The Art Institute of Chicago

Catalogue

Of a

Polychrome Exhibition

Illustrating the Use of Color Particularly in Graeco-Roman Sculpture

With an Introductory Notice by Dr. Alfred Emerson
Curator of Classical Antiquities

January 1892
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JANUARY 1892
THE ART INSTITUTE OF CHICAGO.

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GROUND FLOOR.

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ROOM II, Elbridge G. Hall Collection of Sculpture
        Egyptian, Assyrian and Early Greek
ROOM III, - - - - Same: Age of Pheidias
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FIRST FLOOR.

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ROOM XXII, XXIII, XXIV, - School Rooms

SECOND FLOOR.

ROOM XXV, XXVI, XXVII, XXVIII, XXIX, XXX,
            XXXI, XXXII, XXXIII and XXXIV, School Rooms
THE ART INSTITUTE OF CHICAGO.

The Art Institute maintains a permanent exhibition, open every week day from 9 to 5 o'clock. It is free to members and their families at all times, and free to all upon Saturdays and Sundays.

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January 4, 1892.
INTRODUCTORY NOTICE.

The present exhibit by the Art Institute of Chicago is an outgrowth of a feeling that, in matters involving an appeal to artistic perception, experiment will generally prove more useful than discussion. No particular novelty or originality attaches to the endeavor thus tangibly to illustrate the freedom with which the architects and sculptors of antiquity—Orientals, Greeks, Etruscans and Romans alike—added the seduction of color to their productions in solid materials. The polychrome Egyptian, Assyrian and Greek courts of the Crystal Palace, and Gibson’s famous Tinted Venus are remembered by many. Quite recently, under the impulse of the astonishing discoveries made during the late final excavation and clearing of the Athenian Akropolis, a Polychrome Exhibition, which embraced colored sculptures of all periods of art down to the present day, was organized in Berlin by Professor Georg Treu and other noted scholars. The Art Institute is indebted to the Trustees of the Boston Museum of Fine Arts, and to Mr. Russell Sturgis, of New York, for the loan of pieces which formed the basis of a less ambitious exhibit made in Boston last spring.

In regard to what the uninformed might be tempted to consider a debatable proposition, viz.: That the builders and sculptors of Greece and Rome really painted the white marble temples and statues which those countries erected in honor of their gods—there is no room for discussion. Literary testimony and the evidence of archaeology are too strong and uniform to admit of quibble or doubt. The statements made by Vitruvius, a practical builder of the Augustan age, as to the blue color of the triglyphs on a Doric structure, etc., find perfect corroboration in the actual remains of ruined and standing Greek temples. If Attic comptrollers’ records inscribed on marble slabs recite that a painter was paid five obols, or fifteen cents, a foot for doing the decoration on the inner side of an architrave, it is an easy matter to determine, even now, on the remains
of the temple in question, how the character of his work comports with the wages he was paid for it. It is true that the traces of color are hardly brilliant, except in the rare cases where colored pieces have enjoyed protection from weathering for centuries. Many a piece reported as showing a relatively brilliant coloring when first excavated, has now paled, or scaled off, to a nearly uniform white. It is to be hoped that the chemical glaze which a committee of Greek scientists has recommended will hereafter save the poly-chrome coloring of pieces subjected to the treatment. For this frequently embodies elaborate and interesting details, such as meander tracery and honeysuckle patterns of delicate finish and great beauty of design. But even where the wax pigment has scaled entirely off, a distinct trace of such decoration will sometimes remain and become visible in a slanting light as the merest ghost of relief, set-off by faintly chiselled or scratched outlines—such protection did the waxen crust furnish the painted parts of the marble, whereas atmospheric dust and moisture finished by delicately etching the exposed parts of the stone. A similar principle governs the modern industrial use of the sandblast for engraving upon glass and other hard materials. It is, moreover, known that the workmen were furnished with painted wooden models of the architectural members to be decorated. If stencils were used at all, it was only for the pounced or graven outlines. Wax incrustation itself is called encaustic painting, εγκαστική, and was laid on with the brush, after which warm irons, or charcoal pans, were passed near it, in order to drive the melted wax into the pores of the marble. This was the usual process of ancient painting on wood as well as on stone.

