A Re-examination of some of the South Stoa Wells at Corinth

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In undertaking the publication of the Hellenistic pottery from Corinth, G. Roger Edwards did for Corinth what Homer Thompson had done for the Athenian Agora. Both scholars studied an unattractive body of material from an unfashionable period and made it accessible to a wider audience. In doing so their chronological framework influenced modern scholarship far beyond the archaeology of Hellenistic Corinth and Athens, indeed to every region receiving mainland Greek ceramic imports or imitating them. As a result, most publications on Hellenistic material culture subsequent to Edwards' *Corinth* VII.iii refer to it for stylistic parallels and dates. Even new studies from the Athenian Agora, such as Susan Rotroff's exemplary work refreshing and adjusting Thompson's material, unfailingly cite Edwards' work.¹ To date, certain chronological adjustments notwithstanding, Edwards' basic schema is still widely accepted and cited.

These revisions were anticipated by Edwards himself who wrote that his chronology of deposits, shapes, and decoration "will... be subjected to scrutiny and further modification."² Scrutiny and further modification, however, have been limited by the paucity of new Hellenistic deposits excavated at Corinth since 1970, the year in which Corinth VII.iii was submitted for publication. In the 1973 addendum to his original preface, Edwards acknowledged that excavation had resumed in Building II, north of the South Stoa, and indicated that the construction date of the South Stoa should be revised downwards by a quarter of a century to ca. 300 BC.³ A later Corinth volume by Elizabeth Pemberton on finds from the Sanctuary of Demeter and Kore confirmed that the absolute dates applied by Edwards to certain stylistic sequences should be down-dated by as much as a quarter of a century, but nonetheless accepted the scheme itself.⁴ Since then the most significant new contributions have been the identification of a context dating to after the Mummian sack of 146 BC, a close examination of the contents of Hellenistic graves at Corinth and the publication of material from the Rachi settlement at Isthmia.5

Historical considerations

The widely accepted view before the excavation of Building II was that the South Stoa was erected sometime after Philip II founded the League of Corinth and before the death of Alexander. This date range is based partly on parallels for the surviving architectural detail, partly on the state of knowledge of Late Classical pottery when the South Stoa was published, and partly on the belief that an appropriate building was necessary to house the delegates of the league. As a moment in Corinthian architectural history, the late 4th century is a time thought to have seen the construction of the second phase of the theater, both the fountain house and stoa at Perachora, and parts of the Asklepieion. Indeed, features of the latter two monuments are considered closely related to elements of the South Stoa in scholarly analyses.

Excavation by Charles Williams in the early 1970s of buildings anterior to the construction of the South Stoa produced contexts that permit a re-examination of its construction date. Buildings I, II and III, north of the South Stoa, are at a lower elevation than the Stoa, and parts of Buildings II and III physically underlie the Stoa's colonnade.6 There is some evidence that the buildings were not dismantled but violently destroyed. For instance, on floors of Building II pottery lay where it had fallen, a cache of coins was found on the floor of one room and piles of roof tiles were found both in the same room and in the courtyard.⁷ Attic material from within the drain between Buildings I and II, material which was thought to provide a *terminus ante quem* for the destruction of the buildings, was initially dated to the third quarter of the 4th century BC. Re-examination of the Attic pottery, however, based on Rotroff's revised chronology from the Athenian Agora, now suggests a date in the last quarter of the 4th century BC for the drain fill.⁸ The destruction of Building III, half of which actually underlies the Stoa colonnade, is dated by the pottery to sometime in the last quarter of the 4th century BC.⁹ Furthermore, there are indications that Building II was also destroyed no earlier than the last decade of the 4th century BC.¹⁰ Consequently, the conclusion that the South Stoa was not built between 338 and 323 BC but was started only after ca. 310 BC is, on the present archaeological evidence, difficult to escape. When the historical background of the final quarter of the 4th century is also considered, there are few opportunities presented for the planning and construction of such a large edifice before the early 3rd century BC.11

