Dall'obolo alla litra e il problema del "Damareteion"

From the Obol to the Litra and the Problem of the "Damareteion"*

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1999

(Plates 22–24)

Bibliography

AIIN 1974-75	G. Manganaro, *La caduta dei Dinomenidi*, *AIIN* 21-22, 1974-75.
Bérend	D. Bérend, Réflexions sur les fractions du monnayage grec, *Studies Mildenberg*.
Boehringer	E. Boehringer, *Die Münzen von Syrakus*, Berlin/Leipzig, 1927.
CC	M. Caccamo Caltabiano, *La monetazione di Messana*, *AMuGS* 13, Berlin, 1993.
JNG 1984	G. Manganaro, Dai mikrà kermata di argento al chalkokratos kassiteros in Sicilia nel v sec. a.C., *JNG* 34, 1984.
Randazzo	C. Arnold-Biucchi, *The Randazzo Hoard 1980 and Sicilian Chronology in the Early Fifth Cent. BC*, *NS* 18, New York, 1990.

In the meanwhile, while I was illustrating numerous, largely unknown or unpublished Sicilian Greek coins, often silver coins of the type defined by Aristophanes as μικρὰ κέρματα, distinct from Epicharmus as λίτρα, ἡμιλίτριον, ἐξάντιον τε πεντόγκιον[1], the study of which still raised problems, Denyse Bérend[2] added new examples, also unpublished ones, drawing on the small silver coinage

*Via Fr. Nava 18, I-95030 S. Agata Li Battiati (Catania). — The photos were executed in large part by Signor H. Hotter (Staatliche Münzsammlung, München) thanks to the old friendship of Prof. B. Overbeck, some by Signor G. de Francisci (Ist. Archeologia, Univ. Catania), some by me. I have enjoyed the support of Alexander von Humboldt-Stiftung especially of CNR of Rome. — For me it is a great honor and reason for joy to have contributed to this Miscellanea in honor of Georges Le Rider, scholar of the method of advancement in his difficult works. I also wanted, when possible, to follow his illuminating lessons of L. Robert, and then encountered in Congresses of Numismatics, a figure always distinguished and cordially human. May the most cordial wishes be with him!

[1] JNG 34, p. 11–39, tavv. 2–7.

[2] D. Bérend, Le chromogramme de Strabon, plates A 2, 4; in the eighth [volume] the hemilittron of Abakainon, plate 2, 2 was already known (JNG 34, p. 33, plate 6 n. 84–84 a–b; E. Cammarata, Da Dionisio a Timoleonte, Messina, 1984, fig. 21 b). Regarding the litra of Thermai (plate 2, 25) I must observe that it is not true that "la leggenda Aἰτ dans le champ... ne signifie rien": it means A(ἰτnaion, declaring that this issue is not another established one, in which the symbol of the flower appears (cf. Pl. 22, 7) — destined as a reward for bravery to soldiers: cf. the testimonies I have adduced in AIIN 21–22, 1974/75, p. 24 f. JNG 35, 1985, p. 16, n. 53 (in which I have also cited the litra of Thermai and the well-known tetradrachm of Morgantina) and also D. Knoepfler, La chronologie du monnayage des Siranes in Dionisiaques, RBN 71, 1925, p. 37 n. 148. Connection repeated by S. Garraffo in RIN 1993, p. 181. I would add that A "auf dem Wappenstein" on the obverse of the foreign tetradrachm in L. Boehringer, p. 249, 721, should be resolved as A(ἰτnaion). Bérend, p. 12; see infra n. 52.

of these Aeginetan cities. The circulation must have been enormous. The fractions were always correlated with the drachma (obol being one-sixth, litra being one-fifth) or with the tetradrachm: as for example in the case of Kamarina, the litrae were not connected with higher nominals, naturally they had to rely on multiples of 6 obols or of 5 litrae, integrating into the circulation of these Aeginetan cities. The hesitation expressed by Bérend[3], about the existence of the silver onkia coinage, is justified: it certainly concerns hexas in every case. The same scholar, who was still unaware of the silver submultiples worth four ounces, triantes[4], also noted the singular fact that the only *polis* to affix a countermark on silver fractions, its emblem, the *selion*, turned out to be Selinous[5]: obviously the *polis* opened a mint, after a certain period, when the κέρμα arrived in its coffers, similar to those of Himera, Akragas and Syrakousai. Rather, the countermark with a nymph's head, certainly *Eurymedó*, on a Selinuntine litra[6], reveals that this countermarking operation occurred simultaneously and on the occasion of the issuance of the Selinuntine drachma with the Head of this nymph (BMC Sic. p. 141, 38). Similarly, for example, the countermark with Apollo's Head on the left, preceded by the legend ΛΕΟΝ, in retrograde sense, was affixed above Athena's helmet on a Syracusan bronze litra (Ippocampo al R/) on the occasion of the issuance of onkiai and tetrants of bronze by the Leontinoi, characterized on the obverse by Apollo's Head and the legend ΛΕΟΝ, of an analogous type (*Pl.* 22, 2–3–4): therefore the aforementioned Syracusan litra must precede the Leontinoi issues, earlier in any case than 403 BC, and be dated at least to the beginning of Dionysios I's government. The scholar also touches on the problem of the "calcidesi" fractions of Himera, Zankle and Naxos[7], emphasizing the already existing requirement by the Greeks to typologically distinguish the obol from the litra and notes how at Syrakousai and for the Leontinoi the pentonkion, actually a hemiobolos, constituted a point of "encounter" between the two aforementioned fractions. But the discourse is not clear: for example, I do not believe that the silver litra coined first in the Calcidesi cities was later resumed at Syrakousai, Selinous and Gela "à côté" of the fractions usually derived from the drachma, the obol and the submultiples[8]. It seems true to me instead, that the litra was issued successively, as happened with the obol, even if the litra system already operated in exchanges through the pentonkion and the hexas. The problem of the equivalence of the litra (silver coinage) "with a weight of bronze from the Siculi", is entirely to be reconsidered. The term *litra* is a borrowing from the Sicilian lexicon[9], like the game of *kottabos*, but its monetary value applied to a fraction of the drachma (1/5), as an alternative to the obol (1/6), is a creation of the Greeks of Sicily. The silver litra was coined to respond to the demands of price increases by the minute in the agora, matured within the *polis*, without any conditioning by the Indigenous peoples. The same applies to the fiduciary bronze coinage issued in circumstances of necessity (siege or shortage of silver), to satisfy the subsistence market.

The silver coinage of Akragas defined on the R/ λί(τρα), generally of weight inferior to the

[3]Bérend, p. 12; see infra n. 52.

[4]JNG 1984, tab. 5, 59 ff. and infra n. 106 ff.

[5]Bérend, p. 18 ff.; cf. also JNG 1984, p. 23 ff.; the countermark, erroneously described in SNG München Sik. 354, corresponds to that depicted in G. Castelli Torremuzza, *Siciliae Vet. Nummi*, Auct. III, Panormi 1791, Tab. III, 5. Cf. also MM Listino 406, 1978, 51.

[6]JNG 1984, tab. 3, 22. In: Mondo religioso greco e mondo "indigeno" in Sicilia, *Il dinamismo della colonizzazione greca*, Atti Tav. Rotonda, Venezia 1995, Napoli 1997, p. 79 with n. 74, I overlooked the article by A. Carbè, in RIN 1986, p. 13 ff., in which the nymph is identified as Persephone. See also A.D. Zisa, Le ninfe sulle monete della Sicilia, *Actes du Congr. Numismatique, Bruxelles 1991*, 1993, p. 85–90.

[7]Bérend, p. 19–21.

[8]Ibid., p. 19.

[9]M. Lejeune, Le nom de mesure Λίτρα, in REG 106, 1993, p. 1 ff.

canonical one of gr. 0.87 approximately, only through an absurd theory can correspond to a weight litra of bronze of the «Siculo system» (which one?). This litra, mercantile standard, on the basis of multiple weight-specimens, also inscribed, in bronze and lead, from Sicily, always oscillating, is attested at gr. 220/230[10]. Is a ratio AR/AE 1:270 possible?[11] The real problem is that of understanding the reasons for the passage from the monetary obol to the monetary litra, barely two ounces (gr. 0.14 approximately) heavier than the first, and will be taken up again later.

