
Andrew Tharler
D. Alex Walthall
Elizabeth Wueste
Christy Schirmer
Ben Crowther

See next page for additional authors

Follow this and additional works at: https://digitalcommons.odu.edu/art_pubs

Part of the Architectural History and Criticism Commons, and the Classical Archaeology and Art History Commons

Original Publication Citation

This Report is brought to you for free and open access by the Art at ODU Digital Commons. It has been accepted for inclusion in Art Faculty Publications by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.


In its fifth season, the American Excavations at Morgantina: Contrada Agnese Project (CAP) continued archaeological investigations inside the Southeast Building, a modestly-appointed house of Hellenistic date located near the western edge of the city. The 2016 CAP season had revealed the full extent of the property’s boundary walls and allowed us to propose a cohesive phasing scheme for the building’s construction, occupation, and abandonment. We suggested that the house was occupied for approximately 60-75 years, beginning in the second quarter of the third century BCE. The 2017 CAP excavations resolved a number of remaining questions, particularly those concerning the phasing of the boundary walls, the layout of interior spaces in the southern and eastern parts of the building, and the nature of domestic activities at different stages of the house’s occupation. This report describes the results of these excavations and proposes a new account of the building’s early development. The discovery of two large rotary millstones within the building raises the possibility that the occupants of the house may have specialized in the milling of grains and prompts us to rename the building, “the House of the Two Mills”.

Introduction

The fifth season of the American Excavations at Morgantina: Contrada Agnese Project (CAP) took place between 7 June and 19 July 2017. Beginning in 2014, the CAP excavations have concentrated primarily

---

1 Our work was carried out under the auspices of the American Excavations at Morgantina (AEM) and in cooperation with authorities from the Soprintendenza per i Beni Culturali e Ambientali and Parco Archeologico Regionale di Morgantina. We would like to thank Prof. Malcolm Bell III and Prof. Carla Antonaccio, Co-Directors of the American Excavations at Morgantina, for their permission and constant encouragement as we pursue this project. Our thanks also go to Dott. Rosario Patanè, Arch. Giovanna Susan, and Arch. Concetto Greco of the Soprintendenza per i Beni Culturali e Ambientali and Parco Archeologico Regionale di Morgantina for their assistance and support. We are extremely grateful to the Comune and residents of Aidone for their generosity and hospitality. Our work was made possible by generous financial support from the Department of Art & Archaeology at Princeton University, the Archaeological Institute of America, and the Loeb Classical Library Foundation, as well as from private donors. It goes without saying that this work would not be possible without the many volunteers who gave their time, energy, and goodwill to the project; our thanks go to Lauren Alberti (UArizona), Hayley Barnett (UT Austin), Nathan Beck (UT Austin), Jesper Blid (Stockholm University), Kathryn Briscoe (William & Mary), Aaron Brown (UC Berkeley), August Burman (Uppsala University), Caroline Cheung (Princeton), Paolo Coniglione (Università di Pisa), Laura Corless (Penguin Books), William Dickson (Tulane), Kevin Ennis (Stanford), Jonathan Flood (Frostburg State), Brigitte Freeman (UC Berkeley), Alexandra Noéli Grisanti (Amherst), Kiersten King (Bryn Mawr), Martin Krmáč (Charles University, Prague), Amber Leenders (UBC), Bethany Lynch (UC Berkeley) Allison Marlyn (UBC), Charlotte McMeekin (Princeton), Alex Moskowitz (UMichigan) Kathy Oke (UBC), Max Peers (Brown University), Manuel Peters (Leiden University), Shelby Raynor (UCincinnati), Sarah Sako (UBC), Andrea Sanz-Pustol (Bryn Mawr), Catherine Schenck (UMichigan), Sana Sherazi (Old Dominion University), Matt Sibley (University of Sydney), Robert Smith (Williams College), Emily
on the Southeast Building, a house of the 3rd century BCE that once occupied Lot 1 of insula W13/14S, which lies at the western edge of the ancient city. The Southeast Building remained the focus of the CAP excavations in 2017. We present here a preliminary report on the results of these excavations, focusing principally on new discoveries about the building’s development and use. This account of the 2017 excavation follows the same system of room numbers and wall designations used in the report of the 2016 season (fig. 1). To aid in understanding the multiple occupation phases in each room, we have included our internal seven-digit designations for stratigraphic units corresponding to floors.

Fig. 1. Orthorectified aerial photo of the Southeast Building, with overlaid state plan, indicating room numbers and wall names. Drawing by G. Filantropi.

Stegner (Kenyon), Zachary Taylor (Washington & Lee), Jennifer Townzen (UT Austin), Emilia Trovato (Università di Catania), Jeremy Turner (FSU), and Alexis Watts (UBC).

1 Alex Walthall was the project’s director; Jared Benton and Randall Souza served as field directors. Trench supervisors for the 2017 season were Christy Schirmer in Trench 46, Andrew Tharler in Trench 47, Benjamin Crowther in Trench 48, Elizabeth Wueste in Trench 49, Katharine Potts-Dupre Huemoeller in Trench 50, and Steve Gavel in Trench 51. Anne Truetzel directed the project’s museum teams with Mali Skotheim serving as Supervisor of the Finds Team and Nicole Berlin as Assistant Supervisor. James Huemoeller directed the project’s architectural documentation. Leigh Anne Lieberman directed database operations. Ben Gorham served as Supervisor of the Geospatial Team and was responsible for producing the orthorectified aerial photographs used in this report.

2 For recent research carried out by other scholars working under the auspices of the AEM in Contrada Agnese, see LUCORE (2013; 2015); and TRÜMPER (2015; 2017).
Summary of Previous Work and 2017 Objectives

After we gradually exposed the building’s layout room by room in 2014 and 2015, excavations in 2016 revealed the full extent of the property’s boundary walls and allowed us to propose for the first time a cohesive phasing scheme for the building’s construction, occupation, and abandonment. Material recovered to that point had indicated that occupation of the lot probably began by the second quarter of the 3rd century BCE, diminished significantly around 200 BCE, and effectively ended sometime in the first half of the second century BCE. In our 2016 report, we outlined an initial phase of construction consisting of a suite of three rooms extending along the northern part of the building with a large open courtyard to the south. We further suggested that subsequent construction phases both expanded the footprint of the building to the west and subdivided the vast open area in the center, creating smaller, more discrete interior spaces. Because the architectural arrangements in all phases of the Southeast Building resembled domestic structures excavated elsewhere at Morgantina, and because of the array of strata and objects related to activities of daily life, including consumption, trade, craft production, and the storage of foodstuffs, we identified the building as a house, although one “characterized by an austerity of valuables, construction, and decoration”.

