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# Gymnasia in Eastern Sicily of the Hellenistic and Roman Period

## Summary

According to literary and epigraphic sources, the institution of the gymnasion thrived in Sicily from the 3rd century BC onwards, in the realm of Hieron II as well as in the Late Republican Roman province. This paper critically discusses whether the boom of the gymnasion is also reflected in the archaeological record and the emergence of a clearly discernible building typology. Focusing on five cities of Hieron's realm in eastern Sicily (Syracuse, Morgantina, Megara Hyblaea, Neaiton, and Akrai), it is examined whether gymnasia can be safely identified, what plan, decoration, and function they had, and whether changes between the 3rd century BC and later periods can be observed. It is shown that none of these cities provides evidence of a securely identifiable, fully known gymnasion, however.

Keywords: gymnasion; palaistra; Syracuse; Morgantina; Megara Hyblaea; Neaiton; Akrai Schriftquellen und Inschriften legen nahe, dass in Sizilien die Institution des Gymnasions vom 3. Jh. v. Chr. an florierte, im Reich Hierons II. wie auch in der spätrepublikanischen römischen Provinz. Dieser Beitrag untersucht kritisch, ob sich dieser Boom im archäologischen Befund und in der Entstehung einer eindeutig erkennbaren Bautypologie widerspiegelt. Am Beispiel von fünf ostsizilischen Städten in Hierons Reich (Syrakus, Morgantina, Megara Hyblaea, Neaiton, Akrai) wird untersucht, ob Gymnasia sicher identifiziert werden können, welchen Grundriss sowie welche Ausstattung und Funktion sie hatten, und ob es Änderungen zwischen dem 3. Jh. und späteren Epochen gab. Es wird gezeigt, dass bislang keine dieser Städte ein sicher identifiziertes und vollständig bekanntes Gymnasium aufweist.

Keywords: Gymnasion; Palaistra; Syrakus; Morgantina; Megara Hyblaea; Neaiton; Akrai

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According to literary and epigraphic sources, the institution of the gymnasion thrived in Sicily from the 3rd century BC onwards at the latest. Based on this evidence, scholars formulated two hypotheses: first, that King Hieron II of Syracuse systematically promoted the gymnasion in the cities of his realm for strategic-military purposes, in order to train loyal, competent citizen-soldiers; and second, that "Roman rule in Sicily entailed the continuity, indeed the encouragement of traditional norms, in the form of local military activities and their institutional concomitants, in particular the gymnasion".<sup>1</sup> Consequently, the importance of the gymnasion should be reflected in the archaeological record, both in quantity and typology: one could expect to find a functional standard type, developed and systematically propagated under Hieron and then adopted by the Roman rulers, a kind of model kit gymnasion. Accordingly, J. Prag recently assumed that all 65 cities of Late Republican Sicily provided a gymnasion.<sup>2</sup> With view to the astonishingly scarce archaeological remains of gymnasia, L. Campagna argued, however, that the epigraphic evidence of gymnasiarchs would not necessarily require corresponding monumental built complexes. The office of the gymnasiarch may have been "più genericamente onorifico e liturgico e meno connesso con gli aspetti specifici del training atletico e militare."<sup>3</sup> Gymnasion structures could have been simple, lacking a distinct architectural design that makes them safely identifiable today. A clearly recognizable building type 'gymnasion' (or palaistra) may only have been introduced during the monumental restyling of Sicilian cities in the late Hellenistic period.

It is the aim of this paper to critically discuss

whether the archaeological evidence of gymnasia in Sicily supports these assumptions, focusing on the following questions: Where and how can gymnasia be safely identified; where (cities/urban context), when and by whom were they built, what did they look like (size/plan/decoration), and what was their function; can significant changes be observed, e.g. between the period of Hieron's reign in the 3rd century BC and later periods, notably the 2nd and 1st centuries BC? And finally, what do gymnasia contribute to the current vivid debate about the urban and cultural development of Hellenistic Sicily?

While the archaeological evidence of gymnasia in Sicily recently received some attention in scholarship, important remains are still unpublished and a comprehensive study is missing, so far.<sup>4</sup> This gap can certainly not be filled here. Instead, complementing E. Mango's recent assessment of gymnasia in western Sicily,<sup>5</sup> focus is here on gymnasia in eastern Sicily, more particularly even those in Hieron's realm. Space allows only for a discussion of those cities where archaeological evidence of gymnasia has been identified and is still being debated. These include Syracuse, Morgantina, Megara Hyblaea, Neaiton, and Akrai. In contrast, sites such as Taormina, where identification of a gymnasion has already been convincingly refuted,<sup>6</sup> and Cava d'Ispica where recently discovered evidence is not yet sufficiently published,<sup>7</sup> will be omitted.

Discussion of the sites is mainly based on published literature and on visits to the sites. For easier reference and comparative overview, the main data of the discussed sites are summarized in a table (Tab. 1).<sup>8</sup>

- 1 Prag 2007, 69; cf. also Ferruti 2004; Cordiano 1997.
- 2 Prag 2007, 93.
- 3 Campagna 2006, 31.
- 4 Archaeological remains are discussed, in varying detail by Ferruti 2004; Lehmler 2005, 103, 119, 159–161; Campagna 2006, 29–31; Prag 2007; Fiorentini 2009; Mango 2009; Wilson 2013, 112; Mistretta 2013; A. Mistretta has submitted a PhD dissertation about Gymnasia in Sicily at the University of Hamburg in 2012, which is not yet published, however, and was not accessible to me.
- 5 Mango 2009.
- 6 Ferruti 2004, 198-203; Campagna 2006, 31.
- 7 Trigilla 2011, 100–101 briefly relates that archaeologists identified a newly discovered complex of several grottoes under the grotto of S. Maria as a gymnasion. These grottoes were excavated under the super-

vision of Annamaria Sammito and Vittorio Rizzone, who will provide full publication in the near future; meanwhile for a brief preliminary assessment, see Sammito and Fiorilla 2013, 212–214; Sammito and Rizzone 2014, fig. 8 pl. IX. I am very much indebted to Annamaria Sammito for showing these caves to me in April 2017, for generously sharing information and publications with me, and for inspiring discussions about this highly unusual site and monument. While there is compelling evidence for identifying the complex of caves as a gymnasion and while it provides an intriguing comparison to the complex in Noto, the remains of Cava d'Ispica cannot be discussed in any detail here.

8 For comparison, this table also includes the sites of Tauromenion/Taormina and Solunto, but not the yet unpublished example in Cava d'Ispica.

Site	Epigraphic evidence	Literary evidence	Palaistra / Rooms	Paradromis/ Race track	Bathing facilities / Water supply	Size	Date
Akrai	x, 2nd half of 2nd c BC	,	x, courtyard with at least one portico or probably peristyle courtyard with rooms on at least one side	Unknown	Laconicum, 2 cisterns	Insula ca. 56 × 80– 85 m = 4480– 4760 m <sup>2</sup> ?	2nd c BC? (typology only)
Megara Hyblaia			?, courtyard with at least one portico and rooms on at least 2 sides	?, adjacent main street	Well	$25 \times 34 \text{ m} = 850 \text{ m}^2$	3rd c BC or later? (no conclusive evi- dence)
Morgantina	ı	1					
Neaiton/ Noto antica	x, 3rd c BC?		3, 5 rock cut rooms	2, on terrace	Cistern, channel system	Caves 1–3, $7-8 =$ ca. 100 m <sup>2</sup> ; terrace 28 × at least 80 m <sup>2</sup> = at least 2240 m <sup>2</sup>	3rd c BC? (inscrip- tion only)
Solunto	x, mid-1st c BC or AD?		x, peristyle courtyard sur- rounded by rooms on 3 sides	2, adjacent main street	Laconicum, cis- terns	24 × 42 m = 1008 m <sup>2</sup>	2nd c BC (relative chronology; built af- ter the theater, over earlier residential structures)
Syracuse	?, fragmentary in- scriptions of un- known date	For at least 3 differ- ent gymnasia, from 4th–1st c BC	<ol> <li>?, peristyle courtyard next to altar of Hieron</li> <li>2) ?, 1st phase of "Roman gymnasium", peristyle court- yard / quadriporticus</li> </ol>	<ol> <li>integrated into area of altar/ "palais- tra"</li> <li>unknown</li> </ol>	1) Swimming pool 2) Unknown	1) Courtyard with porticoes $174 \times 40.90 \text{ m} =$ $7.117 \text{ m}^2$ $2) 76 \times \text{c. 66 m} =$ $5.016 \text{ m}^2$	<ol> <li>2nd half of 3rd c BC or later? (archi- tecture vs. stratigra- phy)</li> <li>2) Late Hellenistic (stratigraphy)</li> </ol>
Tauromenion/ Taormina	x, referring to 3rd c BC onwards ("av- ole finanziarie", not found in the peri- style building)		2, peristyle courtyard (9.50 × 7 m), with rooms on at least one side, and at least 2 rooms on a higher terrace; one of these rooms (or entire building) = library according to painted stucco inscriptions	Unknown	2 cisterns (channel and conduits possibly outside the building)	Peristyle section c. 24 × 17 m = $408 \text{ m}^2$ ; upper ter- race c. 22 × 13.5 m = $297 \text{ m}^2$ ; total = at least 705 m <sup>2</sup>	Hellenistic (3rd c BC according to stucco inscriptions?)

While the terminology of structures for athletic and educational activities is debated, the generally accepted identification is followed here: confined buildings with a courtyard and rooms are referred to as palaistrai, complexes that include space and structures for running are called gymnasia.

## 1 Syracuse

Literary sources suggest that Syracuse was provided with different gymnasia that were built from the 4th century BC onwards.9 Dionysios the Older built large gymnasia in the 4th century BC close to the Anapos River that flowed into the southwest end of the great harbor.<sup>10</sup> Another gymnasion was constructed at the end of the 4th century BC around the tomb of Timoleon, close to the agora, in the Achradina quarter; this was called Timoleonteion.<sup>11</sup> A very large example, located, in the Tyche quarter, is mentioned by Cicero.<sup>12</sup> Finally, it is debated whether a Latin inscription of the Imperial period that almost certainly contains the word gymnasium really came from Syracuse. While J. R. A. Wilson was the first to contest a provenance from Syracuse, arguing that the inscription came from Rome via Noto to Syracuse, J. R. W. Prag recently ascribed this very inscription to Syracuse again.<sup>13</sup> Several inscriptions referring to activi-

