Further Notes on the Early Bronze Coinage of Syracuse

R. Ross Holloway

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On the occasion of the conference on the beginnings of bronze coinage in Sicily and Magna Graecia, held in 1977 at the Villa Livia in Naples, and sponsored by the International Center for Numismatic Studies, I addressed the question of the fifth-century bronze coinage of Syracuse[1]. The announcement of new excavation evidence during the course of this meeting made it clear that an additional series of coins long thought to belong to Theron's time, those bearing a head of Athena in Corinthian helmet on the obverse and a hippocampus on the reverse (fig. 1), unquestionably began to be struck before the end of the fifth century. Otherwise it would have been impossible for specimens of this series to have found their way into the deposits associated with the fall of Naxos in 405 B.C. and the siege of Motya in 397 B.C.[2]. Substantial commentary on these questions has been offered both during the congress and following it[3]. It is therefore opportune to reconsider the conclusions reached a decade ago.

The rare Syracusan bronze, female head r./hippocampus above polyp is not an oncion (fig. 3). The example in Munich published by Manganiaro clearly shows the two value dots[4]. Its weight, 2.37 g, is like that of the piece known earlier from the hoard published in Greece and published by D. H. Franke in 1966, 2.5 g[5]. Calciati has added five specimens at progressively lower weights (2.21, 1.91, 1.82, and 1.70 g)[6]. The heavier weights are in accordance with the standard of the initial bronze series of Syracuse with female head and polyp issued in three denominations with a recorded apparent standard (significantly below the theoretical level in the two higher denominations) of 5 g (trias = four ounce coin), 2.5 g (hexas = two ounce coin) and 1.8 g (oncion = one ounce coin).

[1] R. Ross Holloway, *L'inizio della monetazione in bronzo siracusana*, in *Le origini della monetazione di bronzo in Sicilia e Magna Graecia. Atti del VI Convegno del Centro Internazionale di Studi Numismatici*, Napoli 17–22 Aprile 1977, AIIN, Suppl. vol. 25, 1979, p. 123–141.

[2] Intervento di G. Guzzetta, *ibid.*, p. 141–143.

[3] T. Hackens, *Les équivalences des métaux monétaires: argent et bronze en Sicile au V^e s. av. J.-C.*, in *Le origini della monetazione di bronzo*, p. 309–339. Numerous "interventi" in the same congress by various scholars. E. Gammarota, *Da Dionisio di Iolcide a Scheeta*, 1984; C. Boehringer, *Hermerkungen zur städtischen Münzprägung in 5. Jahrnndert*, in *GNS* 28, 1978, p. 48–69 and *inv.*, *Zu Finanzpolitik und Münzprägung des Dionysios von Syrakus in Greek Numismatics and Archaeology, Essays in Honor of Margaret Thompson*, Wetteren, 1979, p. 9–32; G. Manganaro, *Dai nikhe formata di argento di kassiteros basileros la Sicilia e C.*, in JNG 34, 1984, p. 11–10; A. Tusa Cutroni, *La monetazione di Siracusa sotto Dionisio I*, in *Phillia Chartis. Miscellanea in onore di E. Manni*, Palermo, 1981, p. 631–674.

[4] *Op. cit.*, pl. 3, no. 17 (Munich).

[5] P. B. Franke, *Leontilische Phugades in Chalkis?*, in *Archaeologischer Anzeiger*, 1966, p. 395–407, no. 4.

[6] R. Calciati, *Corpus Nummorum Siculorum*, vol. 2, Milan, 1986, p. 62–63.

Sequence of Early Bronze Issues of Syracuse

Series 1: date uncertain, before 405 B.C.		
AE	hemilitron	
AE female head r./polyp	trias	5.0 (fig. 1)
AE	hexas	3.3
AE	oncion	1.8
Series 1A: date uncertain		
AE male head l./polyp	trias	5.0 (fig. 2)
AE female head r./polyp and hippocampus	hexas	2.5 (fig. 3)
AE (female head r./polyp as Series 1)	oncion	1.8
Fractional coins in silver		
	litra	
	hemilitron	
	trias	
Series 2:		
AR		
	litra	
	hemilitron	
AE female head l. E/incuse	trias	5.3 (fig. 4)
AE female head l. E/polyp	hexas	3.6 (fig. 5)
Series 3: about 405 B.C.		
AE female head l./wheel	hemilitron	4.0 (fig. 6)
AE facing female head/polyp	trias	2.0 (fig. 7)
Series 4: after 405 B.C.		
AE Head of Athene l./star and dolphins	drachm	40.0 (fig. 8)
AE Head of Athene l./hippocampus	litra	8.0 (fig. 9)
AE Female head l./dolphin and shell	hemilitron	4.0 (fig. 10)
Series 4 revalued:		
AE Athene head l./star and dolphins	didrachm	47.5
AE Head of Athene l./hippocampus	dilitron	9.5

