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below before the reign of Hadrian. The broad ribs and deeply fluted furrows are found no earlier than the second century. Although the accentuated convex ends of the furrows do appear on some shells of the first century, we mostly find them on second-century shells. Because of all these features, I believe that the soffit shell of the Kom el Shukafa Catacombs belongs to the Hadrianic or Antonine period.

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The funerary house of Aurelios Peteses at Tuna el Gabal should be later in date than these catacombs, since its shell has features which can be considered a further development over the soffit shell. The shell of Tuna el Gabal has some characteristics unknown to shells of the first century, such as the cockle shell, deep fluting of the furrows and accentuated convex endings. The cockle shell of the soffit of Kom el Shukafa, with its hinge on the spring, dates, as we have seen, from the Antonine period. Therefore the representation of the hinge of such a shell beneath the center of the spring should be later, since it is not found on shells of the Antonine period or earlier. The shell of the Hexagonal Pyre at Palmyra, which belongs to the close of the second century, is the example closest to the shell of Tuna el Gabal, since we have to expect the hinge, if represented, beneath the spring. Therefore I believe that the shell of Tuna el Gabal belongs to the close of the second or early third century A.D. It should thus belong to the same period as the rest of the building.

The hexagons on the unpublished semi-dome of the Graeco-Roman Museum represent a repeated unit spread all over the whole field of the semi-dome. The hexagons are all of equal size, a characteristic of semi-domes of the Hadrianic period and not later. From the examples of semi-domes decorated with all-over designs mentioned above, we know that at the close of the second century, and later, the design is composed of more than one unit. Therefore I am inclined to place this semi-dome in the second half of the second century A.D. at the latest, and not earlier than Hadrian. This dating is supported by the composition of the plaster, which is pure lime. Such composition is found in the stuccoes of the second century, for example in the Tomb of the Valerii on the Via Latina in Rome.<sup>55</sup>

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ALEXANDRIA, EGYPT

<sup>55</sup> Wadsworth, *op.cit.* 16, 17, 69ff.

## EXPERIMENTS WITH RUBBER SILICONE COMPOUNDS

Prompted by C. W. Beck's article "Synthetic Elastomers in Epigraphy," *AJA* 67 (1963) 413, and at the suggestion of Dr. Michael H. Jameson, Professor of Classical Studies at the University of Pennsylvania, the Applied Science Center for Archaeology, at the University Museum of the University of Pennsylvania, experimented with several of the synthetic elastomers as well as with Tylac, a latex compound.

Our experiments were conducted on pieces up to 6" x 6" in size. The objects included limestone and marble inscriptions, unsurfaced bone, sherds in varying states of preservation and of assorted shapes, amphorae with and without slip, an inscribed ceramic dish, ivory, bronze coins, and baked cuneiform tablets. Ceramics were included in our experiments because it has been found that synthetic squeezes are very useful for observing shallow or awkward graffiti.

In the process of making squeezes from rubber silicone compounds (elastomers) we have found the General Electric Company's RTV-11 and 21 compounds to be most satisfactory for our needs. We have worked with numbers 11, 21, 41, and 77 with variations of one to 1/2 percent of the catalysts T-773 and T-12. We have also used the Dow Silastics, RTV-502 and RTV-588 but prefer the more solid white color of the GE compounds to the transparent coloring of the Dow materials. RTV-21 happens to be pink but was chosen for its viscosity rather than color. Generally, the solid white compounds afford greater contrast between light and shadow and enhance the readability of obscure inscriptions.

The GE RTV-11 has the additional advantage of being thin enough to make a transparent coating so that when viewed against light, the reading of a shallow or worn inscription is made easier. RTV-21 is viscous enough to prohibit running when applied to a vertical surface, and RTV-41 and 77 are progressively more viscous than RTV-21. With use of one percent of the catalyst T-773 the compound dries in 1/8 the time (approximately 40 minutes) it takes with use of T-12. If however, T-773 is used with RTV-41 or 77 the curing time may be too rapid to permit proper coverage of a large object. It would then be necessary to use catalyst T-12.