Aspects of the *kerma* have been treated by A. Carbè[12] for the coinage of Selinous, compared with that of Rodi, by M.Cr. Molinari[13] and by P. Naster[14]. E.E. Clain-Stefanelli[15] has roughly reproposed the same problems of Bérend connected with the Siceliote fractions, even if she dwelt with greater commitment on those of Zankle, of the Samii in Sicily and of Messana, illustrating new examples. The pentonkion and the hexas would have constituted «the bridge» between the obol system (divisible into 10 chalkoi, in Sicily onkiai) and that of the litra (divisible into 12 onkiai)[16]: this latter would be «an innovation resulting from the contact of the Greek colonists with the native Siculo populations», from which the former «depended for their supplies», and rather «the silver equivalent of the Sicilian standard weight in bronze»[17]. Clain-Stefanelli wondered whether «the military successes of Duketios, leader of the Siculi» had contributed to the affirmation of the «litra system» in the markets, or whether this had been the result of a «slow, but constant process of amalgamation», through intensified commercial relations of the *poleis* with the Indigenous peoples, in the middle of the 5th century BC, for which there would have been verified «the change from a mixed, dual system to a single one» (of the litra?)[18]. The submerged predominance and versatility of the litra system should be noted, which already operated alongside the coined obol, through the pentonkion and the hexas, subfractions that disappeared, when in the agora the coined litra constituted the minimum price for small transactions. On the other hand, the pentonkion is a hemiobolos, and therefore the sum of two pentonkia and one hexas corresponds to one litra!

[10] Apart from what N.F. Parise illustrated, Il sistema della litra nella Sicilia antica tra V e IV secolo, *Atti del VI Convegno Studi Numismatici*, Napoli 1977, AIIN, Suppl. al Vol. 25, 1979, p. 293-304, I recall the weight-specimen of lead (*Pl.* 22, 5), already published in AIIN Suppl. 25, 1979, p. 110, of 113 g.; two others inscribed ONKI of 18 g. each (in Quad.Urbin.Cult.Class. 78, 1995, p. 105 with figg. 33-34); one presented at *Pl.* 22, 6-6A of 425 g. inscribed Δίλιτρος, which is compared with one from Marianopoli, 428 g., inscribed Ἑρμαίου (name of the possessor), published in F. e L. Landolina Paternò, *Illustrazione storica delle monete della Sicilia antica*, Caltanissetta, 1872; a weight of 230.20 g. from Himera (*Himera* I, Roma, 1970, p. 349 ff., p. 361) with the abbreviation Ηιμερ(αίων) δε(μόσιον) and on the sides Σ(τατέρες) Δ(έκα). I note also, if from the Roman period, the weight-specimens inscribed in Greek, fished from the port of Camarina (G. di Stefano, in: *Archeologia Viva* 13/45, 1994, p. 46 ff.).

[11] Th. Mommsen calculated the ratio 1:250 (cf. AIIN 1979, cit. p. 110 with n. 76). CC, p. 142, proposed 1:123, convinced that a «Siculo system of the litra» had also dominated at Syrakousai, if it is true that Epikarmo is said to have mentioned among the monetary species litra and submultiples in the comedy «Le Arpagaì» (cf. already JNG 1984, p. 11-14). Even if it is undeniable that the litra as a metrological system had always operated in Sicily, the corresponding coinage was issued with the Series XIII-XIV Boehringer, probably after the fall of the Dinomenids: but the aforementioned comedy of Epikarmo, who is said to have lived until around 440 BC, can be dated contemporaneously. The theory of the «Siculo system of the litra», imposed by the Indigenous peoples on the Greeks, has a long tradition, from Willers, to Gabrici, to Console Langher, to Breglia and others; see the art. cit. by N. Parise in n. 10.

[12] RIN 88, 1986, p. 3-16.

[13] *Ibid.*, p. 21-24.

[14] RIN 90, 1988, p. 3-14.

[15] On some Fractional Silver Coinage of Sicily and Magna Graecia during the Fifth Cent. BC, RBN 133, 1987, p. 39-65 con tavv. 8-12.

[16] *Ibid.*, p. 52 ff.

[17] *Ibid.*, p. 42 ff.

[18] *Ibid.*, p. 53 ff.

Furthermore D. Bérend has dedicated tasteful pages to the silver fractions of Syrakousai, characterized on the R/ by the type of the octopus[19]: this mollusk must be presented, as in the annexed Pl. 6, with the head up, differently from how it is found in almost all the monetary catalogues[20]. For the occasion, Bérend has illustrated the rare, certainly the first, issue (Head of Athena with Corinthian helmet/octopus) of Adranon, the city founded in 400 BC by Syrakousai, controlled by Dionysios I, on the slopes of Etna and therefore distant from the sea: the Head of Athena of the D/ repeats that of the Dionysian bronze litra mentioned above, while the octopus, with the ethnic of Adranon, recalls the R/ of the tetras of Syrakousai with Head of Aretusa[21]. Evidently on the bronze of Adranon a current typology of the metropolis has been abstractly resumed. Bérend also recalls cases of re-coining of Syracusan obols, such as that on an obol of Aitna[22], on which I will return later, and then illustrates with exemplary clarity the method of classification of the fractions of Syrakousai. However, regarding the litra at Pl. 6, 10[23], in front of Aretusa's face is depicted a laurel leaf with the drupe (so it should be described more correctly, as my friend G. Burgio warned me, the berry!) and not already ≪the leaf and the fruit of the olive≫, in correspondence with the laurel leaf in the exergue of the D/ of the tetradrachm Boehringer 720[24]: it suffices to observe figure 8. The letter H, behind the nymph's nape, could be, excluding an abbreviation H(emilitron), the initial of the engraver's name. In a successive article[25] Bérend classifies the octopus of the R/ of a bronze issue of Messana as a find of the III Syracusan Type, thus putting into comparison the chronology proposed for the bronze issues of Messana by K. Rutter with the high one of M. Caccamo Caltabiano (who later changed opinion). Among other things Bérend identifies as obols the first silver fractions of Messana, recognizes, following Clain-Stefanelli's line, the pentonkion's function of having facilitated the passage from the obol to the litra, and places in the last twenty years of the 5th century BC the beginning of bronze coinage in Sicily, refusing the tendencies toward high chronology.

In 1992 appeared a profitable treatment of the problems relative to the ≪Chalkidian≫ fractions[26] and the long-awaited Corpus of the issues of Messana by M. Caccamo Caltabiano[27], among which naturally figure the fractions, distinct by series. Thus to Series I of drachms (Lion's scalp/ Protome of calf to l., ethnic) on ≪Chalkidian≫ foot, of gr. 5.70-5.50, for which 24 D/ dies are isolated, coined only with the ethnic of the Rheginoi, certainly by Anaxilas[28] — contemporary with the anonymous tetradrachms (Lion's scalp/Samian ship, with a letter of the alphabet, from A to Z) on Attic foot, ascribable to the Samii, settled at Zankle, and coined for at least six years (494/3-488 BC) with various submultiples (diobol, obol, hemiobolos, hexas)[29] — are hooked fractions

[19]Histoire de poulpes, KME, p. 23-28 con tav. 6.

[20]I would observe however that in the bronze tetras of Syracuse (JNG 1984, tav. 3, 17; *Antikenmuseum Basel*, no. 454) on the R/ the octopus is depicted, under Ippocampo, with the head down! The ancient testimonies on the octopus collected in D.A.W. Thompson, *A Glossary of Greek Fishes*, London, 1947, p. 155-158 s.v. Μαλάκια; p. 204-208 s.v. Πολύπους, besides those in RE XXI 2, 1952, 1791-97 (H. Gossen): the octopus for the Greeks symbol of ambiguity (Theogn. 215 ff.). I present at *Tav.* 22, 7 a bronze anepigraph (cf. already Cammarata, *op. cit.* in n. 2, fig. 37).

[21]Bérend, *loc. cit.* in n. 19, tav. 6, 11.

[22]*Ibid.*, p. 24 with n. 6.

[23]*Ibid.*, p. 26; cf. also SNG ANS 5, III 1377, 0.68 g.

[24]Boehringer p. 248, no. 719 ff. for the D/ one reads ≪ im Abschnitt Ölblatt mit Frucht ≫. For the figuration of the laurel leaf in coins cf. Carbè, *art. cit.* in n. 12 and *infra*, n. 37.

[25]Le lièvre et le poulpe, *Studia Westermark*, p. 33-39.

[26]C. de Piro, Le frazioni di Nasso, Zancle, e Imera: brevi considerazioni, RIN 94, 1992, p. 11-25.

[27]CC, see bibliography.