- 9 Ferruti 2004, 205; cf. also Ernst 2015.
- 10 Diod. Sic. 15.13.5: really mentions the plural, gymnasia: κατεσκεύασε δὲ καὶ γυμνάσια μεγάλα παρὰ τὸν Ἄναπον ποταμόν.
- 11 Plut. Tim. 39: ἐποιήσαντο δὲ τὴν ταφὴν τοῦ σώματος ἐν ἀγορῷ, καὶ στοὰς ὕστερον περιβαλόντες καὶ παλαίστρας ἐνοικοδομήσαντες γυμνάσιον τοῖς νέοις ἀνῆκαν καὶ Τιμολεόντειον προσηγόρευσαν. Furthermore, they (the Syracusans, note of author) buried his (Timoleon's, note of author) ashes in the market place, and afterwards, when they had surrounded it with porticoes and built palaestras in it, they set it apart as a gymnasium for their young men, and named it Timoleonteum (translation Perrin 1918). Cf. also Nep. Timol. 5.4; Polyaen. 5.3.8.
- 12 Cic. Verr. 2.4.53 §119; Lehmler 2005, 98, 103.
- CIL X, 7135; Wilson 1988; Prag 2007, 96 n. 164 without reference to Wilson 1988. This inscription was found in the so-called Roman gymnasium. 17 Since Wilson provides a convincing detailed discussion, he is followed here.
- 14 Dimartino 2011, 94, following Manganaro 1999, lists five inscriptions (lists of youths, reference to competitions, dedication of a gymnasiarch's statue), but does not explain why these would have belonged to the gymnasion in the Tyche quarter and not one of the other gymnasia. Cf. also Dimartino 2011, 122. Cordiano 1997 did not list any evidence of gymnasiarchs in Syracuse. The inscriptions identified as references to gymnasia by Manganaro 1999, 67–69 nos. 57–62, are all very fragmentary and they cannot be safely reconstructed and dated. I am very grateful to Jonathan Prag for discussion of these inscriptions.
- 15 Athen. 5.206e: Ἱέρων δὲ ὁ Συρακοσίων βασιλεύς, ὁ πάντα Ῥωμαίοις

ties in gymnasia were found all over Syracuse and linked with the gymnasion in the Tyche quarter.<sup>14</sup>

Interestingly, none of the Syracusan gymnasia can safely be linked with the patronage of Hieron II, although he is particularly known as a builder of temples and gymnasia and famous for having greatly embellished the city of Syracuse.<sup>15</sup>

While now there is general agreement about where the various quarters of Hellenistic Syracuse were located (Pl. 1), correlation of the archaeological evidence with gymnasia known from textual sources is not possible and no gymnasion has been safely identified, so far.<sup>16</sup> Three sites deserve brief discussion.

I. The site around the great altar of Hieron II that is located in the Neapolis has cautiously been identified as a palaistra, from 1954 onwards until recently.<sup>17</sup> The altar (195.85 × 20.85 m) was bordered by a large square in the west (174 × 40.9 m) that was surrounded by Doric porticoes, which included a centrally placed Ionic propylon in the west (Fig. 1).

The square itself included a centrally placed large pool ( $27 \times 12.75$  m, ca. 1.3–1.8 m deep) that was provided with waterproof revetment, stairs in two corners, and a base in its center ( $0.9 \times 1.7$ ).<sup>18</sup> Five parallel rows of cavities found in the open square were originally interpreted as evidence of trees.<sup>19</sup> While the altar is safely dated to the Hieronian period, the ensemble of

φίλος, ἐσπουδάκει μὲν καὶ περὶ ἰερῶν καὶ γυμνασίων κατασκευάς, ἦν δὲ καὶ περὶ ναυπηγίας φιλότιμος, πλοῖα σιτηγὰ κατασκευαζόμενος. "But Hieron, the king of Syracuse, he who was in all respects friendly to Rome, not only interested himself in the building of temples and gymnasia, but was also a zealous shipbuilder, constructing wheat-transports" (translation Gulick 2002). While this statement has often been related to Hieron's building activities in Syracuse, see e.g. Campagna 2004; Campagna 2006, 29, it is rather generic and does not explicitly mention the city; consequently, it is also cited as evidence of Hieron's cultural politics in his realm; e.g. Ferruti 2004, 191. Hieron's large ship, the Syrakosia, included a gymnasion; Athen. 5.206e-209e.

- 16 For reconstructed plans of Hellenistic Syracuse, see Lehmler 2005, 100 fig. 40; Mertens 2006, 311 fig. 567; Veit 2013, 30.
- First by Gentili 1954, 353: palaistra for the iuvenes and maybe even exercise venue for gladiators; resumed by Wilson 1990, 51–52, and Prag 2007, 89 n. 114.
- 18 While this pool is provided with one channel in its northwest corner, which served most likely as a supply channel (the level of its floor being about 0.60 m above the floor of the pool), no second channel (for drainage) has been found; this is nowhere commented upon; see, e.g., Parisi Presicce 2004; Wolf 2016, 40.
- 19 Gentili 1954, 354 mentions only several ditches whose function he could not explain. Stucchi 1954, 175 mentions five rows of trees. Neutsch 1954, 600–601 fig. 71, provides a plan with these five rows of cavities, including 140 in total.



Fig. 1 Syracuse, altar of Hieron II.

porticoes, pool, and trees was originally identified as an Augustan addition, based on finds.<sup>20</sup> According to G. V. Gentili, this very ensemble would have been reminiscent of the Augustan Great Palaestra in Pompeii and could have served similar purposes; however, he does not explain the rather strange combination with a monumental altar, which is missing in the Pompeian complex.<sup>21</sup>

Both the date of the ensemble and its configuration and function remain, indeed, debated. Most recently, C. Parisi Presicce and M. Wolf argued that the parallel rows of cavities would have housed stones with iron rings for fixing sacrificial animals. While, remarkably, no such stone was found here, evidence from other sites such as Klaros, Magnesia on Maeander, and Dion is cited as a possible parallel. Furthermore, the ensemble of stoai, pool, and cavities is now generally dated to the Hieronian period, for various reasons: because it is assumed that the monumental altar required some equally monumental enclosure;<sup>22</sup> because the design of the porticus would correlate remarkably with that of the altar; because the architectural elements of the Ionic propylon would resemble those of the altar in material and execution;<sup>23</sup> and because the stratigraphic context would suggest a Hellenistic date.<sup>24</sup> As a unified concept, the complex would have served as a monumental site for cults and festivals, appropriate for hecatomb sacrifices and a large audience that assembled in the porticoes. Regular athletic training can hardly be reconciled with this concept. Furthermore, literary sources mention the altar, but no gymnasion or palaistra in connection with this.

The debated chronology notwithstanding, both interpretations are intriguing, yet problematic: for the cult site theory, the precise function of the monumental pool and the absence of any of the over 100 stones for fixing animals require further explanation. The pool is certainly large and deep enough for swimming. In the eastern Mediterranean, such pools were built from the 4th century BC in gymnasia and Panhellenic sanctuaries, where they had no obvious cultic function but served for

<sup>20</sup> These came mainly from the fill of a pozzo in the north-eastern part of the square that would have been sealed by the pavement of the square; Gentili 1954, 345–350, 353.

<sup>21</sup> Gentili 1954, 353.

<sup>22</sup> Parisi Presicce 2004; Lehmler 2005, 135–145; Campagna 2013, 50; Veit 2013, 34–35.

<sup>23</sup> Wolf 2016, 48–49, based on the hitherto most detailed architectural examination of the altar-complex. The illustrative reconstruction 50, fig. 23 suggests, however, that the link between altar and porticoes was

rather awkward, because the altar was surrounded by a separate enclosure wall that was not aligned with the external walls of the south and north porticoes.

<sup>24</sup> Zirone 2011, 176, with reference to Gentili 1954, however. It is not specified whether Hellenistic could be late Hellenistic, thus late 1st century BC. Bell 1999, 274–275, is the only one who points to the problematic stratigraphy and suggests that a series of new stratigraphic soundings should be carried out in order to closer determine the date of the porticoes-pool-ensemble.

athletic and leisure swimming.<sup>25</sup> For the palaistra theory, the combination of athletic facilities with a monumental altar remains unique in the ancient world and evidence of trees in the open square should be provided. Furthermore, clear labeling of the complex is challenging since it is neither a typical Greek palaistra, lacking the common rooms around the peristyle courtyard, nor a gymnasion with separate race track and rooms for other athletic activities. A hybrid complex with sufficiently long porticoes and open courtyard space for running and with a swimming pool would be without any comparison in the 3rd century BC and is indeed only known from later periods.

2. The identification of the so-called Roman Gymnasium in the Achradina as a gymnasion has long been refuted, partially based on the design with a combination of theater, temple, and porticoes.<sup>26</sup> Recent excavations showed, however, that the complex was originally built as a quadriporticus in the late Hellenistic period; the theater and temple were only added later, in the post-Tiberian period. It is still assumed, however, that the late Hellenistic quadriporticus already included a funerary monument, a temple, or a heroon, of which no evidence has survived though.<sup>27</sup> The size of the quadriporticus would certainly have been sufficient for a palaistra, but the Late Hellenistic date excludes that this is the Timoleonteion mentioned in literary sources.<sup>28</sup>

3. In 1900, P. Orsi described "una specie di grandiosa vasca" that he excavated "sulla parte alta e pianeggiante dell'Acradina".<sup>29</sup> Today, this area is identified as "all'interno delle mura dell'Epipole", but the structure excavated by Orsi can apparently no longer be identified.<sup>30</sup> This structure had a size of 29.75  $\times$  21.8 m and its rock-cut walls were strengthened with seven buttresses on the short and nine on the long sides, which

"sporgevano dalla linea perimetrale verso l'interno"  $(0.90 \times 1.35 \text{ m})$ . All vertical and horizontal surfaces were covered with a double laver of excellent cocciopesto. Four steps led down to the structure in the northeast corner, and a half-elliptical, rock-cut and heavily cemented conduit  $(1.15 \times 0.5 \text{ m})$  was found in the center of the north wall. While the "vasca" was discovered in an elevation of 1.5 m under the modern level, its original depth is not indicated nor whether it was really fully excavated. In the fill were found many architectural elements that came probably from surrounding structures: lion waterspouts of different sizes, many cornice fragments with different moldings, fragments of figurative reliefs, all mostly made of limestone with stucco; and some colored stucco fragments. Orsi assumed that the space discovered by him was the palaistra of a quite lavishly decorated gymnasion, probably even the gymnasion in Tyche mentioned by Cicero.<sup>31</sup>

J. Delorme discussed Orsi's note in his study of gymnasia. He identified the structure as a pool ('piscine'), but doubted that it belonged to a palaistra or gymnasion.<sup>32</sup> Shortly later, R. Ginouvès cautiously proposed that this pool could be 'tardive' because of its unusual size.<sup>33</sup> Neither Delorme nor Ginouvès seem to have visited the site, and it saw no further discussion after 1962. While the space with its waterproof coating most likely contained water, the interior buttresses clearly speak against its use as a purpose-built swimming pool and suggest that this was a large roofed cistern or reservoir, possibly with additional interior supports. Therefore, this structure, whose date (Hellenistic, Roman Imperial or later period?) must remain open, cannot serve as evidence of a palaistra or gymnasion.