Yet despite these major advances in our knowledge about the house and its occupation history, significant questions remained following the 2016 season, particularly concerning the phasing of the boundary walls, the internal subdivision of rooms in the southern part of the building, and the evidence for late activity in the final phase of the house’s occupation. Excavations conducted during the 2017 season aimed to address these questions of architectural phasing, activity, and chronology. We opened five trenches in the building, each with specific objectives (fig. 2):

- Trench 46 was positioned over the building’s southwest rooms in order to refine our understanding of their relationship to the rest of the house. The trench focused especially on Room 9, which we believe formed the building’s principal entrance throughout its many phases of occupation. It also included Rooms 13 and 14, where excavators encountered backfill from earlier excavations of the 1970s as well as from more recent clandestine activity.
- Trench 47 focused on Room 15, a large, open-air courtyard in the southern part of the building, which had been only partially explored in 2016. Objectives included probing the relationship between Room 15 and adjacent spaces, clarifying its appearance in earlier phases of the building’s development, and dating the construction of the southern boundary wall. Excavations in the southern part of the courtyard were complicated by the discovery of a large circular pit, measuring over two meters in diameter, that cut through the modern soil horizon and ancient stratigraphy down into the sterile sandy bedrock.
- Trench 48 centered on Room 12, which was quickly determined to be in fact two rooms, Room 12a and Room 12b. This trench also stretched into the southeast corner of the lot, where excavators defined the stratigraphic sequence for a cluster of rooms (Rooms 16, 17, 18) that had been added late in the lifetime of the building.
- Trench 49 investigated the central and central-eastern portions of the building (Rooms 7, 10, 11a, and 11b). Excavations focused on clarifying the development of interior spaces following the initial construction phase, as the building’s courtyard was gradually diminished by the addition of new internal rooms.

---

4 For preliminary reports on results from the previous field seasons, see Walthall et al. 2014, 2016, 2018; Benton et al. 2015; Souza et al. 2019.
7 Souza et al. 2019: 2.
8 For instance, while our excavations had firmly established that the property’s northern boundary wall belongs to the initial construction period, the phasing of the southern, eastern, and western walls remained tentative or conjectural. The association of Rooms 13 and 14 in the building’s southwest corner with the first phase had also been hypothesized but required further confirmation. Indeed, because most rooms in the southern part of the lot were exposed for the first time in 2016, this area of the building had been only partially excavated. The oven installed in Room 11a offered compelling evidence for activity during the final phase of the building’s occupation, but its construction required further investigation.
10 The shape and size of the pit suggest that it may be related to the construction of an unfinished well, possibly dating to the 1950s or 1960s, when the area of Contrada Agnese was still actively-cultivated farmland. We did not reach the bottom of the pit in our excavations of 2017 due to safety concerns, but followed the cut down more than three meters below the current ground level. Sherds from a Majolica-ware vessel, found near the lowest point of our excavation, offer further indication that the pit was of recent construction. The pit was subsequently filled with loose soil and stones.
- Trench 50 was laid out in the northeast corner of the building and extended partly into Plateia B to the north and the neighboring lot to the east. The trench aimed to investigate the previously unexcavated Room 4 and explore the building’s architectural relationship with the plateia, as well as with the building that occupied Lot 2 of the insula.
• Trench 51 targeted the western part of Room 5 and a portion of Stenopos W14 in order to clarify the sequence of doors and floor surfaces that led between the room and the street. Additionally, excavations in Trench 51 determined the extent of the brick pavements inside Room 5, which were exposed in 2014 and 201611.

The 2017 season revealed the building’s complete architectural footprint for the first time and provided new evidence for domestic production and religious activity associated with different periods of occupation. Results from this season also substantially clarified the early phases of the building’s development, prompting us to revise our previous interpretation of the house’s initial appearance and discard the theory of its westward expansion on the lot.

Chronological overview

The results of the 2017 season generally accord with the chronology proposed after the 2016 excavations. For several of the main phases, we have proposed a date range based on inferences drawn from the relative sequence of stratigraphic contexts, as the absolute dates attached to many of the diagnostic materials (i.e. coins, ceramics, terracotta figurines) are often only broadly defined by quarter- and half-century intervals. While this has posed certain constraints on our ability to assign absolute dates for each period, the relative sequence of the building’s phasing is not in question (fig. 3).

Fig. 3. Construction phases (1-3) in the Southeast Building. Drawing by G. Filantropi & J. Benton.

Phase 1: Initial Construction (ca. 260-250 BCE)

Phase 1 is defined by the earliest construction activity in the house, consisting primarily of rooms arranged around a large central courtyard (see fig. 3). Excavations in 2016 had revealed a suite of rooms (Rooms 2a, 2b, and 3) that ran along the north side of the building in this phase. Room 4 can now be added to this suite based on the results of Trench 50. Excavations inside this room reached an uneven layer of natural bedrock on which the walls of the room were founded, in similar fashion to those of Rooms 2a, 2b and 3. Wall Q, which formed the east side of Room 4 and part of the eastern boundary wall of the house, was bonded with the room’s southern wall (Wall L5). Wall H4, which defined the north side of Room 4, was added before a beaten earth surface (6050024) was laid down across the room. This early floor surface in Room 4 shared the same elevation as the earliest surface in the adjacent Room 3, to which it is connected by a doorway, indicating that Room 4, like the neighboring rooms to the west, belongs to the initial construction phase of the house.

Excavations also reached bedrock in the portion of Plateia B outside the building immediately to the north of Room 4. Here, excavators found evidence that a series of successive fills had been deposited over the surface of the street, which had been continually worn away by erosion or flooding. In the earliest phase of construction, builders laid down a fill of highly-compacted light brown soil, which covered the foundations of the building’s northern walls and probably served as a rudimentary street surface at the time of its construction.