Even if the buildings underlying the South Stoa were destroyed or dismantled later in the 4th century BC, it is difficult to imagine that the construction of the South Stoa could have been undertaken in the unstable environment between 316 and 303 BC (Diod. Sic. 19.60.1-20.103.3). The South Stoa was, therefore, either erected before 316 or after 303 BC. Given that the date of the pottery in the destruction of Buildings I to III is firmly bracketed within the period 325 to 300 BC, the earlier date range is improbable. The destruction damage to the buildings may witness a particular event such as Kassander's expulsion of Ptolemy in 305 BC or, more plausibly, Demetrios's successful siege, which ousted Kassander. Demetrios's euergetism in the region is well documented. He rebuilt Sikyon on the terraces overlooking the coastal plain having moved the city from its ancient location on the shores of the Corinthian Gulf. He also made plans, though never realized, to cut a canal across the Isthmus. An inscription at Epidauros commemorates his re-foundation of the League of Corinth in the name of his father, Antigonos, and himself (*IG* IV². 1.68) upon which, like Philip, he was declared *hegemon* of the Greeks. Demetrios retained control of the city until his fall in 286 BC. After the success of Demetrios, Corinth enjoyed a period of peace for almost 25 years and was therefore provided in the early 3rd century with both an appropriate time span and historical context for the construction of a monumental stoa. In terms of the absolute chronology of Corinthian Hellenistic pottery, the impact of down dating the construction of the South Stoa to ca. 300-290 BC is significant and wherever Edwards wrote 330 BC, we should now read ca. 300 BC.

Edwards' methodology

Edwards' introduction lays out his general methodology clearly and concisely. His goal was the "presentation, classification (and) chronology ... of the ceramic history of Corinth in its truncated Hellenistic years."12 He limited himself strictly to the study of Corinthian, or what he believed to be Corinthian, products tracing the development of individual styles where necessary from their origins in the Classical period.¹³ He did not find that the material lent itself particularly well to the study of individual workshops and wondered whether to do so would be of any great benefit to scholarship.¹⁴ In order to remain unbiased by the development of shapes common to Corinth and to other regional centers, he refrained with a single exception from external comparisons and dating by parallels with forms elsewhere. In this specific case, given the absence of internal evidence, he based the dates of Corinthian Attic-type skyphoi on forms extant on the floors of houses in Olynthos as chronotypes of ca. 348 BC.15 Edwards then considered individual vessel types within the contexts, analyzing organic developments in profile through time, and found, for instance, that height to diameter ratios in some forms appeared to be significant indicators of date. One example is the articulated kantharos, a shape whose use period Edwards dated to roughly 330-225 BC. The upper date in the range is due to the fact that no articulated kantharoi were present in deposits that predate the construction of the South Stoa or the terraces in front of it, but they do appear throughout deposits connected with the use of the Stoa, i.e the shop wells. He based the lower date of 200 BC because they only appear in small fragments in any destruction deposits associated with the Stoa. He then further narrowed this date to 225 BC, citing that there is relatively little development in the shape.¹⁶

Edwards found it easiest to examine the articulated kantharoi in groups based on their height with a group for each centimeter, starting at 0.14 down to 0.07 meters, for a total of seven groups. He believed that shape development was more clearly observable in the larger sizes. His chronology is based on apparent changes in six criteria: a constriction in the diameter of the foot, a constriction in the lower part of the upper wall, a rise in the point of articulation, a loss of angularity in the articulation, decrease in quality of manufacture and glazing, and a general increase in carelessness in decoration. Similarly, Edwards divided the scores of cyma kantharoi from the wells into ten groups according to their height and considered discrepancies in their profiles and proportions. Each height group, he believed became more attenuated and constricted over time. In other words, they became narrower in relation to their height, the body diameter reduced in relation to the rim diameter and the feet became longer and narrower. He dated production and use of cyma kantharoi to between 330/300 and 225 BC despite the presence of much later coins in and below the level in which the kantharoi were found. He explained the presence of these late coins as intrusions from the later fills above.¹⁷

As Edwards himself has indicated, the chronology of Corinthian kantharoi needs to be further developed and that these shapes are essential to our understanding the chronology of Corinthian Hellenistic pottery. Edwards proposed that the life-spans of the various kantharoi were more or less concurrent with types being dropped from the repertoire through time until replaced by mouldmade or "Megarian" bowls. To summarize, Edwards faultlessly presents his reader with several falsifiable hypotheses that would have made Karl Popper proud. Those that we examine in this paper are:

- 1. The South Stoa wells represent use fills spanning the period ca. 325 to 146 BC;
- The latest coins in these deposits percolated down from later deposits above;
- 3. Cyma kantharoi replaced Attic type skyphoi and are the shape that flourished between about 325 and 225 BC. In turn, cyma kantharoi were replaced by mouldmade bowls; and
- 4. Cyma kantharoi attenuated and constricted with time.

Since we cannot re-excavate the contexts themselves, we must return to the excavation records if we want to reexamine these hypotheses. Unfortunately, with the exception of Edwards' own notebooks, the records are often stilted and leave much to the reader's imagination.