In sum, the design and typology of gymnasia in Syracuse currently cannot be determined. At best, one

placed; since the porticoes are ca. 6 m wide, the interior courtyard would

have been about  $64 \times 54$  m, which is generously sized for a palaistra; cf.

the measures of Hellenistic gymnasia and palaistrai von Hesberg 1995,

30 Zirone 2011, 187-188; Orsi 1900, 207, locates the site with reference to

the Atlas of Cavallari and Holms (Cavallari and Holm 1883, pl. III) close to the cistern marked with no. 70. Correlating the atlas plan with google

maps suggests that the site no. 70 was located in the area that is bordered

by the Via dei Servi di Maria in the east, the Via Giovanni Angelo Mon-

- 25 For Greek swimming pools, Trümper 2017; Trümper 2018. Wolf 2016, 49, cites the large pool (47 × 22.5 m, at least 1.3 m deep) at the Forum of Paestum as a parallel for the presumable cultic function of the Syracusan pool. This pool, which was erected in the Latin colony shortly after 273 BC, was originally included in an area with a simple enclosure wall, and its function is much debated: piscina publica, with or without cultic function (cult of Venus Verticordia?); piscina of a gymnasion; piscina of a campus for the iuventus; horreum publicum; the different interpretations are summarized in Borlenghi 2011, 234–237.
- 26 Wilson 1990, 106-111; Zirone 2011, 170-171.
- 27 Trojani 2005. For the date also Musumeci 2012.
- 28 Plut. Tim. 39; Nep. Timol. 5.4; Polyaen. 5.3.8. According to Trojani 2005, 178, fig. 1, the northern external wall was 76 m long, and the eastern external wall probably ca. 66 m, if the temple and theater were centrally

torsoli in the west, and the Via Filisto in the south. Orsi 1900, 208; Cic. Verr. 2.4.53 §119.

25-27, and von den Hoff 2009, 263-275.

- 31 Orsi 1900, 208; Cic. Verr. 2.4.532 Delorme 1960, 91.
- 2 Delotine 1900, 91.
- 33 Ginouvès 1962, 134.

29 Orsi 1900, 207.

can cautiously infer from the description of the Timoleonteion that features known from gymnasia in the eastern Mediterranean also appeared in this Syracusan gymnasion, namely porticoes/stoai and palaistrai. Literary sources suggest that gymnasia were popular at least from the 4th to 1st century BC. While the archaeological evidence presently does not allow for enriching this rather fragmentary picture with safely identifiable remains, future investigations in the courtyard of Hieron's altar, the so-called Roman gymnasium, or in other areas might change this.

## 2 Morgantina

While Morgantina is not mentioned among the cities that, according to Diodorus Siculus,<sup>34</sup> belonged to Hieron's realm after his treaty with the Romans in 263 BC, it is commonly attributed to his kingdom.<sup>35</sup> Archaeological evidence suggests that the city thrived in the second half of the 3rd century BC when it was provided with a 'standard kit' of Hellenistic cities. Even though there is no epigraphic evidence testifying to the existence of a gymnasion in Morgantina, the early excavators identified the North stoa of the agora as a gymnasion that was built in the mid-3rd century BC by Hieron II. The terrace in front of the stoa would have served as a paradromis, a racetrack under the open sky, and the various rooms of the stoa as apodyterion, loutron, ephebeion etc.<sup>36</sup> This idea was convincingly rejected by M. Bell who showed that this was a highly symmetrically organized stoa with rooms for political-administrative functions, including probably a prytaneion.<sup>37</sup>

Since Morgantina saw a major urban boom under the reign of Hieron II and was generously endowed with different public amenities (theater, stoai, bouleuterion, granaries, baths etc.) it seemed reasonable to keep looking for a gymnasion. Based on excavations in 2004/2005,

- 36 Sjöqvist 1962, 136–137; Allen 1970, 364.
- 37 Bell 1984–1985, 510–512; Bell 1988, 338 n. 77; Bell 2010, 733–734; Bell 2012, 112–113; Bell 2015, 71–72; Wilson 1990, 360 n. 92; Prag 2007, 89 n. 113.
- 38 Except for a brief reference in Prag 2007, 89 n. 113, this identification was not published in print so far, but was discussed as an intriguing idea by the team of the American Excavations at Morgantina. The South Baths – West Sanctuary Project, directed by S. K. Lucore and myself, also started with the assumption that this quarter (Contrada Agnese quarter) may

a potential candidate was identified in a quarter at the western border of the built city (Pl. 2).<sup>38</sup> This is the socalled Southeast Building on the northwestern lot (lot I) of the insula W13/14S, which is surrounded by two public baths, the North Baths across Plateia B, and the South Baths across Stenopos W14. Arguments for an identification included: I. a centrally placed wide entrance, flanked by two monumental structures, probably benches, 2. the vicinity of two public baths that would have been used in connection with the gymnasion; and 3. a strangely oblique wall in the south of the adjacent insula W14/15 S that could have delimitated a race track.

None of these arguments are conclusive and convincing, however, and recent and ongoing fieldwork further refutes this identification: With a surface area of ca. 324 m<sup>2</sup>, one lot of the orthogonal grid plan would have been astonishingly small for a palaistra building, especially in a city, where other public buildings are monumental. The race track would have been strangely placed in relation to the palaistra; at best, the entire insula with at least eight lots of 2592 m<sup>2</sup> (or even more) could have served as a gymnasion, but archaeological fieldwork does not support this idea. A geophysical survey performed in 2012 suggested that the entire insula was densely built with small structures. This is confirmed by the ongoing Contrada Agnese Project under direction of A. D. Walthall, which identified the Southeast Building as an independent building with a central courtyard. While this may have included a colonnade ('peristyle'), finds such as several large pithoi point to storage, and not to any athletic or intellectual use.<sup>39</sup> The strangely oblique southern facades of insula W14/15S and possibly also of insula W13/14S40 are most likely due to the topography of the area and not visibly to the definition of any race track.

- Walthall, Souza, and Benton 2014; Walthall, Souza, and Benton 2016;
   Walthall, Souza, and Benton 2015; Benton et al. 2015.
- 40 While the southern border of insula W14/15S was revealed in 1971, see Allen 1974, 373 fig. 11, the southern border of insula W13/14S is unknown; the geophysical survey carried out in 2012 showed similarly oblique walls in the south of this insula, which could not be safely identified as a border or external wall, however.

<sup>34</sup> Diod. Sic. 23.4.1.

<sup>35</sup> Bell 1988; Bell 1999; Bell 2007, esp. 195 n. 35; Campagna 2004, 156 n. 14 (critical discussion of the arguments); Walthall 2011, esp. 166 n. 41.

have been particularly designed and reserved for public facilities for athletic training, bathing, and other leisure or entertainment activities; Lucore 2015; Trümper 2015; preliminary reports on https://morgantina.org (visited on 27/11/2017).

So far, not a single safely identified gymnasion of the Hellenistic period is connected, spatially and functionally, with an independent public bath, because the form of 'decadent' hot bathing provided in public baths was incompatible with the notion of an ascetic toughening athletic lifestyle.<sup>41</sup> Finally, residential use of the quarter with buildings occupying a standard lot of the orthogonal grid plan was recently confirmed by excavations in the insula to the west of the Southeast Building where a residential complex with central courtyard could be identified.<sup>42</sup>

In sum, there is currently no evidence that the building boom in 3rd century BC Morgantina or any building activities in the 2nd/1st century BC included a gymnasion.

# 3 Megara Hyblaea

Megara Hyblaea certainly belonged to Hieron's realm and also provides clear evidence of Hellenistic building activity. While the Hellenistic city was much smaller than its famous Archaic predecessor, it also was endowed with certain urban amenities, if not as lavishly as Morgantina. Despite the lack of epigraphic evidence of a gymnasion, a building at the southeastern border of the excavated city was identified "without doubt" as a gymnasion or palaistra of the Hellenistic period in the French guidebook of the site, obviously because of its size and plan (Pl. 3. 1-2).<sup>43</sup> On a surface area of 850 m<sup>2</sup>  $(25 \times 34 \text{ m})$ , the building includes a large courtyard with a single colonnade in the north and rooms opening off to the north and east. The courtyard would have been used for exercise, the large northern rooms b-d (with surface areas of 40 and 52 m<sup>2</sup>) for intellectual education, and maybe the adjacent northern street B, the largest street of the city, as a racetrack. The entrance would have

41 Trümper 2009; Trümper 2014a; Trümper 2014b.

42 The South Baths – West Sanctuary project, identified the West Sanctuary as a house with a size of about 360 m<sup>2</sup> (see Monika Trümper, "Morgantina under Roman Rule. Recent Research in the Contrada Agnese Quarter", in: O. Belvedere and J. Bergemann (eds.), *Römisches Sizilien: Stadt und Land zwischen Monumentalisierung und Ökonomie, Krise und Entwicklung*. Forthcoming.)

- 43 Vallet, Villard, and Auberson 1983, 41-43.
- 44 Vallet, Villard, and Auberson 1983, 43. Different now: Tréziny 2018, 237–238.
- 45 Haug and Steuernagel 2014: rooms B15 and D2 had surface areas of 39 m<sup>2</sup>, the house had a surface area of 16–26 × 36 m (c. 790 m<sup>2</sup>) in its first

been in the east, from street D5. A well in the colonnade would have provided the water necessary for a palaistra, whereas the corresponding basins and channels vanished probably when the building was destroyed by the Romans in 214 BC. "Murs tardifs" in rooms b-d suggest that the building was reused for a different function "à l'époque romaine".<sup>44</sup>

While the size of the building is certainly impressive, it is not without comparison in local domestic architecture: the nearby house 49,19 had a similar size and also similarly large rooms.<sup>45</sup> Since the southern part of the so-called palaistra-lot was never excavated, it cannot be excluded that the courtyard was bordered by rooms in the south and southeast, thus conforming even more to typical courtyard houses. Indeed, trenches along the south and east walls of the building revealed stretches of walls that could have delineated further rooms.<sup>46</sup>

The building has never been studied in detail, and the published stone plan includes no elevations. The currently visible remains suggest, however, that the building cannot easily be reconstructed as described above, because the levels of several central features do not correlate (Fig. 2). The southern walls of rooms b, c, and d are preserved at a homogeneous level, made of large fairly well worked blocks; while the row of blocks includes no thresholds, "la disposition des marques de pose et de trous de pince autorisent la restitution de large portes de 3 m environ."47 The preserved (original?) threshold between rooms d and e is at the same (or even slightly lower) level as the row of southern blocks of room. This suggests that rooms b, c, and d had no separate thresholds and thus no lockable doors, or that at least room d had a lower level, requiring steps down from the entrance into the room (of which nothing survives). The stylobate of the colonnade is at a much higher level than both the south wall of rooms b-d and the preserved border of the well.<sup>48</sup> The well and the elevated stylo-

phase, see Haug and Steuernagel 2014, 62 fig. 70. Cf. also e.g. House 23,24 (ca. 844 m<sup>2</sup>), with at least five rooms of up to 44 m<sup>2</sup> surface area that partially open onto a single colonnade; Vallet, Villard, and Auberson 1983, 19, fig. 17. Tréziny 2018, 135–202.

- 46 Clearly visible on the stone plan in Vallet, Villard, and Auberson 1976, plans 63, 64, 69, 70. Tréziny 2018, 234 fig. 352.
- 47 Vallet, Villard, and Auberson 1983, 43. These are not visible today (without cleaning), and they are not marked on the stone plan, Vallet, Villard, and Auberson 1976, plan 63.
- 48 This is mentioned, but not further explained by Vallet, Villard, and Auberson 1983, 43. No traces of columns are visible on the rather uneven (weathered) surfaces of the blocks, and none are marked on Vallet,



Fig. 2 Megara Hyblaia, view of the 'palaistra', from SW.

bate cannot have functioned simultaneously, unless the colonnade did not allow for free circulation between the courtyard and the porticus, which would have significantly hindered or even prevented access from the main entrance in the east to all rooms in the north and east (b-g), and would certainly have been detrimental to the functioning of a palaistra. The 'stylobate' seems strange, however, consisting of three layers of blocks, the uppermost protruding above the middle, and the middle partially protruding above the lowest visible layer. It seems that the level of the stylobate was raised in a second phase of use, probably with spoils. The position of the well that the reconstructed plan locates right in front of the entrance to the largest room b (Pl. 3. 1) is rather inconvenient for circulation in the porticus and the use of room b. While no evidence of a loutron survives (waterproof pavement, stucco, drainage, basins) this would be expected in a remote corner room, such as rooms e, f, or maybe g. Carrying water from the well to any of these rooms for filling potential wash basins would have been suboptimal, at best. Finally, using one of the major streets of the city for regular training (in the nude?) seems problematic, and in any case like a rather unfortunate makeshift solution.