The excavations of 2017 also led us to assign additional rooms along the east side of the lot to the building’s initial plan, including the expansive Room 11b. Although Trench 49 did not reach the base of the room’s western walls (NN1 and NN2), their large stone masonry closely resembles the construction techniques used in the earliest walls of the northern rooms. The contemporary construction of Wall PP along the south side of the Room 11b was corroborated by Trench 48. Notably, this wall was constructed of pisé or rammed-earth set atop a low stone socle (fig. 4). Walls of similar construction had been previously identified as part of Phase 1 construction in Room 2 during the 2016 season. As in that case, portions of white wall plaster were discovered intact on the vertical face of Wall PP along its northern side. A surface of redeposited yellow bedrock aggregate (6049063) served as the earliest floor in Room 11b.

At the same time, Room 12b was established immediately to the south. The same levelling fill running below Wall PP also supported Wall EE1, forming the north and east walls of Room 12b respectively. Wall NN defined the room’s western boundary. Rooms 12b and 12a to the west did not initially communicate, and only later was the doorway between them added. Nevertheless, a beaten earth surface in Room 12a (6048063) corresponds closely in elevation to the earliest surface in Room 12b, further establishing their contemporaneity in Phase 1. Finally, Walls AA1 and AA2 established the southern boundary of Room 12b. A doorway in the southern wall of Room 12b led to a space that became Room 16, which in the initial phase of

---

12 Our seven-digit stratigraphic unit designations break down as follows: “6” is the area designation for Contrada Agnese, “050” stands for Trench 50, and “024” for context 24.
13 Excavators found that the center of the road had worn away entirely at one point, and the resulting gully was filled with a layer of stones. A series of excavations conducted during the 2004 season, at a point in the plateia to the west of that excavated in 2017, revealed traces of a similar rubble packing to fill a depression that had formed along the center of the street.
14 These were Walls QQ and QQ1, which divided Rooms 2a and 2b; see SOUZA et al. 2019: 5-6.
the building’s occupation was part of the open courtyard. There was no corresponding doorway between Room 12b and Room 11b to the north in this phase, or at any point during the building’s lifetime. In this first phase, therefore, Room 12b was accessible only from Room 16 to the south. A beaten earth surface (6048031) formed the earliest, Phase 1 floor in Room 12b. Stone steps were set on top of this surface to negotiate the change in elevation between Room 12b and Room 16 (fig. 5).

We cannot, at the moment, state definitively whether this difference in elevation between these two rooms was already present in Phase 1 or if it was a development that occurred in a later phase of the building’s occupation; nevertheless, we suspect that the change in elevation occurred in stages over the course of the building’s lifetime.

Along the west side of the building, Trenches 46 and 47 support the inclusion of Room 13 in Phase 1. Wall T, the north wall of Room 13, was the earliest construction identified in Trench 46. To the north in Room 9, this wall was abutted by an associated surface formed of unconsolidated yellow bedrock aggregate (6046041, 6046042), which bore notable patches of a blue substance (6046040, 6046082) resembling kiln dust (fig. 6). The distinct bright blue color resembles that of ceramic slag, which was also found in substantial quantities here and elsewhere in the building within the strata associated with Phase 1, raising the possibility that some sort of industrial activity was taking place in the area. No datable material was recovered in these layers.

Excavations in Trench 46 also prompted a reinterpretation of the form and chronology of the building’s original western boundary wall. We previously argued that Wall C3 in Room 5 marked the original western limit of the building before the footprint expanded westward in the next phase and a new boundary wall was constructed along Stenopos W14. This proposal was offered tentatively, as the new western boundary (wall segments A-A3) had not yet been fully investigated. Trench 46 exposed the interface between the building and the street at a significantly greater depth than reached in previous seasons, revealing a pavement (6052071) with concrete-like compaction at the western edge of Room 9 that served as a step or threshold into the building from Stenopos W14 (fig. 7). This feature shared the same elevation as the bedrock aggregate surface (6046041, 6046042) mentioned above and appears to be integrated into the masonry of Wall A3. It is likely,

\[\text{SOUZA et al. 2019: 8, 13.}\]
then, that the step, surface, and wall segment were contemporary installations. We have, therefore, revised our interpretation for the Phase 1 form of the building. Accordingly, we now believe that Wall A3 served as the building’s original western boundary, while Wall C3 formed the eastern boundary of Room 5. The building did not expand west when Wall C3 was demolished in the next phase; rather Room 5 was enlarged to the east, and the western boundary wall remained the same. In Room 5, Trench 51 also identified traces of plaster facing on the south terminus of Wall A2 and the north terminus of A3, suggesting that Room 5 originally had an entrance along Stenopos W14.

The remaining space in the building served as a large L-shaped courtyard extending through much of the central and southern parts of the property. At this time, the portions of the courtyard that would later become Rooms 6a, 6b, 6c, 7, 8, 9, 10, and 11a, 15, 16, 17, and 18 were all a continuous open space. In this early phase, the open courtyard was surfaced with a pavement of redeposited yellow bedrock aggregate.

In summary, the initial layout of the Southeast Building consisted of suites of rooms arranged around a large courtyard that occupied the central and southern areas of the property. Rooms 2a, 2b, 3, and 4 formed a connected suite along the building’s north side, Rooms 11a, 11b, 12a, and 12b took a vaguely L-shaped arrangement in the east, and another suite formed by Rooms 1, 5, and 13 lined the west side. The building’s southern and eastern boundaries are also only tentatively associated with Phase 1; further investigations are required to confirm these tentative attributions.

Phase 2: Major modifications (ca. 250-230 BCE)

The second phase of activity on the lot was characterized by several architectural interventions that altered the internal layout of the house (see fig. 3). As in previous reports, we have divided this phase into sub-phases (2a/2b) based on the relative sequence of modifications. Phase 2a is characterized by significant changes to the west side of the building as well as by minor alterations elsewhere on the lot. Phase 2b accounts for the addition of a columned portico along the north side of the courtyard after that first set of modifications. Excavations in 2017 did not reveal substantially new information about this second sub-phase.

The most substantial change to occur in Phase 2a was the expansion of

---

16 In what will become Room 7, 6049033; in what will become Room 10, 6049059; and in Room 11b, 6049063.
Room 5 to the east and the simultaneous creation of Room 9. The 2016 excavations in Room 5 revealed that Wall C3 (now interpreted as the original eastern wall of Room 5) was demolished and buried after Phase 1. In its place, a new wall (J1) was constructed some 60cm to the east, thus enlarging Room 5 in that direction. In 2017, Trench 46 exposed the construction trench of the wall (Wall N/N1) that separated Room 5 from Room 9 to the south. The builder’s trench ran along the full extent of the wall’s southern face, where it had cut through the step and yellow aggregate surface associated with Phase 1 and into the underlying layers of sterile clay soil and unconsolidated bedrock to create a deep foundation for the wall (fig. 8, A, B). Although entry to the house from the stenopos was already possible in this area from Phase 1, the construction of Wall N/N1 formally established Room 9 as a wide corridor directing movement from Stenopos W14 into the building’s interior spaces. Unfortunately, no dateable material was recovered from the fill of the construction trench.