The same method was employed in the coloring of sculptures. A curiosity of the National Museum at Athens is a small group of sepulchral monuments on which the usual bas-relief adornments are strangely missed, only flat surfaces appearing in their place. On closer inspection it appears that these were adorned with paintings, the general style of which is closely akin to that of the more usual sculptured designs. The difference was one rather of cost and durability than of appearance, for it is beyond doubt that the sculptured bas-reliefs were as vividly colored as the paint-
ings. The best known example of this colored bas-relief is the stèle of Aristion, probably the sculptor of that name, whose effigy, as executed by his son Aristokles, is so striking a type of an Athenian militiaman of the waning VI century as to have acquired the popular sobriquet of "the Soldier of Marathon." On this curious work of early Attic statuary, years of exposure have not entirely obliterated the red, white, blue and purple hues by means of which every detail of the handsomely decorated military accoutrement was made clear for the edification of surviving brother veterans.

A notable example of the application of color to sculptures pertaining to an architectural ensemble are the pediment groups from Aigina, now in Munich. It has been observed that in these statues portions of the hair are executed in bronze. Nothing but an equally opaque coloring of marble and metal looks alike could have harmonized materials so different. And, in fact, the Aiginian statues retain the traces of elaborate coloring. The helmet of Athena, for example, was of a vivid blue, overlaid with a gold network of regular pattern. A close investigation of every part of these statues has shown that the hair, the lips and the eyes of the figures, as well as their draperies, corselets, shields, etc., were painted. The lances, swords, bows and arrows used by the warriors were of bronze, and, in all probability, gilt, with the surrounding architectural framework systematically colored; some use of color on the sculptures was almost necessary. It appears, however, that the undraped flesh parts of the Aiginian statues were not strictly painted, but rather toned by the use of a protective filler, lest the snowy whiteness of freshly cut Parian marble should prove too glaring. There is every reason to believe that the whole surface of marble buildings was similarly treated. Faraday discovered by a chemical analysis of some pieces of an Athenian temple submitted to him, that the stone had been impregnated with an organic substance of a resinous nature. Rosin and gum, like wax, are soluble in turpentine. The result of such toning must have approximated to the effect a brief exposure ordinarily has on the bare marble—of tempering its whiteness to a warm cream or ivory tone.

That deep reds, or "villainous" ochre, such as Semper and others have advocated in their restorations of classical buildings,
were not usually employed on the broad, uniform surfaces, or on the shafts of the columns of marble buildings, is sufficiently demonstrated by the recent discoveries at Olympia. The material of two Doric porticos and of the Treasury of Megara at Olympia is not marble, but porous limestone. It was an almost invariable Greek custom whenever rough stone like this was employed in buildings meant to be handsome, to coat its surfaces with a fine, hard stucco. This served both to define outlines and mouldings with greater accuracy, and in the application of the customary colors to the architectural members. At Olympia the coloring matter is discovered to have been mixed with the substance of the stucco itself, not merely applied to the surface of this finish. The traces of the polychrome decoration are consequently relatively indestructible. But it is clear, from the use made of white stucco along with the colored, that this color was quite as much in favor as any. And the parts coated with white stucco are precisely the same as those on which no traces of color can be found in the marble structures, especially architrave blocks, column shafts, and the plain surfaces of walls and pavements. Even that vexed question in the history of Doric polychromy, viz., whether the capitals of columns were really decorated with a painted leaf and dart design, as they have sometimes been restored, seems to be definitely settled in the negative by the Olympian remains. For even where the stucco on these Doric capitals is intact, it bears absolutely no trace of painting or even engraving. The corresponding part of the rectangular plasters, or antae, is, on the other hand, always painted with the regular leaf ornament in blue and red. When the rectangular slabs above the architrave, which alternate with the blue triglyphs, are not sculptured, these are also white. But whenever the metopes carry bas-reliefs, the figures stood relieved against a colored ground. This was generally red; so on the Parthenon, the Theseion at Athens, on the buildings at Selinous in Sicily. A blue ground was employed sometimes, even in alternation with red. Obviously, where prominent parts of the sculptures themselves were red, a light-blue ground was preferable. This consideration explains its occurrence in connection with great battle groups, as at Aigina. If the ground of the Parthenon frieze was indeed blue, it
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might be inferred that the Athenian cavalry men, whose squadrons are a prominent feature in the festal procession on that frieze, wore red.