In sum, identification of this building as a gymnasion or palaistra "sans aucun doute"49 seems rather optimistic. Comprehensive examination of this building and an evaluation of its complex history may provide more substantial proof for determining its (changing?) function. Until then, the building should probably be taken off the list of safely identified gymnasia.

## 4 Neaiton

Neaiton or Noto antica, another Hieronian city, is the key example in the debate about Hieronian gymnasion politics because of an inscription found in situ, which records an unspecified dedication of the Hieronian Neaniskoi (youths) under the two gymnasiarchs Ariston, son of Agath... and Philistion, son of Epikrates, at an unknown date.<sup>50</sup>

έπὶ γυμνασιάρχω[ν] Άριστίωνος τοῦ Ἀγαθ[-], Φιλιστίωνος τοῦ Ἐπικράτ[εος] νεανίσ[κοι Ἱε]ρώνειο[ι].

The inscription was carved into the rock, into a slightly recessed and crudely framed field of  $0.65 \times 2.12$  m. It served as a kind of lintel or architrave "nello sfondo di un padiglione o protiro d'ingresso (prof. m. 1.6), alla porta

<sup>49</sup> Vallet, Villard, and Auberson 1983, 41. See doubts expressed by Campagna 2006, 29 n. 7, and now also by Tréziny 2018, 240.

Villard, and Auberson 1976, plan 63. Cf. now also Tréziny 2018, 235-236. 50 IG XIV, 240; Manganaro 1963, 55-56 n. 32; Cordiano 1997, 61; ISic 1060; http://sicily.classics.ox.ac.uk/inscription/ISic1060 (visited on 10/11/2018).



Fig. 3 Neaiton, 'gymnasion,' staircase 4 and cistern 5, area 6, and copy of inscription (arrow) from SE.

che metteva ad un camerone di m.  $6 \times 4.65$ ."<sup>51</sup> Since the inscription was sawed out and brought to the Biblioteca civica of Noto in 1894, and no photo or drawing documents its original position, the original context and function can no longer be evaluated. Today, a copy of the inscription is visible on site, carved into a large detached rock that shows some signs of working and dowel holes and may originally have belonged to the ceiling of one of the nearby rock-cut rooms (Fig. 3). Two aspects of the inscription are debated: first, whether Hieron is mentioned as the 'owner' of the neaniskoi, or as the founder of the gymnasion; second, whether the inscription was carved during the reign of Hieron, thus before 215 BC, or at a later date.<sup>52</sup> Both problems cannot be discussed in detail here, even if a date before 215 BC seems more likely. As a reference to a gymnasion built by Hieron himself, the inscription would be highly astonishing as Hieron is not mentioned either as an active donor and euergetes in the nominative nor as the recipient of honors in the dative. In contrast to other gymnasia that pre-

52 See discussion in Ferruti 2004, 193: gymnasion called after Hieron; Cordiano 1997, 61–63, votes for groups of youth called after Hieron; Lehmler 2005, 185, who generally doubts that Hieron pursued a program of cultural politics and systematically dedicated buildings in the cities of his realm, argues without further reference: "Es wurde in der Forschung sicherlich zu Recht nie daran gezweifelt, daß die nach Hieron II. benannten Neaniskoi in einem von Hieron gestifteten Gymnasion untergebracht waren." Similarly Campagna 2006, 29. Date 2nd century BC: Manganaro 1963, 55–56; La Rosa 1987–1988; Lehmler 2005, 185; ISic 1060,

sumably carried the names of their donors<sup>53</sup> the term Hieroneion is specifically not used here. And for no other example, Ptolemaic, Antiocheian or similar youths are known as reference to a gymnasion built by these rulers.

Even if the original position of the inscription remains unknown, the site where it was found can be assessed for its design and possible function. While the site was explored with some trenches and cleaning in 1972 and 1974, no comprehensive examination of all surviving features was ever published.<sup>54</sup>

The complex identified as the gymnasion of Neaiton is located on the eastern slope of the city and includes a group of differently oriented and sized rock cut rooms, and an impressive terrace wall system, excavated for a length of about 80 m. The latter was dated to the Hieronian period, based on the wall technique and "pochi frammenti a vernice opaca raccolti sporadicamente nella zona."<sup>55</sup> The terrain between the rooms and terrace wall is about 28 m wide, but structures partially excavated on this terrace all belonged to post-ancient periods. The

http://sicily.classics.ox.ac.uk/inscription/ISic1060 (visited on 10/11/2018); date 3rd century BC: Cordiano 1997, 61; implicitly also Ferruti 2004, Prag 2007, 91, does not really discuss the date, but seems to assume a Hieronian date.

- 53 The evidence was last assembled by Ameling 2007, 134–135 n. 34, who points out that only the Athenian Ptolemaion, which can safely be identified as a gymnasion, was demonstrably called after its donor.
- 54 Published by La Rosa 1987–1988; otherwise, see Orsi 1897, 81–82; La Rosa 1971, 58, 87–88; Arcifa 1993, 410; Ferruti 2004, 196–198.
- 55 Arcifa 1993, 410.

<sup>51</sup> Orsi 1897, 81.



Fig. 4 Neaiton, plan of the 'gymnasion'

bottom of the terrace wall is significantly lower than the openings of the rock cut rooms. Since the level of the rock cut rooms is nowhere indicated, however, it cannot be safely determined whether there was ever a wide terrace at one single level to the east of the rock cut rooms, and at what level this would have been in relation to the rock cut rooms.<sup>56</sup>

It was assumed that the rock cut rooms served various functions related with the gymnasion, such as for administration (office of the gymnasiarchs), cult, changing (apodyterion), and education, and that the open terrace housed a dromos, paradomis or xystos.<sup>57</sup> Since a terrace of 28 m width seems generous for a simple racetrack, F. Ferruti argued that this could have housed the courtyard of the palaistra, whereas the paradromis should be located further south.<sup>58</sup>

The currently visible remains cannot easily be reconciled with the typology, design and function of wellknown gymnasia of the Late Classical and Hellenistic period. A brief overview of the features reveals numerous problems and questions that are not addressed in literature.<sup>59</sup>

Five rooms or caves can be identified (Fig. 4, nos. 1, 2, 3, 7, 8), of which the largest two are still accessible (Fig. 4, nos. 2, 7); between these rooms, a built staircase with 13 steps (Fig. 4, no. 4) leads to the arched opening of a cistern. The site obviously suffered from some destruction by natural catastrophes (among them probably the famous earthquake in 1693 that destroyed the baroque city), which is most obvious in the area between the staircase and room 7 (Fig. 3; Fig. 4, no. 6); here, several large fragments seem to have broken off the natural rock, among them the worked piece with the copy of the inscription. Nevertheless, apart from this short stretch, the façade of the rock cut rooms seems largely preserved in its original (ancient) state. This is obvious from several facts: the rock was worked and smoothed in many places; the staircase seems fully preserved in a corner between the facades of stretches 3 and 6 (Fig. 3); and, most importantly, all stretches of the façade, except for the broken stretch no. 6, show various cuttings: round, rectangular or arched holes that may (at least partially) have served as (votive) niches; and a well-made channel that runs over

- 56 The stone plan in La Rosa 1987–1988, pl. III includes only elevations for the remains of the terrace wall system. The published section pl. XI shows only the pavement of a 16th century house on the terrace, which is almost 5 m above the bottom of the terrace wall. Since the rock cut rooms are significantly higher, the terrace wall must have been at least 10 m high in order to support a flat terrain at the level of the rock cut rooms.
- 57 Orsi 1897, 81-82; Arcifa 1993, 410; Ferruti 2004, 196-198.

58 Ferruti 2004, 198.

59 The following observations are based on a brief visit to the site in August 2016, when vegetation was still high and dense. For easier reference, rooms and features discussed here are marked with numbers on the plan Fig. 4.



Fig. 5 Neaiton, 'gymnasion,' caves 1 and 2, from NE.



Fig. 6 Neaiton, 'gymnasion,' cave 2 and façade of cave 3, from SE.

the openings of rooms 7 and 8, through a large rectangular niche between these two rooms. Similar cuttings are visible in the rooms themselves, which will briefly be described.<sup>60</sup>

- Room 1 has, according to the published plan, a size of  $2.5 \times 3.4 \text{ m} (8.5 \text{ m}^2)$ ; its slightly arched wide opening is at least 2 m lower than that of the adjacent
- 60 No detailed description is provided in literature.

room 2, and it is almost entirely blocked with debris (Fig. 5). The smoothed rock façade above the opening shows an oblique groove, and on top the remains of a well-made ashlar wall (at least four layers).

- Room 2 has a size of at least  $8.7 \times 4.3$  m (37.4 m<sup>2</sup>) and is 3.8 m high.<sup>61</sup> The opening of about 8 m width is supported by a large central pillar that supports
- 61 Measures provided in La Rosa 1971, 87; the plan La Rosa 1987–1988, pl. III suggests a larger size: ca. 9.4 × 6.9 m.



Fig. 7 Neaiton, 'gymnasion', cave 2 SW corner, from NE.

the ceiling (partially cracked today) (Figs. 5, 6, 7). All walls are covered with cavities of different sizes, particularly in the lower parts (which could be easily reached?). The west wall includes a large niche that reached from the floor almost to the ceiling and seems to have been made to house something special, such as a statue or statue group. The bottom of the south wall and the northern west wall have man-made recesses under the small niches, probably destined for housing something (couches, chests, benches?). The transition to the façade stretch 3 was worked as a large recessed field with an arched top that includes a small arched niche.

- Stretch 3 is a smooth stretch of rock that includes some holes / 'niches', roughly in a horizontal line at the same level (Figs. 3, 6). Under these holes is the opening to another rock cut room or recess (c.  $3 \times 1.5$  m, 4.5 m<sup>2</sup>), which is almost entirely hidden behind debris and was as low as that of room 1.<sup>62</sup>
- The seven lower steps of the staircase (4) are made of well-cut blocks, sitting on a rubble foundation that is built against the rock (Fig. 3). The upper steps are carved out of the rock.

- The cistern (5) has an arched opening right next to the steps of the staircase (Figs. 3, 8); it is round, widening from top to the bottom that is not visible, though, because the cistern is partially filled with debris; waterproof red plaster covers the visible parts of the interior. Above the arched opening are the remains of a wall made out of roughly cut blocks (at least two layers). A channel was cut into the rock, leading from the arched opening with a slight decline to the east, above the rock cut steps of the staircase; after a short stretch (four rock cut steps) it joins a vertical rock cut channel that comes from the terrace above rooms 6 and 7 and ends in another horizontal rock cut channel, at the level of the lowest rock cut step of the staircase. This channel follows the staircase until it breaks off, where part of room 6 was destroyed.