South Stoa Well fills¹⁸

The occasion for re-examining the South Stoa Wells arose with the excavation of several Hellenistic features and fills in the Panayia Field southeast of the Roman Forum at Corinth. One in particular, Cellar 2003-2, contained scores of restorable vessels and appeared to belong to a single dumping operation dated, by a coin of Ptolemy III, to after 247 and probably closer to 220-200 BC.¹⁹ Despite appearing to be homogenous assemblage, the date of individual vessels based on Edwards (1975) ranged from 380 to 146 BC. This disparity

warranted a re-examination of the precepts that determined Edwards' chronology.²⁰ The fill of Cellar 2003-2 suggested that refinements in the chronology were indeed possible and that the material from the lower fills of the South Stoa wells required restudy.²¹ The crucial role of the South Stoa wells in Edwards' work was emphasized when he noted that "A modification in date in respect to one (South Stoa) deposit will in many instances affect the dating of others, one often controlling that of another."²² This becomes all the more clear with the realization that almost two-thirds of the pottery published by Edwards came from these deposits.

The excavators of the South Stoa wells interpreted many of them as having two discrete fills. Where extant, or observed during excavation, the lower fill was generally about a meter deep and contained a mixture of Hellenistic pottery including amphorae, pitchers and large numbers of drinking cups. Among the latter were various types of kantharoi decorated in the West Slope style and mouldmade bowls but few Attic style kantharoi or skyphoi. The upper fill was generally heterogeneous material consisting of earth and building debris dumped sometime in the Roman period; most scholars presume this upper fill resulted from the early Roman colonists cleaning up the debris of the Mummian sack. Since Edwards believed the lower fills of the wells in the Stoa shops accumulated during the course of the Hellenistic period, he never considered the possibility that the wells were not part of the original Stoa construction or that they were ever cleaned or maintained.

The positioning of the wells within the front rooms of the Stoa's suites has raised the question of whether their construction was necessarily part of the original design. Unlike a regular well, none taps the natural water table, but rather they act as cisterns to store water supplied by an underground water channel which also fed the Peirene Fountain complex. Each is sunk alongside and rather deeper than the supply channel which runs the length of the Stoa and the individual wells received water from a narrow lateral tunnel running to it from the main supply channel. No matter the volume of the water used, the water in the well cisterns remained filled to the level of the supply line.²³ Periodic maintenance of the well cisterns would not have been a difficult task. After temporarily blocking the lateral supply channel, the water in the well cistern and the accumulated sludge could be removed from above. If such periodic cleaning did take place, then the chronological range of the well cisterns' contents at abandonment would be considerably shorter than that envisioned by their excavators.

In several cases, a re-assessment of the excavation record enables a different interpretation of how the lower fills accumulated. Some of these cases were those excavated under the supervision of Edwards himself who, unlike Broneer, excavated his wells in a series of horizontal spits. That is, he took arbitrary passes of 15 to 25 centimeters when he could observe no obvious changes in the fill. He kept the material culture from each of these passes in separately numbered lots. The notebooks show that Edwards recorded the numbers of the spits/baskets in which fragments of each joining vessel were found. These enable us to determine that sherds from different parts of the "accumulation fill", from top to bottom, mended up into complete or substantially complete vessels (Table 1).

Edwards does not seem to have considered the depositional processes that might result in such a distribution of sherds. We should expect an accumulation of pottery over several decades to be well-, not randomly, sorted and the vessels to be relatively intact. The random distribution of fragments from the same vessels throughout and the fact that portions of many vessels are missing, despite careful sieving by Edwards et al., strongly suggest that the earth was not an accumulation of material over several decades but rather that the fill was dumped in a single operation. The notebooks also record the precise findspot or basket of many of the coins and thus provide their relative elevation within the fill. In some cases, stamps on Knidian and Rhodian amphorae indicate that the associated coins are not later contaminations but are, if anything, rather earlier than the date of actual deposition.²⁴ In five cases it seems likely that the purpose of dumping a meter or more of fill into the bottom of a well was to cut off the water supply. At some point in the Hellenistic period, doors were inserted between Shops XIX and XX and between XXX and XXXI mak-

Well XXVII Basket	Тор	Bottom	Coins
1-5	-1.00	-4.50	2 Sikyon 323-251 BC; 2 Corinth 400-146 BC
6-10	-4.50	-7.15	Antigonos Gonatas or Antigonos Doson 277-220 BC; 6 Corinth 400-146 BC; 2 Sikyon 323-251 BC; 4 Corinth 400-146 BC; 1 Demetrios Poliorketes 306-283 BC; Ptolemy III 247-222 BC; Athens 339-222 BC
11-15	-7.10	-7.60	
16-18	-7.60	-9.40	
19	-9.40	-10.25	Leukas 4 th century BC; Sikyon 323-251 BC
20	-10.25	-10.45	Philip V 220-178 BC
21	-10.45	-10.75	Skiathos 350-344 BC; Corinth 400-146 BC; Achaian League after 280 BC
22	-10.75	c11.00	7 Corinth 400-146 BC; Kassander 316-297 BC; An- tigonos Gonatas or Antigonos Doson 277-220 BC; 2 Sikyon 323-251 BC
23	c11.00	-11.15	Boiotia 220-197 BC; Demetrios Poliorketes 306-283 BC; Antigonos Gonatas or Antigonos Doson 277-220 BC; Corinth 400-146 BC

Table 1.