[28]CC, p. 24-26.

[29]Cf. J.P. Barron, *The Silver Coins of Samos*, London, 1966, p. 40 ff., p. 178 ff. con tavv. 6-7; , p. 28 con n.

(Lion's scalp/Abbreviated ethnic) defined litrae (with thickening point on gr. 0.95), pentonkia and hexantes[30]. When Anaxilas, having expelled the Samii from Zankle and refounded the city with the name of Messene, organized the mint in this latter, elected as his residence, he began issues of tridrachms (staters for CC), always on Chalkidian foot and with the same types in the name of the Messenioi and of the Rheginoi: an experience of *sympoliteia*[31]. With these tridrachms go connected fractions, of corresponding type (Lion's scalp/Abbreviated ethnic) and precisely litrae and onkiai (?)[32]. The pentonkion is missing (definitively?). At this point one wonders, because the aforementioned major fractions must be defined litrae and not obols. Yet the thickening calculated by CC for those of Rhegion touches gr. 0.95, for those of Messene gr. 0.90/0.85[33]: these values constitute a sixth of the «Chalkidian» drachma (gr. 5.70/5.50) and therefore it would be more correct to define these fractions obols (a sixth of the drachma even Chalkidian). An analogous discourse should be made for the Chalkidian fractions of Himera, Zankle and Naxos, defined litrae by H.A. Cahn, obols by N. Parise[34]. For Himera the two series of fractions, one with the figure of the cock, the other with the hen, have been defined by C.M. Kraay the first respectively litra, the second obol: the coexistence at the time of coinage of two values so close to each other would be absurd. In truth it is a matter of a single value, obol (a sixth of the Chalkidian drachma) issued with two different types, because hooked to the drachma in two types, of «Subgroup IV d», characterized by the cock on the D/, by the hen on the R/.

To Series I A of Rhegion, lasting 13 years from 494/3 until 481 BC, followed a second series (II A), on Attic foot of tetradrachms, didrachms and drachms, characterized by the chariot drawn by mules, guided by a bearded charioteer[35], with empty exergue on the D/, by the running hare to r., surrounded by the ethnic (of the Messenioi or of the Rheginoi) on the R/[36]. This Series II A would have lasted only two years, 480-478 BC, too few for the use of 12 D/ dies for Messene, 7 dies for Rhegion: it would be prolonged until 476 BC, year of Anaxilas' death, who perhaps had just begun Series II B, characterized by «change of style» and by the addition in the exergue of the D/

112. I present at *Tav.* 22, 9-10, a diobol (s.p., dispersed) and an obol of the Samii, collected at Messina.

[30]CC, p. 26 ff.; p. 340 ff.

[31]Concept not accepted in CC, p. 40: cf., however, Randazzo, p. 28 with n. 114; Clain-Stefanelli, *art. cit*, in n. 15, p. 55. Regarding the typology of Series I, rather than referring to imprecise «oriental models» or micro-Asiatic and to a supposed «Heliaic cult» (CC, p. 17-23), it is helpful to consider the types of the issues of Samos, on Samian foot (13 g. circa), Lion's scalp/Protome of ox with horn, to r. within an incuse (Barron, *op. cit.* in n. 29, plate 6, 1-7), which certainly the Samian refugees had brought to the area of the Strait (for Samian mercenaries at Himera, cf. ZPE 101, 1994, p. 121 ff.). I would venture the hypothesis that the Lion and Calf allude to the myth of Heracles, who arrives in Sicily pursuing the fugitive cattle.

[32]CC, p. 30 ff., p. 207, ff. The existence of silver onkiai is improbable (cf. also Clain-Stefanelli, *art. cit.* in n. 15, p. 51). They must always be considered as hexantes, of which CC has collected few examples, which average 0.095 g., compared to 0.12 g. for Rhegion, apart from two examples from the Coll. Bellitti, weighing 0.21-0.20 g., of abnormal weight, perhaps because dirty, that is in the condition in which they were found, considered as «Mare grosso».

[33]CC, p. 202, p. 183.

[34]Cf. de Piro, RIN 94, 1992, p. 11 ff.

[35]It could very well personify Pelops, shown on the obverse of tetradrachms of Himera (Cf. C. Arnold-Biucchi, QT 17, 1988, p. 88 ff.), rather than the supposed «divinity of solar character» (CC, p. 36 ff.). Fanciful is the idea (p. 37) that Anaxilas would have raced to Olympia with a team of mules, animals of mixed breed, insofar as these embodied the diversity of the *ethniai* which he governed. The chariot drawn by mules was certainly the typical means of transport in the Calabro-Messinese area, admitted in time to the races at Olympia.

[36]To this coinage, for Rhegion, Aristotle refers (Frg. 568 Rose-Poll. V 75, in CC p. 32), when he reports that Anaxilas, victor at Olympia with the *apene*, would have introduced the breeding of hares in Sicily, «which until that moment was deprived of them». See my art., Raffigurazioni di fauna e flora nella monetazione, in bronzetti e su anelli della Sicilia greca, *Stuttgarter Koll. zur Histor. Geographie des Altertums* 5, 1993 (1995), p. 220 con n. 39 ff.

of a laurel leaf[37], rather, this Series II B should become Series III, to be prolonged in other Series throughout the years of Micito's government, the devout of Olympia, who withdrew in 467 BC to Tegea (Hdt., 7,170,4): by now the tyrannical regime in the Siceliote *poleis* was on the point of collapsing. The persistence of the ethnic of the Messenioi in Ionic form (that Doric with sigma still serpentine appears only with Series VII, dated 455-451 BC, naturally in correspondence with the massive influx «in Messenia» of the ex-Messenian mercenaries systematized by the Dinomenids in various *poleis* and expelled around 461 BC)[38], leads one to think that, apart from the Danklaean oligarchs refugees at Mylai, at Zankle the old Chalkidian population, which already tended toward linguistic «crisis», as at Himera, must have remained, even after the city was refounded as Messene, numerically superior, for another generation, to the group of Messenioi, who had assumed control, guided by the Chalkidian Anaxilas, even if descendant from a noble Messenian *ghenos*, and tyrant of the Chalkidian Rhegion. The situation would remain unchanged under Micito. The Messenii had to send every year to Rhegion, as an act of homage to the metropolis, a chorus of 35 boys and girls, who once perished in a shipwreck in the dangerous Strait (Paus. 5,25,2 ff.)[39].

A R/ die 22, isolated by CC, common to nr. 38 of Series II A and to nr. 50 of Series II B, and the involvement in the recoining ascertained for examples of Series II B of «Chalkidian» tridrachms and of some unrecognizable ones of Series II A[40], assure the succession and proximity between the two Series, II A and II B. With both are connected for Messene and for Rhegion fractions, defined litrae by CC (Running hare to r./Abbreviated ethnic)[41], pentonkia (Protome of running hare/ M, or R (retrograde), surrounded by 5 pellets), and hexantes (protome of hare/ first two letters of the ethnic)[42]. Once again I wonder why the major fractions must be litrae and not obols, if the point of thickening of them, calculated by CC for Messene results in gr. 0.65, for Rhegion gr. 0.60[43]? Now the foot is that Attic and therefore the major fraction as a sixth of the Attic drachma (gr. 4.20/4.00) is an obol (gr. 0.65 x 6 = 3.90), rather than a litra, a fifth of the drachma (0.65 x 5 = 3.25: too low a value for an Attic drachma).

The successive major fractions are truly litrae, absent for Rhegion, characterized on the R/ by a crown of laurel, which surrounds the abbreviated ethnic MES (then MEΣ): these are accompanied by rare hexantes, but no longer by pentonkia, and in Series VII by hemilitra, declared by the letter H[44]. The same ones, now litrae, which present like those with the octopus of Syrakousai a broader, subtler and flatter flan, are linked to the issue of tetradrachms on Attic foot (Series VI dated 460/456 BC and successive) characterized on the D/, now for the first time, by Nike flying above the mules, to place on their heads a crown (recalled in the R/ of the litrae). The type of Nike reveals a specific Syracusan influence: this Series VI should be connected with Series VII, in

[37]Punctual allusion to the type of flora, which characterized the Messinese landscape, as in the case of the fir tree *ethnos* in the exergue of the D/ of the archaic tetradrachm of Aitna (*Antikenmuseum Basel* no. 250). Greater suggestion vests the crown of laurel leaves on the R/ of the litra of Messene, for which it comes to mind to imagine that in antiquity on the hills along the Messinese coasts laurels should prosper: the leaves would have been collected and treated to confection perfumed oils or for medicinal and culinary use: cf RE XIII 2, 1927, 1438 ff., s.v. Lorbeer (Steier). In confirmation of my idea, Prof. G. Pavone, Director of the Institute of Botany of the University of Catania, referred me to G. Gussone, *Florae Siculae Synopsis* I, Napoli, 1842, p. 459 ff.