Both RTV-21 and 41 were used with unsurfaced bone and produced a good impression. However a stain occurred wherever the elastomers were placed. In all cases, regardless of the elastomer used, porous surfaces, and particularly ceramic surfaces, are left darkened due to their contact with the silicone oil inherent in these compounds. In experimenting with both the catalysts and the rubber silicone compounds separately we have found that both materials stain porous surfaces. We did not experiment with protective coatings before the application of the rubber silicone compounds. We have not been able to remove the darkening with solvents and would not recommend

use of the rubber silicone compounds for museum pieces of non-glazed ceramic or other highly porous material on which a change of color would be unwelcome. However, experiments which we have made on darkened pieces indicate that the darkening may be removed by baking the object at 500° C.

With use on an ivory piece there was no discoloration and the pattern was precisely duplicated. Impressions made of bronze coins were clear, with no difficulties in regard to removal or stain.

After a squeeze made with RTV-11 to which had been added GE Thinner #1500, had hardened, there was some tendency for the elastomer to tear around the edges during the removal process. However there was no curling of the edges once it was removed, and if the squeeze is first scored, it can be removed very easily from stone. This is a great improvement over Tylac and other latex squeezes, as pointed out by Beck.

Table 1: Summary of Recommendations

Material	Optimum Compound	Comments
Stone Ivory Bronze Silver	GE RTV-11 ½ or 1 % T-773	For small, poorly incised inscriptions where a transparent squeeze is needed.
	GE RTV-21 1 % T-773	For small, horizontal or vertical inscriptions. RTV-21 is more viscous than RTV-11
	GE RTV-44 ½ or 1 % T-773	For small, horizontal or vertical inscriptions. RTV-44 is more viscous than RTV-21
	GE RTV-44 ½ or 1 % T-12	For large, horizontal or vertical inscriptions
	GE RTV-77 ½ or 1 % T-12	For large, vertical inscriptions. RTV-77 is more viscous than RTV-44
Ceramics Baked cuneiform tablets Unsurfaced bone	TYLAC RMC-2	Preferred because rubber silicone compounds tend to darken porous surfaces

In accordance with instructions concerning the shelf life of the elastomers, once they are past the specified age limits it is advised that they be discarded. With age the drying times tend to increase. Insufficient time

has elapsed to assess the lifetimes of the molds themselves.

The rubber silicone compounds do have a tendency to form air bubbles and, in use with the intricate and tiny wedges on a cuneiform tablet, they have been found inadequate, and not as satisfactory as latex. It is necessary to press the elastomer down onto the wedges with the fingers and this is still not an assurance that air bubbles will not form.

A latex compound with which we have experimented, and one particularly suitable for squeezes is Tylac RMC-2, made by the International Latex Corporation of Dover, Delaware. This compound was recommended by Professor Homer Thompson of Princeton University.

One thin-to-medium layer was applied to a stone inscription and to the ring base of a sherd. The drying time was 6 hours, after which the Tylac turned the corner of the stone well, was removed easily, and showed excellent impressions. The squeezes also lay flat. Cracking marks, however, tend to appear on the outer surface of the squeezes made with Tylac. When dry, the squeezes are a dull, buff color and no darkening or discoloration of either the stone or the sherd was observed. For use in the field, however, Professor Jameson has found that latex compounds are not satisfactory for metals. The squeezes tend to deteriorate rapidly.

A summary of our recommendations is presented in Table 1. Additionally, we should like to emphasize that the silicone rubber compounds provide a quick and easy method of making duplications in the field.

JEANNETTE M. FLAMM

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UNIVERSITY MUSEUM, PHILADELPHIA

## GREEK VASES IN THE STANFORD MUSEUM

PLATES 17-19

The antiquities in the Stanford Museum derive from three sources, the Cesnola collection, the collection made by Leland Stanford, Jr., in visits to Greece in 1880 and 1883, and more recent gifts and acquisitions. A considerable part of the first two collections was damaged or destroyed in the San Francisco earthquake of 1906, and Miss Hazel Hansen spent years of her life restoring and reorganizing the two thousand or so objects that survived: the present display cases and the admirably arranged teaching collection in the Archaeological Laboratory testify to her self-effacing skill and industry.

Besides the Greek vases to be noticed here, the Museum has Cypriote vases and figurines in abundance, bronzes, glass, Roman coins, lamps, amphorae, and a few pieces of sculpture, including a badly calcined marble head of Aphrodite of about 420 B.C., and a fine marble torso of Roman date presented by a former student in memory of Miss Hansen. The figurines

were catalogued in 1949 by John Rogers Davis (*Catalogue of the Classical Terracottas in the Stanford Museum*, Stanford M.A. thesis), and other pieces of work are in progress. The Museum has recently been given three very fine statuettes from Myrina: 63.52, woman with himation over head, leaning on pillar, not unlike Boston 01.7745 (Burr, no. 79); 63.53, Nike, head and body from same mould as Boston 01.7694-5 (Burr, nos. 68-9); 63.54, Nike, from same mould as Boston 01.7706 (Burr, no. 70).