We may now associate the hippocampus and polyp hexantes with the variant form of the trias, which has a male rather than a female head[7] (fig. 2). The reason for the introduction of these two new type combinations is obviously that the initial issue with similar types for three coins with three different values resulted in difficulties of identification. The trias and hexas received distinguishing types, but we may assume that the issue of oneia continued as before. This is the basis of Series 1A.

The rarity of these triantes and hexantes suggests that the new series was not continued long. The interruption may be interpreted as the result of the return to the coining of silver fractions which seems to have occured between Series 1 and Series 2 of the bronze.

Already in the proof of my paper for the 1977 conference, I was able to make the suggestion that the Athena head/hippocamp coins were introduced as part of the last series of Syracusan bronze issued before the end of the fifth century, my Series 4. At this time the theoretical weight

[7] R. Ross Holloway, *L'inizio ... cit.*, p. 127; R. Calciati, *op. cit.*, p. 31, adds specimens weighing 4.15, 4.09, 3.53, 3.63, 3.63, 3.26, 3.14, 2.78 g. A. Mini, *Monete antiche di bronzo della zecca di Siracusa*, Palermo, 1977, cites specimens weighing 4.5, 3.92 and 3.69 g.

of the litra had been reduced to 8.0 g. The hemilitron was the familiar Syracusan bronze with types female head left/dolphin and shell (fig. 10). The Athena head/hippocamp coins equal (and in fact exceed, a circumstance to be discussed below) the theoretical weight of the litra of 8.0 g. The recorded weights of the Athena head/hippocamp coins embraced the range from 3 to 10.5 g.[8] In part, therefore, it could have served as a litra in the series.

In theory, one might also attribute the Athena head/hippocamp coin beginning with theoretical weight of 8.0 g to Series 3, in which I identified a hemilitron and a trias (four-ounce coin) (fig. 6–7). I refrain, however, from suggesting that the Athena/hippocamps were issued at this stage of Syracusan bronze because the coins of Series 3 retain at least one type which had an established meaning already among the silver fractions of an earlier date. At Syracuse the wheel always stood for the hemilitron. The polyp of the trias is also taken from the traditional fractional coin types. The Athena head/hippocamp combination, however, is something new in the typology of Syracuse and therefore fits better with the equally novel dolphin and shell type of the hemilitron of Series 4.

Discussion at the 1977 conference also focused on the date of introduction of the coin which typologically is the natural companion of the Athena head/hippocamp litra. This is the Athena head/star and dolphins bronze, the recorded weights of which vary from 17 to over 38 g[9] (fig. 8). Far from being the "heavy litra" of Timoleontic date, a theory advanced by Ettore Gabrici which was almost universally accepted until very recently, these coins are now viewed as bronze drachmae.[10] The Athena head/hippocamp pieces, which share the Corinthianizing obverse type, are thus seen as obols (1/6) or, as I prefer, litrae (1/5) of the heavier coin. All is well with this reasoning, except that it cannot include some of the Athena head/hippocamp coins. Many of them, weighing more than 8 g, including the heaviest which reach 9.5 g, are far in excess of a theoretical drachm of 40 g (made up of 5 litrae of 8 g each). The heaviest of the Athena head/star and dolphins bronzes are also above the theoretical weight. Such fidelity to a standard would only have been necessary if the coins were issued at real metal value, as Gabrici thought. In the Syracuse of Dionysius I, however, silver and gold maintained the monetary system, and the bronze, no matter how heavy, was a fiduciary coinage. So much is shown by the fourth-century countermark on the hippocamp litrae, "onki", which in fact states the value of a bronze coin of 8.75 g in respect to silver at an exchange rate of 125 : 1 (8.75 divided by 125 = 0.07 = weight of one silver oncion of a silver litra of 0.84).[11]

