Metropolitan Museum of Art, Birdair inflatable with construction, early 1970s.



The Architectural Production of Nature, Dendur/New York

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I.

Throughout the 1970s and 1980s numerous New York City museums engaged in technically sophisticated expansions and renovations of their interiors. The upgrades of interior space combined new architectural strategies for display with advanced atmospheric systems for the preservation of objects. Such spaces provided more exhibition area and enhanced museum real estate for capital leverage, but they also advanced the museum as a locus of cultural maintenance. Among museum rebuilding projects—which included the Museum of Modern Art's expansion and residential tower and the Guggenheim Museum's North Annex—the expansion of the Metropolitan Museum of Art (1974–1988) most vividly illustrates the power relations embedded within these new spaces where museums produce a specific form of "nature" devoted to display and conservation. When completed, the Museum's Sackler, Rockefeller, Lehman, and American wings housed spectacular, historically significant artifacts protected from urban air pollution and the exterior climate in performatively engineered spaces. The ensemble of new spaces is one of the largest continuous volumes of climate-controlled public space in the city and one of the largest amalgamations of "hygrographmonitored" space in the world—a climatic system that calibrates atmospheric engineering with sensitive instruments that monitor humidity and temperature. In developing the expansions, the museum argued for the role of specially engineered museum environments to enhance its acquisition and movement of cultural relics from distant places, the absorption of neighboring public spaces, and the consolidation of its already significant cultural power. The new spaces enhance the role of the museum as a sanctuary from the physically corrosive environment of cities, a role that has always been an aspect of urban museums but that now suggests new consequences. By visibly engineering specific biophysical environments for cultural material, the museum presented a new means by which emerging global cities might expand their authority over the collection of important, foreign cultural

objects—a form of authority that continues to the present day.

The expansions of the Metropolitan Museum of Art represented an important aspect of the postwar cultural ascension of New York City and of global cities more generally. In the 1970s New York City enhanced its role as the fine-art capital of the United States and as a major cultural competitor in the international drive for tourists and the display of cultural objects. This cultural ascendancy, like the city's corporate ascendancy, is one of the defining features of its "global" character and one of the significant factors in the city's restructuring and redevelopment. In the late 1970s, employment in artrelated occupations in New York City represented 30 percent of all arts employment in the United States, and the revenues from the city's museums accounted for 25 percent of all U.S. museum revenues. Approximately 50 percent of those visiting New York City claim that they come for the "cultural attractions." The tourist dollars raised from this influx of culture seekers is considerable, and the ascendancy of cultural power in New York also affects the value of property, the circulation of capital, and the spatial structure of the city. Not only do cultural institutions such as the Metropolitan Museum of Art hold and reside on valuable real estate; their cultural capital often translates into increased real-estate values for those investors within the Museum's immediate precinct. More directly, the Metropolitan Museum of Art transformed its cultural capital into real capital in its 1985 sale of \$45 million worth of bonds to fund new construction projects. In 2006, Standard and Poor's gave these bonds one of their highest ratings ("AAA") based on the \$2.5 billion of "cash and investments" owned by the museum. In its pursuit of objects, expansion, and capital, the Metropolitan Museum of Art is a central example of the way cultural institutions have become powerful agents in the spatial transformation of their respective cities and farthestflung sites in the developing world.

As museums become intense sites of environmental technologization and influential agents over urban space, they also engage in a process that transforms how we experience nature in cities—a process urban geographers term the "urban production of nature." Authors of literature on the urban production of nature—chiefly Matthew Gandy, Maria Kaika, and Erik Swyngedouw—explore how urbanization transforms nature both as matter and concept. They combine key insights from Lefebvre on the production of space, Neal Smith's and Bruno Latour's notions of socio-natural hybridity, and Foucault's insights on bio-power and governmentality. They examine how urban processes, from the capitalization of land to the provision of infrastructure, generate both the forms and meaning of nature within cities. Something as seemingly simple as the realization of a glass of water in the

city is not only a technological feat of production but a vast assemblage of concepts and material—from theories of hygiene and health to enormous investments of capital in municipal bonds. Water, in such an analysis, is a hybrid object, a "cyborg" made of cash, molecules, and governmental and aesthetic concepts that link the city to the reservoirs of the countryside.3 Although the literature on the urban production of nature is primarily engaged with parks, water, and waste systems, it can be extended into a more explicitly architectural sphere. In the nineteenth century, interiors emerged as the primary receptors of all manner of socio-natural formations—from piped water to aeration schemes. By the late 1960s, almost 50 percent of a building's initial construction budget was tied up in environmental-modification equipment.4 In addition to lighting and plumbing systems, the development of mechanical services greatly impacted the construction industry. 5 While typically viewed as technological transformations of late-modern space, these enhancements of interior space also relate to the larger process of nature-production that traditionally linked interior and city.

Museums, like other urban institutions, are key facilitators of these techno-natural transformations of space. Since the nineteenth century the siting, construction, and technological modernization of museums have been intimately bound to museums' role as a counterpoint to the deleterious processes of modern urbanization. The builders of the Metropolitan Museum of Art, for example, worked with the city to acquire an oasis-like site in Central Park, and the museum was outfitted with one of the city's first, though primitive, air-conditioning systems as a way both to provide comfort and to further protect the museum's collection. The Metropolitan's expansions of the 1960s and 1970s enhanced this early conservation effort, reproducing aspects of the ecosystem of ancient Egypt, providing a stable atmosphere for Pacific Islands art that would crumble in the South Pacific climate, and generally providing protection from the destructive pollution plaguing New York. Thus, not only has the reconstruction of the museum's interior as a refuge impacted the spatial and environmental role of the museum within its host city, but through its activities the museum is impacting spaces and environments in remote areas. All of the Metropolitan's new wings demonstrate the way the museum produces nature. Most contain indoor air systems and verdure carefully engineered to promote the maintenance and display of art objects. But the Dendur Room, located within the Sackler Wing, specifically illustrates how these productions of nature both transform and further the goals of late-modern museums. In particular, the development of the Dendur Room demonstrates how the architectural production of nature is disentangled from traditional engagements with human subjects and is reoriented toward the maintenance of objects. But perhaps more significant is how the development of nature in this space was employed for specific cultural and urban spatial goals. When completed in 1978, the Dendur Room was formative in the development of discourses on indoor air in museums, the preservation of objects, and critical reactions to forms of socio-natural change in the city and beyond.