In the newly-created Room 9, a fill of gray soil with inclusions of crushed yellow bedrock was deposited in substantial quantities to raise the level for a new surface of hard-packed crushed yellow bedrock (6046011). This new floor sat some 50cm above the crushed yellow bedrock surface of Phase 1. Among the various small finds found in this fill were the head of a terracotta figurine (Inv. 17-614), a bronze ring (Inv. 17-607) and a bronze coin struck at Syracuse during the reign of Agathokles, which predates this phase considerably (Inv. 17-426; fig. 9). During the leveling process, a channel made of repurposed terracotta roof tiles was installed under the doorway running south from Room 5 into Room 9 (see fig. 8, C). This feature would have drained excess water flowing from Room 5 to an area outside of the building in the south. The full course of the channel could not be determined, as it appears to have been cut off in both directions at some point in antiquity. In Room 9, the drainage channel was covered with rocks and additional fill that, when surfaced (6046021), created a gradually sloping path leading from the building’s courtyard out into the street.

17 For photographs and discussions of the room’s early architectural arrangement, see SOUZA et al. 2019: 8-9.
18 Inv. 17-426. AE. 11.01g, 26.09mm, 9th. Obv. Head of Artemis r., [ΣΩΤ]ΕΙΡ[Α] / Rev. Winged thunderbolt, [ΑΓ]ΑΘΟΚΛΕΟ[Σ] [Β]ΑΣΙΛΕΟ[Σ]. Syracuse (Agathokles); Date: ca. 304-290 BCE. Ref. MS II, no 328.
At the same time, minor alterations were made to the central part of the building. The construction of Wall OO, as documented by Trench 47, partially divided the courtyard into northern and southern spaces, which we have come to refer to as Room 10 and Room 15 respectively. In its present state, Wall OO does not terminate in a finished western face but instead appears to have been partly demolished at a later phase, meaning that we cannot reconstruct its original extent.

The northern part of the central courtyard, i.e. Room 10, also yielded evidence of modest occupation without substantial alteration to the building’s architecture. A highly-compacted surface of mortar and plaster (6047041) abutting Walls Z and OO represents the earliest identifiable floor in the southern part of Room 10 (fig. 10). In the northern part of Room 10, Trench 49 documented successive resurfacings of yellow bedrock aggregate (6049018, 6049041), which raised the level of the open courtyard by about 30-40cm. It is possible that the accumulation of ash created by repeated burning activities prompted the inhabitants of the house to periodically resurface the area at higher and higher levels. In that case it must be asked why the waste from this burning activity was not disposed of elsewhere.

Few major changes were made to the east side of the building during Phase 2a. In Trench 48, we saw changes in patterns of access among the eastern suite of rooms. First, the doorway between Rooms 11a and 12a was blocked up with rubble and covered with a coat of plaster, cutting off communication between the two spaces (fig. 11). Around the same time, a new passage-way was cut into the wall that divided Room 12a from Room 12b to the east, and a beaten earth surface was then added across both rooms (6048027 in Room 12a; 6048022 in Room 12b). Within the fill added to raise the floor surface in Room 12a during this phase, excavators recovered a silver lita coin struck by Morgantina’s own civic mint (fig. 12)\(^\text{19}\). While the coin itself dates from the second half of the 4th century BCE and, thus, adds little to our understanding of the Phase 2a chronology, it is noteworthy as only the second coin of its type to have been recovered during controlled excavations at the site\(^\text{20}\). Curiously, there is no evidence that the floor surfac-es of nearby rooms in the northeast part of the building (e.g. Rooms 3, 4, 11a/b) were raised in this same phase. The original surfaces must have remained in use, even as the floors of adjacent rooms were raised.

\(^{19}\) Inv. 17-840. AR. 0.61g, 10.74mm, Sh. Obv. Laureate female head r.; at r., MOPΓΑΝΤΙΝΩΝ / Rev. Cavalryman galloping l. Morgantina; Date: ca. 344–317 BCE. Ref.: MS II, no. 244.

\(^{20}\) In his chapter on the mint of Morgantina in MS II: 12–13, Erim notes the existence of 45 specimens of this type, the overwhelming majority of which were known only from trade. For a more recent discussion of the output of Morgantina’s civic mint during the 5th and 4th centuries, see Guzzetta 2009.
Phase 3: Occupation with major modifications (ca. 230-208 BCE)

Phase 3 marks the house’s final major occupation period. This phase is primarily characterized by the further subdivision of the interior courtyard and the addition of substantial fills to raise floor levels in several rooms (see fig. 3). It was during Phase 3 that the walls which defined Rooms 7, 8, 10, and 11a were constructed\(^2\). Most were built directly on top of existing surfaces and show no evidence of having been set within construction trenches (fig. 13). Walls X, M, and M1 filled in some of the intercolumniations of the portico from Phase 2b, further restricting movement through the formerly open courtyard space.

Excavations in Room 7, which was created in Phase 3, provided further evidence of the room’s use; it was in this central, nearly-square room that we discovered a terracotta hip bath and bell-shaped basin resting on a surface in 2016\(^2\). In 2017, while excavating the floor surface on which the tub and basin stood (6049003, 6049010), we encountered several shallow, ash-filled pits and, in the southeastern corner of the room, a large, circular feature that was partially lined with fragments of ceramic vessels. We have interpreted this feature as the remains of a hearth or fire pit. The combination of hearth, tub, and basin on the same floor surface suggests that Room 7 might have served as a bathing space for the residents of the building in Phase 3.

\(^{21}\) For reference, these were Wall M1 and the bonded wall segments M, X, Y, O, O1, O3, and P.