The general rule in the Doric order was a bright coloring of all the projecting members of the entablature, and of such flat surfaces as served to relieve sculptures either in bas-relief or in the round. The colors in this case were those already named—red and dark blue, now and then also light blue. The use of scarlet, green and gilding, was limited to minor ornamental bands, meanders, floral borders, palmetto patterns on the antefixes of the roof, and to such points of the sculptures as called for these hues. So lavishly was minute decoration of this sort applied, that it occurs on portions of the Parthenon high enough in air to make the colored design nearly invisible to the naked eye. Evidently, like many other peculiarities of the developed Doric order, the system of coloring was based on tradition, rather than on theoretical speculations or merely practical purposes. And the beginnings of this tradition dated back to a period when wood, terra-cotta and unburnt brick figured more conspicuously than stone in the Greek architecture, and when the proportions of a typical Greek temple were relatively insignificant. Even in the classical period, the polychromy of the stone and marble structure served to bridge contrasts of material that might otherwise have made themselves felt as harsh. Painted terra-cotta, in its usual color-scale of yellow, red, black and purple, is the material with which sundry important members of the old treasuries at Olympia, of the early Doric temples of Sicily, and of the temple of Aigina are overlaid or incrusted. These members are never undecorated. Again, an Athenian monument of a late period, that of Nikias, consists partly of stone and partly of marble. The costlier material was here used only in such parts as would remain white or receive no definite coloring. And one of the temples at Selinous shows the application of the same principle in the sculptured bas-relief of its metopes, of which only such parts are of marble as might, under the Greek conventional system, have been left white or nearly so. This distinction is accorded to the nude extremities—faces, arms and feet—of the female figures only. It is known from vases and Pompeian frescoes that Greek painters were
in the habit of painting their men very swarthy. At Selinus the faces and limbs of the male figures were cut in limestone, like the ground of the metope slabs, and the draperies of both male and female figures on the same. Consequently, they must have been as heavily colored as any other part of the relief. That polychrome coloring was extended to works done entirely in marble is proved by examples already cited, by numerous vestiges of color on extant statuary, by the many drill holes which may be noted on the Parthenon frieze, and which served to attach gilt metal bridles to the horses' heads and necks. Further, by the peculiar way in which labor was economized on the less perfect works. It is not unusual to find such portions of sculptured work as were made conspicuous by strong patches of color quite roughly and carelessly blocked out. The pediment sculptures and metope blocks found at Olympia furnish several examples of this easy-going device. The same may be said in regard to more than one sepulchral stele. On that of Aristion, otherwise very carefully executed, the point of his spear and the crest of his helmet were merely painted on the flat ground. Another instance is on the monument of Hegeso, where the lady is taking some object not indicated in relief, probably a necklace, from her jewel-case. The figure of Dionysos among the seated gods on the frieze of the Parthenon has his left arm and hand raised in a queer manner, best explained on the supposition of its having held a long painted sceptre. Flat quadrangles underneath the reliefs on the funeral slabs bore painted panels. These are usually obliterated. On one monument in the National Museum in Athens the dim outlines of a crowing cock, and of the morning star, the object of his salutation, are still made out.

Many reliefs and statues, and, not least, the marbles of the Parthenon, show, obviously enough, a conscious calculation in the pictorial disposition of draperies so as to throw out the silhouettes of the figures against their darker texture. In statuary proper, the same method was evidently maintained. The present exhibition furnishes a good illustration of this in the colored restorations of the pediments of Olympia, by Paionios, and of the flying Victory by the same sculptor, who was a contemporary of Phidias. This is the place to allude to the Greek practice of marking the letter-
ing of inscriptions with red, of which the inscription of Paionios, on the lofty triangular pedestal of his Victory, is an illustration. An inscription of Hipparchos, tyrant of Athens, not long ago brought to light in Athens, happens to be quoted by Thucydides, with the remark that "the letters are now very dim." In point of fact, they are perfectly sharp and clear-cut, showing that the historian referred to the color, not the stone-cutting. Mr. Fellows discovered inscriptions in Lycia, the letters of which were painted red and blue in regular alternation. In his Dorische Polychromie, Teuger restores both Attic and Oscar inscriptions after this Lycian pattern, scarcely with sufficient reason or taste. On the other hand, an observation made by Fellows at the time of the excavation of the great series of sculptures belonging to the tomb of the Lycian Satrap, Perikles of Xanthos, casts of which are in the Polychrome room, has a distinct bearing on the proper polychrome restoration of Attic bas-reliefs, such as those of the Parthenon. The discoverer reports that the Lycian slabs had a light-blue ground, and that the nude parts of the male figures were painted of a dun red, parts of the armor and draperies being touched up with vermilion and other bright pigments. An examination of casts of the Lycian friezes in the Institute will show that polychrome treatment would make these curious compositions more readily intelligible. The same may be said, it is true, of almost any piece of sculpture. It holds good more particularly of reliefs originally placed at a great distance from the eye, or, like the Parthenon frieze, at a most unfavorable angle of vision.

