

Introduction

This ideal of a spatial Gesamtkunstwerk guided Raphael and Michelangelo when they found themselves drawn to architectural works. It was the leading idea that linked the literary and artistic endeavors of the great Semper. If only he were still alive today – since we have such great tasks and no artist his equal.

Wilhelm Dilthey, “Three Epochs of Modern Aesthetics”
(1892)

Adulation for the architect, teacher, and theorist Gottfried Semper was the rule, not the exception, in the last decades of the nineteenth century. This “real successor to Goethe,” as Dilthey once referred to Semper, had embellished the cities of Dresden, Zurich, and Vienna with an array of monumental works. His educational legacy dominated the architectural institutions in Dresden and Zurich. His theoretical outpourings were deemed by many architects at the end of the century as his most significant contribution to architecture. What varied with regard to Semper, and in some cases extremely, were the different interpretations ventured on his theory and practice. In Dilthey’s analysis, Semper’s importance resided in the fact that he, “like Wagner in music, wanted to renew architecture from the bottom up by theoretical observation and by actively creating. More consistently and profoundly than anyone before him, Semper recognized and exploited architecture’s material limitation: the origin of its formal language in the arts and crafts, textiles, ceramics, metal works, carpentry, and the oldest stone construction. He also envisioned a *Gesamtkunstwerk* [synthesis of the arts], in which architectural masses became enlivened and shaped, as it were, by ornament, color, and a host of painted and plastic forms.”¹

The connection between Semper and Richard Wagner is an obvious but still an intriguing one. Both men attained the status of demigods in their respective fields; both had a legion of followers – in Semper’s case extending from Vienna to Chicago.² Then there was the long and unlikely friendship between these two colorful and somewhat irascible artists. According to Wagner, it began in the early 1840s, shortly after Semper cornered Wagner in a Dresden music shop and berated the

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young composer for the medieval content of *Tannhäuser*.³ Finally, there was their mutual and deeply rooted sensitivity to the theatrical (for want of a better word), to the drama of the chorus being summoned from orcus, to the diaphanous sheen of the stagelight. Dilthey in his essay praised Wagner for exploiting the expressive qualities of rhythm and intonation, for uniting music, speech, and mime in the theatrical production of the opera. Semper's theory and practice can sometimes be construed as a desire to return to the artifice of the masque. In an unusually explicit and instructive passage of his main work on style, Semper traces the origin of monumental architecture not to the simplicity of a primitive hut, but to the festive celebration, to the improvised festival and stage apparatus "covered with decorations, draped with carpets, dressed with boughs and flowers, adorned with festoons and garlands, fluttering banners and trophies."⁴

1. The Polychrome Controversy

Gottfried Semper was born in Hamburg in 1803, the son of an affluent wool manufacturer.⁵ In 1823 he left his native city and enrolled at Göttingen University, specializing in mathematics and by some accounts intent on pursuing a career as a Prussian officer. Two years later, however, he left Göttingen and moved to Bavaria, reportedly registering at the Munich Academy as a pupil of Friedrich von Gärtner.⁶ Yet Semper's stay in Munich was brief; he traveled to Regensburg and Heidelberg, until his involvement in a duel forced him to flee Germany for the first time. By December 1826 Semper had turned his attention to architecture and was living in Paris, enrolled in a small school operated by the Rhenish architect Frans Christian Gau.⁷ He remained in France through most of 1827, then traveled in Germany for a period of nine months. In 1829 Semper renewed his studies under Gau and stayed in Paris until August of the following year. After witnessing the July Uprising that ended the French monarchy, he embarked on a three-year architectural tour to "the classical land" – Italy, Sicily, and Greece.