Basket		19	20	21	22	23	24
Inv. no.							
C-47-454	cyma kantharos				Х	X	Х
C-47-450				X	Х		Х
C-47-452					Х	Х	
C-47-459 to 460	cyma kantharoi				Х	Х	
C-47-463	cyma kantharos				Х	X	
C-47-466 to 471					Х	X	
C-47-482 to 483					Х	X	
C-47-479					х	X	
C-47-443 to 444					Х		
C-47-448					Х		
C-47-453					Х		
C-47-455					х		
C-47-462	cyma kantharos				х		
C-47-464 to 465					Х		
C-47-473					Х		
C-47-475					Х		
C-47-461	cyma kantharos			X	Х	Х	
C-47-451				X	Х		
C-47-456 to 457	cyma kantharos			X	Х		
C-47-472				X	х		
C-47-474				X	Х		
C-47-476 to 478				X	Х		
C-47-486				X			
C-47-445				X			
C-47-458					х		
C-47-449			Х	x	х		
C-47-440 to 442			x				
C-47-485		Х	х				
C-47-480		Х					

Table 2. Matrix of pottery joins in Well XXVII

ing them into single shops. The presence of two wells in each of these newly expanded units surely exceeded requirements. In these situations, earth was perhaps dumped into Well XIX and Well XXX to the level of the inflow channel to cut off the water supply, and then the well head was presumably covered. In Shop III, the excavation of a kind of apothetis to bedrock for the disposal of terracotta figurines and sundry other objects can be dated from the latest coins, Antigonos Gonatas and Ptolemy III, to the latter part of the 3rd century BC.²⁵ The date of this deposit, as will be seen below, may somehow be related to the closure of the well in the same room. The contents of the wells in Shops XIV, and XXVII also seem to indicate a much later *terminus post quem* for the lower fill deposition than originally envisaged. The reason for the closure of the wells in Shops XIV and XXVII seems to coincide with a change in function in the spaces involved which made the wells in question obsolete.

The best evidence of a South Stoa well being deliberately put out of use in the Hellenistic period is provided by Well XXVII, which consisted of two clear fills.²⁶ The upper fill contained dumped debris, including a large amount of mendable pottery and debris from a burned monumental building. The bottom 70 cm were excavated in four separate spits and contained eight cyma kantharoi grouped and dated by Edwards to between 325 and 225 BC. As examined in order of excavation, basket 21 was 30 cm deep and contained mouldmade bowl sherds and fragments of two cyma kantharoi. Baskets 22 and 23 were 25 and 15 cm deep respectively. The pottery from them mended with each other and with the fragments in basket 21. The very bottom of the well, basket 24, had sherds of a cyma kantharos, pieces of which were also found in the two baskets above. Basket 22 had a coin initially thought to be from Thespiai (178-27 BC) but which proved on reexamination to be totally illegible. Basket 23 had a Boiotian coin (Coin 47-430, BMC Central Greece, 41, no. 81-9), an issue believed to date ca. 220-197 BC. Closer consideration of the depositional processes at work strongly suggests that part of basket 21 and baskets 22 to 24 belong to a single dumping episode. The Boiotian coin, therefore, indicates a date no earlier than 220 and more probably in the first quarter of the 2nd century for the lower fill and the cyma kantharoi it contained. This context not only suggests that cyma kantharoi existed much later than Edwards envisioned but also that they co-existed for a period with mouldmade bowls.

The excavation of Well XIX (Well 1948-3) in 1948 by G. R. Edwards was a classic exercise in how to dig in a confined, dark space where changes in soil color and consistency are difficult, if not impossible, to see until the earth is actually removed. From top to bottom, he dug in spits of between 0.05 to 0.85 m depending on the volume of material culture produced and also changed basket when the consistency and color of the soil changed. He took great pains to note precisely what material culture came from which basket. The excavator's record is so systematic that little or no autopsy is required and it is sufficient to present it in tabular form (Table 3).²⁷