The Orient, from which the Greek genius received its artistic inspiration, does not seem to have conceived of a colorless architecture or sculpture. Under the semi-tropical sun of Egypt, the dryness of the atmosphere has often preserved the wonderful brilliancy of the old pigments, especially in many of the rock tombs and temples. Some idea of the gorgeous polychromy of these sanctuaries is thus obtained. The polychrome decoration of Mesopotamia and Persia, both in architecture and sculpture, partakes of the more refined richness which we still admire in Oriental tapestries. The colored ornaments executed in enameled brick, or applied to stone carvings, in the royal palaces of Babylonia, Nineveh and
Susa, reflect both the spirit and the technique of woven and embroidered work. In Asia Minor the Greeks came in close contact with this Oriental art. Terra-cotta statues found in Cyprus within two or three years show the path and the method of the transmission. (See Journal of Hellenic Studies for April, 1891.) The Orient has lately revealed some marvelous examples of the polychromy of purely Greek sculpture, on a series of princely sarcophagi discovered in Phoenicia. One of them, from its decoration with a composition representing the battle of Issus, and from its magnificent execution, has figured in journalism as the sarcophagus of Alexander the Great himself. These treasures are somewhat inaccessible to Western archaeologists, having been placed in the Imperial Museum of Chinli Kiosk, Constantinople. Unfortunately, they have, as yet, also remained unpublished.

It remains to consider the limitations of polychromy in Greek and Roman statuary, and the question of the aesthetic appropriateness of such a conjunction of two separable arts. In spite of the allusions of classical authors, both Greek and Roman, to the practice of coloring statues, it was only in 1815, in Quatremère de Quincy’s Jupiter Olymphiæ, that an attempt was made to set forth, with emphasis and approval, the freedom with which the Ancients made use of color effects, and the composition of materials of different colors and textures, in sculptured images. Coinciding with the first important revelations of the remains of Greek architecture in the Levant, by the Society of Dilettanti, with the transportation of the Elgin marbles to London, and the discovery of the Alginetan statues, the novelty of the idea excited general attention. It cannot be said to have met with very great favor at the time, either from artists or connoisseurs. It must be remembered that the period was one when industrial and decorative, i.e., popular art, had reached its lowest ebb, being only on the eve of its modern revival. Hence no artistic conceptions or practices were considered legitimate that did not agree with the academic instruction of the time. This was dominated by a sol-disant classical, more exactly by a narrow classicistic spirit. The charms of mediæval art were, as yet, unrecognized, the wonders of Oriental art were still unknown, the beauties of Greek art, if apprehended, were ill under-
stood. Yet so strong was the deference for the Antique, learned
from the Italian masters of the Renaissance, that the accidental de-
struction of the ancient coloring was exalted into a special merit,
and ridiculously associated with the ideal qualities of the highest
art, its lofty serenity, its unsullied purity, its divorce from the vul-
garities of crude realism, and what not. Hegel lays down in his
Æsthetics that the Greeks committed the error of painting their
sculptures, at first, but soon shook off that vulgar realism and created
their more sublime later works without this defect. The sumptuous-
ness and complexity of what the Greeks, with a single voice, pro-
nounced the sublimest piece of statuary ever conceived by man—
the gold and ivory Zeus of Phidias—Hegel would account for by
the corruption of Athenian taste in the age of Perikles, when they
learned to debase the sanctity of art to their own glorification!