Architecturally, Semper could not have selected a more exciting city than Paris in which to receive his training. In the late 1820s the French capital was being entertained by the opening stages of a spirited architectural debate on polychromy in classical antiquity, the outcome of which would contribute to the collapse of the doctrinaire legacy of Napoleonic classicism. The younger French architects and students of this period – led by Guillaume-Abel Blouet, Emile-Jacques Gilbert, Henri and Théodor Labrousse, Félix Duban, Louis Duc, and Léon Vaudoyer – were convinced it was their destiny to enact a new and radical architecture, guided if not propelled by the revolutionary fervor of Saint-Simon.⁸

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Semper's classical training and rebellious personality made him accessible to both the artistic and political issues. His decision to study mathematics at Göttingen was reached, according to one biographical account, out of a compromise between his desire to specialize in classical studies and his father's wish for him to have a career in law.⁹ While at the German University, Semper attended the lectures of A.H.L. Heeren and Karl Otfried Müller, two of Germany's greatest classical scholars.¹⁰

Moreover, Semper's decision to forego the entrance exams of the Ecole des Beaux-Arts in favor of Gau's tutelage was also fortunate since it landed him within an international circle of architectural reformers at the center of the polychrome debate, a circle that revolved around the controversial architect-archeologist Jacques-Ignace Hittorff.¹¹

Both Gau and Hittorff were born in Cologne, a city that between 1801 and 1815 had been incorporated into France. Both moved to Paris in 1810 as French citizens and entered the Ecole in the following year. Both, however, maintained contacts with many of the leading German intellectuals, including Sulpiz Boisserée, Alexander von Humboldt, and Ludwig von Schorn.¹²

Between 1815 and 1821 Gau made an artistic and archeological tour of Italy, Palestine, and upper Egypt; after returning to Paris he began work on the first of his two major contributions to the polychrome question, *Antiquités de la Nubie*.¹³ In addition to the school he conducted in the 1820s, Gau also practiced architecture, although he did not receive an important commission until he was appointed architect to Sainte-Clotilde in 1839.

Hittorff, by contrast, was a prolific designer and builder, yet his fame was perhaps attributable more to a single trip he took to the south in 1822–24. After his appointment with Joseph Lecoq as *Architectes pour les Fêtes et Cérémonies* in 1818, Hittorff began attending the Wednesday *salon* of François Gérard, a circle of artists and antiquarians frequented by Antoine-Chrysostome Quatremère de Quincy. At the latter's urging Hittorff planned a trip to Rome and Sicily in pursuit of archeological discovery.¹⁴ He left Paris for Rome in September 1822 and traveled to Sicily via Pompeii and Paestum in July 1823. Late in the year he made successful excavations at Agrigentum with the help of a small army of laborers. He then moved his crew to Selinus; here, on the acropolis, he unearthed the remnants of a small heroum now known as "Temple B." Hittorff reported his findings to parties in Germany and France,¹⁵ and upon returning to Rome began work on a polychrome restoration of this temple – the drawings that, as Semper would later recount, "sent the antiquarian world into a great uproar and touched off a memorable war of words."

The fact that Hittorff's discovery and his polychrome rendering of a small Greek-colonial temple embroiled Europe in an acrimonious archi-

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Gottfried Semper

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The Parthenon, 1751. From Stuart and Revett, The Antiquities of Athens, vol. 2 (1787). Courtesy The Getty Center for the History of Art and the Humanities.

tectural debate underscores the impending crisis in European architectural theory. The rediscovery and recording of Greek monuments in Paestum, Sicily, and Greece in the early 1750s produced an artistic view in which Greece superseded Rome as the model of the classical ideal. In his writings of the 1750s and 1760s Johann Joachim Winckelmann outlined the aesthetic premises of this ideal with a definition of beauty based on pure form, exclusive of color. Winckelmann even argued that the whiter a body the more beautiful it is, “as white is the colour which reflects the greatest number of rays of light, and consequently is the most easily perceived.”¹⁶ By the end of the century Immanuel Kant had extended this aesthetic of form to every fine art:

In painting, sculpture, and in fact in all the formative arts, in architecture and horticulture, so far as fine arts, the *design* is what is essential. Here it is not what gratifies in sensation but merely what pleases by its form, that is the fundamental prerequisite for taste. The colours which give brilliancy to the sketch are part of the charm. They may no doubt, in their own way, enliven the object for sensation, but make it really worth looking at

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and beautiful they cannot. Indeed, more often than not the requirements of the beautiful form restrict them to a very narrow compass, and, even where charm is admitted, it is only this form that gives them a place of honour.¹⁷