The Cesnola collection includes several Mycenaean stirrup jars, piriform jars, alabastra and one-handed cups, a few geometric cups (cf. *AnatSt* 9 [1959] pl. 25), a Cycladic late protogeometric cup with pendant circles, and an East Greek lip cup of about 600 B.C. with low conical foot and black bands inside and out (cf. *AM* 54 [1929] 36, fig. 28/6; *NSc* 15 [1961] 215, fig. 19). Most of the other Greek vases are either from the Leland Stanford, Jr., collection (numbers from 16962 upwards) or recent acquisitions (numbers of the type 54.81).

*Corinthian.* Twenty-one vases include two good early alabastra (61.67 and another given by Lord Byron to his doctor, whose grandson gave it to a visitor from Stanford) a Middle Corinthian aryballos with padded dancers (64.1), a Middle Corinthian pyxis with convex sides and strap handles decorated with panther, owl, and goat (61.68), and a late pyxis with inverted lotus and bud chain (17415).

*East Greek.* Besides the Cesnola cup, a moulded vase in the form of a foot (28193) very like Brussels R450, *CVA* 1, pl. 5, 13.

*Attic black-figure.* Tyrrhenian amphora (61.66), *Ars Antiqua* (1961) no. 90. Neck, handles, and part of shoulder zone restored. A (pl. 17, fig. 1). Symposion of four pairs of bearded and unbearded men. The second table from the right has a panel between the legs decorated with two animals. B (pl. 17, fig. 2). Six komasts with nonsense inscriptions. The two on the left are modern above the knees, the third above the shoulders. For the frontal bearded face of the komast on the right, cf. *CVA* Copenhagen, pl. 101/1=103/1. Below, lotus-palmette band and two rows of animals. Near in style to Louvre E 865, Beazley *ABV* 94ff, no. 66.

Oenochoe (61.69, pl. 19, fig. 3), *Münzen und Medaillen* (1961) no. 147, made up from fragments, but no repainting except tongues above Herakles' scabbard. Herakles and Antaios. The contrast between neat Greek and untidy foreigner is rendered very much as on the kalyx-krater by Euphronios (Louvre G 103, Beazley, *ARV* 14). The scheme of the fight is nearest perhaps to the amphorae London B 196, *JHS* 26, pl. 5, and Munich 1417, *JHS* 25, 276, fig. 15: Antaios kneels and does not defend himself as Herakles lifts him. Key-side class (Beazley, *ABV* 426); the artist belongs to the Leagros group (*ABV* 355).

Stanford has also nine lekythoi including one with a maenad riding a bull between two satyrs (17340) which belongs to the Class of Athens 581 (*ABV* 489), and one (ultimately from Lord Byron) with a chariot

and a warrior with spears leaping off the chariot, which is in the manner of the Haimon painter (cf. *ABV* 489 and *Hesperia* 32 [1963] 116, pl. 36, A7).

*Attic red-figure.* Pelike (17410). A (pl. 17, fig. 4). Woman playing the flute; naked girl dancing with castanets. B (pl. 17, fig. 5). Woman spinning (the wool is in added red); woman moving away with lump of wool (?) and kalathos. This shape of pelike is commonly used by the Early Mannerists. For the subject of A, cf. a column krater by the Pig painter in Lecce, *CVA* Italy 4, pl. III Ic, 3/1; there the flautist is seated on a chair with a drape similar to that on B. Probably by the Pig painter.

Kalpis (17412, pl. 19, fig. 6), reconstructed from fragments. Gynaikeion with cock on extreme left and dog. The woman on the left holds a weaving frame, cf. R. T. Williams, *Antike Kunst* 4 (1961) 27. The woman in the center holds a circular hank of wool (in red); the woman on the right is spinning, the spindle (in red) appears in front of her knee. By an Early Mannerist. The chair drapes recall the Pig painter (cf. above); so do the pets, cf. London E 172 (*CVA* pl. 75/4 and 77/2). But this is by a more delicate artist, perhaps the Leningrad painter: the composition is not unlike that of the Caputi hydria (J. R. Green, *JHS* 81 [1961] pls. 6-7).