[38]There were certainly no «signatories of the *koinon* dogma» (CC, p. 63), but each *polis* reconstituted issued its own «common decree (of all the people)» (cf. AIIN 1974-75, p. 15), while the *xenoi* cleared out with their belongings. Cf. also my article, Studi di epigrafia siceliota, *Rend.Acc.Lincei* 1996, pp. 50-52.

[39]Cf. F. Cordano, I Messenii dello Stretto e Pausania, *Parola del Pass.* 195, 1980, p. 436-440.

[40]CC, p. 209-211.

[41]CC, p. 233 ff., p. 350 ff.

[42]CC, p. 237 ff., p. 352 ff.

[43]CC, p. 186; p. 204.

[44]CC, p. 241 ff.; p. 247 ff.

which appears the Doric ethnic MESSANION and descend toward 455 BC, after the settlement of the Messenian refugees confluent «in Messenia». But the same Series VI should be preceded by an interruption of the mint, intervened after Series V in 465 BC, approximately as it has been supposed for Rhegion[45]. The absence of die links and the impossibility, at least for me, of ascertaining sequences constructed on particulars, which have no stylistic relevance[46], leave me perplexed. On the other hand, the collection of hexantes and pentonkia — to exclude the onkia, as also for Katane[47] — in the Messinese Corpus must be considered provisional[48].

The pentonkion of Series I A for Rhegion and of Series II and following for Messene and Rhegion deserves to be investigated in its function: defined «proper nominal of the Siculo system»[49], the superior fraction must be implicitly litra, Siculo by essence. But even if it is true that the term litra derives from the Siculo lexicon, the monetary nominal follows a Greek metrological standard (decimal/duodecimal). The Greeks of Sicily for monetary fractions had available the obol, metropolitan term, a sixth of the drachma, which could be Attic or Chalkidian, and besides the litra, valued a fifth of the drachma, as attested for example by the legend ΠΕΝ(ΤΑΛΙΤΡΟΝ) under the eagle on the D/ of the drachma of Akragas, to which corresponds the legend ΛΙ(ΤΡΑ) under the crab of the R/ of the fraction, issued by the same mint. These abbreviated metrological didascaliae on the coin itself reveal the need to proclaim their value to users, who no longer dealt with obol. However, the litra, even before being coined, had operated in the daily reality of the market through the submultiples tariffed in onkiai, that is hexas and pentonkion, issued together with the obol, to facilitate adjustments and occasional balances. Thus the pentonkion of Series I of Rhegion, of Chalkidian standard, of gr. 0.30 approximately, adding with an «Attic» obol of the anonymous series of the Samii at Zankle, reconstituted a value equivalent to an obol (litra for CC) «Chalkidian» of gr. 0.95 (gr. 0.30 pentonkion + gr. 0.70 Samian obol). The pentonkion of Series II, on Attic foot, of Messene and of Rhegion (Protome of hare/ Initial of the ethnic surrounded by 5 pellets), with thickening on gr. 0.26, adding with the superior fraction, an obol, whose point of thickening touches gr. 0.65, could reconstitute again a value equivalent to the preceding «Chalkidian» obol of gr. 0.95 approximately.

This my reconstruction of the mechanisms of reciprocal compensation of the various submultiples of the obol (litra) launched into circulation in the Messinese area may seem too complicated, to be true: but the reality of a market now accustomed to coinage, in which various monetary species met and combined to realize the exchange, even in archaic Sicily was complex. The reconstruction of the context of monetary circulation in a market always remains arduous: the discovery increased in these last decades of minimal nominals, hexantes and pentonkia, and also of tetrants and triants of silver (I will illustrate new examples further on) allows one to intuit the complex dynamics. Perhaps no important mint in Greek Sicily remained deprived of hexas and pentonkion:

[45] CC, p. 43.

[46] Cf. Randazzo, p. 27.

[47] Cf. *supra*, n. 32; JNG 1984, p. 24.

[48] I note to the reader JNG 1984, tav. 3, 26-27 and now four examples (*Pl.* 22, 11-14) corresponding to the types, CC tavv. 16-18, nr. 231.271-271; e tav. 38 nr. 638 (reproduction, and it is not the only one, very poor): Λ certainly is not an abbreviation of Λ(ίτρα).

[49] CC, p. 31.

so it results for Syrakousai[50], for Gela[51], for the Leontinoi[52], for Kamarina[53], Akragas[54], Himera[55], Selinous[56] and for Motya[57], while for Segesta the pentonkion is still missing[58], and for Katane, which began to coin the submultiples a little later, beside the dominant litra hexas, tetras and hemilitron[59].

The passage from the obol system to the litra system marks an important moment[60], a watershed in the history of the monetary economy of the Siceliote *polis*. This is clear for Syrakousai. In the very solid framework for the sequences, if not for the chronology, that E. Boehringer has presented of the Syracusan coinage, the last issues of obols, unexceptionable definition on a metrological basis[61], accompany Series XIIe, of the so-called Damareteion: with the successive Series XIII-XIV (of the Ketos), appears the litra characterized by broad and flat flans and distinct for the typology of the R/, the octopus (*Pl.* 23, 17).

The reasons for which in Sicily in the middle of the 5th century BC the issue of the obol ceased, substituted with a nominal, theoretically heavier by barely a hexas (gr. 0.14 approximately), the litra, must be found exclusively within the *polis* in its economic and political life, which never and in no way allowed itself to be conditioned by ≪indigenous≫ realities, so in economy as in religion and in institutions[62]. The end of the tyrannical regime in various *poleis* provoked movement of men, greater circulation of goods and a rise in the price of commodities, which was consolidated by making inflation explode: for example a medimnus of grain (or of barley) now could be worth more than an obol, that is a litra, or half of the same, 6 hemihekta, a hemilitron, as probably wanted to proclaim the type of the grain of barley surrounded by 6 pellets, on hemilitra of Himera and of the Leontinoi[63].

The litra became the primary coin for the local market of a *polis* under democratic regime, in which prices have increased, settling on the average value of the same: hexantes and pentonkia, besides having performed a function of connection, may have facilitated business at increased prices, compared to the obol, on the wave of inflation.

Connected with this problem of the passage from the obol to the litra, at Syrakousai, seems to me also the problem of the Damareteion, still debated in these recent years. CC, inclines to cut short with the major problems, remaining firm in personal solutions, rather hypothetical work[64],

[50] I present, *Pl.* 22, 15 e 23, 16, a hexas and an archaic pentonkion.

[51] JNG 1984, p. 25 ff., tav. 3, 36: the pentonkion identified by H. Küthmann. This and the connected hexas with the horse's head to l., and on the R/ the initial of the legend ΓΕ flanked by two pellets (one above, one below) (gr. 0.102) (*Pl.* 23, 16 A) present the protome of the little horse standing for the litra!

[52] Chr. Boehringer, Kataneische Probleme: Silberne Kleinstmünzen, *Actes 9ème Congrès Int. Numismatique, Berne 1979*, Louvain-La-Neuve, 1982, p. 71-83, Taf. 8.

[53] U. Westermark, K. Jenkins, Notes on some New and Rare Coins of Kamarina, QT 11, 1982, p. 48 ff., p. 53.

[54] JNG 1984, p. 26: ahead, *Pl.* 23, 25-26, I present two new examples.

[55] JNG 1984, p. 27, tav. 4, 50.

[56] For the pentonkion, cf. Cammarata, *op. cit.* in n. 2, tav. 2, 18 a.

[57] JNG 1984, p. 28.

[58] Beside hemilitron and hexas (BMC Sic. p. 135-136, 47-48).

[59] Chr. Boehringer, *art. cit.* in n. 52, p. 81 ff.; and my art. La monetazione di Katane dal V al I sec. a.C., *Catania antica, Atti Convegno SISAC*, Catania, 1992, p. 308 e tavv. 2-3. I note the pentonkion of Aitna, with the type of the Head of Silenos to r. on the D/ (known from Italo-svizzera collection).

[60] See already Chr. Boehringer, Aitna und das Hieroneion, JNG 18, 1968, p. 81 ff.