As a matter of fact, there was necessarily some development in
the artistic sense of color, just as there was progress in the direc-
tion of a more and more refined sense of form, as long as Greek art
continued in the paths of ascending growth. It is not surprising to
find that where the stone carvers of the VI century were satisfied
with bold reds, blues, and greens, the skilful terra-cotta modelers of
the III century had learned to be better pleased with delicate azure
and rose tints, applied over a ground of pure white, by which the
resemblance of their clay figures to miniature marble statues was
made complete. Plato says that the finest parts of a marble statue
are colored not with the costliest (i.e. brightest), but with delicate
pigments. We do not find that the great masters of the age imme-
diately preceding the Alexandrian epoch had been led to abandon
the seductions of color. The dead hue of a slaughtered animal in
the hand of a raving Manad, by Skopas, is particularly mentioned
by Callistratus. And Pliny relates of Praxiteles that he modestly
ascribed the success of his best works to the encaustic coloring given
them by Nikias. It is not likely that he would have asked the
assistance of one of the most celebrated painters of his age, or that
Nikias, who vied with princes in wealth and haughtiness, would
have given his aid, unless the work had required unusual skill and
pictorial taste. On this account—although it is known that in nude
statues the process of filling, rather than coloring, the marble with
white wax (γαλάκτωμα) was a common one, and although the late discoveries on the Akropolis of Athens, as well as the above-mentioned Aigionian statues, show that a partial application of color on a practically white ground was at times thought sufficient, the writer is disposed to assume the use even of local flesh tints for the Praxitelean period. The lips, eyes, eyebrows must have been colored in all statues. Those of bronze often had stone eyes. Very curious is the preference of Greek artists for red hair, or blonde. It hardly indicates that the national complexion was not usually dark, but may rather be compared to the same coloristic preference as shown in the works of Venetian painters. The hair of the Venus of Medici was gilt. An Eros (Cupid) of Praxiteles had golden, i.e., gilded wings. A Latin epigram speaks of another statue with wings of a thousand colors, which must have been a wonderful triumph of polychromy.

The best extant examples of the life, interest, and added charm of loveliness that a tasteful coloring can impart to plastic works, are for the older period a series of marble statues and fragments found on the Athenian citadel rock in 1886. The present exhibition includes water-colors and carefully tinted photographs of a number of these. Most of the statues were figures of Athena. It will be seen from these fac-similes that the work of the sculptor-colorist was, even at that early period, far more arduous than a mere staining of large surfaces in monochrome. The painting exactly reproduces the handsome and elaborate designs of woven and embroidered stuffs. The blue or green beards and emerald eyes of the stone Tritons from a very archaic pediment—their iridescent, much-wound tails, the rainbow pinions of a winged horse seem directly projected into reality from the fantastic realms of Greek folklore. The pedestals of the dedicatory statues, also colored, are equally important documents for the history of early Attic art, both for their peculiar architectural forms, their inscriptions—from which we learn that the statues were the work of artists of repute—and their vivid coloring. The advanced taste of a later period is best illustrated by the exquisite Tanagra figures, so highly valued by collectors. Some of these preserve effective traces of their tasteful polychromy. It is largely due to the abundant discoveries in the
necropolis of Tanagra, and on the Akropolis of Athens that interest has been newly awakened in the whole subject of ancient polychromy, with some prospect of the various questions connected with the history of the practice receiving a critical settlement.

The Greek practice was followed, as a matter of course, by the artists of Etruria and Rome. Etruscan taste, ruder in every way than the Hellenic, shows a fondness for lurid coloring, which Greek masters might scarcely have approved. Nevertheless, the best Etruscan pieces, generally funerary portraits in terra-cotta, are startling in their realism. Roman sculpture took an equally realistic turn from the outset; the portrait was, strictly speaking, the only indigenous subject of Roman sculpture. The portraits of ancestors, modelled in wax, were religiously preserved in old Roman families, and were worn as masks at funerals by people who thus impersonated these family heroes. This use, and the material employed, forbid us to think of the portraits as uncolored. The portrait bust, fashioned either with or without shoulders and drapery and set on a turned foot, is a Roman invention. It is an imitation of the old waxen masks. Imperial luxuriousness, imitation of the Egyptians, and a certain progressive depravation of taste, led under the Empire to an extensive use of naturally colored marbles, basalt, porphyry, serpentine and translucent stones. A good example is the Apollo Musagetes of the Neapolitan Museum, of red porphyry, with head, hands and feet of white marble. Nor did the Romans hesitate to combine marble and bronze in a rather incongruous fashion. It is hard to say whether the late Roman custom of chiselling the outlines of the iris and pupil on the ball of the eye was due to the decline of polychromy or to a division of labor that made it desirable for the sculptor to show his intention to painters not working under his own eye. The direction of the glance has much to do with the expression of the whole face; so, for example, in the bust of Vitellius, which figures in this exhibition, it indicates habitual suspicion.