II.

The Temple of Dendur was first offered to the U.S. government in 1963 in exchange for funds to be used in the Aswan High Dam project. The dam project was chiefly a Soviet-funded hydro-electrification scheme that replaced an earlier colonial-era dam, but it extended into numerous reconfigurations of natural landscapes, cultural sites, the construction of new housing forms, and a massive population relocation of at least fifty thousand people. 6 As part of this larger project, the Egyptian president Gamal Abdel Nasser offered to trade numerous ancient Egyptian artifacts sited in the dam's path in exchange for funds to move and reorganize the siting of the statues of Abu Simbel from the Nubian plain to the upper hills of Lake Nasser. In addition to Abu Simbel, four Augustan-era temples, the Temples of Debod, Dendur, Ellysea, and Saffeh, were threatened with permanent flooding by the rising waters of Lake Nasser. Using UNESCO as a broker, Nasser's administration worked with representatives of the United States, Spain, and Italy to acquire over \$36 million to hire crews and import machinery to disassemble, move, and reassemble various ancient objects that would otherwise be well below the dam's flood line. For countries offering funds for the relocation effort, the temples would



be significant acquisitions at a time when Western nations and their cities were beginning increasingly to hedge their economic futures on tourists in search of the display of important and spectacular objects. Nonetheless, some American skeptics doubted the worth of the temples as well as the ability to understand them outside their original context. One dissenting archaeologist wrote,

With the possible exception of Dendur, these are the least interesting of the Nubian temples....

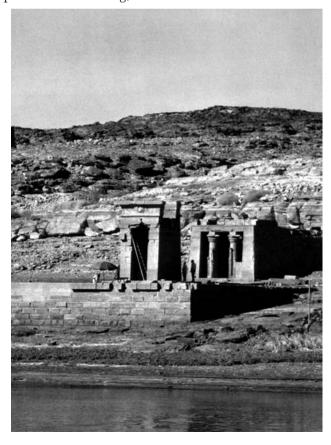
Left: Construction of the Aswan Dam, May, 1964. Bettman Archive.

Opposite: The Temple of Dendur on the banks of the Nile, ca. 1960.

Outside of their natural setting they will not look like much. And probably they will not hold up well away from a desert climate. . . . An ideal site would be the Arizona desert, except there no one would see it.⁷

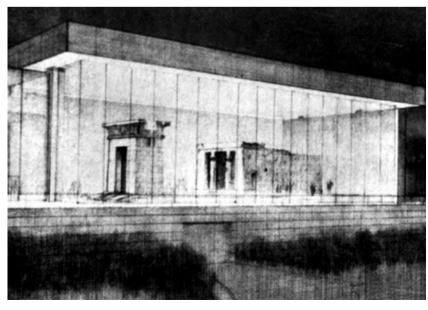
After the Temple of Dendur was formally granted to the United States, its future location was determined through a national competition organized by the Johnson administration in 1965. The competition committee evaluated the ability of museums to produce the most "appropriate" environment for the preservation and interpretation of the temple. Numerous cities competed for the temple, and the applications presented to the committee primarily rested on a particular city's ecological and climatic suitability. For example, the city of Albuquerque, New Mexico, claimed that the municipality would pay for an outdoor site for the temple where the climate of the city would be the most appropriate for the temple's preservation. The initial bid made by the trustees of the Smithsonian contained a proposal to create a replica of the Nile environment on the banks of the Potomac River that would provide the temple with an outdoor setting that was both representational and linked to the other great "classical" monuments of the city.8 The Metropolitan Museum of Art was unique among entrants in the competition for the temple in arguing that the environment of modern architecture was the most suitable for the preservation and potential interpretation of the monument. The Metropolitan Museum of Art worked with the architects of the recently completed Thomas J. Watson Library (the Museum's research center) to extend that building's predominantly Miesian vocabulary for an enormous climate-controlled "vitrine" for the temple. Thomas Hoving, the director of

the Metropolitan, claimed that the museum would re-create aspects of the temple's original environment. The proposed "glass case" contained a water concourse, Nile reeds, and strong lighting mimicking the Egyptian sun. Mirroring the Metropolitan's proposal, Southern Illinois University worked with Buckminster Fuller (who held a professorship at the institution from 1959 to 1975) to develop a potential interior for the temple. Fuller proposed either reassembling the geodesic dome he designed for the Montreal Expo or developing a similar new structure,



recalibrated to contain the temple. 10 The latter proposal was not seriously considered by the Johnson administration (it was not included in the final list of competitors), but it reveals how a Miesian conception of space and Fuller's spatial conception were both conceived as viable interior locales for the reconstruction of the temple's original environment. Fuller's conception—the sphere—has emerged as the more dominant space in which "worlds"—from Epcot's Spaceship Earth in Florida to Biosphere 2 in the American Southwest—are re-created. This only makes the Museum's proposal, its investigation of a largely corporate spatial conception as the site for the staging of an environmental recreation, that much more exceptional. 11