- Area 6 maybe have been the "vestibule" or "prothyron" described by P. Orsi,<sup>63</sup> but its design and accessibility currently cannot be reconstructed (Fig. 3). Since the façade of room 7 seems to be fully preserved, room 6 cannot have served as a vestibule to this room.
- Room 7 was described as a rectangular room with a

62 Its size may be suggested with a thinly dotted line on La Rosa 1987–1988, ious rooms, bu pl. III: 1.25 × 3.1 m. This plan shows some recesses and niches in the var- 63 Orsi 1897, 81.

ious rooms, but not consistently all of those that are currently visible. Orsi 1897, 81.



Fig. 8 Neaiton, 'gymnasion,' cistern 5 with channel system and built wall, from S.



size of ca.  $6.15 \times 4.65$  m (28.6 m<sup>2</sup>) (Figs. 3, 9, 10).<sup>64</sup> Since there are several cuttings in the worked rock above the northern part of its opening, the room can never have been fully rectangular. The opening is significantly lower than that of room 2, and it may have included above its southern part or between room 7 and 6 the inscription. In the interior, room 7 shows several cuttings in the south wall, among

64 Orsi 1897, 81:  $6 \times 4.65$  m; La Rosa 1971, 87:  $6.15 \times 4.25$  m; the inscription would have been carved above the entrance to this room.

Fig. 9 Neaiton, 'gymnasion,' caves 7 and 8, façade with niche, channel, and cavities, from E.

them at floor level a large well-made niche in the southwest corner that may have housed something; a similar large niche is visible in the center of the north (or northwest) wall. Large parts of the walls and ceiling are covered with a whitish plaster. The room is filled with debris, among them several large blocks, and its entrance is partially blocked with a (modern) rubble wall.



Fig. 10 Neaiton, 'gymnasion,' cave 7, W corner, from E.

- The entrance of room 8 is lower than that of room 7 and today largely blocked by debris (Fig. 9); it may have had a size of about  $3.75 \times 4.7$  m (17.6 m<sup>2</sup>).
- Finally, the well smoothed rock façade above rooms 7 and 8 includes several rock cut features (Figs. 9, 11): 1. a large rectangular niche just at the intersection of the rooms that shows each two grooves in its upper side walls; 2. a half-round channel that ran from the south down to the north, leading through the large niche;<sup>65</sup> its precise provenance is unknown, but its seems to come from the terrace above 6, where some source such as a reservoir may have been located that also fed the channel system next to the staircase; its destination is also unknown because it just vanishes in the debris at the northern end of room 8. Above the channel, the rock facade of room 8 shows further cuttings for some unknown function; remains of a wall with roughly cut blocks are visible on top of the rock façade of rooms 7 and 8.

In sum, the remains are much more complex than hith-

erto known, incorporating built features and the rock that was exploited in its natural configuration, but also clearly worked in all visible parts (rooms 2 and 7, façade). It cannot be determined whether the group of rooms I– 8 with their highly irregular façade and varying orientation ever functioned as a clearly defined ensemble. There was obviously some larger built feature on top of features 6–8 that was most likely connected with the cistern and the channel systems, suggesting some coherent planning and function.<sup>66</sup>

Two key problems remain to be discussed: The first key problem is dating: apart from the inscription that may have been seen in situ (but not further documented) by T. Fazello in 1558,<sup>67</sup> thus before the big earthquake, no safe evidence for dating survives. The overall well preserved rock walls provide no further evidence of inscriptions or at least graffiti which may seem astonishing. Problems of chronology regard particularly the numerous cuttings in the rooms and the façade, which, in theory, could have been made any time in antiquity or later. For example, the detached inscription shows two round holes right in the center of the second line and a larger rectangular cutting at the upper right edge, which

<sup>65</sup> A groove in the south wall of the niche suggests that a half-circular open channel made of wood, metal or terracotta bridged the niche between the rock cut parts. The water features are mentioned briefly by La Rosa 1971, 88 n. 175: "Sulla parete di roccia nella quale si aprono i cameroni, resti di canalette di scolo intagliate."

<sup>66</sup> Some cuttings and features are visible above rooms 2–3, from the topmost step of the staircase; but this area is too heavily overgrown for further evaluation.

<sup>67</sup> Ferruti 2004, 192.



Fig. 11 Neaiton, 'gymnasion', channel in façade of caves 7 and 8, from N.

all must post-date the carving (and major use?) of the inscription.<sup>68</sup> While some of the holes or the plaster in the caves could even have been made by shepherds and peasants after the earthquake of 1693, when the city was otherwise largely abandoned, this seems less likely for the more sophisticated system of channels and the large rectangular niche.<sup>69</sup> Even the impressive terrace wall system, which is still partially visible today, cannot be safely dated because the wall technique of the few preserved layers is hardly conclusive.

The second key problem is function: what were the wide open rooms with remarkably different heights of their openings<sup>70</sup> used for? Were they appropriate for any administrative function, athletic training (in the nude)

68 See the photo of the detached inscription in Orsi 1897, 82.

- 69 La Rosa 1971, 88, assumed that the arched opening of the cistern was "verosimilmente posteriore", without giving any evidence or argument, however; it seems clearly linked with the channel system next to the staircase.
- 70 This requires further examination and explanation: rooms 1, 3, and 8 could only have been realistically accessible if the level of the terrain in front of them was significantly lower than today; consequently, the opening of room 2 would have been remarkably high.
- 71 Cf. the nearby caves with numerous niches, inscriptions and reliefs that

and intellectual education, or rather for other activities such as cult,<sup>71</sup> assemblies, and dining? The water system is not visibly connected with any feature that may have served as a loutron, and the niche crossed by a channel rather suggests some cultic or decorative function, for example as a nymphaion. Finally, the completely irregular rock façade could not have been linked with built features on the wide terrace, such as a colonnade or palaistra right in front of the rock cut rooms: features in front of the caves could not have been easily roofed (or at all) and would have taken all light from the caves.

Thus, for now the example in Noto does not allow for closer assessing a Hieronian or later standard gymnasion type – if this complex ever was a clearly defined gymnasion-complex at all.<sup>72</sup>

# 5 Akrai

Akrai also belongs to the cities that were certainly part of Hieron's kingdom after 263 BC. A very fragmentary inscription mentioning two gymnasiarchs was found in 1814 in an unknown context and dated to the second half of the 2nd century BC, based on the lettering. The preserved fragments may have belonged to the records of gymnasiarchs.

ἐπὶ Ἀ[- - - - - τοῦ]
Ἀρτέμ[ωνος Ἀφροδίται?]
γυμνασ[ίαρχοι]
Ἀρχέδαμ[ος]
Νυμφο[δώρου]
Πολύκλε[ιτος
[- - - - ]<sup>73</sup>
[Ἐπ]ὶ Ἡρα[κλείοῦ? τοῦ δεῖνα]

were identified as a Heroon: La Rosa 1971, pl. XIV, 3-4.

- 72 The ensemble recently excavated in Cava d'Ispica shows many similarities with the complex of caves in Noto, and full publication of the first may provide further insights for evaluating the second. The two largest caves in Cava d'Ispica include rock cut benches along three walls, however, which are clearly visible on the published plan and photo; Sammito and Rizzone 2014, fig. 8 pl. IX.
- 73 IG XIV, 213, followed by Cordiano 1997, 41–43 except for line 1 where he prefers Manni Piraino's interpretation, see Manni Piraino 1972–1973, 56–57 no. 31.

Άρτέμ[μιτι καὶ — — — — — ] γυμνασ[ίαρχοι – – – – – –] Ἀρχέδα[μος – – – – – –] Νυμφο[δώρου? – – – – –] Πολύκλ[ειτος – – – – –] [τοῦ δεῖνα]<sup>74</sup>

While the theater and bouleuterion of Akrai are commonly dated to the 3rd century BC, thus testifying to a certain wealth and building boom under Hieron II, no gymnasion was ever identified. Furthermore, the post-Hieronian period of Akrai has received little attention until recently. Since 2009, a Polish project focuses on investigating the Roman to Byzantine periods of Akrai, employing various non-invasive methods and excavation.<sup>75</sup> The project does not include the complex of interest here, however, notably the so-called agora.

The area to the west of the theater and bouleuterion was presumably excavated in the 1980s to early 2000s, but never published beyond a rudimentary sketch.<sup>76</sup> Because of its location, west of the bouleuterion, south of the major east-west artery of the city, the area is commonly identified as an agora. The most remarkable excavated feature is a round room with a diameter of 10.2 m that is half cut into the rock, half built (Figs. 12, 13, 14, 15).<sup>77</sup>

This room can be identified as a laconicum, a round sweat bath, based on the following criteria: a very narrow entrance door; a small triangular shaped anteroom with benches; waterproof pavement and stucco; some revolutionary roofing system of which cavities in the rock cut walls as well as built walls and some terracotta fragments preserved in situ in one of the cavities survive;<sup>78</sup> and typological comparisons, most notably with a similar room in the palaistra of Solunto (Pl. 4).

Currently, 42 safely identified round sweat baths are known from the entire Mediterranean, which were built in the 2nd and 1st centuries BC and not yet provided with sophisticated floor- or wall heating.<sup>79</sup> While

- 74 Manni Piraino 1972–1973, 56–57 no. 31. Cf. now also ISic 1033; http: //sicily.classics.ox.ac.uk/inscription/ISic1033 (visited on 10/11/2018).
- 75 Chowaniec 2014 with further literature.
- 76 Voza 1999, 129-139.

these bathing facilities were included in a remarkably broad variety of contexts, among them public baths, houses, clubhouses, gymnasia, and porticus-complexes, none was ever attached to a safely identified agora. The largest examples, with diameters of 5.9 to 9.95 m<sup>80</sup> were only found in gymnasia or palaistrai. Thus, the round room of Akrai, with 10.2 m the largest of the entire list, most likely belonged to a palaistra or gymnasion.

There are other features that support - or at least do not contradict - this identification. The plan published by G. Voza<sup>81</sup> and Google Earth allow for identifying some features of the excavated area. The laconicum may have been situated in the southwest corner of a building that was prominently located on or close to the main east-west artery of the city. This street had been provided with a pavement and sidewalks in the 1st century BC.<sup>82</sup> The building may have included a central peristyle courtyard with a cistern and rooms in the south and west (Figs. 14, 15). A line of well-worked blocks is visible in the southern part of the building, to the east of the round room. This may have been the stylobate of a stoa, suggested also by the pillars set up here (in modern times; Fig. 15). Some rock cut rooms with fairly regular, rectangular layouts opened onto this colonnade in the south. Just north of the stylobate, a fairly large rock cut pool may have served as a cistern; another, smaller equivalent is visible further west, close to the entrance of the laconicum (Figs. 14, 15). Rock cut steps in the western part of the area, to the north of the round room, may have belonged to another stoa without or with small rooms. A well-made niche with a molded socle in the northeastern outer corner of the round room may have been a small shrine or have housed an honorary monument. The rock cut rooms remind of the situation in Neaiton, but they are much more regularly organized here and combined with the conclusive laconicum.