This tenet conformed perfectly with the prevalent image of the Greek temple, an ideal many thought should be emulated in contemporary practice. Greek and modern architecture could thus be reduced to a few bold, pristine masses, preferably of white marble, broken or accentuated with decorative relief. The antiquarian scholar Christian Ludwig Stieglitz summoned up this view in 1801: “Works of architecture receive their beauty as beautiful form, which is evoked in architecture, as in all of the fine arts, through order and symmetry, through decorum and good proportions. . . . [To] avoid a facile monotony and to give the whole a greater multiplicity, elegance should be added through the decoration and embellishment of the essential parts of a building, serving as adornment.”¹⁸

What caused this “white” view of architecture to be challenged in the first few decades of the nineteenth century was a growing interest in classical philology, combined with new discoveries of color applied to ancient works. The philological and archeological evidence, however, often remained too vague to draw firm conclusions. Vitruvius, for instance, spoke of a blue coloring applied to the triglyphs of old temples, but his passage could be interpreted as referring only to temples executed in wood.¹⁹ Pausanias, in a passage extensively debated in the 1830s, mentioned red and green Athenian tribunals, yet it is unclear whether these colors were the actual tones of the facades or the color of the principal ornaments.²⁰ Winckelmann himself provided his later critics some comfort in this regard, when he argued against a passage of Pliny the Elder and maintained that paintings were executed directly on the walls of Greek buildings (not on canvas or wooden panels hung on the wall), and by such artists as Polygnotus, Onatus, and Pausias.²¹ The interpretation of this passage, a point of contention between Aloys Hirt and C.A. Böttiger in the first decade of the nineteenth century, was debated in Paris in the 1830s, and was raised again in Semper’s treatise of 1860–63.²²

The coloring and painting of walls was known in Egyptian architecture, at Pompeii and Herculaneum, but preserved remnants of color were relatively scarce with the lesser-known Greek works. The outlines of a painted decoration discovered in the upper fascia of the pentelic Temple on the Ilusus by Stuart and Revett tended to support the “white” view of Greek classicism, because it demonstrated that the Greeks could tastefully apply small quantities of color to secondary architectural members.²³ By 1800 a picture of antiquity emerged in

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which color played a major part in non-Greek (barbaric) architecture, was applied in a more limited way to early Greek architecture, disappeared with the high art of Pericles, then returned as a practice during the decline of art under the Romans. The painted sculpture and bas-reliefs recorded by Gau in Upper Egypt, the vigorous decorations of the Treasury of Atreus at Mycenae, the Etruscan painted tombs at Tarquinia and Vulci, and the brilliant walls of Pompeii: all combined to support a theory in which color could be associated with periods and places of artistic infancy or provincial decadence.

The revolutionary theoretical work that challenged this view of antiquity was Quatremère de Quincy's *Le Jupiter olympien, ou l'art de la sculpture antique considéré sous un nouveau point de vue* (1815).²⁴

Quatremère de Quincy was perhaps Winckelmann's greatest disciple in France, and as he indicated in the preface to his book, he viewed his research as little more than a supplement to Winckelmann's *History of Ancient Art*. Quatremère's task in his lengthy folio was to reconstruct the celebrated colossal statues of Zeus and Athena executed by Phidias in gold and ivory for their temples at Olympia and Athens and regarded by many classical authors, by Pausanias especially, as the masterpieces of antiquity. The issue that beleaguered Quatremère's effort, however, was the reconciliation of the dazzling reviews of chryselephantine works given by classical authors with the cooler, even hostile regard for these works by eighteenth-century artists and critics.²⁵ He listed the most frequent criticisms of his day as four: (1) that chryselephantine statuary was the accidental result of a taste foreign to Greek artistic sensitivity; (2) that the mixing of two materials was aesthetically less pure than executing a work in a single material; (3) that the visual extravagance of gold and ivory falsely swayed antiquity as to the works' intrinsic or artistic value; (4) that the combination of gold and ivory in the illusional imitation of cloth and skin violated the essence of sculpture, which is form (pp. 389–91).

