

**MOVING EXPERIENCES:
Traveling Museum Exhibitions and the Infrastructures of Cultural Globalization**

by
Nushelle de Silva

S.M.Arch.S., Massachusetts Institute of Technology, 2015
A.B., Princeton University, 2011

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Signature of Author: _____

Department of Architecture
5 August 2022

Certified by: _____

Arindam Dutta
Professor of the History of Architecture
Thesis Supervisor

Accepted by: _____

Leslie K. Norford
Professor of Building Technology
Chair, Department Committee on Graduate Students

DISSERTATION COMMITTEE

Chair

Arindam Dutta
Professor of the History of Architecture
Massachusetts Institute of Technology

Readers

Timothy Hyde
Associate Professor of the History of Architecture
Massachusetts Institute of Technology

Lucia Allais
Associate Professor of Architecture
Columbia University

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ABSTRACT

In the wake of two world wars, traveling museum exhibitions were touted as a model for advancing peace, broadening the views of diverse publics by compelling museums across borders to share their treasures. In this dissertation, I examine how the establishment of a global infrastructure for museum exchange was established by two organizations dedicated to cultural peacebuilding: the United Nations Educational, Scientific, and Cultural Organization (UNESCO), and the International Council of Museums (ICOM). I argue that while these ambitions spatially reorganized museums in the latter half of the twentieth century to prioritize object exchange over accumulation, the uneven globalization facilitated by exhibitions still augments rather than alleviates the coloniality of museums.

UNESCO and ICOM led the charge to instate international administrative standards for circulating museum exhibitions in increased quantities, encompassing packing solutions, border inspections, climate requirements, and risk management. I examine their efforts to establish uniform practices across museums through increasingly standardized paperwork: manuals for professional practice, exhibition loan and insurance agreements, object condition and facility reports, and customs labels. These documents were critical interfaces for negotiating the definition of art and determining parameters for a homogenized global museum interior optimized for exchange. These standards shored up the power of dominant institutions, sanctioning their situated practices and the conservation needs of their specific object collections as universally applicable.

Instead of augmenting scholarship on how museums developed their collections, I attend to how museums developed relationships of exchange. Rather than trace the itineraries of the individual objects that traveled, then, I examine the forms of paperwork that authorized their mobility and the spatial normalizations these documents instigated: the reconfiguration of registration and storage facilities to enable object movement; the relocation of border inspections to museum premises; the establishment of climate and building security standards. Albeit availing itself of the infrastructures of globalized trade, this emerging governmental apparatus of exhibition circulation was discursively constructed as an instrument of conservation. Traveling exhibitions persuasively guide our appraisals of art. As this dissertation demonstrates, administrative practices play a determinative role in object mobility and must be untangled to address inequitable cultural representation in the museum.

Thesis Supervisor: Arindam Dutta

Title: Professor of the History of Architecture

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I write this at a time of terrible crisis in Sri Lanka and I've debated whether to acknowledge this here. Completing a PhD while far from home is a difficult thing to do even at the very best of times. My dissertation milestones were haunted not only by the angst of the pandemic but also by my island's political ills. I handed in my dissertation proposal and passed my language exam amid the 2018 constitutional crisis. I embarked on a month of archival research while processing the news of the 2019 Easter bombings. I gave my first job talk as a nationwide state of emergency was declared and submitted my "3/4ths" draft as the prime minister resigned. I submitted my complete manuscript as thousands from around the island, including family members, gathered in Colombo to protest. In the weeks since, a new president has been installed, only to unsurprisingly continue the longstanding Lankan tradition of brutally suppressing dissent. I do not know what is to come, only that it will be hard. I have no words for my heartbreak, except to say that it has stained every page of this work.

But while writing this dissertation often *felt* like a tremendously lonely endeavor, I look back on the last few years and it is profusely peopled with the most generous, warm, supportive network I could ask for. I could not have completed this very hard thing at a very hard time without them.