While the size and plan of this complex currently cannot be determined, the size of the laconicum suggests that this was an ambitiously large ensemble. An area or

79 Trümper 2008, 258–275.

- 80 Trümper 2008, 421–426 tab. 3: diameters of round rooms in the gymnasia of Assos (8.45 m), Eretria (9.95 m), Solunto (6.7 m), and Thera (5.92 m).
- 81 Voza 1999, 131 fig. 101.
- 82 Voza 1999, 129–139.

<sup>77</sup> In 2003, I received generous permission from G. Voza to study this room on site, which is most gratefully acknowledged here.

<sup>78</sup> The fully preserved rock cut cavities are remarkably long; of the cavities cut into ashlar blocks only the lowest part survives, because only one layer of ashlars is preserved. Wilson 2013, 96 n. 48, assumes brick ribbing. Guards on site confirm that the entire roof was found collapsed

onto to the floor, but the evidence was never published. It must remain open whether the room was covered with the traditional conical dome or already with a half dome, which would have been revolutionary.

Site – Gymnasion (or parts of it)	Area in m <sup>2</sup>
Agrigento, Paradromis / Xystos and pool	at least 4368 (excavated area)
Akrai Insula/Area	c. 4480–4760 (hypothetical-
	ly calculated size of insula)
Amphipolis	
– Palaistra	1600
– Paradromis	5000
– Total	6600
Delos ("Gymnasion")	
– Palaistra	3500
– Stadion	8400
– Total	11 900
Delphi	
–Palaistra	1200
– Loutron	750
– Paradromis	5000
– Total	6950
Eretria, Upper Gymnasion (double palaistra)	2593
Miletus, Hellenistic Gymnasion	1600
Neaiton	
<ul> <li>Rock-cut rooms</li> </ul>	c. 100
- Terrace in front of rooms $(28 \times 80)$	c. 2240
Olympia	
– Palaistra	4500
– Paradromis	20 000
– Total	24 500
Pergamon	
– Upper Terrace	6600
– Kellerstadion Area	7000
– Middle Terrace	5500
– Lower Terrace	1000
– Total	20 000
Solunto, Gymnasion (Palaistra)	1008
Syracuse, Area of Altar (Porticus triplex with courtyard)	7117
Syracuse, Quadriporticus of Roman Gymnasium	c. 5016
Taormina, 'Library' peristyle courtyard with rooms on 2 terraces	c. 705

Tab. 2 Gymnasia/palaistrai, comparison of sizes (sizes of non-Sicilian examples according to von den Hoff 2009; Ackermann and Reber in this volume).



Fig. 12 Akrai, schematic plan of area around the round room.

'insula' of about 80–85 NS  $\times$  56 EW (4480–4760 m<sup>2</sup>) is bordered by streets in the north and west, and probably also east,<sup>83</sup> and by a steep cliff in the south (Fig. 12). The palaistra may not have occupied the entire 4480-4760 m<sup>2</sup>, but have been bordered by shops in the north or even included a race track (in the east). It is quite clear, however, that there is not sufficient space for an additional appropriately sized agora.

A comparison with other sufficiently preserved

gymnasia/ palaistrai shows that an area of 4480-4760 m<sup>2</sup> would have been generously sized for a palaistra only, whereas it would have been small for a palaistra with race track. Furthermore, even the north-south extension of the area is not sufficiently long for a standard race track (Tab. 2).

Comparison with other agorai is much more difficult because comparable parameters are much harder to define.<sup>84</sup> A scale to scale comparison of several Sicilian

<sup>83</sup> This is suggested by the sketch in Voza 1999, 131 fig. 101: the street ran to 84 What should be included into calculations: the open courtyard, stoai, the west of the bouleuterion, which is located on a higher level than the laconicum and surrounding features.

adjacent 'appropriate' buildings such as bouleuteria that may also be located on different terraces and not immediately on the agora?



Fig. 13 Akrai, 'palaistra', laconicum, from NW.



Fig. 14 Akrai, 'palaistra', SW corner, from NE.

sites demonstrates, however, that the area in Akrai would have been small for an agora compared to the overall size of the city.<sup>85</sup>

In sum, it is argued here that the so-called agora of Akrai was a palaistra or even gymnasion and that the real agora should be located somewhere else, for example in the vast area to the north of the theater and main road. The crucial question of the date remains to be discussed. Currently, only typological criteria can be cited, notably the inclusion of a round sweat room, which has no safely dated parallels before the 2nd century BC. This would agree with the date of the above-mentioned inscription and the construction date of the gymnasion in Solunto, which is the closest typological comparison in Sicily.

of an independent monumental stoa seem to have been found in Akrai, similar to several stoai of the agora of Morgantina and the Pi-shaped stoa of the agora in Solunto.

<sup>85</sup> Morgantina: city 78 ha; agora (square with stoai and adjacent buildings)
c. 30 000 m<sup>2</sup>; Solunto: city 18 ha, agora (square with stoa) c. 2312 m<sup>2</sup>;
Akrai: city 36 ha, 'agora' terrain 4480-4760 m<sup>2</sup>; furthermore, no elements



Fig. 15 Akrai, 'palaistra', S part with stoa, from NE.

# 6 Conclusion

The balance of gymnasia in eastern Sicily is disillusioning (Tab. 1). While literary and epigraphic sources testify to the existence of gymnasia from the 4th century BC onwards, not a single building survives that can safely be identified as a palaistra or gymnasion and is sufficiently preserved for assessing the typology, design, and function of this building type in eastern Sicily.

- The complexes in Syracuse are either sufficiently preserved, but not safely identifiable as a palaistra/gymnasion (peristyle courtyard next to Hieron's altar) or not fully preserved and thus not safely identifiable (Quadriporticus of the Roman Gymnasium).
- Morgantina provides no reasonably identifiable evidence at all.
- The presumable palaistra in Megara Hyblaia is fairly well preserved, but cannot be securely recognized as a palaistra.
- It is not certain that the often cited structures in Neaiton were ever used as a clearly defined and confined palaistra/gymnasion complex. Without the in-

scription, the site certainly would never have been identified as a potential venue of gymnasion activities as it lacks any well-known standard features that might suggest such a function. If the caves and possible adjacent structures served for athletic training and intellectual instruction, the 'gymnasion' may have been a site with little elaborated features and maybe even without access control.

- Akrai was recognized here as the site with the most securely identifiable gymnasion, although no gymnasion had been identified in literature so far. Since the complex has not been completely excavated, it cannot serve to reconstruct the possible typology of gymnasia in eastern Sicily. It may have been similar, however, to the only fully known and safely identifiable palaistra of entire Sicily, notably the one in Solunto (Pl. 4), but it was certainly significantly larger.<sup>86</sup>
- None of the examples discussed here is fully published, including architecture and finds and providing a safely established chronology. In fact, dating remains a crucial problem for all examples, certainly regarding the archaeological remains and often also the inscriptions. This concerns not only the date of
- 86 For the palaistra of Solunto, which is commonly called 'ginnasio'/gymnasion, see Cutroni Tusa 1994, 77–79; Mistretta 2013; Sposito

2014, 212–219.

construction, but also the later history and point of abandonment of the complexes. Therefore, archaeology currently does not allow for assessing the development and significance of the gymnasion as an institution and building type in eastern Sicily.

The many uncertainties regarding the examples discussed here render a comparative synthetic assessment of key features rather pointless. The urban context cannot be evaluated because central characteristics of the respective cities, such as the location of the agora, are unknown.87 Two well-known examples suggest, however, that there were no obligatory standards for the location of palaistrai/gymnasia in Sicilian cities: the example in Solunto is located right next to the agora, whereas the one in Agrigento was built a significant distance away from the safely identified (upper) agora.<sup>88</sup> While location certainly mattered, local conditions and particularly the availability of space will have determined the placing of gymnasia, and not ideological concepts such as a specific intraurban or suburban location or a compellingly close combination of agora and gymnasion.89

Examining an easily assessable and commonly standard feature of gymnasia such as bathing facilities, only two of the examples discussed here provide conclusive evidence, notably the complex next to Hieron's altar and the building in Akrai. The aforementioned safely identified examples, the gymnasion in Agrigento and the palaistra in Solunto, both included bathing facilities, suggesting that this was common in Sicilian athletic facilities. The lack of bathing facilities in the Quadriporticus of Syracuse and the complexes of Megara Hyblaia and Neaiton<sup>90</sup> may go back to the insufficient state of excavation, preservation, and publication, but may also indicate that these were not (standard?) athletic facilities.

A stronger common denominator is the courtyard with stoa(i) or even peristyle courtyard, included in the complexes of Syracuse, Megara Hyblaia, and Akrai, but this element is far too generic and common in many different Hellenistic building types and contexts to serve as a conclusive criterion for identifying palaistrai.<sup>91</sup>

Textual sources are only little more illuminating for reconstructing the appearance of gymnasia in eastern Sicily. When Plutarch mentions stoai and palaistrai for the Timoleonteion in Syracuse that served as a gymnasion for the neoi, he lists elements known from Greek gymnasia in the eastern Mediterranean. Plutarch is a late source, however, and his remarks cannot easily be understood. He suggests that an agora<sup>92</sup> was transformed into a gymnasion, by first building Timoleon's tomb in the agora, then surrounding the agora with stoai, and finally building palaistrai within or next to the agora. This is an intriguing, yet unparalleled genesis and description of a gymnasion, which does not allow reconstructing the design of this specific gymnasion, let alone of others in and outside the city.<sup>93</sup>

The gymnasia that Hieron built on his ship and elsewhere<sup>94</sup> are not described in any detail. The extensive financial accounts from Tauromenion confirm that numerous agones were held and oil was used in the local gymnasion,<sup>95</sup> but otherwise do not mention any expenses for the construction and maintenance of structures in the gymnasion.

Coming back to the initial question: Prag's optimistic assumption currently cannot be corroborated by the archaeological record for the Hellenistic or even Roman period of eastern Sicily, either because gymnasia did not exist in great numbers, were not yet found, or were not recognized because they did not include designs and features common of Greek equivalents in the eastern Mediterranean; they may have been sites, equipped at best with temporary or makeshift features, rather than elaborate built complexes. If the complexes in Akrai and Syracuse were only built in the 2nd and 1st century BC and served for gymnasion activities, they would confirm Campagna's argument.

Hieron's building and cultural politics regarding gymnasia in Syracuse and in his realm cannot be assessed

87 For example, from the examples listed in table. I, the location of the agora is only safely known in Megara Hyblaia, Morgantina, Solunto, and possibly Tauromenion, but not in Akrai, Neaiton, and Syracuse.

90 As well as those in Tauromenion.

91 Emme 2013, and B. Emme in this volume.

92 Plut. *Tim.* 39, see above n. 11. It remains open whether this is one of several agorai in Syracuse, and whether this would have been the main or a secondary agora.

- 94 Athen. V 206e, 207d.
- 95 Cordiano 1997, 72-82.

<sup>88</sup> Assuming with Wilson 2012, 246–247, that the so-called lower agora is a modern fiction. For the gymnasion in Agrigento, see Fiorentini 2009.

<sup>89</sup> Against ideologically motivated standard locations: von den Hoff 2009, 252; pro: von Hesberg 1995; Mistretta 2013 who identifies a specific agora-gymnasion-type.