Fragments of the temple eventually were provided to the two most competitive bidders, the Smithsonian and the Metropolitan. Representatives of the Johnson administration asked these institutions to analyze how their proposals would affect the surface of the temple's engravings and its general long-term preservation. The competition committee wrote that the "cementing problem" (i.e., disintegration) of the stone "would probably be aggravated by the dissolved gas contaminants of city or industrial atmospheres," "thaw cycles," or "wind abrasion." In their guidelines, the committee wrote that "an application should show what steps will be taken to protect the temple from deterioration" and to "ensur[e] its permanent safety." The Smithsonian determined that the temple would be saturated with moisture from Washington's humid climate and that this moisture would freeze inside the temple's stones in the winter—effectively bursting it apart. The Smithsonian thus proposed that a chemical strategy would be the most competitive response to the Metropolitan's vitrine concept. Conservators at the Smithsonian worked with the Texas Refinery Company to use their preservative—called Pencapsula that could "embalm" the temple, and which was used on other outdoor architectural preservations. The Smithsonian's chemical approach culminated in imagery bordering on science fiction. Richard Goodwin, a Smithsonian political appointee and a major agitator for a Washington-based Dendur, talked of "surrounding the temple with an invisible shield, a 'field of force'" to protect the temple from the city's climate. 13 The team from the Metropolitan Museum of Art worked with Konstadt Laboratories, atmospheric research



Brown, Lawford, and Forbes Architects. Proposal for Temple of Dendur Pavilion, 1967.

scientists, to analyze both the optimum conditions for the stones and the existing conditions in the museum's most technologically sophisticated galleries. The museum and Konstadt successfully countered the Smithsonian by arguing that climate-control was both a source of human comfort and a medium that effected a chemical transformation in the air by removing pollution. In their final application to the committee, the Metropolitan Museum wrote, "These reports show that in those galleries where air-conditioning has been installed an exceptionally pure atmospheric condition is maintained. The area of the new wing for the Temple of Dendur will have the same high degree of protection against air pollution as those mentioned in the Konstadt report."¹⁴

The ensuing debate regarding the future home of the temple centered on arguments about environment, climate, and protection from the pollutants in American cities. In 1965 the editors of the *Washington Post* wrote,

it seems to us that the logical home is Washington. . . . The chief problem of placing the temple here is the humidity, which could erode away the elaborate carvings in sandstone. But the temple could be protected within a transparent shell constructed around it. It could be given a site on the Potomac that would duplicate its present setting on the Nile . . . by providing a suitable home for this temple, the way could be opened for possible acquisition of other relics now threatened by the rising waters of the Aswan Dam project. 15

Katharine Kuh, a New York–based art critic, pressed for a New York home for the temple, employing predominantly climatic arguments:

Because the building is made of highly porous and friable aeolian sand-stone, it demands an indoor setting. To expose it to Washington's damp climate and dirty air would constitute a risk even more serious than the dangers of possible vandalism. At present no chemical or plastic exists that can harden the surface of porous stone and yet protect it from air pollutants and weather. Dendur's pink stone was created by windblown sand, not by the usual mineral deposits, and hence is extremely fragile. Laboratory experiments show that it can even be abraded by talc—the softest of all minerals. In a few years, if exposed to an outdoor urban onslaught, the temple's subtle color would deteriorate and its crisp reliefs disintegrate.

Egypt's hot, dry climate coupled with high dunes of blown sand protected the temple over the centuries. In its original setting, an intense southern light gave tonal vitality to the reliefs, which were carved with a deliberate understanding of the environment they were to inhabit. To locate the temple amid Washington's historic, albeit youthful, American monuments would be both meaningless and inept.¹6

The arguments of the Metropolitan Museum and Kuh represent an extension of the parameters developed by the International Institute for the Conservation of Museum Objects (IIC). The group's regulatory guidelines developed in the 1950s—were aids to assist museums in the management and preservation of objects. 17 The arguments made by the Metropolitan and by Kuh demonstrate how the siting of artworks could be overdetermined by technology and architecture—in the Metropolitan's case, by its ability to realize a carefully humidity- and temperature-controlled space. The Metropolitan's Dendur proposal linked these parameters with the type of engineered spaces being built as office buildings throughout New York City. This link became more explicit with the development of further guidelines by both the IIC and the International Council of Museums in the mid-1960s. ¹⁸ These guidelines also established regulations governing humidity, temperature, and pollutant levels in museums, but they differed from earlier guidelines because they argued for the centrality of technically advanced spaces in the preservation of objects. 19 Ultimately, the museum's ability to link the preservation of objects to a particular spatial formation won the temple for the Metropolitan Museum. The Dendur Temple competition committee decided to cede the temple to the Metropolitan because "there was no way of guaranteeing the preservation of the temple out-of-doors and the museum obviously had the financial resources to maintain it properly."20



III.

After shipping the disassembled temple from its temporary transit site in Egypt to New York City, the Metropolitan Museum of Art housed it in a large inflatable structure while plans to build a more permanent structure were developed. Walter Bird, the engineer of the traveling U.S. Atomic Energy Commission "Atoms for Peace" pavilion (in collaboration with Victor Lundy), "Radomes" (in collaboration with Buckminster Fuller), and mobile hospitals for the Vietnam War, designed

Left: Metropolitan Museum of Art before expansion with the Birdair pavilion visible in the lower left, ca. 1968. Corbis.