[61] Notwithstanding the reservations in CC, p. 31 con n. 116.

[62] See my art., Mondo religioso greco (*supra*, n. 6), p. 80 ff.

[63] Cf. JNG 1984, p. 29.

[64] As for example, for the chronology of the decadrachm of Kimon, at p. 105; for the so-called ≪drachma≫ Dionysian and for the monometallic bronze system (!), at p. 140 ff.; for the insertion of bronze coins before others of small silver, at p. 111-115. Happy the abandonment of the high chronology, 442 BC, for the

after having liquidated as «antihistorical» the attempt of the reaffirmed C.M. Kraay, who although he raised, if not unanimous consent, reflections of various scholars, has categorically reaffirmed the dating in 480/79 BC of the Damareteion «issued by initiative of Gelon's wife» (even if it were a Ptolemaic basilissa!)[65].

The same echoes H.A. Cahn, who again recently[66] has repeated the connection of the Damareteic decadrachm with the victory of Himera in 480 BC: the olive crown, victory crown, which encircles Aretusa's head for the first time in Syracusan coinage, in Series XII e, would be «the golden crown», which the Carthaginians accorded to Damareta, Gelon's wife (Diod. 11,26,3). Only that in Diodorus ὁ στέφανος χρυσοῦς designates according to late-Hellenistic language «a tribute in gold»[67] and the Syracusan victory, celebrated by crowning Aretusa on the coin, can be other and not that of Himera. D. Knoepfler[68], re-examining in his folds the problem of the Damareteion, rather has demolished the pillar of 480 BC, noting that in 478 BC there must have occurred at Syrakousai the official abandonment of the *koppa* on inscriptions and coins, substituted by the *kappa*, employed in the legend of the decadrachm, for an intervened «orthographic reform of Hieron»[69]. The same recognizes in the decadrachm of Series XIIe an extraordinary issue, detached from every sequence, probably destined to recompense soldiers (*aristeion*) for a field victory, adding it to that of the Syracusans over the Agrigentines in 472 BC[70]. However I wonder what role of relief the Leontinoi may have had, to whom belongs a «Damareteic» issue of tetradrachms, characterized on the D/ by the symbol of the little lion in the exergue, under the quadriga, on which flies Nike who crowns the charioteer and on the R/ by the Head of Apollo crowned, with the little lion under the neck: this little lion appears in the exergue of the D/ of the Damareteic Syracusan Series. It follows, if I am not wrong, a political connection between the Leontinoi and the Syracusans. The hooking of the «Damareteic» Series with a military victory seems to me indisputable, for which remains priority the need to find it and to justify on the historical plane every chronological proposal. Thus remains too generic that of C. Arnold-Biucchi, 475-470 BC[71], who, publishing Randazzo's hoard, whose burial seems datable around 450 BC, and in which figure, beside Syracusan tetradrachms of Series XIII-XIV, tetradrachms of the Leontinoi of the Damareteic type, in my opinion has allowed herself to miss an occasion to propose an adequate solution of the problem of the Damareteion. No one can deny that the adoption of the symbol of the little lion, *parasemon* speaking of the Leontinoi, on Series XII e of Syrakousai, reveals a political bond between the two cities, a sort of *sympoliteia*, a military alliance and a celebration of common victory (crown for the protecting god), which cannot have been verified except in the course of the common struggles for the achievement of autonomy and democracy, both at Syrakousai and for the Leontinoi. In this perspective one is induced to place the Syracusan decadrachm — even if it does not result in Randazzo's hoard (but it could have been and perhaps was concealed) — shortly before Series XIII, which must be dated when at Syrakousai the democratic regime was affirmed, which promoted inflation and the systematic issue of litrae. Too hasty is the dating of the Damareteion «before 467/66 BC», ultimately reiterated by Chr. Boehringer, who has wittily added that the decadrachm could have been coined with Damareta's patrimony around 470 BC (after her death?)[72]. Also H.B.

bronze of Messana (see also JNG 1984, p. 117 n. 28).

[65] CC, p. 59.

[66] Die bekränzte Arethusa, *Studia Westermark*, p. 99-102.

[67] See AIIN 1974-1975, p. 29.

[68] La chronologie du monnayage de Syracuse sous les Deinoménides, RSN 71, 1992, p. 5-32.

[69] *Ibid.*, p. 22, p. 33 ff.

[70] *Ibid.*, p. 37.

[71] Randazzo, p. 47

[72] Rendiconto di Randazzo, SNR 71, 1992, p. 208.



Mattingly has preferred a generic dating after the fall of the Dinomenids[73].

On the other hand, it is not permissible to liquidate the problem by defining the Damareteion «a myth», as K. Rutter has done[74], subjecting to examination the relative tradition in Diodorus, certainly constructed in multiple layers. Rutter recognizes that in the Diodorean tradition a Ptolemaic queen's role is attributed to Damareta, as I had underlined referring to Timaeus[75], but he also grasps Diodorus' own suggestions, derived from a propaganda, which would have been favored by Gelon II of Syrakousai, who claimed to descend from the Dinomenids. The Damareteion would be a constructed myth: but if the name, on the model of the Philistideion, which designated a silver coin issued by Gelon II with the name «of queen Philistis» his wife, is invented, the archaic decadrachm exists and awaits a historical placement. The tradition, constructed anachronistically in Diodorus, must have precise roots, perhaps in a legend arisen early in the Syracusan *damos*, which referred the extraordinary coin of 10 drachms, of which some example will have been preserved in opulent houses at Syrakousai, to the extraordinary figure of Damareta, consort of the idolized Gelon: this popular tradition, after being probably accepted by the historian Antiochus, can have arrived until the beginning of the 4th century BC, so that Philistus could have recorded it in his «Sicelian History». Philistus knew the decadrachms signed by Kimon and by Euainetos, which were worth 50 litrae (even if by now rare were the silver litrae). It may have been Philistus, echoed in Diodorus (11,26,3), to describe the decadrachm attributed to Damareta as «a coin of 10 Attic drachms, for the Siceliotes according to the weight of the value of 50 litrae». In reality that decadrachm corresponds to 60 Attic obols, of those issued at the time, the last of the Syracusan mint.

By the way, it deserves to be re-examined a Syracusan obol[76] of gr. 0.58, of type Boehr. 365 (Series XIId), which (*Pl.* 23, 18), results recoined, revealing within two spokes of the wheel, on the R/, evident traces of the segmented body of a shrimp, which cannot be other than that depicted on the D/ of the obol of the Aitnaioi (*Pl.* 23, 19). On the R/ of this same one, between the spokes of the wheel, are articulated the first four letters of the ethnic AITN, repeating the typology of the R/ of the Syracusan obol of Series XIIe of the Damareteion (Boehr. 392 ff.). The engraver of the obol die of Aitna, naturally that implanted in 475 BC on the site of destroyed Katane, seafaring city, as the choice of the shrimp type reveals[77], must already have known the «Damareteic» obol of Syrakousai (*Pl.* 23, 20). Therefore both this latter and the obol of Aitna should be dated before the transfer of the Aitnaioi to Inessa, which occurred in 461 BC: a coinage with the shrimp type by the Aitnaioi of Inessa is hardly likely and to be excluded.

On the other hand the Syracusan obol of type Boehr. 365 (Series XIId) must be successive to the obol of Aitna, recoined, and to that «Damareteic» (Series XIIe). One must therefore conclude for a dating of this latter before the obol of Aitna, and of the Syracusan obol B. 365 (Series XIId), which is successive, even if by little, when the Syracusan mint, having exhausted the extraordinary coinage of the Damareteic Series, returned to employ the old dies of Series XIId. Boehringer's sequences therefore should be modified, confirming G.K. Jenkins' proposal to place Series XIIa-d after Series XIIe[78].

However, the issues of the «Damareteic» obols and of Series XIIa-d conclude the era of the depressed market, at fixed prices, even if hexantes and pentonkia allowed adding to reach higher

[73]The Demareteion Controversy — A new approach, *Chiron* 22, 1992, p. 1-12.
[74]The Myth of the «Damareteion», *Chiron* 23, 1993, p. 176 ff.
[75]AIIN 1974-75, p. 31: I had not taken account of the chronological limits of Timaeus.
[76]See already in JNG 1984, p. 16, tav. 2, 1-2.
[77]It returns as symbol for example on drachms and tetradrachms of Katane (*Antikenmuseum Basel*, 332-335).
[78]G.K. Jenkins, *The Coinage of Gela*, AMuGS 2, Berlin, 1970, p. 23 ff.



transactions.