At bottom of basket 41, a coin attributed to Philip V (220-178 BC) C-48-118 Small pot	-	_		16-20 21	21-25 2	97	77	2	j	30	31	32	ŝ	5	8	10-00	ŝ	65	40	41
	sket 41, a coin	attrib	uted to	Philip V	/ (220-1	178 BC														
	Small pot																		×	
C-48-105 Kant	Kantharos																		×	
C-48-106 "																			×	
C-48-107 "																			×	
C-48-110 "																			×	
C-48-111 "																			×	
C-48-112 "																			×	
C-48-121 Cool	Cooking bowl																	×	×	
C-48-122 Pitcher	her																	×	×	
C-48-123 Cool	Cooking pot																	×	×	
C-48-119 Ungr	Unguentarium																	×		
C-48-114 " lid			<u></u>															×		
C-48-128 SAH	SAH Rhodian		<u> </u>														×			
At top of Fill 1 in basket 37, 2 coins of Philip V (220-178 BC)	n basket 37, 2	coins	of Phil	ip V (220)-178 BC	() ()														
C-48-126 Brazier	tier													×	×					
In baskets 32-34, 31 coins minted between 180 and 173 BC	, 31 coins min	ited bei	tween	180 and :	173 BC															
C-48-101 Bowl	ŀ												×	×						
C-48-104 "													×	×						

C-48-104a	"												×				
C-48-231	Coarse pot												×	×			
C-48-94	Bowl												×	×			
C-48-95	Plate												×	×			
C-48-99	n											×	×	×			
C-48-100	Two-handled bowl											×	×	×			
C-48-116	Ring handled pot											×	×				
C-48-96	Plate											×	×				
C-48-102	п											×	×				
C-48-127	Small pitcher												×				
C-48-93	2 handled bowl										×	×	×	×			
C-48-130	Rhodian dated 178-76	78-76							×	×	×						
C-48-109	Coarse lid							×		×	×	×					
C-48-82	Two-handled jar						×	×	×	×	×						
C-48-195	Coarse pitcher	x		×	×	×	×	×	×				×				
C-48-120	Cooking pot							×		×	×	×					
C-48-68	Coarse pot	×	×	×	×	×	×	×			×	×					
C-48-72 bis	1			×	×	×	×	×	×		×	×					

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	×			×	×					×	×	
,,	Two-handled jar	Coarse pot	"	"	"	п	п	Ink well	Coarse pot	"		
C-48-67	C-48-74	C-48-75	C-48-115	C-48-73	C-48-69	C-48-70	C-48-71	C-48-108 Ink well	C-48-72	C-48-65	C-48-77 etc	

Table 3.

Well XIX consisted of three distinct fills, two of which were Hellenistic. The upper Hellenistic was clearly a dumped fill because the pottery recovered throughout the 22 spits excavated mended up. Kantharoi fragments are clearly residual and the predominant drinking vessels are mouldmade bowls. This upper fill has a terminus post quem ca. 170 BC provided by 31 Ptolemaic coins (180-173 BC) at the bottom in baskets 32, 33 and 34.²⁸ The fill was separated from the lower Hellenistic deposit by a 70 cm layer of gravel. The lower fill occupied the bottom 75 cm of the well below the water inlet tunnel. It contained several fragmentary cyma kantharoi, one of which Edwards dated to ca. 275 and the other to ca. 250. Based on his pottery dates, he considered the coin found at the very bottom to be much too late: it must have somehow trickled down from the upper fill through 70 cm of gravel and 75 cm of the accumulation fill. This coin was originally attributed to Philip V but has since been identified as a Corinthian issue of the late 3rd century. It suggests that the lowest fill has a *terminus post quem* of at least 225 and probably after 200 BC.²⁹ Like the lowest fill of Well XXVII, the lowest fill of Well XIX suggests a much later date for cyma kantharoi than Edwards envisaged.

Well III was excavated in 1896 leaving only the bottom three meters for Broneer to complete in 1934.³⁰ He found a layer containing architectural fragments but no noteworthy pottery. Below this layer was a fill containing several articulated and cyma kantharoi, lamps and coins. The coins include one of the Aitolian league dated between 279 to 168 BC, one of Ptolemy III, one of Argos dated between 228-146 BC and one of the Achaian League minted by Messene after 222 BC. Edwards grouped the individual cyma kantharoi by shape and dated his groups to between 325 and 225 BC. A transcription of the notebook reads:

[p. 68] Febr. 16, Monday

"In the afternoon foreman and two workmen worked in Well III. When we reached the undug earth below water level some tiles and poros blocks were found... [p. 69] Coin Ptolemy III 247-222 BC (Coin 47-119, as Edwards 1933, no. 468) same place. [p. 70] Toward the evening some fragments of two-handled Hellenistic cups came out of the well – resembling those found in 1934 in the pottery deposit of shop I. and like those some of these carry inscribed inscriptions below the lip (C-47-87, C-47-120 and C-47-121 cyma kantharoi)... (on one) a coin attached – Aetolian League 279-168 BC (Coin 47-121, Price 1967, no. 56). Coin Argos 228-146 BC (Coin 47-120, Price 1967, no. 116)..."