Opposite: Interior of the Birdair inflatable, Metropolitan Museum, 1968.

the temporary structure, which was built by his company, Birdair. Hoving had used Bird's inflatables before. As New York City's director of parks, he had asked Bird to provide inflatable structures for Bryant Park in 1966 as a way to embellish that park with a complementary set of indoor recreations. The imagery of Bird's inflatable structures, and of inflatables more generally, oscillated between the utopian and the institutional. Throughout the 1960s, inflatables were used in military installations. They were also appropriated by various "experimental" architects of the late-1960s, generally for more counterinstitutional aims. Bird's Radomes provided a new image of the militarized North American frontier, and the transportable inflatables he developed for both the Vietnam War and for suburban, back-yard swimming pools only furthered the collapsing of "military and recreational realms in the late fifties."21 By using Bird to develop the temporary pavilion, Hoving extended this recreational and military imagery into a more explicitly cultural setting. Bird's technicians installed the 29-feet-high, 100-feet-long, and 60-feet-wide structure in the Metropolitan's south parking lot. There parkgoers and museum entrants could observe the unassembled temple stones in a shelter that the museum claimed "was necessary to prevent expansion or cracking by moisture."22 The inflatable conveyed the sense of urgency the museum wished to project regarding its preservation of the temple. As one reporter observed of the inflating of the shelter and the movement of the stones into it, "The fork-lifts scurry like beetles between them, sorting out a jig-saw puzzle, hurrying to get the stones under shelter before they are destroyed, corroded by the New York air." The "iron lung," as the same reporter dubbed the inflatable, provided a visible way for the museum to preserve the temple, and the powerful contrast with the existing Beaux-Arts building dramatized the museum's salvage efforts.²³

The permanent wing planned for the Temple of Dendur was part of a "Comprehensive Architectural Plan for the Second Century" designed for the museum by Kevin Roche, John Dinkeloo, and Associates under the managerial supervision of Thomas Hoving, who remained the director of the museum throughout the 1970s. Impressed by Roche/Dinkeloo's realization of an interior atrium garden at the Ford Foundation, Hoving hired the architecture firm to develop an addition for the Metropolitan—conceptualized as a series of indoor environments—including the Dendur room. In addition to a

wing for the temple, Roche/ Dinkeloo worked with Hoving on a wing for Pacific Islands art, a gallery for collections of European masterworks, and wings for



American Art and architectural fragments. Roche/Dinkeloo's responsibilities also included the renovation of the museum's Fifth Avenue façade and the reworking of the museum's circulation spaces. All of the new construction provided various climatically or visually "sensitive" settings for the museum's recent acquisitions formed through mixtures of complex structural and environmental engineering and the incorporation of greenery and pools. In addition to advancing a room for the vulnerable Temple of Dendur, the museum's literature described the fragility of the Pacific Islands art, the significance of the Rockefeller Wing's mechanical systems in preserving that art, and the methods used by Roche/Dinkeloo to save various architectural fragments of American masterpieces in the American wings.

In developing these buildings, Roche/Dinkeloo extended ideas regarding the interaction of people, verdure, and buildings systems the firm had developed in concert with landscape architect Dan Kiley and Consentini engineers at the Ford Foundation. Kiley, in particular, had brought to the Foundation's gardens and mechanical systems concepts from the horticulturalist and atmospheric scientist Frits Went.²⁴ Went, a Dutch scientist working in Dutch African colonies on agricultural development, eventually relocated to the United States where he developed interior chambers that precisely regulated temperature and humidity for the growing of indoor plants. Went argued that if the precise interior conditions of humidity and temperature were known, then the growth potential of plants could be predicted. Kiley absorbed concepts from Went, particularly in estimating how the indoor environment of conditioned office buildings (typically 70 degrees Fahrenheit and 50 percent humidity) would impact the potential growth of plants. In addition to informing Kiley's selection of plant species, this general strategy informed Roche/Dinkeloo's and Consentini's development of the climate system. At the Metropolitan Museum such ideas were transferred to a focus on balancing human comfort, plant life, and the conservation of cultural artifacts. The landscaped interiors offered the museum's curators the opportunity to present works of art in indoor replicas of outdoor settings—particularly in the Sackler and American Wings.

The museum management used themes of preservation and stewardship to argue for the expansion of the museum's structure into the surrounding park areas. These arguments were primarily presented in local papers and press releases to the public and to potential funders of the wings. Despite the museum's stated benevolence in carrying out this work, the expansion of the museum was vigorously criticized on grounds of park "encroachment" and cultural "centralization" and "imperialism." The development of spaces that could effectively save objects in specially produced environments would

Top: Kevin Roche, John Dinkeloo, and Associates. Model, Temple of Dendur Room, 1970.

Bottom: Kevin Roche, John Dinkeloo, and Associates. Model, Museum Expansion Plan, 1971.

involve the appropriation of some of the city's own parkland. The proposed expansion of the museum into Central Park would require the dismantling of a popular playground and would bring the museum to the edge of the road along its western side. ²⁶ In numerous public appearances before city, parks, and community review boards, the museum's administrators attempted to mollify the expansion's critics. At one meeting Hoving claimed, "We have to be of the utmost sensitivity. . . . Anything we build will be in some manner, a sympathetic extension of the park. We would be very lacking in sensitivity not to solve the problem that way."27 In the development of the museum expansion, Hoving and Roche stressed that "the new plans would be a blend of landscape and building." And Hoving made continuous reference to the fact that "[w]ork in progress in other parts of the country by the Roche-Dinkeloo firm shows an unconventional synthesis of these elements, a factor that was influential in its selection by the museum."28 In subsequent arguments for the expansion, Hoving claimed that the new project would actually add land to the park by replacing existing parking areas with 53,700 square feet of new "indoor" park.29