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INDEX OF ACRONYMS AND ABBREVIATIONS

- AAM: American Alliance [formerly Association] of Museums
AAMD: Association of Art Museum Directors
AFA: American Federation of Arts
AIC: American Institute for Conservation of Historic and Artistic Works (formerly AG-IIC: American Group, International Institute for Conservation of Historic and Artistic Works)
Arts Council: Arts Council of Great Britain
ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers (formerly ASHVE: American Society of Heating and Ventilating Engineers)
CCI: Canadian Conservation Institute
CIC: Committee on Intellectual Co-operation, League of Nations
CUA: Department of Cultural Activities, United Nations Educational, Scientific, and Cultural Organisation
FAIC: Foundation of the American Institute for Conservation
Florence Agreement: UNESCO Agreement on the Importation of Educational, Scientific, and Cultural Materials
GFR: General Facility Report (formerly SFR: Standard Facility Report)
HVAC: Heating, Ventilation, and Air-Conditioning systems
ICA: Intermuseum Conservation Association
ICCROM/Rome Centre: International Centre for the Study of the Preservation and Restoration of Cultural Property (formerly the International Centre for Conservation in Rome; renamed as the International Centre for the Conservation and Restoration of Monuments, hence ICCROM, an acronym it has retained despite a further change resulting in its current title)
ICOM: International Council of Museums
ICOM-CC: International Council of Museums Committee for Conservation (formerly Commission for the Care of Paintings and Subject Committee for Museum Laboratories; combined 1965)
ICOM-ICEE: International Council of Museums International Committee for Exhibition Exchange (formerly International Art Exhibition Committee)
IECI: International Educational Cinematograph Institute
IIC: International Institute for Conservation of Historic and Artistic Works (formerly International Institute for the Conservation of Museum Objects)
IIIC: International Institute of Intellectual Cooperation, League of Nations
IMO: International Museums Office
KIK-IRPA: Royal Institute for Cultural Heritage, Brussels (Koninklijk Instituut voor het Kunstpatrimonium - Institut Royal du Patrimoine Artistique)
MACM: Musée d'Art Contemporain de Montréal
Met: Metropolitan Museum of Art, New York
MFA: Museum of Fine Arts, Boston
MoMA: Museum of Modern Art, New York
MRM: *Museum Registration Methods* handbook (various editions denoted by number)

NGC: National Gallery of Canada, Ottawa

NGL: National Gallery, London

RH: Relative humidity

SFMOMA: San Francisco Museum of Modern Art, formerly San Francisco Museum of Art

SITES: Smithsonian Institution Traveling Exhibition Service

UNESCO: United Nations Educational, Scientific, and Cultural Organisation

V&A: Victoria and Albert Museum

INTRODUCTION

“Cargo moves on paper. If the papers aren’t correct, the cargo does not move.”

— Racine Berkow, “Import and Export: Guidelines for International Shipping,” *Museum Registration Methods*, 6th edition (American Alliance of Museums, 2020), 721.

Revisiting the Exhibitionary Complex

In the summer of 1946, the Musée National d’Art Moderne in Paris hosted an exhibition of 200 tapestries sponsored by the French state, many of which had just been taken out of safekeeping during World War II. The show was curated by the museum’s director, Jean Cassou, and Pierre Verlet, chief curator of the Department of Decorative Arts at the Musée du Louvre. Showcasing several centuries of works and a live demonstration of weaving techniques, the exhibition was intended to showcase a postwar revival of an older medium.¹ It then went on a two-year tour of museums in Amsterdam, Brussels, London, New York, and Chicago, becoming the first exhibition circulated to multiple museums after the war, and the most notable art collection to be sent across the Atlantic at the time.² *Masterpieces of French Tapestry*, as it was referred to in its English-language catalogues, was hailed for its “contribution...to international cooperation and friendship” in the inaugural issue of *ICOM News*, the quarterly periodical of the newly formed International Council

¹ Art historian K. L. H. Wells views the juxtaposition between ancient and modern tapestries at the exhibition as a deliberate move “to symbolize French recovery through the tapestry revival,” and that Cassou and Verlet “incorporated the recent war into their narrative by describing the history of tapestry as a rise, fall, and renaissance, [disavowing] previous attempts to revive tapestry during the nineteenth and early twentieth centuries, insisting that it was only in postwar France that tapestry was undergoing a true renaissance.” Katherine L. Wells, *Weaving Modernism: Postwar Tapestry between Paris and New York* (New Haven, CT: Yale University Press, 2018), 60.

² The exhibition venues were as follows: Musée National d’Art Moderne, Paris: June-July, 1946; Rijksmuseum, Amsterdam: 9 November-29 December 1946; Palais des Beaux-Arts, Brussels: 12 January-23 February, 1947; Victoria and Albert Museum, London: March 29-May 31 1947; Metropolitan Museum of Art, New York: Nov 22 1947-Feb 29, 1948; Art Institute of Chicago: March 17-May 16, 1948.

of Museums, together with an exhibition of decorative objects from museums in Austria that was circulated to many of the same locations on the heels of the French exhibition.³