Broken the long-lasting spell, which connected the archaic Syracusan decadrachm with Damareta and with the victory of Himera, there remains for us the duty of attempting the historicization and of seeking the field victory, which may have provoked the addition of the olive crown on Aretusa's head in Series XIIe at Syrakousai, and on Apollo's head in the corresponding tetradrachms of the Leontinoi. In Diodorus' tradition, rather discontinuous for the successive years at the end of the tyranny at Syrakousai, the only significant episode is that referred, at the conclusion of the struggles of the Syracusans against the *xenoi*, for 461 BC (11,76,2): «the Syracusans gratified (ἐστεφάνωσαν) the chosen soldiers, 600 in number, artificers of the victory (over the *xenoi* in revolt), as prize of bravery (ἀριστεῖα) giving to each a mina of silver». Naturally in coined money and a mina corresponds to 10 decadrachms: why cannot the Damareteic decadrachms have been with Aretusa's Head encircled by an olive crown, symbol of victory? Some other similar episode may have occurred for the Leontinoi, if one is to accept the dissolution ἀρ(ιστεῖον) of the siglum, noted in front of the horses of the D/ of a «Damareteic» tetradrachm of the same[79]. Or even in preceding years, starting from 466 BC when the tyrant Thrasybulus decided to leave Syrakousai. With the constitution of democracy this city has assumed Athens as its model: to *petalismos* and to the institution of the *Eleutheria* festivals[80] there may have been added the issue of decadrachms, almost to measure oneself with Athens, privileged commercial pole, which had issued, and perhaps in 467 BC (C.M. Kraay), a prestigious decadrachm[81]. Diodorus has condensed in book XI the narration of events successive to 466 BC in only two years: in 463 BC (11,72-73), in which he narrates of the decision to institute annual commemorative festivals of the liberation from tyranny (*Eleutheria*) and to erect a statue of Zeus Eleutherios, and in 461 BC (11,76), in which the episode of the *aristeia* to the soldiers is reported. Every notice of Sicilian history is missing for the years 465, 464 and 462 BC. I would not exclude that the episode of the *aristeia* should date back some years, in 463 BC, and so also the institution of the *Eleutheria*, even in 465 BC, void of events in Diodorus. In the quinquennium 466-461 BC the Syracusan decadrachm may have been coined, with which is to be connected undoubtedly the group of «Damareteic» tetradrachms of the Leontinoi. There will follow at Syrakousai a new coinage, that of Series XIII ff. with the type of the *ketos*, and from there within some quinquennium the reconstituted cities will begin to coin, Katane, Naxos, Leontinoi, Kamarina, Gela, the Danklaioi of Mylai and then Aitna-Inessa. On the stylistic plane with the crowned Head of Aretusa of the Damareteion are mixed the crowned Head of Dionysios of the first tetradrachm of the reconstituted Naxos and then the majestic Head of Silenos of the tetradrachm of Aitna-Inessa, kept at Brussels, which recalls the Silenos lying on the R/ of the aforementioned tetradrachm of Naxos. These three realizations of divine faces in profile brought back to the activity, which extended over three lustra, of a single artist: they represent the product and overcoming of the so-called Severe Style, which is an abstraction of the moderns, difficult to dismantle[82].

I believe that one must return to Kraay's approach, who in his heroic enterprise of moving the dating of the Damareteion, fixed at 480-479 BC, despite the weighty credit accorded to E. Boehringer, had the merit of capitulating before the Diodorean tradition. He wanted to save

[79]Cf. already AIIN 1974-75, p. 24 with n. 47.

[80]Diod. 11, 72, 2. For the *Eleutheria* at Athens, cf. V.J. Rosivach, The cult of Zeus Eleutherios at Athens, *Parola del Pass.* 232, 1978, p. 262 ff.

[81]Cf. besides M. R.-Alföldi, *Dekadrachmon*, Wiesbaden, 1976, p. 90 ff., Kraay, ACGC p. 66 ff. and my note in AIIN 1974-75, p. 32. See also H. Nicolet-Pierre, Autour du décadrachme athénien conservé à Paris, *Studies Price*, p. 293-300 (pointed out by S. Hurter).

[82]See Lo Stile severo in Sicilia, Mus. arch. Palermo 1990, pp. 151-157.

it, hypothesizing a gold issue, derived from the golden crown donated by the Carthaginians to Damareta, not yet found[83].

A stance in favor of Kraay has been expressed ultimately by the venerable Master G.K. Jenkins, who, in the second edition of his treatise[84], has proposed for the Damareteion a dating around 465 BC. And perhaps this is the right solution, which can reconcile numismatic criteria with a historical approach, which rather cannot be based on precise elements due to the summarity of the Diodorean tradition. On the other hand, to claim to establish the exact year for a Greek monetary issue, deprived of precise intrinsic elements, is not for us mortals. But proposals heuristically motivated for a dating of the Damareteion in 465-463 BC deserve to be discussed and not ignored haughtily.

By way of appendix I present some *kermata* of some rarity or unpublished, preserved for a long time, heavily oxidized, which only after repeated cleanings I believe I have been able to «read» and now propose for attention. They are all very small and fragile coins, of which a large part presents small faces sometimes in profile, sometimes frontal, which with the indefinite smile challenge we moderns, pretentious of historical science, to guess who engraved them on minuscule dies and then coined them using thin flans of almost pure silver, and what were the small communities, which although not wanting to declare themselves, were eager to offer their anonymous monetary product, small price for small goods. The same ones with a touch of pride, while remaining anonymous, wanted to demonstrate that they were capable of rivaling the great *poleis*, evoking in miniature the masterpieces of extraordinary artists.

I take the cue from an article by L. Lazzarini, in which is illustrated[85], attributing it to Kamarina, a silver fraction (characterized on the D/ by a bivalve shell, on the R/ by a wheel), of gr. 0.58, defined obol and dated in the period 480-470 BC, similar to that already in SNG Lloyd 1031, gr. 0.78, attributed to Himera. It, rather a litra, had already been published by me[86], after a hexas with closed shell, within a circle of pearls[87]. The attribution to Kamarina rather must remain uncertain: by hypothesis one could not exclude Katane[88].

L. Lazzarini has also presented a nominal[89], corresponding in typology to the litra of Kamarina, 173,1 W(est.)-J(enkins)[90], the weight of gr. 1,41 (correctly recorded?) would suggest thinking of a dilitron, but the diameter mm. 14 and the figure (tav. I, 3), if truly, do not seem to give confirmation. I fear that it is a matter of a litra, like that somewhat worn of gr. 0,557, which is published here (*Pl.* 23, 21). I add some other examples of Kamarina, interesting even if of modest conservation: I) a worn litra, gr. 0,37 of type W.-J. 112 (*Pl.* 23, 22); II) another litra of gr. 0,623 (*Pl.* 23, 23) of type W.-J. 175 A[91]; III) the clearest of two examples (*Pl.* 23, 24), gr. 0,09 (the other weighs gr. 0,10) from the same die, of hexas W.-J. 129 E with swan to l., and the letters K under the swan, *alpha* (inverted) above the same, on the D/, and on the R/ M orthostatic below

[83] See AIIN 1974-75, p. 28.

[84] *Ancient Greek Coins*, 2nd ed., London, 1990, p. 84.

[85] Due nuovi piccoli nominali di argento di Camarina, RIN 98, 1997, p. 77-84.

[86] JNG 1984, p. 25, tav. 3, 34, of 0.63 g.; the known examples therefore weigh 0.51 g. (MM Listino 412, 1979, 14); 0.63 g.; 0.58 g.; 0.59 g.; 0.78 (0.81) g.

[87] JNG 1984, tav. 3, 33.

[88] For example, on the R/ to l. of the winged thunderbolt of a litra of Katane is noted a closed shell (defined «Bogentasche (?)» in *Griechische Münzen aus der Sammlung eines Kunstfreundes*, Bank Leu-Münzen und Medaillen, 28 maggio 1974, no. 86).

[89] RIN 1997, *cit.* in n. 85, p. 82-83.

[90] U. Westermark, G.K. Jenkins, *The Coinage of Kamarina*, London, 1980, p. 209, tav. 29.

[91] Cf. Westermark-Jenkins, QT 1982, *cit.* in n. 53, p. 55-56 with pl. 3.

the two pellets, *alpha* (inverted) above. The legend runs in retrograde sense on the D/ and on the R/[92].