[p. 72] Febr. 17 Tuesday

"It stopped raining about 10 AM and the men went back to Well III to look for more fragments of inscribed vases – several pieces of which were found in the mud removed yesterday afternoon and large numbers came out today... C-47-86 (cyma kantharos). Practically the whole vase is preserved. It has a festoon in white paint on both sides. C-47-98 [p.73] CL 3785, C-47-95, C-47-96, C-47-97... Two coins found stuck together with pottery above (Coin 47-122, Alliba 3rd century, Price 1967, no. 24) and Coin 47-123)... C-47-92 to C-47-94 – these are fragments of numerous two-handled cups – most of them apparently uninscribed (kantharoi)."

[p. 138] March 3 Cont-

"Some cleaning was done in the earth removed from the wells at east end of stoa – the finds [p.139] are recorded here by wells. Well III ... coins of Aetolian League 279-168 BC (Coin 47-167, Price 1967, no. 57), Ptolemy III 247-222BC (Coin 47-167, as Edwards 1933, no. 468) and Achaean League, Messene after 222 BC (Coin 47-168)."

The notebook record is very imperfect, but if we consider the date and time of excavation as criteria, Edwards's two "earliest" examples were found higher in the fill, on Monday, and the "later" examples were found lower down, on Tuesday. If the fill was indeed a gradual accumulation, the relative location of the kantharoi within it would negate Edwards's hypothesis that cyma kantharoi constricted and attenuated with time. Indeed, it would suggest that the reverse was the case. Yet consideration of the likely formation processes involved leads one to believe that the fill was not a gradual accumulation but rather, a dumping operation. Even assuming the briefest period of their use, the coins indicate that the material was dumped no earlier than the very end of the 3rd century BC. This would mean that various cyma kantharos varieties co-existed and again suggests that cyma kantharoi existed much later than Edwards thought.

The lower fill of Well XIV was excavated as a single operation.³¹ Unfortunately, the notebook provides no indication of the depth at which individual inventoried objects were found. It is clear, however, that the excavator considered the two-meter deep fill was derived from the well's use and Edwards gave a 330 to 146 range for its contents. These include two almost complete cyma kantharoi, which Edwards dated about 250 to 225 BC. The coins from the lower fill include issues of Ptolemy III (Coin 47-252 as Edwards 1933, no. 468), Philip V (Coin 47-253) and Ptolemy V (Coin 47-99, copper coinage dated 193-181 BC as *BMC* 73). Two of the stamped amphora handles found in the lower fill are Rhodian handles (C-47-283 and 285) one bearing the name Pausanias and the other with the name Zenon and the month Artamitiou dating, according to Finkielsztejn, to between 234 and 220 BC³²

We can explain the dichotomy between the absolute dating evidence offered by the coins and amphora stamps and the dates which Edwards gives in two ways. One is that part of a later fill was excavated with the use fill thereby contaminating the context. The other is that Edwards was wrong – it is not a gradual accumulation but rather debris dumped during the first half of the 2nd century. Even if we reject the latest dating material in sequence, we are left with *termini post quos* of 193, 220, 233 and 247 for the deposit. Although the record is far from clear, in the light of other, better-excavated wells in which cyma kantharoi were found and discussed above, we are inclined to believe that the fill is a dump dating no earlier than the end of the 3rd century and, more likely to the beginning of the 2nd century BC. Again, this date is rather later than Edwards would have chosen from the forms of the kantharoi in the fill.

Well XXX, as summarized by Edwards (1975), contained three fills "though their identity is not fully demonstrable." The earliest consisted of 65 cm of fill, from the bottom (-11.15 m) to just below the 1947 water level (-10.35 m). This lowest deposit, like many others in the South Stoa wells, was thought to be a horizon which developed gradually during the course of the well's use from the last quarter of the 4th century to the second quarter of the 2nd century. The second fill, from ca. -10.50 m to an elevation of -4.00 m, was regarded as "Mummian cleanup," while the uppermost fill from -4.00 m to the top was perhaps Late Antique.³³

Corinth Notebook 195 records the work on Well XXX that resumed in 1947 at a depth of -7.50 m. The upper portion of the second fill contained material dumped since the termination of work in 1938, presumably during the war years, and included architectural members, well curbing and tile fragments.³⁴ Removal of the debris revealed the ancient fill at – 8.90 m, described as "slightly muddy" it included large quantities of "broken up terracotta jars of huge size, with long vertical handles" as well as an amphora stamped on both handles with an inscription in Latin. Thereafter the record is not transparent, and it appears as if the excavator of record understood the lower fill to be homogenous.³⁵ Entries for material culture thus occasionally have comments such as "from the same place and elevation" appended. The record is difficult to disentangle but suggests that the "use fill" may have actually been one or even two dumped fills, although this cannot be demonstrated as fully as it can in the case of the wells excavated by Edwards.