The archives of materials on these exhibitions add depth to this broad gloss. Reams of correspondence between the actors who set the French tapestries exhibition in motion demonstrate that its every aspect—from which pieces would go to which locations, to the terms of the tapestries’ insurance and their transport—was an extended negotiation, techniques of which ranged from coaxing to coercion. Perusing portions of this paperwork in several archives over 2018 and 2019, I was as struck by its heft and organization as I was by the content. At the Louvre, correspondence with all participating institutions was wedged tightly into two massive and aging binders and interleaved with scraps of paper on which many draft layout designs were sketched, bringing to life as much as the written word the extent to which French organizers strove to control from afar their envisioned visual message. (Fig. 0.1) At the Metropolitan Museum’s archives, I browsed manila folders that were titled vaguely and covered arbitrary slices of time (“September-December 1947” and “Misc. Letters 1947-48” were two such), but one event that lasted only about an hour—the disembarkation ceremony of the 31st of October 1947—merited an entire folder for its political significance. (Fig. 0.2) These documents also illuminated the Metropolitan’s role as diplomatic broker for American museums, as its leadership interceded with French organizers on behalf of other institutions interested in the exhibition.

But correspondence seemed to me a patently inefficient means for organizing an exhibition, and not just because of its quantity. In the Met archives, I pieced together a diplomatic faux pas that may have been avoided if not for this reliance on letters. By his own account, the Museum’s director

³ *ICOM News* I, no. 1 (1948), 8.

Francis Henry Taylor was requested by Georges Salles, director of the Museums of France, to secure exhibition agreements for a subset of the tapestries; while all 200 were to remain in the US for a year, few museums had space to show the tapestries in their entirety.⁴ Of the institutions Taylor communicated with, the Toledo Museum of Art in Ohio and the Boston Institute for Modern Art (now the Institute for Contemporary Art) responded positively, agreeing to show a portion of the modern tapestries.⁵ This seemed a satisfactory proposition, especially when Pierre Verlet of the Louvre visited the United States in late 1947 to discuss the possibility of a show at the Arts Institute of Chicago, and it became clear that for reasons of space and interest only a fraction of the modern tapestries could be displayed there.⁶ Believing this arrangement to have been confirmed, the Met sent out a press release as its showing came to a close in early February 1948, indicating that the tapestries would soon circulate to other cities.⁷ Yet nothing was contractually confirmed, and it was only when Met staff started drafting plans to pack the tapestries that René de Messières, cultural attaché to the French embassy in New York, stated that Salles did not wish to separate the tapestries, and that all were to go to Chicago, with those not shown to remain crated⁸ (a decision that was not reversed despite the Met's entreaties).⁹ In a letter to French ambassador Henri Bonnet, an incensed Taylor wrote that the Boston and Toledo exhibitions were arranged "as a favor to the Metropolitan," and

⁴ Francis Henry Taylor to Henri Bonnet, 1 March 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

⁵ James S. Plaut to Francis H. Taylor, 18 December 1946; G.H. Edgell to James S. Plaut, 23 December 1946. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁶ Francis Henry Taylor to Henri Bonnet, 1 March 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

⁷ Press release, 2 February 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

⁸ René de Messières to Francis Henry Taylor, 2 February 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

⁹ René de Messières to Francis Henry Taylor, 27 February 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

that “each institution went to considerable expense in regard to preliminary arrangements,” so this refusal was “both embarrassing to the Metropolitan Museum and prejudicial to French prestige in these two cities.”¹⁰

Judging by this correspondence, the French tapestries exhibition did not seem quite the model for “international cooperation and friendship” that *ICOM News* claimed it to be. But it had, after all, been lauded in the article alongside another exhibit of decorative objects from museums in Austria, so I dutifully combed through the archival documentation of this latter exhibition as well. Reading both exhibitions together was revelatory. The organization of the second exhibition still entailed piles of paperwork, but it was clear that its character was now changing, especially in the North American archives. One document stands out: a draft exhibition agreement for participating institutions in the United States and Canada. Austrian organizers worked with the Met’s legal advisor Dudley T. Easby to negotiate terms,¹¹ and the agreement was updated each time a new museum agreed to show the exhibition. Museum directors found themselves applying their signatures to several rapidly updated versions to ensure no unpleasant last-minute surprises.¹² The show was organized with far fewer frantic telegrams than the French exhibition, marked instead by a coalescing administrative apparatus for cultural diplomacy that was messy, mundane, and more calculating than convivial. Each agreement carefully delineated each party’s responsibilities (and each of the four versions merited its own dedicated manila folder). (Fig. 0.3)

¹⁰ Francis Henry Taylor to Henri Bonnet, 1 March 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

¹¹ Draft Proposal to Austrian Minister to the United States, Legation of Austria, undated; General Suggestions for Agreement in Connection with Austrian Show, undated; Draft Agreement, 17 June 1948. Loan Exhibitions Held 1950: Vienna, Treasures from Imperial Collection – Misc. Correspondence (1948-1950) 1947-49 L 7806. Metropolitan Museum of Art Archives.