\(^{22}\) **Souza et al.** 2019: 18.
The creation of Room 7 necessitated the addition of a leveling fill (ca. 10-15cm in depth) across Room 10, which was now bounded on its western side by Wall X. This fill covered the Phase 2a white mortar surface in the southern part of Room 10 and buried the lowest courses of the new walls that defined the northern and western sides of the room. The room was subsequently resurfaced with a mixture of hard-packed soil and yellow bedrock aggregate (6049015, 6049016, 6049020). A low step of mixed stone blocks was also added along the eastern side of the room to help negotiate the transition between Room 10 and Room 11a, which retained its lower surface elevation. Excavations in 2016 had revealed stretches of a beaten-earth surface in Room 8, which we now know shared a corresponding elevation with the beaten-earth surface of Room 10, immediately to the south. Although movement between these two spaces was now restricted by the construction of Wall M, the shared elevation suggests that the surfaces in Rooms 8 and 10 were added at roughly the same moment in time. In the fill layer below the packed-earth floors of Rooms 7 and 10, excavators found ceramic material dating from the second half of the 3rd century, consistent with the date range previously assigned to Phase 3.

The construction of Rooms 7 and 10 also required raising the floor surfaces in what remained of the house’s open courtyard (Room 15) to the south. The new expansive packed-earth surface associated with these renovations in Phase 3 contained sporadic patches of redeposited crushed yellow bedrock aggregate, the usual material used for floors throughout the building. These patches in Room 15 were found in greater concentration along the west side of the courtyard, where greater foot traffic from persons coming and going may have necessitated periodic repair.

A range of materials was found resting directly on top of this Phase 3 floor surface, including many objects associated with religious practices. Among these were the remains of a large cylindrical terracotta altar, measuring 50cm in diameter, which we discovered scattered in the northern area of Room 15 (fig. 14). Nearly diagnostic material found within this context includes fragments of an Attic type-A squat conical skyphos, rim fragments belonging to a black-gloss outturned rim plate, and the rim of a kantharoid skyphos.

Pieces of the upper molding include: Inv. 17-198,17-211, 17-216, 17-220,17-290, 17-291; those belonging to the base of the altar are 17-209, 17-214, 17-217, 17-218, 17-219, 17-341, 17-343, 17-344.
the full circumference of its base was preserved, and the rim and upper body could also be substantially restored. The altar’s decorative scheme features a cornice with dentils overhanging a Doric frieze, making it quite similar in appearance to the large terracotta altars found elsewhere at Morgantina, including in the House of Eupolemos and the North and South Sanctuaries\footnote{For the terracotta altar in the House of Eupolemos, see BELL 2000: 38-39; For the South Sanctuary, see WHITE 1964: 276. For the use of such altars in Hellenistic households elsewhere in Sicily, see ORLANDINI 1957: 163; PELAGATTI 1962: 259; MARTIN et al. 1980: 414; and HINZ 1998: 108-109.}. The large size of the altar, its relatively complete condition, and the fact that its fragments were found on a surface suggest that it was probably used not far from the concentration of fragments. We note that a circular pit filled with gray ash and charcoal lay just to the east of these altar fragments in the southern part of Room 10, which was not separated from Room 15 by any architectural feature. While the process leading to the formation of the pit is not known for certain, its proximity to the altar raises the possibility that it may have contained burnt refuse from sacrifices.

Along the western side of the Room 15, excavators also discovered several moldmade terracotta female figurines. These were found lying on the surface of the courtyard in close proximity to one another and alongside the spool-like bases on which they once stood. Given their relatively good state of preservation, we may hypothesize that the figurines belong to a primary deposit of material and might even have once stood in the general vicinity, perhaps on a shelf or low platform along the western wall of the courtyard. While the excavations across the broader site at Morgantina have produced thousands of figurines of the draped female variety, few have been found together with their bases\footnote{MS I: 176, nos. 369a and 369c. The spool bases for terracotta figurines (inv. 17-259, 17-401, 17-407, 17-461).}. These finds from 2017 may thus shed valuable light on the use and display of these seemingly ubiquitous objects within the context of the ancient household. Here, we note two particularly well-preserved figurines from the courtyard assemblage (Fig. 15). One (inv. 17-386) represents a draped female figure wearing a himation; it belongs to a well-attested mold series that originated in Syracuse\footnote{At least a dozen known specimens of this type are known from Morgantina; see, MS I: 59-60, and 177, no. 375.}. The second (inv. 17-400) is of a type not otherwise attested at Morgantina; it represents a female figure dressed in a high-girt chiton, belted under the breasts, with a himation worn low across the body. Traces of added gold, visible under a microscope, were identified in several places on the surface of the fig-

![Terracotta female figurines found on Phase 3 surface of Room 15.](image)

Fig. 15. Terracotta female figurines found on Phase 3 surface of Room 15.
re's drapery. The remains of two miniature terracotta arulae were found in close association with the figurines on this surface (inv. 17-275, 17-292; fig. 16). The abundance, preservation, and character of the floor assemblage suggests that the courtyard may have served as a privileged location for ritual activity in the house during this phase. The courtyard may also have been the site of religious practices even earlier in the building's history. In Phase 2a a rectangular platform was constructed against the east phase of Wall V1 in the same area where the small arulae were deposited later.

At the same time as the central portion of the building's courtyard was being filled in with new construction, internal subdivisions were also made in the southeastern wing of the courtyard. The construction of a gamma-shaped wall (formed by Walls CC and DD) abutting the building's southern lot wall gave definition to a small room (Room 17). The casual construction technique used for the walls, coupled with the absence of roof tiles within the small space, as well as the lack of hard-packed floor or pavement of any kind (aside from a rubble packing restricted to the northwest corner), has led us to identify Room 17 as an unroofed storage space or, perhaps, a pen for animals. This room was provided with drainage, however, by means of the central shaft of a small terracotta louterion stand used as a pipe and set in the western wall. This makeshift conduit drained onto the surface of the open courtyard to the west. Immediately to the north of Room 17, a short north-south spur wall (Wall BB) was constructed against Wall AA, narrowing entry to the rooms in the southeastern quadrant of the lot and, in effect, creating another discrete space, which we have identified as Room 16.28

Among the rooms along the east side of the building, relatively minor transformations occurred during Phase 3. In Room 11a, our attention again turned to an oven first discovered in 2015.29 The oven was built into the northeast corner of Room 11a, where it sat on a square-shaped base formed by two flat roof tiles (pan

---

28 There is no evidence of a doorway or barrier at the newly-defined entryway to restrict access to this cluster of rooms (12a and 12b, 16, 17, 18, and 19).
tiles). The oven itself was constructed from pithos fragments and broken terracotta bricks. Our excavations in 2017 revealed that the layer of fallen roof tiles ran up to the edges of the oven structure, but did not continue underneath it, indicating that the oven was constructed in the corner of Room 11a during Phase 3, and not—as we had originally proposed—subsequent to the collapse of the building's roof. While we could not identify a floor surface belonging to Phase 3 in Room 11a, it cannot have been much lower than the base of the oven, which would thus have sat very close to the floor. The small size and form of the oven suggests that it was used for baking bread.