On March 5, 1947, below the level of the channel supplying water to the cistern from the main Peirene tunnel (depth not recorded) were three lamps and two fragments of a white marble table. Two stamped amphora handles came from the "same place." Thereafter is a list of further inventoried finds, which presumably belonged together in the fill at and immediately below the level of the supply channel.³⁶

Marginalia to the work of March 5 records three batches of material culture from different elevations. The highest two are presumably the fill from the level of the supply tunnel down. Edwards considered these to belong to the Post-Mummian clean-up dumped into the well.³⁷ The third batch belonged to Edwards' "use fill" along with all the pottery found on the subsequent day, March 6 when he started the day's record with the comment "We continue to find a great deal of Hellenistic bowls."³⁸ The day's finds consisted of several almost complete vessels among these were a number of cyma kantharoi.³⁹ The complete vessels from March 6 include the following:

C-47-61	Edwards 1975, no. 408, dated 250 BC
C-47-62	Edwards 1975, no. 411, dated 275 BC
C-47-63	Edwards 1975, no. 402, dated 300 BC
C-47-64	Edwards 1975, no. 418, dated 2/4 of 3 rd century BC
C-47-65	Edwards 1975, no. 420, dated 3/4 of 3rd century BC
C-47-66	Edwards 1975, no. 401, dated 300 BC
C-47-67	Edwards 1975, no. 414, dated 250 BC
C-47-68	Edwards 1975, no. 429, dated 3/4 of 3rd century BC
C-47-70	Edwards 1975, no. 419, dated 250 BC
C-47-71	Edwards 1975, no. 423, dated 300 BC
C-47-74	Edwards 1975, no. 392, dated 3/4 of 3 rd century BC
C-47-76	Edwards 1975, no. 430, dated 3/4 of 3rd century BC

According to standard practice at Corinth, the waterlogged excavated earth from the well then was put on one side to dry before searching for missing fragments and other material. From this mud came numerous coins including nine of Ptolemy III (247-222).⁴⁰ Unfortunately, there is no record of where precisely the earth came from within the well but since the earth was so waterlogged as to require drying, it is safe to assume that it derived from below -8.90 m where the earth became only "slightly muddy." More probably the earth came from below the point at which "wet mud was reached" near the elevation of the Peirene supply channel at approximately – 9.40 m below the well curb.⁴¹ Given the late date of the four other wells presented, it is not unreasonable that one or more of the coins of Ptolemy III came from the lowest fill containing the kantharoi and therefore we should consider this a late 3rd century deposit.

Conclusion

What does a reexamination of the excavated record permit us to say about Edwards's null hypotheses? Firstly, we can reject the statement that all of the lower fills of the South Stoa wells were use fills spanning the period ca. 330 to 146 BC. We can also reject the notion that the late coins somehow percolated down from above. In fact, these coins provide a *terminus post quem* for the pottery with which they were found. The fill of Well III demonstrates that constriction and attenuation are not valid criteria for dating cyma kantharoi. Indeed, the fact that a broad range of cyma kantharoi varieties appears in the dumped fills suggests that they co-existed and some other factor, such as manufacturing preferences in different workshops, account for differences in shape. Thanks to the work of Sarah James, we can now state with a high degree of certainty that cyma kantharoi began to be used in the third quarter of the 3rd century shortly before the date when Edwards considered their use to be ending ca. 225 BC.⁴² The paucity of mouldmade bowls in the deposits considered here suggest that cyma kantharoi flourished for about 50 years down to about 175 BC

and only then were superceded as the predominant drinking vessel at Corinth by mouldmade bowls.⁴³ It is clear from this brief discussion of the South Stoa wells that autopsy of archival records is a valuable exercise