¹² A. T. Gardner to Herbert Fleishhacker, 6 December 1949; A. T. Gardner to Chauncey McCormick, 6 December 1949; Dudley Easby to Martin Baldwin, 29 December 1949. Loan Exhibitions Held 1950: Vienna, Treasures from Imperial Collection – Misc. Correspondence (1948-1950) 1947-49 L 7806. Metropolitan Museum of Art Archives.

My dissertation examines the making of this apparatus, on paper and in space.¹³ Exhibitions in the mid-twentieth century brought constellations of institutional actors into collaboration in ways that have come to circumscribe how agglomerations of objects are brought into public view in the present. Museum exhibitions persuasively guide public and scholarly appraisals of art, and in the chapters that follow I argue that paperwork was increasingly standardized—or “properly patterned”¹⁴—to structure the political and physical exhibition circuits through which art objects could move. I offer an account of aesthetic canon-building in the mid- to late-twentieth century that makes marginal the individual art objects in transit, foregrounding instead the global flows that determine their itinerancy, to show how the post-WWII period ushered in a new age of museology.

Historians and theorists of museums have largely focused on processes of accumulation and display. Sociologist Tony Bennett deploys Foucauldian surveillance and Gramscian hegemony to argue that museums cast the public as “nationalized citizenry” disciplined by consent, as with the Victoria and Albert Museum’s displays of design that visually ordered evolutionary progress by national manufacturing ability.¹⁵ Art historians Carol Duncan and Andrew McClellan argue that universal survey museums such as the Metropolitan Museum and the Louvre showcase the modern

¹³ The Foucauldian apparatus (*dipositif*) is a useful term for its elaborations by Giorgio Agamben, Gilles Deleuze, Stephen Legg (who emphasizes the geographical aspect of governmentality) and James Ferguson (who uses it to critique development), all of which I find useful for unpacking the work of cultural governance museums performed through UNESCO and ICOM, and still undertaken through other mediators. Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*, trans. Colin Gordon (New York: Harlow, 1980); Giorgio Agamben, “*What Is an Apparatus?*” *And Other Essays*, Meridian, Crossing Aesthetics (Stanford, Calif: Stanford University Press, 2009); Gilles Deleuze, “What Is a Dispositif?,” in *Michel Foucault, Philosopher: Essays Translated from the French and German*, ed. Timothy J. Armstrong (New York: Routledge, 1992), 159–68; Stephen Legg, “Assemblage/Apparatus: Using Deleuze and Foucault,” *Area* 43, no. 2 (June 2011): 128–33; James Ferguson, *The Anti-Politics Machine: “Development,” Depoliticization, and Bureaucratic Power in Lesotho* (Minneapolis: University of Minnesota Press, 1994).

¹⁴ The phrase “properly patterned” is from Annelise Riles, *The Network inside Out* (Ann Arbor: University of Michigan Press, 2000), 80. I am indebted to its usage in Matthew S. Hull, *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan* (Berkeley: University of California Press, 2012).

¹⁵ Tony Bennett, “The Exhibitionary Complex,” *New Formations* Spring, no. 4 (1988): 73–103.

equivalent of nationalistic war trophies.¹⁶ Political scientist Benedict Anderson places the museum alongside the census and the map as a tool for totalizing, with the museum as a “pictorial census of the state’s patrimony” (and anthropologist Bernard Cohn similarly casts the museum as a tool for colonial knowledge production).¹⁷ Even museums in post-colonial nations follow this model for establishing the state, argue art historians Tapati Guha-Thakurta and Kavita Singh, who both examine how the spatial configurations of galleries at the National Museum of India in New Delhi reinforce politicized hierarchies of South Asian art.¹⁸ However, these assertions rely on an interpretation of museums as static permanent collections, and ignore the complex relationship between nationalism and internationalism that sharpened in the nineteenth century and defined the twentieth, an ambivalence that is central to the temporary exhibition, now the dominant mode of display in many types of museums and especially in those of art.