In addition to the controversy involved in building in Central Park, other commentators attacked the general consolidation of the Metropolitan into an even larger, single spatial entity devoted to the fine arts. Rather than encroach on parkland, a variety of newspapers, community groups, and art critics claimed that the temple (among other museum acquisitions) should be relocated to another area of the city or repatriated to the nation of origin. In place of material preservation and cultural interpretation, these critics argued for the diffusion of artifacts to enable social and urban transformation. The New York City group Harlem CORE (Congress of Racial Equality) stressed that the Temple of Dendur was the product of a Nubian-African culture and should





be located either in Harlem or Bedford-Stuyvesant. Extending the museum's own public exhortations on environmental appropriateness, the group stressed that these neighborhoods were the most ethnically appropriate locale for the temple. A "Harlem Dendur" would provide a cultural centerpiece to bolster a neighborhood entering an uncertain future in postindustrial New York City, while symbolically repatriating the object with an "African" social aggregation.³⁰ The editors of the *Times* mirrored these arguments when they wrote,

What is raised [by the museum's expansion] is a much larger and more important issue—the way in which the Temple of Dendur could be used to enrich the city far beyond making it one more jam-packed treasure in Fifth Avenue's awesome supermart of art. To use it as a city planning tool, a cultural focus and point of beauty for any one of the many parts of New York that need it far more than Fifth Avenue and Central Park. is a challenge that should surely be explored.³¹

The editors of the *Times* were arguing that the temple should be used to develop a new cultural marker in New York City. The editors argued that Dendur's deployment could be used to enact an urban transformation in the manner of the turn-of-the-twentieth-century City Beautiful movement.

Bernard Leitner, a frequent architectural critic for Artforum, believed the tapping of corporate architects to develop the museum's new expansion actually represented the cultural dominance the museum wished to project:

When Mr. Hoving, the Director of the Metropolitan Museum, selected the architects Kevin Roche, John Dinkeloo and Associates to prepare the new Master Plan, he accepted—maybe even wanted—what is the hallmark of Kevin Roche and Co.: simplicity of form and monumentality of scale. It is design reduced to the simplest, immediately comprehensible, objective, geometrical shapes—but subjectively exaggerated and forced into gigantic dimensions suggesting a certain lust for power. It is the kind of architecture which is difficult to reconcile with respect for the individual.

Leitner also explored the implications of building interior parklike spaces where important public parkland already existed:

It is difficult to overlook the new spirit. The Master Plan provides for two interior parks, enclosed with glass, climate-controlled with green trees twelve months a year. Both will have a most welcome entrance from Central Park. An artificial park within a museum within a park might help to smooth the transition between nature and art.... An artificial year-round green park within the natural year-round Central Park is like an aquarium in the ocean: Perhaps a touch of surrealism but certainly extremely effective, an unforgettable impression—nature de luxe.³²

Considering the degree of artifice visible in Central Park itself, Leitner's criticism is ironic if not somewhat historically uninformed. In addition to Leitner's piece, the debates over the architectural expansion of the museum and its increased acquisition of objects also produced an important text of contemporary critical museum studies: Leon Golub's "Regarding the Lehman and Rockefeller Gifts to the Metropolitan Museum" of 1970. Golub provided the most incisive criticism, linking the production of the museum's spaces with museums' new role as both local and international reorganizers of space. He wrote that opposition to the Metropolitan's proposed expansion "is largely concerned with the protection of Central Park, decentralization, city financial responsibilities, etc. . . . However, one can question the means and ends taken for granted in the acquiring of vast art collections and the centralizing of these collections in American museum custody."³³ Golub linked the museum's expansion to a larger symbolic and material process of cultural disenfranchisement:

Americans collect art in massive expenditures of surplus wealth (aided by governmental tax policies). The collecting of art, the aggrandizement of cultural choice, can be considered as surplus dividends to the exalted existence of the dominant west. As one notes in the Lehman Collection, the collecting of art continues to function as an imperial preserve in respect to the quasi-deification of the collector.

The power governing the acquisition and distribution of art is a distillation of the acquisitions and distributions of economic and strategic resources. Boards of Trustees of major museums are powerful cross-sections of American international economic power. The assets of art are as equally well protected as the assets of oil, uranium, or cobalt. . . . the collecting of art on vast scales illustrates in a highly sublimated manner the consumption patterns and fantasies of American power manias.

A museum is an agency to centralize the holding of artifacts and art objects. These must come from somewhere. This *somewhere* is typically the nations that cannot protect their arts for one reason or another. Just as it is an assumed American prerogative to take possession of (what is estimated to be) 60–70% of the world's resources, it is, also, our privilege to take possession of much of the world's art. . . . Our cultural imperative is one with our strategic and territorial imperative.³⁴

Although the in-depth history of the politics surrounding the acquisition of objects such as the Temple of Dendur and the Rockefeller collection of primitive art was probably unavailable to him, Golub effectively linked aspects of the museum's expansion, the acquisition of objects, and the remaking of space both abroad and in the United States.

Finally, the Museum's impending expansions in Central Park also caught the notice of Robert Smithson and formed a core portion of his "Dialectical Landscape" essay of 1973. Smithson wandered Central Park considering the constant mediation of city and nature through its landscape. Smithson noted the irony of the "ecological graffiti" on the boulders that surrounded the site of the future Museum expansions—graffiti protesting the Museum's encroachment on the park. Smithson recounted what this graffiti sprayed on natural elements proclaimed:

"Concrete and trees do not mix."

"Let's not turn Central Park into an Asphalt jungle."

"Save the Park."

