

though fragments of gold sepulchral diadems were discovered. Among the bronze objects were one hundred mirrors, all unengraved, and a number of strigils, one of which was ornamented with a figure of Hermes. In a good many graves small bronze tablets, bearing the name of the deceased in incised, dotted letters, were discovered. Of the pottery found, our authors give a full description under the headings "Common Ware" and "Poterie de Luxe." Among the amphora handles found, twelve were of Rhodes, eleven of Cnidus, and nine of Thasos. The decorated vases belong chiefly to a late period of Greek ceramic art. Among them are small black-glazed amphoras with floral ornaments in yellow, &c. Various miscellaneous objects in terra-cotta were found, including the small pyramids and cones that have been so often discovered elsewhere.

W. W.

Gli Scavi della Certosa di Bologna descritti ed illustrati dall'Ingegnere architetto capo municipale, ANTONIO ZANNONI. Bologna. Regia Tipografia 1876—1884.

Ueber die Ausgrabungen der Certosa von Bologna zugleich als Fortsetzung der Problemen in der Geschichte der Vasenmalerei. H. BRUNN (aus den Abhandlungen der k. bay. Akad. der Wissenschaften, 1887.)

THE excavations conducted by Zannoni at the Certosa of Bologna have raised the Museo Civico of that town to the front rank among the museums of Italy. The Museo Civico is a model of orderly arrangement; the contents of each of the four separate sets of tombs—however various—have been carefully kept together, and the same excellent system is observed in Zannoni's work: whether he goes to the Museo or opens the book, the archaeologist is so far as possible present at the actual scene of excavation; he knows what each tomb contained and the exact 'lie' of each object; no link is missing that might suggest a date or correct a hypothesis. The author justly says it is rather his province adequately to present the material than to discuss the questions arising therefrom. Some general conclusions he however sets forth. In his preface he gives the history of the beginning of the excavations (1869), and the reasons for the identification of the site with the ancient Felsina 'princeps Hetruriae.' Here we are bound to note that Sig. Zannoni is lamentably inadequate in his citation of ancient texts: Pliny, *Nat. Hist.* iii., Silius Italicus, *De Bello Punico*, Lib. 8, Livy, Lib. 52, might surely be amplified. The first part of the book is devoted

to the detailed description of the excavations under the head of the four groups of tombs, the second to the discussion of the furniture of the tombs, the evidence given of the funeral rites observed and consequent deductions as to the degree of civilization obtained by Felsina (*a*) before the Etruscan invasion, (*b*) during the Etruscan epoch. Briefly, Sig. Zannoni concludes, from a conspectus of the Certosa excavations and others undertaken in consequence.

1. That the territory round Felsina was peopled before the coming of the Etruscans by a succession of races, among whom a Lithuanian stock can clearly be distinguished.

2. To these succeeded the Umbrians. So far the earliest stages of their art have not been discovered. We come upon them first at the stage of a 'brilliante arcaismo,' *e.g.* at the excavations of Benacci: this develops step by step to the stage found at Arnoaldo, at Stadello della Certosa, and at the Arsenal excavations: the highest development here attained sinks into a decadence, the first stage of which may be studied in the Sepolcreto Arnoaldo and at Stadello.

3. That the Etruscans invaded the district at a period when they were themselves considerably Hellenized, and developed there a civilization markedly different from that of their kinsmen on the other side of the Apennines.

4. Next, traces of Gallic influence are found—notably in the Sepolcreto Benacci and De Luci.

5. Finally, the impress of Roman supremacy is clearly observable.

Dr. Brunn avowedly approaches the subject of the Certosa excavations with a special object, the support of his theory long ago published in the *Probleme*. From an examination of the other contents of the Certosa tombs, notably the bronzes and the famous stelai, he comes to the conclusion that they must be dated low down in the third century. Unless therefore we hold that the inhabitants of Felsina, so far as pottery was concerned, only buried with their dead what we might call 'ancestral plate,' *i.e.* such pieces as were consecrated by long family usage and had become heirlooms, or that there was a special manufacture of trade in archaic black ware for funeral purposes, we must conclude, Dr. Brunn says, that the black-figured ware found in these tombs was made during the latter half of the third century—*i.e.* we must accept the main contention of the *Probleme*, which is that a large quantity of the black-figured ware which we are accustomed to regard as genuine fifth century B.C. work is in fact archaistic. The painting of black or red figures

on vases was, according to Dr. Brunn, not a matter of strict chronological sequence, but rather a question of convention with respect to certain vase-shapes and varied much with the fashion of the day. Perhaps some of Dr. Brunn's incidental criticism will be valued by some more than his main contention, notably his careful analysis of the development of style in the funeral stelai and of their decorative motives: also his very pertinent remarks on the development of Umbrian art. Art, he says, in the outlying districts (*Peripherie*) of Greek and Italian culture cannot be measured by the same standards as those that may be applied in the great native centres. Umbrian art is a neighbour growth which starting from the same root had to a certain extent a separate life, but was never able to attain for itself full and distinct development. Nor had it even the advantage of consecutive *pari passu* influence from Greece. By a rough analogy it may be compared to Byzantine art which, while Italy and all Western Europe has gone through whole cycles of development since the days of Giotto, remains still trammelled in the mountains of the Balkan; if we can suppose it suddenly released from hierarchic fetters and brought into vital contact with the west, it would be constrained to a non-natural development, overstepping many intermediate stages and catching up the west where it would find it at the present. By some such supposition we must fill up the *lacunae* in Umbrian development.—J. E. H.

Mykenische Vasen: Vorhellenische Thongefässe aus dem Gebiete des Mittelmeeres im Auftrage des k. d. Arch. Inst. in Athen: gesammelt u. herausgegeben von ADOLF FURTWÄGLER u. GEORG LÖSCHCKE: mit einem Atlas von 44 Tafeln. Berlin: Verlag von A. Asher & Co. 1886.

THE earliest history of Hellenic life and art has received a special share of attention within the past twenty years, mainly for the reason that since the excavations at Ialysos in 1864, and Mykenae and other sites more recently, it is now possible to test former conjectures with independent scientific deductions. Among the mass of material provided by these finds bearing on this question, the decorated pottery is by far the most important, as it is the largest, class. Whenever presumably primitive Hellenic graves have been opened, vases analogous to one or other of the Mykenae groups have been brought to light; and what has been most needed in recent years was that some one should collect and connect these