In the Augustan age, certainly, there was little or no departure from the methods followed by the sculptors of Greece. Even in Rome the majority of sculptors were probably born Greeks. Perhaps the best extant example of thorough-going sculptural poly-
chromy is a statuette of Aphrodite. A chromo-lithograph fac-simile of this piece has been published by Dilthey in the Archæologische Zeitung for 1881. Both the semi-nude Venus herself, and an archaic idol on which her left elbow reposes, are quite elaborately colored. Her cloak alone appears to have been yellow, with a pink hem on one side, and sky-blue with a white hem on the other. The little idol wears green and yellow. Both figures have blonde hair and black eyebrows. The eyes are painted in, and even the eyelids were limned with black. How little such detail is foreign to general Greek practice is shown by the possibly contemporary statuette of Athena Parthenos, found in 1880, which has red lashes. A special value attaches to the Pompeian Aphrodite as furnishing an illustration of the use of flesh tint. The body exhibits no sign of color to the careless observer, but vestiges of a carnation pigment in the small cavities of navel and nostrils compel us to assume a naturalistic coloring of all the nude surfaces. Nor is the example isolated.

We need only cite the vivid polychromy of the handsome statue of Augustus, found at Prima Porta, a cast of which stands in the hall of the Institute, and the 2,500 colored figures of the column of Trajan, to show that the methods of the Greeks were not disdained in purely Roman works. The vestiges of the polychrome work on the Augustus indicate that the intention of the artist was to render the appearance of a cuirass of beaten silver, richly adorned with repoussé figures enamelled in different colors.

An investigation of mediaeval and modern polychromy is beyond the limits of our present purpose. It is the writer's opinion that the practice was the instinctive one of all artistic races and periods, and died out only in consequence of a mere misconception of the antique custom. The popularity of the polychrome figures in wax, plaster, bisque, majolica, porcelain, bronze, wood, leather, etc., etc., which modern industry continues to produce, and the frequently noted indifference of the public to specimens of a more academic type of sculpture, seem to show that the doctrinaires have failed, after all, to overcome the healthy, artistic instinct of ancient and modern man. The history of art teaches that its propriety need never have been called in question. Canova's and Gibson's
experiments with colored sculpture have found an illustrious follower in Gérôme, whose polychrome works have charmed the cultivated public of the French Salon. In fact, the contention of Hegel proves only less absurd than the opinion of the painter Magnus, emitted as late as 1872, that the vestiges of polychrome ornament discovered on the Parthenon were due to late and tasteless efforts at restoration. The German artist's incompetent judgment is best honored by associating it with his Swedish namesake's curious notion that the Ancients in general, and the Greeks in particular, labored under the physical infirmity of color-blindness!

Benvenuto Cellini, in his Discourse on the Relative Merits of Painting and Sculpture, has set forth the fundamental principle of polychromy with admirable quaintness. Scripture assures us, he contends, that God Himself, by modelling man in clay, was not loth to be remembered as the world's original sculptor. But when He had modelled birds and flowers of the same material, says Cellini, He saw that they looked dead, and so colored them. "And for this reason there is necessity of colored sculptures."

The present exhibition being of necessity an experiment, especially in the actual coloring of casts and marbles, different methods of polychromy have been tried. The results in some instances are far from satisfactory. Least so where calcimine, chalk, and pastel have been used on plaster. While pigments applied in these ways can be washed off again, which admits a temporary coloring, the effect obtained is mostly detestable. More pleasing effects are secured by using wax softened in turpentine as the vehicle of the coloring substances, and pure wax for the whites. Yet more pleasing results have been obtained with pastel colors on marble, showing how much depends, even in polychrome sculpture, on the texture of the material. It would have been indiscreet to try wax on the original antiques, or other marbles belonging to the Institute; and even with pastels, great care was exercised to avoid the danger of staining the marbles with any colors likely to adhere to the stone or stain it. Ordinary oil paints were found not altogether disagreeable in texture, when the too glossy surfaces were suitably dulled with a thin coat of wax.
REFERENCES.

Owen Jones, Grammar of Ornament. Plates I to X, and text.

Racinet, L'ornament Polychrome. Plates I to VI. Note especially Pl. IV, Fig. 9: a Tarentine mosaic, representing the Aphrodite Sosandra, a celebrated statue by Kalamis of Athens, about 500 B. C.


CATALOGUE OF THE EXHIBITION.

COLLECTION OF BROMIDE ENLARGEMENTS, COLORED BY
MISSES GRACE LONG, ALICE NESSLING, LAURA COWLES
AND FLORENCE BECKER, OF THE INSTITUTE.