Stanford has three small early classical lekythoi: 4713, Cesnola collection, with a Nike moving to the right holding a phiale, perhaps early work of the Aischines painter; 16963, with white-ground shoulder, woman holding patterned box, a chair behind her and a wool basket in front of her, probably by the Karlsruhe painter (cf. *CVA* Mannheim, pl. 32/9; Gallatin, 26/9); 4714, Cesnola collection, with a maenad with wing-sleeves moving away from a thyrsos stuck in the ground; the subject recalls the Providence painter (*ARV*<sup>2</sup> 646), but this is a squat lekythos with a flat shoulder of the shape used by the Seireniske painter (*CVA* Gallatin 2, pl. 60/2) and the Well painter (*Hesperia*, 18 [1949] pl. 81/10). A kylix (60.388) with no picture outside, but inside a bearded man putting his hand on a seated youth's shoulder, is perfunctory work from the Penthesilea painter's workshop, probably by the painter of London D 12, cf. *CVA* Bonn, pl. 7.4.

The Lebes Gamikos (17416, pl. 18, fig. 7) is terribly damaged; it was briefly described by Miss Hansen in *AJA* 34 (1930) 60. The winged women with formal flowers (cf. *CVA* Brussels 3, pl. 12/9) are perhaps Aurai rather than Nikai. On A, three women, the one on the left holds scarf (cf. P. E. Corbett, *Hesperia* 18 [1949] 312) and alabastron, the one in the center a decorated box with a scarf falling below it; B. Two women, the first with an alabastron, and a young man leaning on a stick. On the stand, four draped women. The style suggests a follower of Polygnotos.

The bell-krater (17411) is partly restored. A. Satyr, Dionysos, and maenad, B. Three youths (mostly modern). The style is not far from *CVA* Hoppin, pls. 14-15, by the Curti painter, who belongs to the Group of Polygnotos and his followers (*ARV*<sup>2</sup> 1042).

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below before the reign of Hadrian. The broad ribs and deeply fluted furrows are found no earlier than the second century. Although the accentuated convex ends of the furrows do appear on some shells of the first century, we mostly find them on second-century shells. Because of all these features, I believe that the soffit shell of the Kom el Shukafa Catacombs belongs to the Hadrianic or Antonine period.

The exedrae shells of Kom el Shukafa are identical with shells of the Antonine or Severian period, such as those of the Praetorium of Mousmieh and the Caracalla Temple at Atil. Since the type of shell of the exedra is not found on Hadrianic shells, and since we do not find the soffit semi-dome or its type of shell in the Severian period, I believe that the shells of the soffit and the exedrae of the Catacombs of Kom el Shukafa belong to the Antonine period, and that this period employs the two types of shell, since they both exist in one building and almost on one floor. This dating does not contradict the dating given by other scholars to the building.

The funerary house of Aurelios Peteses at Tuna el Gabal should be later in date than these catacombs, since its shell has features which can be considered a further development over the soffit shell. The shell of Tuna el Gabal has some characteristics unknown to shells of the first century, such as the cockle shell, deep fluting of the furrows and accentuated convex endings. The cockle shell of the soffit of Kom el Shukafa, with its hinge on the spring, dates, as we have seen, from the Antonine period. Therefore the representation of the hinge of such a shell beneath the center of the spring should be later, since it is not found on shells of the Antonine period or earlier. The shell of the Hexagonal Pyre at Palmyra, which belongs to the close of the second century, is the example closest to the shell of Tuna el Gabal, since we have to expect the hinge, if represented, beneath the spring. Therefore I believe that the shell of Tuna el Gabal belongs to the close of the second or early third century A.D. It should thus belong to the same period as the rest of the building.

The hexagons on the unpublished semi-dome of the Graeco-Roman Museum represent a repeated unit spread all over the whole field of the semi-dome. The hexagons are all of equal size, a characteristic of semi-domes of the Hadrianic period and not later. From the examples of semi-domes decorated with all-over designs mentioned above, we know that at the close of the second century, and later, the design is composed of more than one unit. Therefore I am inclined to place this semi-dome in the second half of the second century A.D. at the latest, and not earlier than Hadrian. This dating is supported by the composition of the plaster, which is pure lime. Such composition is found in the stuccoes of the second century, for example in the Tomb of the Valerii on the Via Latina in Rome.<sup>55</sup>

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<sup>55</sup> Wadsworth, *op.cit.* 16, 17, 69ff.