This argument tends to suggest that the Athena head/hippocamp bronzes were originally introduced at a theoretical weight of 8.0 g, which of course few or none of them would have attained in practice. They may have been accompanied by Athena head/star and dolphins drachmae, naturally struck well below their theoretical weight of 40 g. At some point, however, a strange phenomenon occurred. The coins began to be issued to a higher standard, so that the real weights surpassed the old theoretical litra level of 8.0 g. I consider this the clearest evidence that, as vaguely suggested by the anecdotal sources containing information about the fiscal practice of Dionysius I, the nominal value of coinage in his realm, which included Corinthian silver didrachms as well

[8] Frequency table in T. Hackens, *Les équivalences ... cit.*, p. 340; R. Calciati, *Catalogue of the Published Drachms of Dionysius*, Milan, 1983 and Id., *A Hoard of Dionysius Drachms from Gela*, Milan, n.d., gives a further collection of weights.

[9] Frequency table in T. Hackens, *Les équivalences ... cit.*, p. 340; R. Calciati, *Corpus cit.*, amplified the material notably, as has F. A. Arslan, *La moneta della Sicilia Antica* (*Catalogo delle Civiche Raccolte Numismatiche*), Milan, 1976.

[10] E. Gabrici, *La monetazione del bronzo nella Sicilia antica*, Palermo, 1927. The modern revision of Gabrici's opinion, returning to the ideas of the 19th century, was initiated by S. Consolo-Langher, *Contributo alla storia dell'antica moneta bronzea in Sicilia*, Milan, 1964 and established its ascendency at the 1977 Naples conference.

[11] R. Calciati, *Le contromarche della serie Athena-Ippocampo di Siracusa*, Pavia, 1985.

as Syracusan coins in bronze and precious metals, was doubled by governmental decree.[12] The bronze drachm thus became a didrachm, while the Corinthian pegasus circulating in Dionysius' domains became a fiat tetradrachm. The heavier Athena head/hippocamp litrae (fiat dilitrae) of 9.5 g imply a bronze drachm (fiat didrachm) of at least 47.5 g. Having doubled the nominal value of the coinage, its weight was increased by 20%, making the change still very much to Dionysius' advantage.

It is interesting that some of the Athena head/star and dolphins coins carry a single pellet, indicating that they are a unit. This works very well for the original drachm valuation. Most of the coins of this type, however, are struck without sign of value. These, I suggest, are the fiat didrachms.

Needless to say, the new weight standard was not maintained, and by the end of its long life the Athena head/star and dolphins coin had decreased to around 25 g, the hippocamp coin to about 5 g.

A recent publication presents two Athena head/hippocamp bronzes which have the weight and dimensions of the star and dolphin coins. What part these coins play in the system of the Syracusan bronze is still far from clear.[13]

The chronology of the Syracusan bronze cannot be said to have been fixed definitively. The hypothesis that the Syracusan bronze was born of the necessities of war during the Athenian siege has undoubted appeal.[14] Excavation evidence, both connected with the Carthaginian invasion and Dionysius I's first year in power from the inland sites of the Salso Valley investigated in the 1950s and 1960s and from more recent work at Naxos and Motya, makes it certain that our Series 4 begins before 405.[15] If Series 4 represents the coinage of Dionysius I beginning that year, Series 3 must have belonged to the brief period preceding when the pressure of the Carthaginian invasions was straining Syracusan resources. Series 2 and the silver fractional issues which separate it from Series 1 and Series 1a would belong to the years following the Athenian defeat.

Giacomo Manganaro has recently published three overstruck coins which bear on these questions.[16] Two of these are Syracuse, Series 1 coins on Himera (head of nymph/wreath) and Selinus (head of Herakles/bow and club). The chronology of either of the undertypes is definitively settled. It has been assumed that both belong to the years before the respective cities fell to the Carthaginians in 409 B.C., but Christof Boehringer has argued that politically neither city was fully destroyed on those occasions. Selinus, we know, was reoccupied by Hermocrates, and Himera too, or refugees from Himera maintaining a political identity, had a life after 409.[17] The third coin is thought by Manganaro to be Syracuse Series 1 over Syracuse female head/dolphin and shell, although the strike is far from clear on the published illustration. Manganaro interprets these and other overstrikes Syracuse Series 1 over Syracuse Series 3 triantes (female head in 3/4 view/polyp) as evidence for a revival of the Series 1 typology at a later date. Two of the pieces (over Himera and Selinus) do not have the characteristic top knot of the Series 1, but do face r. like Series 1.