<sup>93</sup> To name just some problems: did the stoai around the former agora serve as trace tracks; why did the complex include two or more palaistrai, although Plutarch mentions only the neoi as users, and where exactly were these palaistrai located in relation to the agora with stoai?

from the archaeological record; even the structures in Neaiton should be evaluated much more cautiously than is commonly done based on a single problematic inscription. Research on gymnasia outside of Hieron's realm, most notably in Agrigento and Solunto,<sup>96</sup> has already shown that the gymnasion was an important institution in the Late Hellenistic period when it was included in urban building programs as a clearly defined, built feature, prestigious and in even monumental. Providing more reliable dates and information for the complexes discussed here, particularly the example in Akrai, could substantiate this picture and significantly contribute to the ongoing reevaluation of cities in Roman Sicily.

<sup>96</sup> Cutroni Tusa 1994, 77–79; Fiorentini 2009; Mistretta 2013; Sposito 2014, 212–219.



Pl. I Syracuse, plan of the city.



Pl. 2 Morgantina, Contrada Agnese Quarter, plan.





Pl. 3 Megara Hyblaia, 'palaistra' stone plan (r) and reconstructed plan (z).



Pl. 4 Solunto, Gymnasion, schematic plan.

# Bibliography

## Allen 1970

Hubert L. Allen. "Excavations at Morgantina (Serra Orlando). 1967–1969. Preliminary Report X". *American Journal of Archeology* 74 (1970), 359–383.

## Allen 1974

Hubert L. Allen. "Excavations at Morgantina (Serra Orlando). 1970–1972 Preliminary Report XI". *American Journal of Archaeology* 78 (1974), 361–383.

## Ameling 2007

Walter Ameling. "Wohltäter im hellenistischen Gymnasion". In *Das hellenistische Gymnasion*. Ed. by Daniel Kah and Peter Scholz. Berlin: Verlag Antike, 2007, 129–162.

## Arcifa 1993

Lucia Arcifa and Vincenzo La Rosa. "Noto". In *Bibliografia* topografica della colonizzazione greca in Italia e nelle isole tirreniche XII. Ed. by G. Nenci. Pisa: Scuola Normale Superiore, 1993, 410–412.

## Bell 1984–1985

Malcolm Bell. "Recenti scavi nell'agora di Morgantina". *Kokalos* 30-31 (1984–1985), 501–520.

#### Bell 1988

Malcolm Bell. "Excavations at Morgantina, 1980–1985. Preliminary Report XII". *American Journal of Archaeology* 92 (1988), 313–344.

## Bell 1999

Malcolm Bell. "Centro e periferia nel regno siracusano di Ierone II". In *La colonisation grecque en Méditerranée occidentale. Actes de la rencontre scientifique en hommage à Georges Vallet* (*Naples and Rome, 15–18 novembre 1995*). Collection de l'Ecole française de Rome 251. Rome: École française de Rome, 1999, 257–277.

#### Bell 2007

Malcolm Bell. "An Archaeologist's Perspective on the Lex Hieronica". In *La Sicile de Cicéron: Lectures des Verrines*. Ed. by J. Dubouloz and S. Pittia. Besançon: Presses Univ. de Franche-Comté, 2007, 187–203.

#### Bell 2010

Malcolm Bell. "Serra Orlando". In *Bibliografia topografica della colonizzazione greca in Italia e nelle isole Tirreniche* XVIII. Ed. by G. Nenci and G. Vallet. Pisa, Rome, and Naples: Scuola Normale Superiore, 2010, 724–751.

#### Bell 2012

Malcolm Bell. "Spazio e istituzioni nell'agora greca di Morgantina". In *Agora greca e agorai di Sicilia*. Ed. by C. Ampolo. Pisa: Edizioni della Normale, 2012, 111–118.

## Bell 2015

Malcolm Bell. "Gli dei dell'agora". In *Morgantina ieri e oggi*. Ed. by L. Maniscalco. Palermo: Museo di Aidone, 2015, 68–81.

#### Benton et al. 2015

Jared Benton, R. Benjamin Gorham, Alex Walthall, Randall Souza, Leigh A. Lieberman, David Massey, James Huemoeller, Jared Benton, Anne Truetzel, and Aislinn Samalling. "Recenti scavi a Morgantina: il progetto Contrada Agnese (2013–2014)". *Geologia dell'Ambiente*. Supplemento al n. 2/2015 (2015), 19–24.

## Borlenghi 2011

Aldo Borlenghi. Il Campus. Organizzazione e funzione di uno spazio pubblico in età romana. Le testimonianze in Italia e nelle Province occidentali. Rome: Quasar, 2011.

#### Campagna 2004

Lorenzo Campagna. "Architettura e ideologia della basileia a Siracusa nell'età di Ierone II". In *Nuove prospettive della ricerca sulla Sicilia del III a.C. Archeologia, numismatica, storia. Atti dell'Incontro di studio, Messina, 4–5 luglio* 2002. Ed. by M. Caccamo Caltabiano, L. Campagna, and A. Pinzone. Soveria Mannelli: Dipartimento di Scienze dell'Antichità dell'Università degli Studi di Messina, 2004, 151–189.

#### Campagna 2006

Lorenzo Campagna. "L'architettura di età ellenistica in Sicilia. Per una rilettura del quadro generale". In *Sicilia ellenistica, consuetudo italica. Alle origini dell'architettura ellenistica d'Occidente. Spoleto, Complesso monumentale di S. Nicolò, 5–7 novembre 2004.* Ed. by M. Osanna and M. Torelli. Pisa: Accademia Editoriale, 2006, 15–34.

#### Campagna 2013

Lorenzo Campagna. "Monumenti e potere regio a Siracusa nell'età di Ierone II". In *Archimede. Arte e scienza dell'invenzione*. Ed. by G. Di Pasquale and C. Parisi Presicce. Florence: GAMM Giunti, 2013, 49–53.

#### Cavallari and Holm 1883

Francesco Cavallari and Adolfo Holm. *Siracusa. Topografia archeologica di Siracusa. Atalante*. Palermo: Tip. del giornale 'Lo statuto,' 1883.

#### Chowaniec 2014

Roksana Chowaniec. "Palazzolo Acreide, Sicily, Italy. Excavations in 2014". Światowit XII (LIII) (2014), 165–170.

#### Cordiano 1997

Giuseppe Cordiano. *La Ginnasiarchia nelle 'poleis' dell'Occidente mediterraneo antico*. Studi e testi di storia antica 7. Pisa: ETS, 1997.

#### Cutroni Tusa 1994

Aldina Cutroni Tusa. *Solunto*. Rome: Istituto Poligrafico e Zecca dello Stato, Libreria dello Stato, 1994.

#### Delorme 1960

Jean Delorme. *Gymnasion. Étude sur les monuments consacrés à l'éducation en Grèce (des origines à l'Empire romain).* Bibliothèque des Écoles françaises d' Athènes et de Rome 196. Paris: De Boccard, 1960.

### Dimartino 2011

Alessia Dimartino. "Fonti Epigrafiche". In *Siracusa. Immagine e storia di una città. Per lo studio delle fonti letterarie epigrafiche e numismatiche e della storia della ricerca archeologica*. Ed. by C. Ampolo. Bibliografia topografica della colonizazzione greca in Italia e nelle Isole Tireniche XIX. Pisa: Edizioni della Normale, 2011, 59–132.

#### Emme 2013

Burkhard Emme. *Peristyl und Polis. Entwicklung und Funktion* öffentlicher griechischer Hofanlagen. Berlin: De Gruyter, 2013.

## Ernst 2015

Paul Ernst. "Réflexions sur les relations entre Romains et gymnase(e) grec(s)". *Ktema: civilisations de l'Orient, de la Grèce et de Rome antiques* 40 (2015), 267–277.

## Ferruti 2004

Francesco Ferruti. "L'attività di Ierone II a favore dei ginnasi". In *Nuove prospettive della ricerca sulla Sicilia del III a.C. Archeologia, numismatica, storia. Atti dell'Incontro di studio (Messina, 4–5 luglio* 2002). Ed. by M. Caccamo Caltabiano and L. Campagna. Soverina Manelli: Dipartimento di Scienze dell'Antichità dell'Università degli Studi di Messina, 2004, 191–212.

## Fiorentini 2009

Graziella Fiorentini. "Il ginnasio di Agrigento". *Sicilia antiqua: International Journal of Archeology* 6 (2009), 71–109.

#### Gentili 1954

Gino V. Gentili. "Siracusa. Ara di Ierone. Campagna di Scavo 1950–1951". *Notizie degli scavi di antichità* (1954), 331–361.

#### Ginouvès 1962

René Ginouvès. *Balaneutikè. Recherches sur le bain dans l'antiquité grecque*. Bibliothèque des Écoles françaises d'Athènes et de Rome 200. Paris: De Boccard, 1962.

## Gulick 2002

Charles Burton Gulick. *Athenaeus: The Deipnosophists*, Volume II. Trans. by Charles Burton Gulick. Loeb Classical Library 208. London: Heinemann, 2002.

## Haug and Steuernagel 2014

Annette Haug and Dirk Steuernagel. *Das Haus XV B (Maison 49, 19) von Megara Hyblaia. Zur architektonischen und funktionalen Gliederung von Zweihofhäusern im hellenistischen Sizilien.* Wiesbaden: Reichert, 2014.

## von Hesberg 1995

Henner von Hesberg. "Das griechische Gymnasion im 2. Jh. v. Chr." In *Stadtbild und Bürgerbild im Hellenismus. Kolloquium München 24. bis 26. Juni 1993.* Ed. by M. Wörrle and P. Zanker. Vestigia 47. Munich: C. H. Beck, 1995, 13–27.

#### von den Hoff 2009

Ralf von den Hoff. "Hellenistische Gymnasia: Raumgestaltung und Raumfunktion". In *Stadtbilder im Hellenismus. Die hellenistische Polis als Lebensform*. Ed. by A. Matthaei and M. Zimmermann. 1. Berlin: Verlag Antike, 2009, 245–276.

### ISic

Jonathan Prag, James Cummings, James Chartrand, Valeria Vitale, and Michael Metcalfe. *I. Sicily*. URL: http://sicily.classics. ox.ac.uk.

#### La Rosa 1971

Vincenzo La Rosa. "Archeologia sicula e barocca. Per la ripresa del problema di Noto antica". *Atti e memorie dell'Istituto per lo studio e la valorizzazione di Noto* 2 (1971), 43–102.

## La Rosa 1987–1988

Vincenzo La Rosa. "Per la Neaiton ellenistica. Un saggio di scavo nella zona del ginnasio". *Atti e memorie dell'Istituto per lo studio e la valorizzazione di Noto* 18–19 (1987–1988), 75–104.

#### Lehmler 2005

Carolina Lehmler. Syrakus unter Agathokles und Hieron II. Die Verbindung von Kultur und Macht in einer hellenistischen Metropole. Frankfurt/M.: Verlag Antike, 2005.

#### Lucore 2015

Sandra K. Lucore. "Le terme sud di morgantina: impianti idrico e di riscaldamento". In *Morgantina ieri e oggi*. Ed. by L. Maniscalco. Palermo: Museo di Aidone, 2015, 102–114.

#### Manganaro 1963

Giacomo Manganaro. "Nuove ricerche di epigrafia siceliota". *Siculorum gymnasium* 16 (1963), 51–64.