#### EXPERIMENTS WITH RUBBER SILICONE COMPOUNDS

Prompted by C. W. Beck's article "Synthetic Elastomers in Epigraphy," *AJA* 67 (1963) 413, and at the suggestion of Dr. Michael H. Jameson, Professor of Classical Studies at the University of Pennsylvania, the Applied Science Center for Archaeology, at the University Museum of the University of Pennsylvania, experimented with several of the synthetic elastomers as well as with Tylac, a latex compound.

Our experiments were conducted on pieces up to 6" x 6" in size. The objects included limestone and marble inscriptions, unsurfaced bone, sherds in varying states of preservation and of assorted shapes, amphorae with and without slip, an inscribed ceramic dish, ivory, bronze coins, and baked cuneiform tablets. Ceramics were included in our experiments because it has been found that synthetic squeezes are very useful for observing shallow or awkward graffiti.

In the process of making squeezes from rubber silicone compounds (elastomers) we have found the General Electric Company's RTV-11 and 21 compounds to be most satisfactory for our needs. We have worked with numbers 11, 21, 41, and 77 with variations of one to ½ percent of the catalysts T-773 and T-12. We have also used the Dow Silastics, RTV-502 and RTV-588 but prefer the more solid white color of the GE compounds to the transparent coloring of the Dow materials. RTV-21 happens to be pink but was chosen for its viscosity rather than color. Generally, the solid white compounds afford greater contrast between light and shadow and enhance the readability of obscure inscriptions.

The GE RTV-11 has the additional advantage of being thin enough to make a transparent coating so that when viewed against light, the reading of a shallow or worn inscription is made easier. RTV-21 is viscous enough to prohibit running when applied to a vertical surface, and RTV-41 and 77 are progressively more viscous than RTV-21. With use of one percent of the catalyst T-773 the compound dries in ⅛ the time (approximately 40 minutes) it takes with use of T-12. If however, T-773 is used with RTV-41 or 77 the curing time may be too rapid to permit proper coverage of a large object. It would then be necessary to use catalyst T-12.

Both RTV-21 and 41 were used with unsurfaced bone and produced a good impression. However a stain occurred wherever the elastomer was placed. In all cases, regardless of the elastomer used, porous surfaces, and particularly ceramic surfaces, are left darkened due to their contact with the silicone oil inherent in these compounds. In experimenting with both the catalysts and the rubber silicone compounds separately we have found that both materials stain porous surfaces. We did not experiment with protective coatings before the application of the rubber silicone compounds. We have not been able to remove the darkening with solvents and would not recommend

use of the rubber silicone compounds for museum pieces of non-glazed ceramic or other highly porous material on which a change of color would be unwelcome. However, experiments which we have made on darkened pieces indicate that the darkening may be removed by baking the object at 500° C.

With use on an ivory piece there was no discoloration and the pattern was precisely duplicated. Impressions made of bronze coins were clear, with no difficulties in regard to removal or stain.

After a squeeze made with RTV-11 to which had been added GE Thinner #1500, had hardened, there was some tendency for the elastomer to tear around the edges during the removal process. However there was no curling of the edges once it was removed, and if the squeeze is first scored, it can be removed very easily from stone. This is a great improvement over Tylac and other latex squeezes, as pointed out by Beck.

Table 1: Summary of Recommendations

Material	Optimum Compound	Comments
Stone Ivory Bronze Silver	GE RTV-11 ½ or 1 % T-773	For small, poorly incised inscriptions where a transparent squeeze is needed.
	GE RTV-21 1 % T-773	For small, horizontal or vertical inscriptions. RTV-21 is more viscous than RTV-11
	GE RTV-44 ½ or 1 % T-773	For small, horizontal or vertical inscriptions. RTV-44 is more viscous than RTV-21
	GE RTV-44 ½ or 1 % T-12	For large, horizontal or vertical inscriptions
	GE RTV-77 ½ or 1 % T-12	For large, vertical inscriptions. RTV-77 is more viscous than RTV-44
Ceramics Baked cuneiform tablets Unsurfaced bone	TYLAC RMC-2	Preferred because rubber silicone compounds tend to darken porous surfaces

In accordance with instructions concerning the shelf life of the elastomers, once they are past the specified age limits it is advised that they be discarded. With age the drying times tend to increase. Insufficient time

has elapsed to assess the lifetimes of the molds themselves.