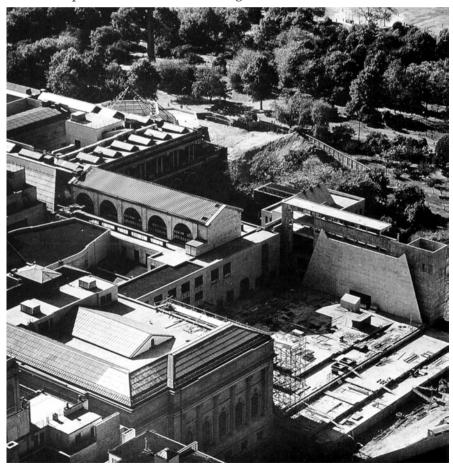
"The Met is not good for trees and other flowering things."

"Does the Met smell as nice as a tree?"35

For Smithson, the graffiti illustrated the larger and ineluctable dialectic of city and nature represented by the park itself. In an article that informs much of the thinking behind the literature on the urban production of nature. Smithson wrote that the structures in the park must be understood as part of a process set in motion by the seemingly irresolvable concept of an "urban nature."36 The park, for Smithson, was a place where the contradictions of nature and urbanization were staged: "like having an orchid garden in a steel mill, or a factory where palm trees would be lit by the fire of blast furnaces."37 However, while critically engaged with this dialectical conception, oddly, Smithson reiterated a view held by Olmsted that the museum was one of several "subtractions" from the park and by implication outside the dialectic of nature and society staged in the park.

In light of the critiques by Smithson, Golub, and others, the museum and its architects might be understood as attempting to entangle the museum in the "dialectic" of the park while reconfiguring these very dialectical processes into a far more complex form of interchange. Through their incorporations of multiple forms of nature—from verdure to climate control— Roche/Dinkeloo designed the museum's expansions to engage more forcefully with the park and the desires of the museum administrators. The area immediately outside the museum already contained mixtures of plants, water, and an ancient artifact—Cleopatra's Needle. This object was brought from Egypt to the city through the efforts of the Vanderbilt family in the nine-teenth century and performatively installed via a temporary railway strung through the park. Roche/Dinkeloo extended and intensified this activity of geographical relocation, employing the corporate assemblages of curtain wall, indoor verdure, and indoor air systems to both preserve and establish a setting for the Temple of Dendur that bridged the park with an idealized image of the Nubian plain. But in simultaneously opening the museum to the urban nature of the park, developing an atmosphere that would inarguably locate the temple from the Nubian plain into the museum, and partially invoking the technologies of the corporate city to accomplish this, the constructions of Roche/Dinkeloo and the museum suggest even more complex interfaces between nature and society than those imagined by Leitner, Golub, and Smithson.

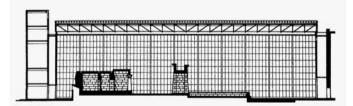
Rather than an explicitly dialectical synthesis of nature and society organized in pastoral or counterpastoral forms or as a naked expression of colonial reorganization, the development of the space at the Metropolitan can be understood as a new "territorialization" of socio-natural matter.³⁸ This concept might explain the freeing of the object from the Nubian plain and the capture of it within a chamber in Central Park. The processes that set the temple free and recaptured it were structured around governmental and institutional conceptualizations of conservation and preservation, actualized through a particularly corporate conception of space, technology, and management. This webwork of capture differs from the strategies of other cities



that argued for their particular correspondence or innate natural equivalence with the Nubian landscape and climate. Through Roche/Dinkeloo, institutional management, corporate space, and preservation were cojoined in the production of a zone (akin to the "comfort zone" developed for human beings) that might situate ancient artifacts unearthed from their original sites.³⁹

IV.

Construction did not begin on the Metropolitan's various wings until 1971, after eighteen months of particularly aggressive lawsuits by the Municipal Art Society, the Parks Council of the City of New York, and several public protests.⁴⁰ The Lehman Wing (1975), housing European masterworks, was the first of the wings to be completed. The Dendur Wing followed in 1978 and the Michael C. Rockefeller Primitive Art Wing in 1982. The remaining wings were completed by 1988. When finished, the wing housing the Temple of Dendur was one of the most technologically sophisticated spaces built in any Western museum. In addition to the specialized environment for the temple, a "staging area" containing "the country's first museum environmental chamber, designed to condition art objects brought to the Metropolitan whose materials might be sensitive to climatic changes,"41 was created underneath the temple platform. The environmental chamber allowed the museum to produce a middle atmosphere between a cultural object's original atmospheric environment and the specialized atmosphere of preservation within the display spaces of the museum. When completed, the staging area was filled



with temple blocks (removed from the inflatable) awaiting reassembly in the Dendur room above. Above the staging area in the temple exhibition space, limestone pavers and palms surrounded a pool planted with grasses. The architects and mechanical engineers designed a



large air-supply plenum into the rear of the temple's base to provide conditioned air for the temple space and the staging area below. The plenum also resolves the difference in topography between the original, Egyptian setting of the temple and the new room by replicating the slope on which the temple originally stood. The plenum quite literally replaces the ground (a more traditional zone of territorial dispute) with a hollow topography built to deliver the specialized atmosphere of the temple space. By the mid-1980s the Dendur room and the Metropolitan Museum's other expansions provided both a new form of space and a corresponding argument for acquiring fragile cultural artifacts. The strategies developed by the museum and their architects within the Dendur room extended to the other wings of the newly refurbished museum, as well as to other global museums. The planning of the Museum's Rockefeller Wing is but one example of an approach that expanded the environmental and atmospheric stewardship pioneered in the Dendur room. Critics praised the "spectacular" wing, which was equal in size to the



Opposite, top: Kevin Roche, John Dinkeloo, and Associates. Section of Dendur Room.

Opposite, bottom: Staging area under Dendur Room with Dendur stones, Metropolitan Museum. mid-1970s.