In Room 11b, a new beaten-earth surface (6049057) was deposited on top of the original Phase 1 floor. The new floor level was raised only about 10cm, keeping this large room at a lower elevation than nearby Rooms 8, 10, and 12a/b. The elevation of Room 11b, then, remained fairly consistent throughout the main occupation phases, even when the interior of the building was modified with new walls and surfaces with higher elevations. It was during this phase that a passageway was made in the room's western wall, allowing movement between Room 11b and Room 8. That these two rooms were indeed accessible through some sort of aperture in the wall during the last occupation phase is confirmed by the fact that an unbroken layer of fallen roof tiles ran from Room 8 into Room 11b at this point. The layer of fallen roof tiles in Room 11b sealed a great number of objects, which were found resting on the room's final beaten-earth surface. Here, as elsewhere in the building (e.g. Room 3), excavators found concentrations of large storage vessels, including the remains of several large pithoi and amphoras of Greco-Italic manufacture. These tended to be concentrated in the corners of the room, where they may have stood during the house's final occupation phase or were relocated prior to the collapse of the roof. Smaller vessels were also scattered about the space, including portions of at least three echinus bowls, several outturned rim plates, and a mostly-intact guttus shaped like the head of a friendly boar (inv. 17-723; fig. 17).

A large number of tools and artifacts related to household production were also discovered resting on the Phase 3 surface in Room 11b. Among these, excavators recovered 16 discoid loom weights, a bronze gratter, several stone weights—including one carved of lava stone and inscribed twice with the Greek letter delta (Δ)—a lava-stone quern, and various iron implements of sundry application (fig. 18). Most strikingly, the upper and lower elements (catillus and meta) of a large, Morgantina-type, rotary millstone were found on this floor surface, suggesting that grain was milled here (fig. 19). We note that the upper and lower elements of multiple hopper-rubber millstones have also been found throughout the house. Some were even used as building materials and incorporated into floors as pavements, like those documented in Room 13 during the 2015 season. The clear investment in milling technologies by the owners of the house suggests that they have specialized in the milling of grains.

Immediately to the south of Room 11b, Trench 48 documented little substantial activity in Phase 3. Occupation is attested by several vessels found resting on the last surface of Room 12b, including the remains of four nearly complete Greco-Italic amphorae and a concentration of assorted cooking and dining vessels, which had been smashed in the northeast corner of the room (fig. 20). This concentration of vessels may be an indication that Room 12b served as a storeroom during this last major phase of occupation.

Finally, on the west side of the building, Trench 46 documented evidence of renovations in the Room 9 corridor during Phase 3. The north-south drainage channel originating in Room 5 was put out of use and completely cut off in the center of the room. After a leveling fill raised the floor some 20 cm, a higher and wider drainage channel formed of upturned roof tiles was installed running along the southern half of the corridor in an east-west direction. This new drain brought excess water from the central courtyard out into the street to the west (see fig. 8, D). During a subsequent renovation, a new narrow drain appears to have been added in the corridor to carry off excess water from Room 6. In 2015, our excavations exposed the northern segment of this

---

30 SOUZA et al. 2019: 23, fig. 40. A protective baulk that had been left around the back (eastern portion) of the oven in 2015 and 2016 was excavated in 2017. The possible remains of a second oven of similar construction were identified in the southeast corner of the same room, separated from the first oven by the doorway leading into Room 11b. Only a few flat bricks and the faint outline of a dome of grayish soil visible in the trench’s baulk attest to the existence of this second oven. Tiles from the collapsed roof were found to run above the remains of this second, fugitive oven, recommending its association with Phase 3.
31 WALTHALL et al. 2018: 19.
A toppled stack of nine terracotta column drums was also found at the eastern end of the corridor, resting on the Phase 3 surface (fig. 21). Their orientation suggests a collapse in situ. The addition of this small column may have lent heightened formality to the entranceway leading into the building’s courtyard. In this respect, the addition of the column follows on the modest monumentalization efforts attested elsewhere in the building during Phase 2.

Fig. 17. Inv. 17-723. Guttus in the shape of a boar’s head found on Phase 3 surface of Room 11b.

Fig. 18. Assorted tools found on Phase 3 surface of Room 11b.

Fig. 19. Catillus and meta of a Morgantina-type, rotary mill-stone resting in situ on Phase 3 surface of Room 11b, surrounded by tile fall.

32 WALTHALL et al. 2018: 14-15. The physical junction of this north-south drain and the east-west channel in the corridor does not survive, but their relationship is presupposed by the elevation of the surviving segments of the two systems. In 2017, we exposed the point where the drain entered the corridor, finding that the neck of a Punic amphora was repurposed to serve as a section of the drain, where it passes through the short section of wall that divided Room 6b from the corridor to the south.
Alterations were also made to Room 5. In Phase 2, this room was surfaced with a brick pavement, first exposed in 2016. Although we found this pavement to be preserved only in the southern portion of the room, we have good reason to believe that it originally extended across all of Room 5. There is evidence that some of the bricks were systematically removed towards the end of Phase 3, leaving the original subsurface preparation for the pavers as the de facto floor surface. Notably, a concentration of materials was found resting directly on top of this newly exposed subsurface, including fragments of a nearly intact Greco-Italic amphora lying against the westernmost preserved brick pavers. Around the same time, the doorway that led from Room 5 to Stenopos W14 was blocked up with rubble, eliminating communication with the street from this room.

Finally, in Room 13, the catillus of a second Morgantina-type rotary millstone like that found in Room 11b was discovered resting on a beaten-earth surface against the building’s southern lot wall (fig. 22). Much of Room 13 had been disturbed by modern activity, including excavations carried out in the early 1970s by Dr. Hugh Allen, but the southern- and easternmost portions of the room had remained untouched. The placement of the catillus in the room clearly predates the collapse of the building, as indicated by the layer of roof tiles and rubble that ran above the top of the millstone. This catillus was likely originally joined in Room 13 by a meta discovered in the neighboring House of

---

33 A small platform, fashioned from two courses of the same type of terracotta brick, was also discovered in the northwest corner of Room 5 in 2014; see WALTHALL et al. 2016: 13-15. This platform was set on a beaten-earth surface of the same elevation as the brick-lined pavement in the southern portion of the room.