#### Manganaro 1999

Giacomo Manganaro. *Sikelia. Studi di antichità e di epigrafia della Sicilia Greca*. Pisa and Rome: Istituti Editoriali e Poligrafici Internazionali, 1999.

#### Mango 2009

Elena Mango. "Il ginnasio in Sicilia. Un caso particolare?" In Immagine e immagini della Sicilia e di altre isole del Mediterraneo antico. Atti delle seste giornate internazionali di studi sull'area elima e la Sicilia occidentale nel contesto mediterraneo, Erice, 12–16 ottobre 2006. Ed. by C. Ampolo. Pisa: Edizioni della Normale, 2009, 763–772.

### Manni Piraino 1972–1973

Maria T. Manni Piraino. "Epigrafia siceliota". *Kokalos: Studi pubblicati dall'Istituto di storia antica dell'Università di Palermo* 18–19 (1972–1973), 339–347.

## Mertens 2006

Dieter Mertens. *Städte und Bauten der Westgriechen. Von der Kolonisationszeit bis zur Krise um 400 vor Christus*. Munich: Hirmer, 2006.

#### Mistretta 2013

Alessia Mistretta. "Dalla paradromis all'agorà-ginnasio di Solunto. Componenti architettoniche e sintassi topograficourbanistica". *Mare Internum: archeologia e culture del Mediterraneo* 5 (2013), 101–119.

## Musumeci 2012

Agostina Musumeci. "Materiali ellenistici dal ginnasio romano. Un altare extramoenia per la grande dea della natura". *Archivio storico siracusano* 4 (2012), 617–638.

## Neutsch 1954

Bernhard Neutsch. "Archäologische Grabungen und Funde im Bereich der Soprintendenzen von Sizilien (1949–1954)". *Archäologischer Anzeiger* 1954 (1954), 466–706.

#### Orsi 1897

Paolo Orsi. "Noto Vecchio (Netum). Esplorazioni archeologiche". *Notizie degli scavi di antichità* (1897), 69–90.

#### Orsi 1900

Paolo Orsi. "Avanzi di fabbricato nel podere De Matteis sull'Acradina". *Notizie degli scavi di antichità* (1900), 207–208.

## Parisi Presicce 2004

Claudio Parisi Presicce. "Ecatombi nell'area dell'altare di Ierone II a Siracusa". In *Nuove prospettive della ricerca sulla Sicilia del III a.C. Archeologia, numismatica, storia. Atti dell'Incontro di studio (Messina, 4–5 luglio 2002)*. Ed. by M. Caccamo Caltabiano, L. Campagna, and A. Pinzone. Soverina Manelli: Dipartimento di Scienze dell'Antichità dell'Università degli Studi di Messina, 2004, 213–228.

#### Perrin 1918

Bernadotte Perrin. *Plutarch's Lives. Dion and Brutus. Timoleon and Aemilius Paulus. English Translation*. Cambridge, MA: Harvard University Press, 1918.

#### Prag 2007

Jonathan Prag. "Auxilia and Gymnasia: A Sicilian Model of Roman Imperialism". *Journal of Roman Studies* 97 (2007), 68– 100.

## Sammito and Fiorilla 2013

Annamaria Sammito and Salvina Fiorilla. "Sulle tracce di Bizantini e Arabi. Primi dati da Cava d'Ispica". In *La Sicilia del IX secolo tra Bizantini e Musulmani*. Ed. by S. Modeo, M. Congiu, and L. Santagati. Caltanissetta: Sciascia, 2013, 209– 228.

## Sammito and Rizzone 2014

Annamaria Sammito and Vittorio Rizzone. *Cava Ispica. L'Area Archeologica*. Ragusa, 2014.

## Sjöqvist 1962

Erik Sjöqvist. "Excavations at Morgantina (Serra Orlando) 1961. Preliminary Report VI". *American Journal of Archaeology* 66 (1962), 135–143.

## Sposito 2014

Alberto Sposito. *Solunto. Paesaggio città architettura.* Rome: L'Erma di Bretschneider, 2014.

## Stucchi 1954

Sandro Stucchi. "Scavi nella zona dell'Ara di Gerone, Fasti Archeologici". *Annual Bulletin of Classical Archaeology* 7 (1952) (1954), 174–175, no. 2092.

#### Tréziny 2018

Henri Tréziny. *Mégara Hyblaea 7. La ville classique, hellénistique et romaine, avec la collaboration de Frédéric Mège*. Rome: École française de Rome, 2018.

## Trigilla 2011

Melchiorre Trigilla. *La Cava d'Ispica. Archeologia storia e guida*. Ispica: Trigilia Cultura, 2011.

## Trojani 2005

Maria Trojani. "Il c.d. ginnasio romano di Siracusa". In  $M\epsilon\gamma\alpha$ - $\lambda\alpha\nu$   $\eta\sigma\sigma$ o. Studi dedicati a Giovanni Rizza per il suo ottantesimo compleanno. Ed. by R. Gigli. 2. Palermo: CNR, 2005, 177–186.

#### Trümper 2008

Monika Trümper. *Die ,Agora des Italiens' in Delos. Baugeschichte, Architektur, Ausstattung und Funktion einer späthellenistischen Porticus-Anlage.* Internationale Archäologie 104. Rahden/Westf.: Marie Leidorf, 2008.

#### Trümper 2009

Monika Trümper. "Complex Public Bath Buildings of the Hellenistic Period. A Case-Study in Regional Differences". In *Le bain collectif en Égypte, Institut français d'archéologie orientale*. Ed. by M. Fr. Boussac, Th. Fournet, and B. Redon. Études urbaines 7. Cairo: Institut Français d'Archéologie Orientale, 2009, 139– 179.

#### Trümper 2014a

Monika Trümper. "Greek Baths and Bathing Culture". In *Encyclopedia of Global Archaeology*. Ed. by C. Smith. sub verbum B. New York: Springer Reference, 2014, 784–799.

#### Trümper 2014b

Monika Trümper. "Privat versus Öffentlich in hellenistischen Bädern". In *Stadtkultur im Hellenismus, Die hellenistische Polis als Lebensform*. Ed. by A. Matthaei and M. Zimmermann. 4. Mainz: Verlag Antike, 2014, 206–249.

## Trümper 2015

Monika Trümper. "South Baths at Morgantina: Assessment of the Heating System in the Context of Graeco-Roman Public Baths". In *Morgantina ieri e oggi*. Ed. by L. Maniscalco. Palermo: Museo di Aidone, 2015, 102–114.

#### Trümper 2017

Monika Trümper. "Greek Swimming Pools: Case-Study Olympia". In *Cura Aquarum in Greece. Proceedings of the 16th International Conference on the History of Water Management and Hydraulic Engineering in the Mediterranean Region: Athens, Greece, 28–30 March 2015*. Ed. by Kai Wellbrock. Schriften der Deutschen Wasserhistorischen Gesellschaft 28. Siegburg: DWhG Papierflieger Verlag GmbH, 2017, 215–250.

#### Trümper 2018

Monika Trümper. "Swimming Pools and Water Management in the Eastern Mediterranean World of the 4th to 1st Century BC". In *Water Management in Ancient Civilizations*. Ed. by J. Berking. Berlin: Edition Topoi, 2018, 255–296. DOI: doi:10.17171/3-53.

#### Vallet, Villard, and Auberson 1976

Georges Vallet, François Villard, and Paul Auberson. *Mégara Hyblaea 1. Le Quartier de l'agora archaïque*. Paris: De Boccard, 1976.

## Vallet, Villard, and Auberson 1983

Georges Vallet, François Villard, and Paul Auberson. *Mégara Hyblaea 3. Guide des fouilles. Introduction à l'histoire d'une cité coloniale d'occident.* Paris: De Boccard, 1983.

## Veit 2013

Caroline Veit. "Hellenistic Kingship in Sicily: Patronage and Politics under Agathokles and Hieron II". In *Sicily. Art and Invention between Greece and Rome*. Ed. by C. Lyons, M. Benett, and C. Marconi. Los Angeles: Getty Museum, 2013, 27–37.

## Voza 1999

Giuseppe Voza. Nel segno dell'antico. Palermo: Lombardi, 1999.

#### Walthall 2011

Alex Walthall. "Magistrate Stamps on Grain Measures in Early Hellenistic Sicily". *Zeitschrift für Papyrologie und Epigraphik* 179 (2011), 159–169.

## Walthall, Souza, and Benton 2014

Alex Walthall, Randall Souza, and Jared Benton. "Preliminary Report on the 2013 Field Season of the American Excavations at Morgantina. Contrada Agnese Project (CAP)". *The Journal of Fasti Online* 322 (2014). URL: http://www.fastionline.org/docs/ FOLDER-it-2014-322.pdf (visited on 27/08/2018).

#### Walthall, Souza, and Benton 2015

Alex Walthall, Randall Souza, and Jared Benton. *Contrada Agnese Project (CAP)* 2015, *Report from the Field*. 2015.

#### Walthall, Souza, and Benton 2016

Alex Walthall, Randall Souza, and Jared Benton. "Preliminary Report on the 2014 Field Season of the American Excavations at Morgantina. Contrada Agnese Project (CAP)". *The Journal of Fasti Online* 324 (2016). URL: http://www.fastionline.org/docs/ FOLDER-it-2016-364.pdf (visited on 27/08/2018).

#### Wilson 1988

Roger J. A. Wilson. "A Wandering Inscription from Rome and the So-Called Gymnasium at Syracuse". *American Journal of Archaeology* 71 (1988), 161–166.

#### Wilson 1990

Roger J. A. Wilson. *Sicily under the Roman Empire. The Archaeology of a Roman Province 36 BC – AD 535.* Warminster: Aris and Phillips, 1990.

## Wilson 2012

Roger J. A. Wilson. "Agorai and Fora in Hellenistic and Roman Sicily. an Overview of the Current Status Quaestionis". In *Agora greca e agorai di Sicilia*. Ed. by C. Ampolo. Pisa: Edizioni della Normale, 2012, 245–267.

#### Wilson 2013

Roger J. A. Wilson. "Hellenistic Sicily, c. 270–100 BC". In *The Hellenistic West. Rethinking the Ancient Mediterranean*. Ed. by J. R. W. Prag and J. C. Quinn. Cambridge: Cambridge University Press, 2013, 79–119.

## Wolf 2016

Markus Wolf. Hellenistische Heiligtümer in Sizilien. Studien zur Sakralarchiteketur innerhalb und außerhalb des Reiches König Hierons II. Deutsches Archäologisches Institut Sonderschriften 20. Wiesbaden: Reichert, 2016.

## Zirone 2011

Donata Zirone. "Storia della ricerca archeologica". In *Siracusa. Immagine e storia di una città. Per lo studio delle fonti letterarie epi-grafiche e numismatiche e della storia della ricerca archeologica*. Ed. by C. Ampolo. Bibliografia topografica della colonizazzione greca in Italia e nelle Isole Tireniche XIX. Pisa: Edizioni della Normale, 2011, 149–208.

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 <sup>3</sup> Vallet, Villard, and Auberson 1976, plans 63, 64, 69, 70. Vallet, Villard, and Auberson 1983, 42 fig. 32.
 <sup>4</sup> Cutroni Tusa 1994, 78 pl. 23.

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