For some rare coins it seems to me possible to propose better attributions. So I believe it opportune to re-examine the silver coin of gr. 0.481 with a large Apolline head to r. on the D/ and on the R/ two bay leaves with nervature (*Pl.* 23, 27), for which I had not been able to propose an attribution[93]. It happened to me to notice in the Münzkabinett of Berlin, among the coins of the Leontinoi, one of gr. 0.26, with corresponding types (Apolline head to r/ one bay leaf with nervature) (*Pl.* 23, 28); for the weight it presents itself as half of the preceding and perhaps represents the hemilitron. It is licit to attribute both coins to the Leontinoi, or rather think of Rhegion[94], and date them to the end of the 5th century B.C.?

A rare silver litra, already published by Imhoof-Blumer[95], merits particular attention, which on the D/ in front of the face of the nymph, with hairstyle "in the Syracusan manner," had read K]IMAPO: on that here presented (*Pl.* 23, 29), of gr. 0.615, which seems to me from the same die for the D/, made agreement by a similar example in the Coll. Cammarata, I believe one should read on the D/, beginning from the top in front of the face MOPCAN[. On the R/ is figured a protome of boar to r., with long snout, hairy neck and crest, and with one foot forward, surmounted by two long barley grains. A significant typological correspondence presents a specimen preserved in Paris, B.N., 268, of gr. 0.55, of which on the base of the very borrowed casts with great courtesy by M^{me} Gerin I present the photo (*Pl.* 23, 30). The features of the face of the nymph are subtle and on the R/ above the protome of boar of different type do not appear barley grains. The ethnic, as is noted on litrae of Abakainon, begins on the D/ in clockwise sense in front of the profile of the Nymph MOP, to continue on the R/ in counterclockwise sense in front of the snout of the boar CAN (this particular verified also on a specimen of the noted coll. Italo-svizzera). The litra (*Pl.* 23, 29) therefore should be attributed to Morgantina.

New testimonies of the fashion of presenting on small silver coins the face in three-quarter view of divine figures are not lacking[96]. This appears turned slightly to r., as on the tetradrachm of Segesta (*Pl.* 23, 32), imitated on the D/ of the litra, which on the R/ shows the crab and the Punic legend, referred to Motya, as on this one of gr. 0.56 (*Pl.* 23, 33). We also call attention to an anonymous pentonkion of gr. 0.22 (*Pl.* 23, 34), whose R/ presents the wheel, among whose spokes are scattered four pellets and a fifth is at the center of the same[97].

On other coins the frontal face is turned to l., as in the Syracusan tetradrachm of Cimone, in

[92]Cf. *ibid.*, p. 48 ff., con tav. 2 a p. 53: the combination *alpha-lambda* will be a die break.

[93]JNG 1984, p. 36 with pl. 6, 94.

[94]One could add, as litra and hemilitron, to the drachma of Rhegion (Leonté frontale/Testa di Apollo a d., due foglie di alloro dietro la nuca): H. Herzfelder, *Les monnaies d'argent de Rhégion frappées entre 461 et le milieu du IV^{e} siècle av. J.C.*, Paris, 1957, p. 122, 109; Antikenmuseum Basel, p. 68, 223.

[95]NZ 18, 1886, p. 240, tav. 6, 7 (B. Head, HN p. 145). This litra, with gamma a semicircle, should represent the most ancient emission of "Greek" Morgantina, datable around 424 B.C., when, concluded the common peace, promoted by Hermocrates (which for the historian Antioco, whom I suspect was a partisan of customs, represented an epochal event, if he concluded his *Sikelika* in 424 B.C.: Diod. 12, 71, 2) Morgantina was ceded by the Syracusans, having received compensation, to Kamarina (Thuc. 4, 65, 1). In reality at "indigenous" Morgantina there should have been settled silently Greek colonists of the same extraction as those, who in 461 B.C., with the auspice of the Geloi (Diod. 11, 76, 5), refounded Kamarina: the integration of the "indigenous" center, now strongly hellenized, with this last era was therefore more than natural. In 'La Moneta a Morgantina. Dal tetradrachma al denario', *Atti della Giornata di studi su Morgantina, Aidone, Giugno 1992*, Catania, 1993, only "outdated" problems have been treated.

[96]See K.P. Erhart, *The Development of the Facing Head Motive on Greek Coins and its Relation to Classical Art*, New York, 1979.

[97]Cf. JNG 1984, p. 30.



the drachm of Kamarina, and in the didrachm with Hipparis[98] (*Pl.* 24, 35): this was the model for the horned head of river divinity (*Pl.* 24, 36), on a hemilitron of the Sicha(ninoi)[99], and again for the feminine head in three-quarter view on a trias, of "Punic area"[100], which (*Pl.* 24, 37) shows on the R/ four pellets, which surround, two above and two below, a barley grain. We add an unpublished variant (*Pl.* 24, 38-38A) of gr. 0.27: on the D/ appears the head in three-quarter view turned to l., with horns (?) on the forehead and hair spread in curly locks soaked, on the R/ are four pellets within a laurel crown, knotted at the base and just above the knot seems to be detected a *chi*[101].

The tetras (trionkion) is attested alongside the hemilitron, besides for Katane[102], for Himera and e.g. on this specimen of gr. 0.09 (*Pl.* 24, 39), with the type of Tychon on the D/[103], and for Naxos. For this last I present three variants[104]: a tetras of gr. 0.166, a second of gr. 0.18 and a third of gr. 0.171 (*Pl.* 24, 40-42). And again it results for unknown mints, but certainly of Sicily: here is a specimen of gr. 0.17 (feminine head "in the Syracusan manner" to r/ three pellets, one above and two below a grain of wheat) (*Pl.* 24, 43), and another of gr. 0.17 (masculine head (?), with strange arched headdress to r./ three pellets) (*Pl.* 24, 44), published in an auction catalogue[105].

Rarer is the trias (according to the correct denomination now universally accepted): which bronze coin, tariffed with four pellets, results e.g. among the issues of Akragas and Selinous[106], minted at Himera and Segesta[107]. Instead, which silver coins, appear prevalently in "Punic area," to which should be referred, besides those already illustrated[108], the two following specimens: one of gr. 0.20 (feminine head to l./ four pellets within a beaded circle) (*Pl.* 24, 45) and another of gr. 0.26 (*Pl.* 24, 46), extremely interesting. On the D/ in fact appears an ephebic head to r., with hair flowing also on the forehead, on the temples and on the nape, girt by a band knotted at the base and with four pellets scattered in the field to l.: this particular recalls the six pellets in front of the face of the nymph to l. of the bronze hemilitron of Himera[109]. The type of ephebic head recalls, even if lacking incisiveness, the Apolline head, turned to l., of the R/ of the drachm of Katane (*Pl.* 25, 47), connected with a corresponding tetradrachm[110]. On the R/, at the center

[98] *Ibid.*, p. 30 con tav. 5, 75-79. An imitation of the frontal face of Athena with helmet "in the manner of Eukleidas" is found in the trihemiobolo of Morgantina (*Pl.* 23, 31).

[99] *Ibid.*, p. 31 s. con tav. 7, 78. Rather than the beginning of an ethnic, as I had thought, the four letters detectable only in some specimens to r. of the frontal face on the D/, would mark the name of the engraver according to Chr. Boehringer, Der sizilische Stempelschneider SIKA-, QT 14, 1985, p. 85-91. For the ethnic Ichaninoi, see my article, Alla ricerca di *poleis mikrai* della Sicilia centro-orientale, Orbis Terrarum 2, 1996, p. 140 s. con tavv. 11-12. See also D. Salzmann, ΑΚΙΣ — Flussgott statt Stempelschneider, Gaz. Num. Sv. 40/158, 1990, p. 36-39.

[100] Edited as pentonkion in JNG 1984, p. 28.

[101] An analogous sign on a tetras, edited in JNG 1984, p. 29 con tav. 5, 69. The R/ of the new trias evokes that of a rare bronze hemilitron of Himera (cf. Chr. Boehringer, KME, tav. 7, 8).

[102] Cf. *Catania antica*, cit. in n. 59, p. 308. Naturally also for Messene and Rhegion.

[103] JNG 1984, p. 27.

[104] Edited in MM, Listino 373, 20: 0.16 g.; Listino 406, 46: 0.19 g.; Listino 373, 22: 0.10 g.