34 In both 2016 and 2017, excavators found traces of a hard-packed soil layer with heavy concentrations of yellow crushed-bedrock aggregate in Room 5 at an elevation just below that of the brick pavement. Initially interpreted as a surface in its own right, it more likely was adapted as such following later spoliation activity that is evident throughout the building.

35 The millstone’s location within the room suggests that it was placed in an out-of-the-way location for storage, perhaps during a moment of renovation inside the house or during part of the year when the operation of two rotary mills was not needed. For another possible scenario involving the temporary storage of building materials, tools (including millstones), and large storage vessels in a house at Monte di San Fratello (ancient Apollonia), see PERRUTTA 2008: 23-34.
the Two Skeletons in 2004. To test this hypothesis, we placed the 
\textit{catillus} on top of the \textit{meta}, and then traced a line around the point at
which the two pieces met with a piece of chalk. Upon removing the 
\textit{catillus}, we found that the wear pattern visible on the upper portion of
the \textit{meta} matched precisely with the area covered by the \textit{catillus}, leaving us with little doubt that
the two were used together in antiquity (fig. 23).

\textbf{Phase 4: Abandonment and roof collapse (ca. 208-200 BCE)}

Phase 4 marks the end of full-scale occupation of the house and is characterized pri-
marily by the collapse of the roof across almost the entire building. The \textit{terminus post quem}
for this event can be established with some confidence to the year 208 BCE or not long thereaf-
ter by means of the coins sealed under the tile fall throughout the building. These coins were struck by a Roman mint that operated on Sicily during the Sicilian phase of the Second Punic War. Many have been found in previous seasons immediately below the tile fall layer in different parts of the building.

Along the west side of the building, this period of abandonment and collapse was represented in Room 5 and Room 9 by layers of debris and gradual accumulation capped by fallen roof tiles. In Room 9, this layer of rubble and tile covered the nine collapsed column drums.

The central courtyard (Room 15) was unroofed throughout the building’s life, and the deposits of tiles along the northern and western edges of the courtyard likely originated from adjacent rooms. The tiles were eventually covered by a heavy deposit of mixed refuse spilling over from Room 9, which contained undifferentiated concentrations of building materials (i.e. roof tiles, stone rubble, terracotta column drums) and household objects (e.g. loom weights, broken cook ware, fragments of louteron basins and pithoi). It appears that Room 15 was used as a convenient area for dumping trash in this phase. Immediately to the north, Room 7 also appears to have been used as a dump.

The collapse of the house’s tile roof was well-represented across Rooms 7, 10, 11a, and 11b. Excavators found that the layer of fallen roof tiles in 11b formed an undulating, but continuous, stratum with the tile-fall layers encountered in Rooms 3, 8, 10, and 11a, indicating that open passageways existed between these spaces and that there was a nearly contemporaneous collapse of the building’s roof across much of the central-eastern portion of the house. We note that tiles also seemed to continue through a gap in the wall shared with the adjacent property to the east, suggesting that there might have been a door or passageway between these lots when the roof collapsed. Further investigations in subsequent seasons may help to clarify this situation. In Room 11b, the latest dateable objects found below the layer of roof tiles were several Roman bronze \textit{sextantes}

\footnote{36 We believe that this \textit{meta} was first discovered during Allen’s excavations in Room 13 of the Southeast Building and then placed across the \textit{stenopos} in Room 7 of the House of the Two Skeletons when both buildings were being simultaneously excavated during the 1970/71 season. While the supervisor responsible for the excavation of this trench makes no mention of a millstone in their notebook, over the past several seasons we have encountered evidence that Allen’s team relocated many of the larger stone architectural elements within the open trenches at the edge of each excavation campaign. This would account for how a \textit{meta} initially recovered from the Southeast Building could end up in the House of the Two Skeletons.}

\footnote{37 E.g. Three bronze \textit{sextantes} (inv. 14-268, 15-371, 15-374; all \textit{RRC} 69/6) from below the tile fall layer in Room 3; one bronze \textit{triens} (inv. 15-156; \textit{RRC} 69/4) in Room 6. For photos and measurements of these coins, see \textit{Walthall et al.} 2016: 6-7, 16; \textit{Walthall et al.} 2018: 8.}

\footnote{38 For additional photographic documentation of the tile fall, see \textit{Souza et al.} 2019: 21. Tiles excavated in previous seasons: 6043028 (Room 6c/8), 6043028 (Room 7), 6043070 (Room 10), and 6043026, 6043054 (Room 11a).}
struck between the years 211 and 208 BCE (inv. 17-728, 17-730, 17-733)\footnote{Ref. RRC 69/6; MS II, no. 520.}. These coins confirm the terminus post quem date for the collapse of the house's roof that we had advanced in previous preliminary reports.

Finally in Trench 48, excavators exposed a tile fall layer that stretched across both Rooms 12a and 12b. The tiles did not fall directly onto the beaten-earth floor but instead covered an uneven layer of soil and ceramic debris, suggesting some length of time had passed between the abandonment of the house and the collapse of the roof in this part of the building. Other materials, mainly pithoi fragments, were also found mixed in among the tiles in Room 12a.

**Phase 5: Post-abandonment (ca. 200-100 BCE)**

Only sporadic activity is attested following the collapse of the roof. As had been identified in previous excavation seasons, most evidence from Phase 5 suggests that activity within the building was limited to the discarding of trash and desultory scavenging of materials left behind in the abandonment process of Phase 4. The only major construction in this phase is represented by Wall F, first identified in 2014, that was built over top of Rooms 2, 3, and 4\footnote{For discussion of this late wall, see WALTHALL ET AL. 2016: 11, where it is referred to as Wall M. The portion of this late wall (Wall F2) that ran over top of Room 4 was more fully exposed during the 2017 season.}.

Rooms 12a and 12b appear to have served as expedient garbage dumps, judging from the accumulation of fragmentary storage vessels (i.e. pithoi, amphoras) and other ceramics found on top of, and mixed among, the layer of fallen roof tiles within their walls. Of note, several fragments belonging to the roof tiles but before the disintegration and toppling of the walls. This distribution of tiles may indicate that some effort was made to remove the rotary millstone during Phase 5, after the collapse of the roof tiles but before the disintegration and toppling of the walls. Perhaps in that case the millstone turned out to be too heavy to move.