1. A lotus capital from the Egyptian Temple of Karnak.
   From Prisse d'Avennes.

2. Two Egyptian lotus-bud columns, similarly designed
   as to form, but differently colored, although adjoining.
   From Prisse d'Avennes.

3. Bands of polychrome decoration, antefixes, etc., from
   Athenian buildings. From Fenger.


5. Similar ornaments from Athenian temples. Restoration
   of the stele of Aristion and of the statue of Augustus,
   from observed traces; conjectural restoration of
   other Greek sepulchral slabs, and stiffs of Parthenon
   frieze.

6. Torso of an Athena by the sculptor Antenor—flourished
about 500 B.C. Found on the Akropolis. From a plate in *Denkmäler*.

7. Head of a Triton, enlarged. Same as No. 13. From plate on *Denkmäler der antiken Kunst*.


9. Eastern façade of the Parthenon. From a model by Chipiez, in the Metropolitan Museum. The restoration of the sculptures is largely conjectural.

10. Western façade of the Parthenon. From the same model. The restoration of this pediment is more secure, in respect to the sculptures.

11. Head of Athena Parthenos, a marble copy of the chryselephantine statue by Pheidias, 450 to 438 B.C., in the Kaufmann collection, Berlin. From plate in the same publication. The colors appear to indicate the use of both gold and silver in the original.

COLLECTION OF WATERCOLORS AND COLORED PHOTOGRAPHS
LENT BY MR. RUSSEL STURGIS, OF NEW YORK.

These pictures are all conscientiously exact reproductions of the actual appearance of the pieces discovered on the Akropolis between 1886 and 1888.

13. Watercolor. Corner of an archaic pediment group, representing three Tritons, probably witnesses of the combat of Herakles and Nereus. As fantastic sea monsters, they have green eyes, green or blue beards and hair, and many-colored tails and wings. Flesh-tint is applied unreservedly. The material is porous limestone. The group belonged to an early temple on the citadel, probably destroyed by the Persians. Colored photograph of one head from the above groups, front and side views. Also, uncolored photograph of same view for the sake of showing the effectiveness of the coloring by comparison. The blue is more vivid in patches than in the original condition of the sculpture, owing to scaling in the thick paint. Black and colored photographs of statues of Athena, similar with the ones done in watercolor.


14, 15, 16. Watercolors. Front and back views of statues of Athena, of Parian marble, without flesh-tints, but
with the coloring of eyes, lips, hair, the embroidery on the white garments, and the color of the dyed stuffs, very well preserved. These figures, as well as the following, appear to have been destroyed by the Persian invaders of 480 B.C. The dates of their execution may be placed variously towards the close of the VI century B.C., and at the opening of the fifth. The Athenians, on their return, built them into a terrace on the north side of the Akropolis, where they remained undisturbed until excavated by the Greek Archæological Society.

17. Watercolor of part of a similar statue, very delicately colored. Same as No. 6. In the Akropolis Museum. An inscription on the base shows that the piece was by Antenor, a famous master of about 500 B.C.

17b. Uncolored photograph of the whole statue.


19, 20. Torsos of statues of Athena, similar to the above. Akropolis.


22. Archaic head of an Attic athlete, with braided hair.
Coloring faded. Feet and pedestal of a female statue, colored.

23. Neck and part of wing of a Pegasos. The mane of the horse is colored conventionally in red and green lines.

24. Part of a colored pedestal, and female feet.

25. Fragments of architecture and sculpture.


27. Fragments of another horse.

28, 29, 30. Colored capitals of statue pedestals.

PLASTER CASTS POLYCHROMED BY MR. R. E. MILLS, OF BOSTON, UNDER THE DIRECTION OF MR. EDWARD ROBINSON. LENT BY THE BOSTON MUSEUM OF FINE ARTS.

31. Mask of the Hermes of Praxiteles, about 360 B. C. The coloring is in wax, with a touch of gilding in the hair. Traces of polychromy have been observed on the original marble, which had red hair. The darkness of the complexion, indicating exposure, is in accord with the swarthy coloring given to male figures in Pompeian frescos, and probably in Greek painting and sculpture also.
32. Mask of the Venus of Medici. The technique is the same. The gilded hair is in accord with the traces observed on the original statue.

**Antique Marbles from the Institute Collection, Temporarily Colored in Pastel.**

33. Head of a satyr, found in Rome. Conjectural restoration of the original coloring.

34. Head of a youth of the Claudian family. The coloring is conjectural, but analogous to that of other ancient marbles.

35. Statuette of Heracles, found in Rome. The coloring approximates to the present appearance of some polychrome antiques.