The rubber silicone compounds do have a tendency to form air bubbles and, in use with the intricate and tiny wedges on a cuneiform tablet, they have been found inadequate, and not as satisfactory as latex. It is necessary to press the elastomer down onto the wedges with the fingers and this is still not an assurance that air bubbles will not form.

A latex compound with which we have experimented, and one particularly suitable for squeezes is Tylac RMC-2, made by the International Latex Corporation of Dover, Delaware. This compound was recommended by Professor Homer Thompson of Princeton University.

One thin-to-medium layer was applied to a stone inscription and to the ring base of a sherd. The drying time was 6 hours, after which the Tylac turned the corner of the stone well, was removed easily, and showed excellent impressions. The squeezes also lay flat. Cracking marks, however, tend to appear on the outer surface of the squeezes made with Tylac. When dry, the squeezes are a dull, buff color and no darkening or discoloration of either the stone or the sherd was observed. For use in the field, however, Professor Jameson has found that latex compounds are not satisfactory for metals. The squeezes tend to deteriorate rapidly.

A summary of our recommendations is presented in Table 1. Additionally, we should like to emphasize that the silicone rubber compounds provide a quick and easy method of making duplications in the field.

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## GREEK VASES IN THE STANFORD MUSEUM

PLATES 17-19

The antiquities in the Stanford Museum derive from three sources, the Cesnola collection, the collection made by Leland Stanford, Jr., in visits to Greece in 1880 and 1883, and more recent gifts and acquisitions. A considerable part of the first two collections was damaged or destroyed in the San Francisco earthquake of 1906, and Miss Hazel Hansen spent years of her life restoring and reorganizing the two thousand or so objects that survived: the present display cases and the admirably arranged teaching collection in the Archaeological Laboratory testify to her self-effacing skill and industry.

Besides the Greek vases to be noticed here, the Museum has Cypriote vases and figurines in abundance, bronzes, glass, Roman coins, lamps, amphorae, and a few pieces of sculpture, including a badly calcined marble head of Aphrodite of about 420 B.C., and a fine marble torso of Roman date presented by a former student in memory of Miss Hansen. The figurines

were catalogued in 1949 by John Rogers Davis (*Catalogue of the Classical Terracottas in the Stanford Museum*, Stanford M.A. thesis), and other pieces of work are in progress. The Museum has recently been given three very fine statuettes from Myrina: 63.52, woman with himation over head, leaning on pillar, not unlike Boston 01.7745 (Burr, no. 79); 63.53, Nike, head and body from same mould as Boston 01.7694-5 (Burr, nos. 68-9); 63.54, Nike, from same mould as Boston 01.7706 (Burr, no. 70).

The Cesnola collection includes several Mycenaean stirrup jars, piriform jars, alabastra and one-handled cups, a few geometric cups (cf. *AnatSt* 9 [1959] pl. 25), a Cycladic late protogeometric cup with pendant circles, and an East Greek lip cup of about 600 B.C. with low conical foot and black bands inside and out (cf. *AM* 54 [1929] 36, fig. 28/6; *NSc* 15 [1961] 215, fig. 19). Most of the other Greek vases are either from the Leland Stanford, Jr., collection (numbers from 16962 upwards) or recent acquisitions (numbers of the type 54.81).

*Corinthian.* Twenty-one vases include two good early alabastra (61.67 and another given by Lord Byron to his doctor, whose grandson gave it to a visitor from Stanford) a Middle Corinthian aryballos with padded dancers (64.1), a Middle Corinthian pyxis with convex sides and strap handles decorated with panther, owl, and goat (61.68), and a late pyxis with inverted lotus and bud chain (17415).

*East Greek.* Besides the Cesnola cup, a moulded vase in the form of a foot (28193) very like Brussels R450, *CVA* 1, pl. 5, 13.

*Attic black-figure.* Tyrrhenian amphora (61.66), *Ars Antiqua* (1961) no. 90. Neck, handles, and part of shoulder zone restored. A (pl. 17, fig. 1). Symposion of four pairs of bearded and unbearded men. The second table from the right has a panel between the legs decorated with two animals. B (pl. 17, fig. 2). Six komasts with nonsense inscriptions. The two on the left are modern above the knees, the third above the shoulders. For the frontal bearded face of the komast on the right, cf. *CVA* Copenhagen, pl. 101/1=103/1. Below, lotus-palmette band and two rows of animals. Near in style to Louvre E 865, Beazley *ABV* 94ff, no. 66.