Before rearranging our picture of the issues of Syracuse to accommodate this material, we must ask if it is unequivocally Syracusan. There was a long tradition of imitations of Syracusan fractional

[12] R. B. Holloway, *Il problema dei "pegasi" in Sicilia*, in *NAC*, 11, 1982, p. 129–136. The basic text is Pseudo-Aristotle *Economics*, p. 1349b., 28–33.

[13] The weight of one, 29.65 g, is given by R. Calciati, *Corpus ... cit.*, p. 75. Both specimens are illustrated by F. Cammarata, *Da Dionisio ... cit.*, fig. 44; R. Calciati, p. 75, also publishes a coin of 2.10 g with a female head r. and hippocamp reverse. The obverse is poorly preserved.

[14] T. Hackens, *Les équivalences ... cit.*

[15] R. B. Holloway, *L'inizio della monetazione in bronzo ... cit.*

[16] *Op. cit.*, in note 3, pl. 2, fig. 13, 14, 15.

[17] C. Boehringer, *Bemerkungen zur Sizilischen Bronzeprägung ... cit.*

silver produced in inland Sicily evidently to serve the needs of local circulation with familiar coin types.[18] The bronze of Series 1 was imitated at Eryx.[19] The new overstrikes may be attributed to this or to a similar mint, whose intentions can easily be imagined. First, there was the occasion for reissuing the coinage of the cities suppressed at the end of the fifth century. Second, there was the usefulness of restriking Syracusan money of Dionysius I for circulation outside Syracusan boundaries in the Carthaginian-dominated area of the island. This phenomenon of overstriking, therefore, need have no significance for the dating of the early Syracusan bronze.[20]

[18] Id., *Die barbarisierten Münzen von Akragas, Gela, Leontinoi und Syrakus in 5. Jahrhundert v. Chr.*, in *Le Emissioni dei centri siculi fino all'epoca di Timoleonte e i loro rapporti con la monetazione delle colonie greche di Sicilia, Atti del IV Convegno Internazionale di Studi Numismatici, 1973*, *AIIN*, Suppl. Vol. 20, 1975, p. 157–159. Could the series of bronzes, female head l., hair rolled rather than gathered in a topknot/polyp, C. Boehringer, *op. cit.*, in *Essays in Honor of Margaret Thompson*, pl. 39, no. 20, belong here as well?

[19] E. Gabrici, *op. cit.* in note 8, p. 131, nos. 42–44.

[20] Calciati's *Corpus ... cit.*, includes two unusual coins. The first, p. 24, has obv. a female head r., hair in sakkos, dolphin behind head, rev. polyp, weight 3.45 g. The second, p. 33, has obv., male head l. of fine style, rev. polyp, weight 2.32 g. The exact position of these two pieces in the framework of the Syracusan coinage is still to be determined.



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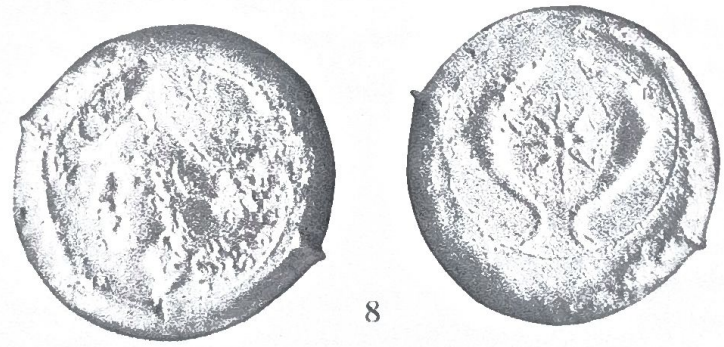
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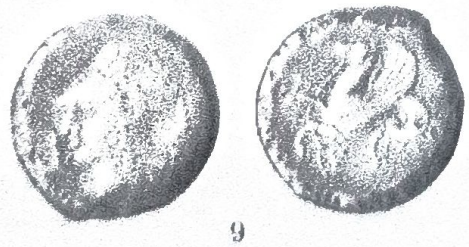
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1. Series 1 trias. Ex Virzi Collection; 2. Series 1A trias. Ex Virzi Collection; 3. Series 1A hexas. Private Collection; 4. Series 2 trias. Private Collection; 5. Series 2 hexas. Private Collection; 6. Series 3 hemilitron. Private Collection; 7. Series 3 trias. Ex Virzi Collection; 8. Series 4 drachm. Private Collection; 9. Series 4 litra. Private Collection; 10. Series 4 hemilitron. Ex Virzi Collection.