Right: Temple of Dendur Room under construction, Metropolitan Museum, ca. 1977. entire Whitney Museum of American Art, as a "conservator's dream." One curator at the Metropolitan claimed, "... Never has so much expensive high technology been lavished on a display of 'primitive' art." As with Dendur, the Rockefeller Wing employed sophisticated displays of modern technology in the name of cultural preservation. The museum's press releases boasted that "[n]early an acre of sophisticated, temperature and humidity-controlled glass cases" had been "painstakingly built to display the 2000-odd objects." Within this space and the other additions to the museum the technologies of preservation were on display as much as the work within.

Ultimately, the development of the Dendur room entailed far more than just providing a space for the preservation and display of an object from a transformed ancient landscape or the intrusion of a cultural institution on its surroundings. The presence of Dendur in New York can be seen as the result of multiple productions of nature that employ nature-matter to unhinge and reconcentrate cultural value into select locations—from foreign investments that reconfigure culturally significant sites to the development of atmospheric systems. Rather than seeing Dendur as an artifact simply rescued from a newly industrialized space—the Nubian plain—or as an act of colonial aggression, the museum, the park, and aspects of the Egyptian landscape should all be viewed as spaces transformed in tandem. The transformations of the Nubian plain, Central Park, and the indoor atmosphere of the museum involve wildly different scales of productions of nature, but they are nonetheless registers of interconnected movements of capital and cultural power that reformulate the more discernable urban/nature dialectics of a previous era. Institutions within contemporary cities constantly engage in these global, socio-natural webworks, and while the effects register most intensely in the transformed landscapes of the global South, they reverberate in the West—in spaces such as the Dendur room where recuperated artifacts and the people who observe them are surrounded by the drafts and dull hums of the urban interior.



Notes

- 1. On the sale of the bonds see "Metropolitan Museum Offer," New York Times, 9 May 1985. On the 2006 value of the bonds see "Metropolitan Museum of Art, NY Bond Rating Raised to 'AAA' on Stronger Financial Profile," PR Newswire, 16 October 2006. The data on New York's late-modern culture industry and the real estate dynamics of the Metropolitan Museum comes from Sharon Zukin, The Culture of Cities (Oxford, UK: Blackwell, 1995), 110–113. Zukin locates the "production of culture" as the new productive apparatus of post-industrial cities. Like industrial production, cultural production involves radical scale realignments of labor, city, state, and nation. Zukin, however, does not account for the traditional industrial relations between metropole and colony implicated in the urban production of culture, a gap partially addressed in this essay.
- 2. The phrase "urban production of nature," an expansion of Neil Smith's phrase the "production of nature," is used by the geographers Erik Swyngedouw, Matthew Gandy, and Maria Kaika. For a recent explanation of the phrase, see Matthew Gandy, "Urban Nature and the Ecological Imaginary," in *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*, ed. Nik Heynen, Maria Kaika, and Erik Swyngedouw (London: Routledge, 2006), 63–74. See also, Neil Smith, *Uneven Development* (London: Blackwell, 1984), 15–28.
- 3. For literature on the urban production of nature, see Neil Smith, *Uneven Development*, 15–28; Erik Swyngedouw, "The City as a Hybrid: On Nature, Society and Cyborg Urbanisation," *Capitalism, Nature, Socialism 7* (1996): 65–80; Matthew Gandy, *Concrete and Clay: Reworking Nature in New York City* (Cambridge: MIT Press, 2002); Erik Swyngedouw, *Flows of Power: Social Power and the Urbanization of Water* (Oxford, UK: Oxford University Press, 2004); and Maria Kaika, *City of Flows: Modernity, Nature and the City* (London: Routledge, 2005).
 - 4. Reyner Banham, "A Home Is Not a House," Art in America 53 (April 1965): 70-79.
- 5. In addition to Banham above, see also Cecil Elliot, *Technics in Architecture* (Cambridge: MIT Press, 1993) and Bill Addis, *Building: 3000 Years of Design Engineering and Construction* (London: Phaidon, 2007).
- 6. On the development of the Aswan High Dam, see Daniel Kendie, "Egypt and the Hydro-Politics of the Blue Nile River," *Northeast African Studies* 6, no. 1–2 (1999): 141–169; and, more generally, Timothy Mitchell, *Rule of Experts: Egypt, Techno-politics, Modernity* (Berkeley and Los Angeles: University of California Press, 2002).
 - 7. "Egypt Has No Takers for 1 of 3 Free Temples," Washington Post, 16 February 1966, C8.
- 8. One of the best discussions of the competition for the temple is Sophy Burnham, "A Little Bit of Egypt on Fifth," *New York Magazine*, 18 November 1968, 46–49.
- 9. Thomas Hoving, Making the Mummies Dance: Inside the Metropolitan Museum of Art (New York: Simon and Schuster, 1993), 58–59.
 - 10. See Burnham, 48.
- 11. For more on concepts of environment, corporate space, and late modernity (particularly touching on Fullerite conceptions of space), see Christine Macy and Sarah Bonnemaison, "Closing the Circle: The Geodesic Dome and a New Ecological Consciousness, 1967," in Architecture and Nature: Creating the American Landscape (London: Routledge, 2003), 293–346; Reinhold Martin, The Organizational Complex (Cambridge: MIT Press, 2003); David Serlin, "The Corporate Biosphere," in Big and Green: Toward Sustainable Architecture in the 21st Century, ed. David Gissen (New York: Princeton Architectural Press, 2003), 144–153; and

Felicity Scott, Architecture or Techno-Utopia: Politics after Modernism (Cambridge: MIT Press, 2007).