Oenochoe (61.69, pl. 19, fig. 3), *Münzen und Medaillen* (1961) no. 147, made up from fragments, but no repainting except tongues above Herakles' scabbard. Herakles and Antaios. The contrast between neat Greek and untidy foreigner is rendered very much as on the kalix-krater by Euphronios (Louvre G 103, Beazley, *ARV* 14). The scheme of the fight is nearest perhaps to the amphorae London B 196, *JHS* 26, pl. 5, and Munich 1417, *JHS* 25, 276, fig. 15: Antaios kneels and does not defend himself as Herakles lifts him. Key-side class (Beazley, *ABV* 426); the artist belongs to the Leagros group (*ABV* 355).

Stanford has also nine lekythoi including one with a maenad riding a bull between two satyrs (17340) which belongs to the Class of Athens 581 (*ABV* 489), and one (ultimately from Lord Byron) with a chariot

and a warrior with spears leaping off the chariot, which is in the manner of the Haimon painter (cf. *ABV* 489 and *Hesperia* 32 [1963] 116, pl. 36, A7).

*Attic red-figure.* Pelike (17410). A (pl. 17, fig. 4). Woman playing the flute; naked girl dancing with castanets. B (pl. 17, fig. 5). Woman spinning (the wool is in added red); woman moving away with lump of wool (?) and kalathos. This shape of pelike is commonly used by the Early Mannerists. For the subject of A, cf. a column krater by the Pig painter in Lecce, *CVA* Italy 4, pl. III Ic, 3/1; there the flautist is seated on a chair with a drape similar to that on B. Probably by the Pig painter.

Kalpis (17412, pl. 19, fig. 6), reconstructed from fragments. Gynaikion with cock on extreme left and dog. The woman on the left holds a weaving frame, cf. R. T. Williams, *Antike Kunst* 4 (1961) 27. The woman in the center holds a circular hank of wool (in red); the woman on the right is spinning, the spindle (in red) appears in front of her knee. By an Early Mannerist. The chair drapes recall the Pig painter (cf. above); so do the pets, cf. London E 172 (*CVA* pl. 75/4 and 77/2). But this is by a more delicate artist, perhaps the Leningrad painter: the composition is not unlike that of the Caputi hydria (J. R. Green, *JHS* 81 [1961] pls. 6-7).

Stanford has three small early classical lekythoi: 4713, Cesnola collection, with a Nike moving to the right holding a phiale, perhaps early work of the Aischines painter; 16963, with white-ground shoulder, woman holding patterned box, a chair behind her and a wool basket in front of her, probably by the Karlsruhe painter (cf. *CVA* Mannheim, pl. 32/9; Gallatin, 26/9); 4714, Cesnola collection, with a maenad with wing-sleeves moving away from a thyrsos stuck in the ground; the subject recalls the Providence painter (*ARV*<sup>2</sup> 646), but this is a squat lekythos with a flat shoulder of the shape used by the Seireniske painter (*CVA* Gallatin 2, pl. 60/2) and the Well painter (*Hesperia*, 18 [1949] pl. 81/10). A kylix (60.388) with no picture outside, but inside a bearded man putting his hand on a seated youth's shoulder, is perfunctory work from the Penthesilea painter's workshop, probably by the painter of London D 12, cf. *CVA* Bonn, pl. 7.4.

The Lebes Gamikos (17416, pl. 18, fig. 7) is terribly damaged; it was briefly described by Miss Hansen in *AJA* 34 (1930) 60. The winged women with formal flowers (cf. *CVA* Brussels 3, pl. 12/9) are perhaps Aurai rather than Nikai. On A, three women, the one on the left holds scarf (cf. P. E. Corbett, *Hesperia* 18 [1949] 312) and alabastron, the one in the center a decorated box with a scarf falling below it; B. Two women, the first with an alabastron, and a young man leaning on a stick. On the stand, four draped women. The style suggests a follower of Polygnotos.

The bell-krater (17411) is partly restored. A. Satyr, Dionysos, and maenad, B. Three youths (mostly modern). The style is not far from *CVA* Hoppin, pls. 14-15, by the Curti painter, who belongs to the Group of Polygnotos and his followers (*ARV*<sup>2</sup> 1042).