FURTHER NOTES ON THE EARLY BRONZE COINAGE OF SYRACUSE

R. Ross Holloway

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The rare Syracusan bronze, female head r./hippocamp above polyp is not an oncion (fig. 3). The example in Munich published by Manganaro clearly shows two value dots (4). Its weight, 2.37 g, is like that of the piece known earlier from the hoard found in Greece and published by P. R. Franke in 1966, 2.5 g (5). Calciati has added five specimens at progressively lower weights (2.21, 2.04, 1.91, 1.82, and 1.70 g) (6). The heavier weights are in accordance with the standard of the initial bronze series of Syracuse with female head and polyp issued in three denominations with a recorded apparent standard (significantly below the theoretical level in the two higher denominations) of 5 g (trias = four ounce coin), 2.5 g (hexas = two ounce coin) and 1.8 g (oncion = one ounce coin).

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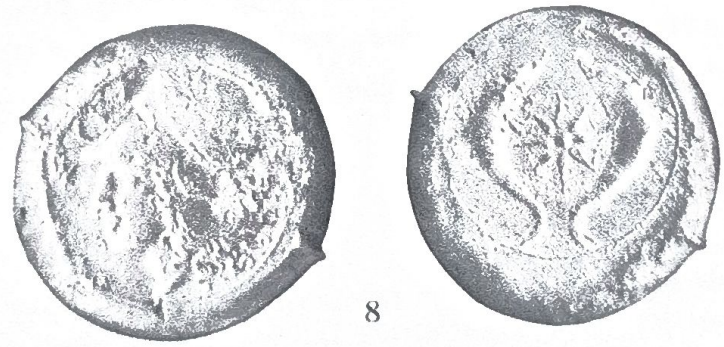
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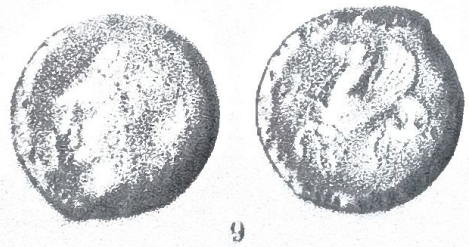
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Series 3: about 405 B.C.		
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(10) E. Gabrici, *La monetazione del bronzo nella Sicilia antica*, Palermo, 1927. The modern revision of Gabrici's opinion, returning to the ideas of the 19th century, was initiated by S. Consolo-Langher, *Contributo alla storia dell' antica moneta bronzea in Sicilia*, Milan, 1964 and established its ascendency at the 1977 Naples conference.

(11) R. Calciati, *Le contromarche della serie Athena-Ippocampo di Siracusa*, Pavia, 1985.

practice. They may have been accompanied by Athena head/star and dolphins drachmae, naturally struck well below their theoretical weight of 40 g. At some point, however, a strange phenomenon occurred. The coins began to be issued to a higher standard, so that the real weights surpassed the old theoretical litra level of 8.0 g. I consider this the clearest evidence that, as vaguely suggested by the anecdotal sources containing information about the fiscal practice of Dionysius I, the nominal value of coinage in his realm, which included Corinthian silver didrachms as well as Syracusan coins in bronze and precious metals, was doubled by governmental decree (12). The bronze drachm thus became a didrachm, while the Corinthian pegasus circulating in Dionysius' domains became a fiat tetradrachm. The heavier Athena head/hippocamp litrae (fiat dilitrae) of 9.5 g imply a bronze drachm (fiat didrachm) of at least 47.5 g. Having doubled the nominal value of the coinage, its weight was increased by 20%, making the change still very much to Dionysius' advantage.

It is interesting that some of the Athena head/star and dolphins coins carry a single pellet, indicating that they are a unit. This works very well for the original drachm valuation. Most of the coins of this type, however, are struck without sign of value. These, I suggest, are the fiat didrachms.

Needless to say, the new weight standard was not maintained, and by the end of its long life the Athena head/star and dolphins coin had decreased to around 25 g, the hippocamp coin to about 5 g.

A recent publication presents two Athena head/hippocamp bronzes which have the weight and dimensions of the star and dolphin coins. What part these coins play in the system of the Syracusan bronze is still far from clear (13).