Following the collapse of the roof over Room 11b, the large eastern property wall fell inward, an event represented by a deposit of large, rectilinear masonry blocks lying on top of the tiles. Above this, a thick stratum of soil with a bright reddish-orange color accumulated above and amidst the layer of fallen stones. As was documented in Rooms 2a/b and Room 3, this soil layer surely represents the disintegrated pisé walls that once formed (at least) the western and southern sides of the room, a portion of which was still preserved in elevation above the stone socle of Wall PP defining the south side of 11b.

Over time, the walls of the building collapsed onto the layer of fallen roof tiles. Traces of this process were encountered around the house in 2017 as well as in previous seasons. In large part, this appears to have been a gradual process, as the walls of rammed-earth and light rubble construction—now exposed to the rain and elements—slowly disintegrated and spilled out across the building to form a thick stratum of reddish-orange soil with few inclusions except for wall plaster and small rubble. In some instances, heavier masonry walls seem to have toppled in a more sudden or violent event, as with the collapse of the building’s eastern property wall over Room 11b (fig. 24). Among the latest dateable objects to have made their way into this layer of accumulation above the tile fall was a moldmade lamp with relief decoration of two erotes on it (inv. 17-533; ca. 230-190 BCE; fig. 25). Aside from the excellent state of preservation, this lamp is remarkable as an Egyptian import that reached the interior of the island during the late 3rd or early 2nd century\footnote{For the date of this lamp series and parallels from other parts of the Mediterranean, see HOWLAND 1958: 143–145; ROTROFF 1997: 508; and MYLNARCZYK 1997: 34–37.}. Moreover, it is the second lamp manufactured from this mold to be discovered at Morgantina, as a near-identical counterpart was found in 1956 during Princeton-led excavations of the residential quarter on the East Hill\footnote{Inv. 56-2500; for photo and discussion of this second lamp, see MS VI: 37–38. We thank Shelley Stone for sharing his expert observations about inv. 17-533, and for bringing to our attention the existence of its counterpart.}. It is well known that during the reign of Hieron II (r. 260-215 BCE), the cities of eastern Sicily enjoyed particularly strong...
connections, both commercial and cultural, with Ptolemaic Egypt. As one of the cities subject to Hieron’s political authority during this time, Morgantina would have benefited from the ties between the two Hellenistic kingdoms. This lamp and its counterpart from the East Hill are among the material vestiges of this cross-Mediterranean interconnectivity.

Conclusion and Observations

The results of the 2017 excavations have refined our picture of the distinct periods of construction, occupation, and renovation in the Southeast Building and, in turn, helped clarify the phasing of its architectural development. The initial plan of the building included suites of rooms along the northern, eastern, and western sides. Most of the lot in Phase 1 was occupied by a large courtyard extending from the center of the building up to the southern boundary wall. Contrary to what we proposed in the preliminary report for the 2016 season, the original footprint covered the entirety of the lot, reaching Stenopos W14 in the west and Plateia B to the north. In Phase 2, a new corridor leading into the building from Stenopos W14 altered the internal configuration slightly, and a columned portico was also added to the courtyard in a second period of construction. The size of the courtyard was greatly diminished during Phase 3, a final ambitious period of renovation in which the central part of the building was subdivided and a complex suite of rooms was added in the southeast corner of the lot. At this stage, the milling of grain inside the house appears to have reached levels beyond that intended to simply meet household consumption, as suggested by the rotary millstone in Room 11b (and possibly that found in Room 13). The proximity of the oven in Room 11a to the rotary mill in Room 11b may not be a coincidence, but evidence that the two were used in concert for some time. The assemblage of altar fragments and arulae on the surface of Room 15, found in close proximity to an ash pit, points intriguingly to the possibility of identifying specific domestic religious activities and ritual spaces. The property was largely abandoned around the last decade of the 3rd century BCE, after which time there appears to have been sporadic occupation until the collapse of the roof and walls. In all, the life of the Southeast Building lasted no more than about 50-75 years. There are, however, signs that the house was a site of infrequent activity—primarily scavenging of architectural materials, it seems—into the early decades of the 2nd century BCE.

By the close of the 2017 season we had finished defining the limits of the property, as nearly every room of the building was at least partially excavated (fig. 26). Nevertheless, some questions could not be directly addressed this season. Targeted excavations in the future could clarify the phasing of the western boundary wall, identify Phase 1 surfaces in the southern part of the building, resolve the relationship between the Southeast Building and the property to the east, and explore Room 1, which was exposed in previous seasons, but only partially excavated. Further excavations could also refine the absolute chronology of the construction, occupation, and abandonment of the Southeast Building.
Finally, we have long sought a more distinctive moniker for the Southeast Building, the name first given to this property in 2004 during excavations of the North Baths complex. The discovery this season of large rotary millstones in both Rooms 11b and 13 has now prompted us to adopt a new name for the building. The house located on Lot 1 of insula W13/14S will now be called the House of the Two Mills.

Andrew Tharler  
Duke University  
E-mail: andrew.tharler@duke.edu

D. Alex Walthall  
University of Texas at Austin  
E-mail: dwalthall@austin.utexas.edu
Elizabeth Wueste  
American University of Rome  
E-mail: e.wueste@aur.edu

Christy Q. Schirmer  
University of Texas at Austin  
E-mail: schirmerc@utexas.edu

Benjamin Crowther  
University of Texas at Austin  
E-mail: bcrowther@utexas.edu

Jared Benton  
Old Dominion University  
E-mail: jtbenton@odu.edu

Randall Souza  
Seattle University  
E-mail: souzara@seattleu.edu

Katharine P.D. Huemoeller  
University of British Columbia  
E-mail: katharine.huemoeller@ubc.ca

ABBREVIATIONS

RRC = CRAWFORD M.H., 1974, Roman Republican Coinage, London.

BIBLIOGRAPHY


HOWLAND R., 1958, Greek Lamps and Their Survivals (The Athenian Agora IV), Princeton.


ROTROFF S.I., 1997, Hellenistic Pottery: Athenian and Imported Wheelmade Table Ware and Related Material (The Athenian Agora XXIX), Princeton.