[105] Giessener Münzhandlung 52, 1990, 71: defined as hemiobol and attributed to Himera.

[106] SNG ANS 3, I, 1017; R. Calciati, CNS I, p. 234.

[107] SNG ANS 4, II, 655 ff. The trias value is also expressed with the numeral *delta*, replaced on analogous emissions of Menainon, end of 3rd century, sometimes with four pellets, sometimes with four *astae* (Calciati, CNS III p. 186 ff.). Therefore the resolution D(ekonkion), an inconsistent term, recorded also for Kentoripai already in Gabrici and in CNS III p. 169 ff., is erroneous!

[108] JNG 1984, p. 28.

[109] Cf. e.g. *Antikenmuseum Basel*, nr. 307.

[110] See e.g. *Catania antica*, cit. in n. 59, tav. 5, 51; tav. 7, 61.

of each of the four triangles formed by the spokes of a wheel in relief, appears a pellet. However the new silver trias testifies the charm, that the coinage of Katane, in the years in which Maestri operated there, had aroused in western area, where it seems the same comes from.

I present also an unpublished Hexas, badly minted and worn, which weighs gr. 0.104, characterized on the D/ by a bearded head with pointed beard, to r.[111] and on the R/, between two pellets, by a lame seated figure, probably with a headdress (*Pl.* 24, 48) turned to l., which rests the right hand on a staff (?) and the left to the stool. The type of the R/ is singular, though finding a comparison on the R/ of a bronze hemilitron (curved figure among six pellets) and of a bronze trias (seated figure among four pellets) (*Pl.* 24, 49), both attributed to Himera[112].

Finally, it merits being reconsidered the anonymous coin, which I had published[113] without being able to give adequate interpretation. In these years, after careful cleaning of the incrustations that covered the figure, I have "read" two specimens, characterized on the D/ by a protome of bull to l., with horn and evident folds on the neck, *a forte rilievo*, surrounded by a crown of pellets, and on the R/ by a deep incuse square, divided into 8 or 10 converging spokes to the center. The two specimens (*Pl.* 24, 50-51) are very probably fractions of the obol type.

The type of the incuse, rather particular, has evoked for me that of the R/ of the anonymous staters, attributable to Selinous for the leaf of *selinon*, which appears *a forte rilievo* on the D/ (*Pl.* 24, 52), classified by C. Arnold Biucchi[114] in Group I, which oscillate between gr. 9.20 and gr. 7.65, thickening around gr. 8.70. The anonymous obols here presented therefore represent the relative fraction, however still ignored. The minting technique is entirely corresponding for the staters of Selinous and for these obols. The bull's head with horn on the D/ constitutes a prefiguration of the bull that Heracle tames, grasping it by the horn on the D/ of the didrachms with the figure of Hypsas, who sacrifices on the R/[115].

Once again for the attribution of certain coins, even anonymous ones, the collection of information on the zones of discovery, which are still lacking, is essential: however it does not seem that any result in the excavation journals of Selinunte.

[111] Cf. for the cut of the face, SNG Oxford 1749 (= MM Listino 602, 1996, 20: 0.49 g) and the pentonkion edited in JNG 1984, Tav. 4, 50.

[112] Cfr. F. Imhoof-Blumer, NZ 1886, p. 242, nr. 5, Tav. VII, 10; E. Gabrici, Topografia dell'antica Imera e di Terme, RIN 7, 1894, pp. 69-70, nr. 93. 95, Tav. V, 17. 21 (the virile nude figure is described having "horn of goat in front, sitting.... to r., right leg rests on a seat...., left leg to a rock and chin to the left arm resting on the left knee"). See also R. Calciati, CNS I, pp. 27-28, nr. 5. 8A. A typological correspondence AR/AE is repeated for Himera between the silver litra SNG Cop. 311 and the small bronze that appeared in Num. Ars Class. Zürich 1, 1989, 72.

[113] JNG 1984, p. 28.

[114] The Beginnings of the Coinage in the West: Archaic Selinus, *Studia Westermark*, p. 14. Cf. also C. Arnold-Biucchi, L. Beer-Tobey, N.M. Waggoner, A Greek Archaic Silver Hoard from Selinus, MN 33, 1988, p. 20 ff. See e.g. SNG ANS 4, II, 673-683.

[115] Cf. SNG ANS 4, II, 702.

Plates 22-24

1 Thermai. Litra AR, 0.593 g. Coll. P(rivata)
2 Syrakousai. AE, s(enza) p(eso)
3 Leontinoi, AE onkia, s.p.
4 Leontinoi, AE tetras, s.p.
5 Peso di piombo. 113 g. Coll. P.
6a-b Peso di piombo. 113 g. Coll. P.
7 Syrakousai (?). AE, 2.31 g. Coll. Cammarata
8 Syrakousai. Litra AR, 0.58 g. Coll. P. x 2
9 Samii di Zankle. Diobolo AR, s.p.
10-10A Samii di Zankle. Obolo AR, 0.80 g. Coll. P.; 10A: x 2
11 Messene. Obolo AR, 0.74 g. Coll. P. x 2
12-12A Messene. Pentonkion AR, 0.312 g.; 12A: x 3
13 Messene. Hexas AR, 0.10 g.
14 Messene. Litra AR, 0.53 g. x 2
15 Syrakousai. Hexas AR, 0.07 g. x 2
16 Syrakousai. Pentonkion AR, 0.19 g.
16A Gela. Hexas, 0.102 g. x 4
17 Syrakousai. Litra AR, 0.746 g. x 2
18 Syrakousai. Obolo AR, 0.58 g. (JNG 1984, tav. 2, 1) x 2
19 Aitna. Obolo AR, 0.58 g. Paris, F.G. 269 (JNG 1984, tav. 2, 2) x 2
20 Syrakousai. Obolo AR, 0.626 g.
21 Kamarina. Hexas AR, 0.557 g. x 2
22 Kamarina. Litra AR, 0.37 g. x 2
23 Kamarina. Litra AR, 0.623 g. x 2
24 Kamarina. Hexas AR, 0.09 g. x 3
25-25A Akragas. Hexas AR, 0.07 g. 25A: x 3
26 Akragas. Pentonkion, 0.27 g. x 2
27 Leontinoi? Litra AR, 0.481 g. (JNG 1984, tav. 6, 94) x 2
28? Hemilitron AR, 0.26 g. Staatl. Mus. Berlin
29-29A Morgantina (?). Litra AR, 0.615 g. 29A: x2
30 Morgantina (?). Litra, 0.55 g. Paris, F.G. 268
31 Morgantina. Litra AR, 1.002 g. Münzkab. München. x 2
32 Segesta. Tetradramma AR, 17.35 g. L. Mildenberg, Actes 8ème Congr. Num. 1973, p. 113 s., tav. 11, 19
33 Motya. Litra AR, 0.56 g.
34-34A Punica (?). Pentonkion AR, 0.22 g. 34A: x 2
35 Kamarina. Didramma AR (JNG 1984, tav. 5, 72)
36 Sichana. Hemilitron AR, 0.38 g. (JNG 1984, tav. 5, 78)
37 Punica (?). AR, 0.23 g. (JNG 1984, tav. 5, 60)
38-38A Punica (?). Trias AR, 0.27 g. 38A: x 3
39-39A Himera. Tetras AR, 0.09 g. 39A: x 3
40-40A Naxos. Tetras AR, 0.166 g. 40A: x 3
41-41A Naxos. Tetras AR, 0.18 g. 41A: x 3
42 Naxos. Tetras AR, 0.171 g. x 3
43 Punica (?). Tetras AR, 0.17 g. x 2

44? Tetras AR, 0.17 g. (Giess. Münzhdlg. 52, 1990, 71)
45? Trias AR, 0.20 g.
46 Punica (?). Trias AR, 0.26 g. x 1.5
47 Katane. Dracma AR. (Harlan Berk, 88th Sale, nov. 1995, 95)
48 Himera. Hexas AR, 0.104 g. x 2
49 Himera. Bronzo, Gabrici, RIN 1894, tav. V, 21 (D/ e R/)
50-50A Selinous (?). Obolo AR, 0.58 g. 50A: x 2
51 Selinous (?). Obolo, 0.68 g. x 2
52 Selinous. Didramma AR, 8.78 g. Leu 74, 1998, 89



MANGANARO, DALL'OBOLO ALLA LITRA (1)



MANGANARO, DALL'OBOLO ALLA LITRA (2)



MANGANARO, DALL'OBOLO ALLA LITRA (3)