**Collection of Original Antiques Showing Vestiges of Color, Recently Acquired by the Institute.**

36. Lion's Head in terra-cotta, with vestiges of red. From the Naval Arsenal of the Athenians at the Peiraeus. An architectural ornament, V century B.C.

37. Mask of a beardless satyr, on terra-cotta, with vestiges of red and blue.

38. Mask of a bearded satyr. Same character and provenance.

40. Standing female figure, possibly Aphrodite, loosing her sandal. From Tanagra. Similar vestiges.

41. Seated Greek lady. Terra-cotta, from Tanagra; vestiges of red, etc. Piot collection.

42. Stelé formerly at Orchomenos. A man amusing his dog with a grasshopper. Incompletely colored in pastel. It was intended to do a larger number of plasters in pastel, which readily washes off, but the medium proves decidedly unsatisfactory on plaster.

43. A case of plaster fac-similes of Tanagra figurines, by Eichler, Berlin.

44. A terminal Pan, piping. A late work in imitation of earlier pieces, which often had real draperies hung about the square posts which took the place of the body. Temporarily colored in calcimine.

45. The “Theseus” of the Parthenon. Colored in chalk.

46. The reception of Dionysos by a dramatic poet. Probably a copy of an earlier relief of this sort. The piece is one of the most pictorial of all antique sculptures. A satyr is decorating a temple in the background with garlands. Other satyrs are removing the god’s shoes, so that he may recline on the dining
couch. Others form a cortège. The curtain back of Ikarios is the sculptural method of saying, "This is an indoor scene." The polychromy is temporary, unsatisfactory and incomplete.


49. Grüttner's restoration of the Victory of Paionios, on her triangular pedestal. Original erected at Olympia by exiled Messenians about 425 B.C. The style requires color, to which it is left to harmonize certain details; so the only half-sculptured eagle beneath the flying robes. Paionios had ventured to represent his Victory as just about to alight, but still suspended in flight. Her bellied cloak, executed in solid marble, counterbalanced the strong forward slant which would otherwise have upset or broken the statue. The polychromy also greatly assisted the effectiveness of the figure, in lightening the effect of the agitated masses, and in emphasizing the distinctions of inner and outer garments, and of the two faces of the woolen tunic. Colored in wax by Mrs. A. H. French.

50. Sculptured base of a column of the Temple of Artemis at Ephesos. The subject, more completely shown on
the adjoining uncolored duplicate, is the release of Alkestis from Death by Herakles and Hermes, the guide of departed souls. The winged figure with the sword is the Greek god of death, Thanatos. Alkestis wears a brown and yellow mantle, and veils her head with it. Hermes looks upwards, as about to take the woman up to earth again. His hair and wand are golden, as described by the poets. The ground of the relief is blue, as in some of the earlier friezes. Date about 340 B.C. Colored in wax by the Curator.

51. Piece of a Greek relief; colored by D. C. French. Paris and Eros, planning the rape of Helen.


53. Dedicatory relief of a musician, representing Apollo Citharæus followed by Artemis and Leto, and receiving a libation from the Goddess of Victory. His own altar at the right, the Delphic tripod at the left. Beyond the wall, which serves as a ground for the relief, a Corinthian building stands to represent the Delphic sanctuary, although this was not Corinthian, but Doric. This detail and the good proportions of the nude show that the quaintness of the attitudes
and draperies is an affectation. The coloring is conjectural, in imitation of the Tarentine mosaic in Racinet. Although the work is really late, its affected archaism makes it an apt illustration of early polychrome work.

54. A mechanical reduction of the "Marble Faun" of Praxiteles. Original about 340 B.C. Colored in oil by Mr. Beggs. The color appropriately indicates outdoor exposure.

55. Bust of the Emperor Vitellius, aged fifty-four. This Emperor reigned but three months, largely devoted to gluttonous feastings. Done in oil by Mr. Beggs, in a naturalistic manner.

56. Wax bust in the Musée Wicar at Lille, attributed to Antiquity and to Raphael, with equal lack of evidence. Fac-simile in wax by Gurlitt, Berlin.

57. Design for a mantel, by Mr. Daniel C. French.

Occasion has been taken to color a number of casts from bronze statues and statuettes, in a fashion conveying the character of the originals to the eye better than white plaster can possibly do.