- 12. "Guidelines for Making Application for the Temple of Dendur," in "Application to Committee in Washington D.C. for Dendur Temple," 20 February 1967, Dendur Correspondence File, Metropolitan Museum of Art (MMA).
 - 13. Burnham, 47.
 - 14. "Application to Committee."
 - 15. Editorial, Washington Post, 16 April 1965, A20.
- 16. Katharine Kuh, "What Home for the Temple," *The Saturday Review,* 26 November 1966, 56–57.
 - 17. It is now the International Institute for Conservation of Historic and Artistic Works.
- 18. ICOM was founded in 1946, emerging from concerns for the condition of objects in Europe after World War II.
- 19. The development of atmospheric guidelines is explored in Garry Thomson, *The Museum Environment* (London: Butterworths, 1983), and Michael Brawne, *The Museum Interior: Temporary and Permanent Display Techniques* (New York: Architectural Book Publishing, 1982). See, in particular, Thomson's discussions of hygrometrics and atmospheric pollution in museums (66–69 and 130–132). Much of my understanding of the history of atmospheric guidelines comes from a written exchange with Marjorie Schwarzer (13 December 2007), author of *Riches, Rivals, and Radicals: 100 Years of Museums in America* (Washington, DC, American Association of Museums, 2006).
- 20. Milton Esterow, "Metropolitan Due to Get Temple of Dendur," New York Times, 25 April 1967, 1. The City of New York also agreed to pay one half of the costs of transporting and building the space for the temple, a factor that must have been considered in the deliberations.
- 21. Marc Dessauce, *The Inflatable Moment: Pneumatics and Protest in '68* (New York: Princeton Architectural Press, 1999), 13. On Bird's inflatable housing for the Temple of Dendur at the Metropolitan Museum, see Burnham, 46. The Dendur Construction File at the MMA contains an informative drawing of an early design proposal for the inflatable.
- 22. "660 Dendur Stones Are Given a Temporary Shelter," New York Times, 2 November 1968, 33.
 - 23. Burnham, 46.
- 24. I explore the history of this collaboration and the influence of Went in my dissertation, "Atmospheres of Late-Modernity: The Urban Production of Indoor Air in New York City, 1963–2003" (Ph.D. diss., University of London, 2008), ch. 5. Dan Kiley spoke of the influence of Went in Dan Kiley: The Complete Works of America's Master Landscape Architect (New York: Bulfinch Press, 1999). For information on Frits Went, see his Experimental Control of Plant Growth (Waltham, MA: Chronica Botanica, 1957).
- 25. See Bernard Leitner, "A Master Plan: The Met Plans Its Second Century," *Artforum* 9 (October 1970): 64–68; Leon Golub, "Regarding the Lehman and Rockefeller Gifts to the Metropolitan Museum," *Artforum* 9 (November 1970): 40–44; and "The Talk of the Town: Meeting," *The New Yorker* 46 (20 June 1970): 25–26.
- 26. The museum formalized its plans for expansion into the park in late 1970, a few months after the Earth Day demonstration that took place in Central Park in April 1970. The proximity to the Earth Day demonstration might partially explain the aggressive protests against what

were ultimately small expansions of the museum into the park.

- 27. Ada Louise Huxtable, "Metropolitan Museum to Expand in Park and Revamp Collections," New York Times, 29 September 1967, 1.
 - 28. Huxtable.
 - 29. See "The Talk of the Town," 25-26.
 - 30. Burnham, 46.
 - 31. "Dendur-in-New York," New York Times, 23 November 1967, 32.
 - 32. Leitner, 66.
 - 33. Golub, 40.
 - 34. Golub, 40-41; emphasis in original.
- 35. Robert Smithson, "Fredrick Law Olmsted and the Dialectical Landscape" (1973), in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley and Los Angeles: University of California Press, 1998).
 - 36. See Gandy, Concrete and Clay, 92, 103.
 - 37. Smithson, 63.
- 38. See Gilles Deleuze and Felix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (1972; Minneapolis: University of Minnesota, 1983), 257: "Civilized modern societies are defined by processes of decoding and deterritorialization. But what they deterritorialize with one hand, they reterritorialize with the other." In using the term *territorialization*, I hope to convey Deleuze and Guattari's idea that deterritorialization and reterritorialization always appear simultaneously as one and the same process.
- 39. This negotiation of nature/society relationships through institutional and corporate techniques would ultimately impact the future restructuring of the park itself. As geographer Matthew Gandy noted, Central Park was quickly adapting the institutional structure of the Metropolitan Museum and other New York City museums as a way to increase the budgets that maintain and conserve the park's existing buildings. See Gandy, *Concrete and Clay*, 104–105.
- 40. An excellent review of these protests can be found in Robert Stern, Thomas Mellins and David Fishman, *New York 1960: Architecture and Urbanism Between the Second World War and the Bicentennial* (New York: Monacelli Press, 1997), 794–796.
- 41. Grace Glueck, "Drills Sing in Park as Museum Flexes Wings," New York Times, 28 March 1974, 67.
- 42. The British Museum argued that one justification for continuing to hold the Parthenon's "Elgin Marbles" (despite the protests of the Greek government) was the museum's ability to maintain a stable atmospheric environment for their preservation. Their assumption seems to have been that such an atmosphere could not be maintained in a museum within Athens. See Christopher Hitchens, *Imperial Spoils: The Curious Case of the Elgin Marbles* (London: Verso, 1988).
 - 43. Grace Glueck, "A Spectacular New Wing," New York Times, 24 January 1982, SM20.
 - 44. Glueck, "A Spectacular New Wing."
 - 45. Glueck, "A Spectacular New Wing."