Notes

- 1 Rotroff 1997.
- 2 Edwards 1975, 188.
- 3 Edwards 1975, vi-vii; Williams & Fisher 1972, 171. Rather than use the observation of Edwards that the beginning date of the Stoa was later and pro-rate his pottery dates, all dates given here are those which appear in the text of Edwards 1975.
- 4 Pemberton 1989.
- 5 Romano 1994; Pemberton 1985 and Anderson-Stojanović 1993 respectively.
- 6 Williams & Fisher 1972, 164-5, believes that the buildings' functions were taken over by the Stoa.
- 7 Williams & Fisher 1972, 151-74.
- 8 E.g., Williams & Fisher 1972, 155-63 nos. 24, 29 and 34 are like Rotroff 1997, no. 1398, 118-119 and 867 respectively all datable to the end of the 4th century.
- 9 Williams & Fisher 1973, 25, no. 29, a Corcyrean amphora of Corinthian type B form (no. 344) is dated by Koehler 1978, to the last quarter of the 4th century; no. 30, an Attic fish plate as Sparkes & Talcott 1970, no. 1075, inv. P6962, whose find spot, D-E 8-9:1, is there given a date of 325-310 BC. Rotroff now dates this particular piece ca. 310 BC., see Rotroff 1997, 444, no. 711 for a summary of the cistern D-E 8-9:1 with material dating between 325 and 275 BC.
- 10 Williams & Fisher 1972, 171. See in this context, Well 1971-2 between rooms 6, 7 and 8, 9 of Building II which contained a one-piece kantharos and a Corinthian amphora with dipinto dated 275-250 BC by Koehler 1978, 203, no. 279.
- 11 The Sisypheon is probably the low hill immediately to the southwest of the entrance to Acrocorinth.
- 12 Edwards 1975, 1.
- 13 Edwards 1975, 2.
- 14 Edwards 1975, 6.
- 15 Edwards 1975, 6-7.
- 16 Edwards 1975, 83-84.
- 17 For example, Edwards 1975, 225-226, Context 96, South Stoa Well III: "A proportion of these no doubt are infiltrative from the later filling."
- 18 I am grateful to Dr. Orestes Zervos who reexamined all the coins from the South Stoa wells checking and in some cases correcting the identifications made by Dr. Margaret Thompson and Dr. Martin Price.
- 19 Cistern 2003-2. Lots 2003-82 and 2003-83. Coin 2003-74 Ptolemy III, (247-232).
- 20 The Hellenistic material from the Panayia Field was given to Sarah James, University of Texas at Austin, for her doctoral dissertation expressly with this objective in mind. Her paper in this volume reflects some of the chronological changes she proposes after close examination of the Panayia and other, older deposits, a total of over three tons of pottery, in the past two years.
- 21 Once the basic work was complete and a re-assessment drafted, Yuki Miura and Lynne Kvapil documented the vessels, transcribed the notebooks, studied Edwards's groups, attempted a seriation of the wells and wrote a summary of

their work in the Summer of 2005. Stephen Elliot made a catalog of the coin finds, Andrew Siebengartner looked at the mouldmade bowls, Rebecca Karberg the Attic type skyphoi and Amy Sowder the terracotta figurines.

- 22 Edwards 1975, 197.
- 23 Broneer 1954, 59-60.
- 24 There was once a belief that somehow coins percolated downwards in certain contexts like wells. Where coins are genuinely intrusive, it may be that they were seeded by workmen in an era when they were rewarded a nominal sum for discovering a coin. Although this sum was seldom more than a few drachmas, ten or so were enough to buy an unscrupulous workman a packet of cigarettes. Coins, usually medieval, collected when cultivating the fields are usually the culprits and stand out in otherwise homogenous earlier deposits. Casual coin finds of this nature had a greater retail value with visiting tourists and the problem of seeding does not seem to have been common.
- 25 Broneer 1954, 96-97; Davidson 1942, 105-127.
- 26 Notebook (NB, hereafter) 199, 79-83.
- 27 NB 200.
- 28 Edwards 1933, 355-367.
- 29 Coin 48-289.
- 30 Well 1934-2, NB 195, 65-169
- 31 Well 1936-11, NB 151, 44, 46-49, 53, NB 195, 46-49, 84, 158, 169 and 176.
- 32 Finkielsztejn 2001, 102, table 18 p. 191 and table 22.1 p. 196.
- 33 Well 1938-1, Edwards 1975, 234, deposit 115, NB 195,137-147; 150; 165-167.
- 34 NB 195, 140-141.
- 35 NB 195, 142.
- 36 NB 195, 142-144.
- 37 NB 195, 144 "ca. 9.40-10.50 in Well XXX: C-47-54 to C-47-59," pottery saved as Lot 3781 and "ca. 10-10.50 in Well XXX: C-47-49 + 50;" Edwards 1975, 234.
- 38 NB 195, 144 "ca. 10.50 to -10.75: CL 3847, Type VII" and sherds saved in Lot 3782; Edwards 1975, 234.
- 39 NB 195, 145-46. Lots 3783 and 3784.
- 40 Coins 47-318-22, 325 to 27, 332, all as Edwards 1933, no. 468.
- 41 NB 195, 142.
- 42 James 2010.
- 43 This point has been amply demonstrated by S. James (2010; 2013; and this volume) in the course of her ongoing research on deposits from the Panayia Field and elsewhere at Corinth. Rotroff 2006b, dates the introduction and development of full scale production of mouldmade bowls at Athens to between ca. 220? and 180 BC and peaks production between 180 and 86 BC.