Quatremère de Quincy advanced the thesis that the high regard for chryselephantine works in antiquity was owing not so much to their material or illusional value, but to the fact that they exploited another, nonformal element of the Greek artistic personality, namely, *color*. The historical models for gold and ivory statuary, he argued, were found in the primitive, wooden idols of early Greek times – *les statues-mannequins* – painted and dressed with actual materials.²⁶ This art subsequently developed into toreutics (sculpture assembled by worked pieces, usually metal), and the use of color was continued to protect the material against the effects of the weather and time, to correct material deficiencies, later to relieve the coldness and monotony of the larger surfaces. By the time of Pericles the use of color had become an indigenous part of the Greek artistic outlook, symbolically fixed and

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consecrated by the religious tradition and by the nature of the sculptural technique. In his magnificently colored reconstructions of these two works, Quatremère depicted the gold and ivory statues in the Parthenon and the Temple of Zeus as enveloped in a subtle gloss or transparent color sheen, “une sorte de peinture sans être de la couleur, c’est d’être colorés sans avoir été peints, c’est d’offrir enfin l’apparence et non la réalité de l’illusion.”²⁷

What Quatremère de Quincy had proposed in his work on Greek statuary was a general theory of Greek polychromy that could be applied to all the arts, and this suggestion was not overlooked by the younger generation of architects. Quatremère’s book aroused a flurry of archeological activity and discussion over the next two decades, in which both theory and excavations came together to produce a new and radically different interpretation of the classical past. Evidence of color uncovered earlier in the century found reevaluation in light of Quatremère’s thesis.

Thus the painted pedimental sculptures unearthed on the island of Aegina in 1811 by C.R. Cockerell and Carl Haller von Hallerstein were described by the former, eight years later, as confirmation of Pliny and Pausanias, in which “we have a very remarkable, and very ancient example of the practice which prevailed among the Greeks, of painting their sculpture; for the style and execution of the colours found on the statues and ornaments of the temple, prove that they cannot be of any other date than the original construction.”²⁸ Cockerell attributed this polychrome practice of the Greeks to a need for delicacy in the execution of works so small in size yet so grandly conceived, and to a desire to enhance the visual effect and distinguish the parts.

In a lecture given in 1821 describing the reconstruction of an Etruscan temple, the German architect Leo von Klenze began by rebuking Winckelmann and Caylus for their “dry, cold, and rigid” view of antiquity, and praising Quatremère de Quincy, Cockerell, and others for reassessing it. Klenze portrayed his temple’s carpentry as “painted in bright colors and decorations.”²⁹ In a later restoration of a temple facade designed to serve as a backdrop to the Aeginean Marbles at the Glyptothek, Klenze colored the peristyle and metopes yellow, the cella walls red, the triglyphs blue.

Another monument unearthed by Cockerell and Haller in 1811 that received a later interpretation was the Temple of Apollo at Bassae, a work of Ictinus and therefore contemporary with the Parthenon.³⁰ In Otto Magnus von Stackelberg’s presentation of this Arcadian ruin in 1826, in which the crisp lines and purity of forms were highlighted with a panoply of color effects, a new explanation for polychromy was put forth.³¹ In contrast to Quatremère’s emphasis on tradition and technique, Stackelberg saw this temple as a joint creation of the sunny

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southern climate, picturesque landscape, and ruddy Greek spirit. “The color that even now is indispensable to all southern people to enliven architectural masses,” he argued, “was employed by the Greeks on the greatest masterworks of the Periclean age, both Doric and Ionic, as evidenced by the Theseum, the Parthenon, the Temple of Minerva Polias, the Propylaea, where colors were even applied to the exterior as building decorations” (p. 33).

Cockerell, Haller, and Stackelberg can really be considered as part of the second wave of nineteenth-century travelers to Greece to examine the Greek monuments with regard to color. The first contingent of travelers, all British, came around 1800 and consisted of Lord Elgin, William Leake, William Wilkins, and Edward Dodwell,³² the last three of whom published polychrome reports. Wilkins detected remnants of paint and gilding in the entablatures of the Propylaea and Hephaesteum.³³ Leake remarked on the “various colours” he found on the architectural surfaces and sculptures of the Parthenon.³⁴ Dodwell perhaps gave the most extensive reports on the last work, noting the blue, red, and yellow paint he found on the cornice: “It is difficult to reconcile to our minds the idea of polychrome temples and statues; but it is certain that the practice was familiar to the Greeks in the earliest times, and even in the age of Pericles. No doubt all the Grecian temples were ornamented in the same manner . . . with the highest finish and the greatest elegance, corresponding with the sculptural parts.”³⁵