The chronology of the Syracusan bronze cannot be said to have been fixed definitively. The hypothesis that the Syracusan bronze was born of the necessities of war during the Athenian siege has undoubted appeal (14). Excavation evidence, both connected with the Carthaginian invasion and Dionysius I's first year in power from the inland sites of the Salso Valley investigated in the 1950's and 1960's and from more recent work at Naxos and Motya, makes it certain that our Series 4 begins before 405 (15). If Series 4 represents the coinage of Dionysius I beginning that year, Series 3 must have belonged to the brief period preceding when the pressure of the Carthaginian invasions was straining Syracusan resources. Series 2 and the silver fractional issues which separate it from Series 1 and Series 1a would belong to the years following the Athenian defeat.

Giacomo Manganaro has recently published three overstruck coins which bear on these questions (16). Two of these are Syracuse, Series 1 coins on Himera (head of nymph/wreath) and Selinus (head of Herakles/bow and club). The chronology of either of the undertypes is definitively settled. It has been assumed that both belong to the years before the respective cities fell to the Carthaginians in 409 B.C., but Christof Boehringer has argued that politically neither city was fully destroyed on those occasions. Selinus, we know, was reoccupied by Hermocrates, and Himera too, or refugees from Himera maintaining a political identity, had a life after 409 (17). The third coin is thought by Manganaro to be Syracuse Series 1 over Syracuse female head/dolphin and shell, although the over-

(12) R. R. HOLLOWAY, *Il problema dei "pegasi" in Sicilia*, in *NAC*, 11, 1982, p. 129-136. The basic text is Pseudo Aristotle *Economics*, p. 1349b., 28-33.

(13) The weight of one, 29.65 g, is given by B. CALCIATI, *Corpus ... cit.*, p. 75. Both specimens are illustrated by E. CAMMARATA, *Da Dionisio ... cit.*, fig. 44; B. CALCIATI, p. 75, also publishes a coin of 2.10 g with a female head r. and hippocamp reverse. The obverse is poorly preserved.

(14) T. HACKENS, *Les équivalences ... cit.*

(15) R. R. HOLLOWAY, *L'inizio della monetazione in bronzo ... cit.*

(16) *Op. cit.*, in note 3, pl. 2, fig. 13, 14, 15.

(17) C. BOEHRINGER, *Überlegungen zur Sizilischen Bronzeprägung ... cit.*

strike is far from clear on the published illustration. Manganaro interprets these and other overstrikes Syracuse Series 1 over Syracuse Series 3 triantes (female head in 3/4 view/polyp) as evidence for a revival of the Series 1 typology at a later date. Two of the pieces (over Himera and Selinus) do not have the characteristic top knot of the Series 1, but do face r. like Series 1.

Before rearranging our picture of the issues of Syracuse to accommodate this material, we must ask if it is unequivocally Syracusan. There was a long tradition of imitations of Syracusan fractional silver produced in inland Sicily evidently to serve the needs of local circulation with familiar coin types (18). The bronze of Series 1 was imitated at Eryx (19). The new overstrikes may be attributed to this or to a similar mint, whose intentions can easily be imagined. First, there was the occasion for reissuing the coinage of the cities suppressed at the end of the fifth century. Second, there was the usefulness of restriking Syracusan money of Dionysius I for circulation outside Syracusan boundaries in the Carthaginian-dominated area of the island. This phenomenon of overstriking, therefore, need have no significance for the dating of the early Syracusan bronze (20).

(18) Id., *Die barbarisierten Münzen von Akragas, Gela, Leontinoi und Syrakus in 5. Jahrhundert v. Chr.*, in *Le Emissioni dei centri siculi fino all' epoca di Timoleonte e i loro rapporti con la monetazione delle colonie greche di Sicilia, Atti del IV Convegno Internazionale di Studi Numismatici, 1973, AIIN*, Suppl. Vol. 20, 1975, p. 157-159. Could the series of bronzes, female head l., hair rolled rather than gathered in a topknot/polyp, C. Boehringer, *op. cit.*, in *Essays in Honor of Margaret Thompson*, pl. 39, no. 20, belong here as well?

(19) E. Gabrici, *op. cit.* in note 8, p. 131, nos. 42-44.

(20) Calciati's *Corpus ... cit.*, includes two unusual coins. The first, p. 24, has obv. a female head r., hair in sakkos, dolphin behind head, rev. polyp, weight 3.45 g. The second, p. 33, has obv., male head l. of fine style, rev. polyp, weight 2.32 g. The exact position of these two pieces in the framework of the Syracusan coinage is still to be determined.