A third group of British antiquarians and architects followed Cockerell to Greece, beginning in 1816, composed of William Kinnard, Joseph Woods, T.L. Donaldson, Charles Barry, Charles Eastlake, and William Jenkins.³⁶ Kinnard, Donaldson, and Jenkins combined their research with Cockerell’s in a supplementary fourth volume to the second edition of Stuart and Revett’s *Antiquities of Athens* (1825–30). The architect Kinnard augmented the new edition, in particular with extensive annotation referring to the recent reports of color.³⁷ In the chapter on the Parthenon in the second volume (issued in 1825), he set out in a lengthy note a general commentary on Greek polychromy that went beyond earlier discussion. He noted the numerous traces of paint that had been spotted on this monument, then stated that “the polished columns of white marble with their architrave, triglyphs, and the chief part of the cornice, may therefore have thus been relieved in a manner agreeable to the eye, in so sunny an atmosphere, by the enrichment and combination with colours and gilding judiciously applied” (p. 44n.). He also suggested that the painting of monuments was a practice that had been introduced into Greece from the East, first to correct atmospheric and material deficiencies, later becoming sanctified with religious meaning. In deference to Quatremère de Quincy he concluded: “On that account both polychrome ornaments and gilding may have been therefore intro-

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duced on this temple, as well as to cause the edifice to correspond in richness with the gorgeously decorated colossus it enshrined” (p. 45n.).

P.O. Brønsted’s *Reisen und Untersuchungen in Griechenland* (Travels and Investigations in Greece) was issued simultaneously with the new edition of *The Antiquities of Athens*.³⁸ Together, Brønsted, Haller, Stackelberg, Georg Koes, and Jacob Linckh planned their tour of Greece and Asia Minor from Rome in 1810, with the intention of doing a comprehensive survey of all major Greek monuments. In the second part of Brønsted’s study dealing with the Parthenon sculptures (issued in 1830 and dedicated to Cockerell and Thorvaldsen), the Danish scholar placed a greater emphasis on the importance of color than did his British colleagues. He traced the Greek temple through the four stages of its development from a wooden prototype, treating color as an attribute that became more extensive in each succeeding stage. Only in the fourth and last stage were the metopes fully painted and sculptured, and this stage coincided with the marble temples of the Periclean age. He further divided the painting of monuments into three categories: (1) color applied broadly to surfaces without the purpose of creating illusion; (2) color used to create an illusion as a substitute for sculptural (light and shade) effects; (3) color used to enrich sculpture and unite it with the architecture.³⁹ Although Brønsted’s interest lay primarily with the last two categories, he went into considerable detail in explaining the reasons for the general application of paint to architectural surfaces: “The first kind of color usage was so general in the most beautiful period of Greek architecture, that one can . . . confidently assert that all Greek temples were more or less painted” (p. 148).

Based on his investigations of Doric temples in Greece and Sicily and the text of Vitruvius, Brønsted also concluded that the Doric triglyphs were most often painted a “sky-blue,” the ground of the metope a “bright red” (p. 148). In a plate depicting the Parthenon entablature (unfortunately uncolored) he noted extensive painted decorations. He also discussed finding on many Greek temples a thick gypsum and marble powder stucco that preened the porous limestone and acted as a base for the coat of paint.

Brønsted’s comments on polychromy appeared too late to guide Hittorff in formulating his conception of classical architecture, but the latter was certainly receptive to the earlier findings of his British, German, and Danish colleagues.⁴⁰ In 1820 Hittorff taught himself English and traveled to London to view the Elgin marbles. Shortly after arriving in Rome in 1823 he met T.L. Donaldson, who had just returned from Greece with literary “observations” and samples of paint from the Hephaestum.⁴¹ Around the same time, in March 1823, William Harris and Samuel Angell reported their unearthing of painted metopes from two temples at Selinus. Later in the same year, in Palermo, Hittorff

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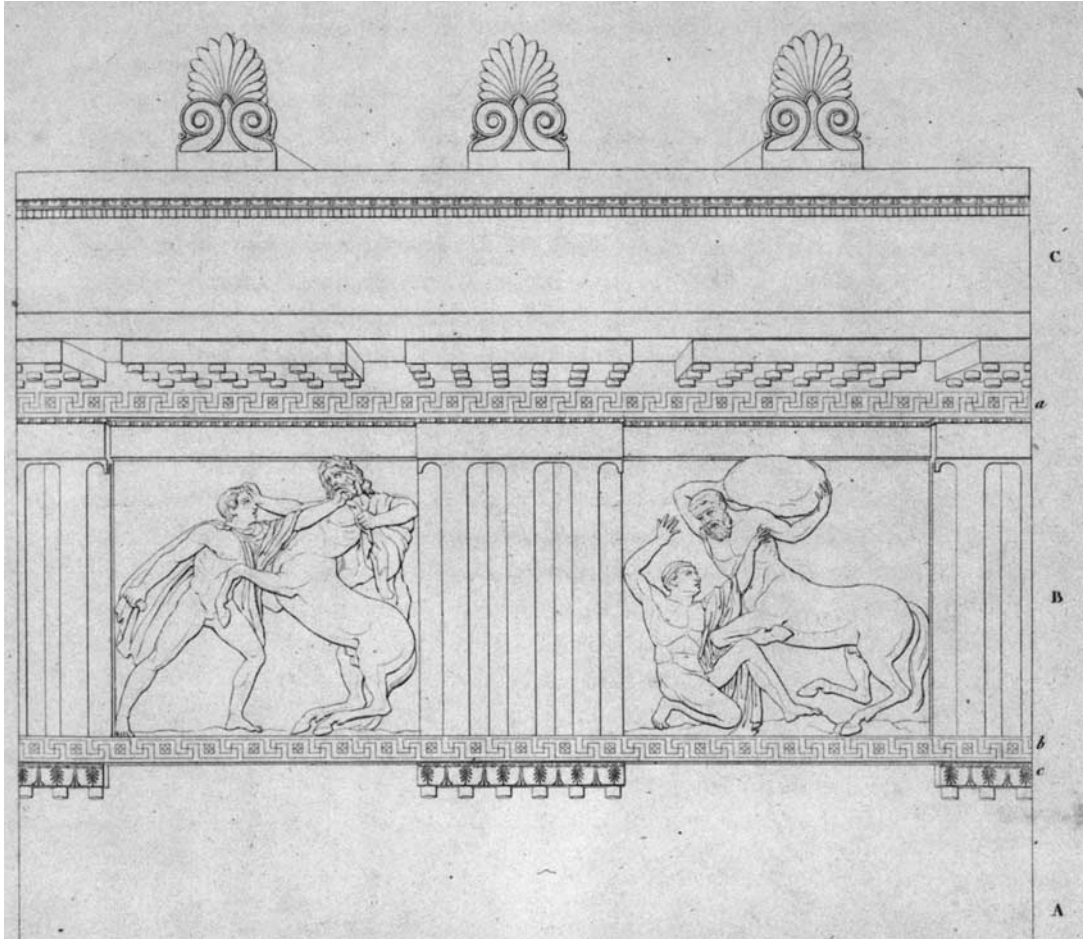
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P.O. Brønsted, restoration of the Parthenon entablature with painted decorations. Courtesy The Getty Center for the History of Art and the Humanities.

caught up with Angell (Harris had died at Selinus) and the metopes from Selinus, three of which contained numerous patches of red paint.⁴² Yet what made Hittorff's subsequent discovery and restoration of a Sicilian temple unique with regard to the other findings was his effort to circumscribe it within a general theory, or what he called a "system" of polychromy.

The basic elements of Hittorff's system were probably formulated in 1824 in Rome, where he began to compose his restoration drawings. After returning to Paris, however, he became more reticent. He read one paper on his findings in the French capital in the summer of 1824; between 1827 and 1830 he published three colored renderings of the entablature and ceiling of the Selinus temple in his *Architecture antique de*