Scholars who acknowledge the ascendance of temporary exhibitions in the mid-twentieth century foreground the agency of curators and designers of individual exhibitions, as in the work of art historians Mary Anne Staniszewski, Emma Barker, and Kathleen Berrin. They discuss choices including wall color, framing techniques, and number of paintings on a wall (the crowded “salon” style of the nineteenth century giving way to the minimalist “white cube” of the twentieth) to

¹⁶ Carol Duncan, *Civilizing Rituals: Inside Public Art Museums* (London; New York: Routledge, 1995); Andrew McClellan, *The Art Museum from Boullée to Bilbao* (Berkeley, CA: University of California Press, 2008).

¹⁷ Benedict R. O’G Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Revised edition (London New York: Verso, 2016); Bernard S. Cohn, *Colonialism and Its Forms of Knowledge: The British in India*, Princeton Studies in Culture/Power/History (Princeton, N.J: Princeton University Press, 1996).

¹⁸ Tapati Guha-Thakurta, *Monuments, Objects, Histories: Institutions of Art in Colonial and Postcolonial India (Cultures of History)* (Columbia University Press.); Kavita Singh, “Kavita Singh, ‘The Museum Is National,’ India International Centre Quarterly,” *India International Centre Quarterly* 29, no. 3/4 (Winter 2002-Spring 2003): 176–96. See also Mark Crinson, “Nation-Building, Collecting and the Politics of Display,” *Journal of the History of Collections* 13, no. 2 (2001): 231–50.

emphasize that object placement is political.¹⁹ Yet these latter studies leave out entirely the equally political roles of museum administrators and even non-museal actors in determining what objects are shown, even though their power is more consequential than that of curators.

While museums function within a national apparatus of governance that includes other types of disciplinary and classificatory institutions, they also operate within larger international networks of museums, engaging in various forms of exchange. Many have done so since their inception. It is only recently that scholars have begun to acknowledge and map these inter-museal relationships. Anthropologist Catherine Nichols' account of how "duplicate specimens" at the Smithsonian Institution were identified for circulation to local institutions offers a useful philosophical precedent for UNESCO's more ambitious projects for circulation; however, her conclusion that this history offers a model for "mission-driven" work in the present is more optimistic than mine.²⁰ A recent edited volume—which grew out of research on the circulation of objects between the Royal Botanic Gardens, Kew and other institutions—argues for the centrality of mobility to the work of museums through case studies of individual objects or collections from various parts of the world (although art museums are not examined).²¹ In general, museums scholars still focus more on objects than on systems. Sociologist Fernando Domínguez Rubio's ethnographic study of the Museum of Modern

¹⁹ Mary Anne Staniszewski, *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art* (Cambridge, Mass: MIT Press, 1998); Emma Barker, ed., *Contemporary Cultures of Display*, bk. 6 (New Haven: Yale University Press, 1999); Kathleen Berrin, *Exhibiting the Foreign on U.S. Soil: American Art Museums and National Diplomacy Exhibitions before, during, and after World War II* (Lanham: Rowman & Littlefield, 2021).

²⁰ Catherine A. Nichols, *Exchanging Objects: Nineteenth-Century Museum Anthropology at the Smithsonian Institution*, *Museums and Collections* 12 (New York: Berghahn Books, 2021).

²¹ Felix Driver, Mark Nesbitt, and Caroline Cornish, eds., *Mobile Museums: Collections in Circulation* (London: UCL Press, 2021).

Art is an outlier in this work, taking seriously the politics of administration, albeit firmly committed to articulating the peculiarities of the behemoth that is MoMA.²²

My dissertation builds on this work to engage in a historical mapping of the infrastructural apparatus of exhibitions, drawing out how administrative needs for museal circulation informed the stabilization of spatial infrastructures, and showing how museums were both swept up in and continue to contribute to processes of (uneven) globalization. It revises Bennett’s “exhibitionary complex” to argue for the central role of a circulatory apparatus to how these cultural institutions function in the present, and to historicize the conditions of its formation. The irritating inefficiency of the letters I waded through, yet dependent as it was on systems like the telegraph that decoupled transportation from communication,²³ epitomizes a particular form of twentieth-century globalization; I am indebted to a robust body of scholarship on globalization in articulating how this apparatus came together and how it functions at present. Global exchange cannot be described as “liquid,”²⁴ even today (or perhaps, *especially* today, as we grapple with all the shocks of the past few

²² Fernando Domínguez Rubio, *Still Life: Ecologies of the Modern Imagination at the Art Museum* (Chicago; London: The University of Chicago Press, 2020).

²³ For an account of this decoupling that emphasizes its attendant inefficiencies over the course of its adoption, see Benjamin Sidney Michael Schwantes, *The Train and the Telegraph: A Revisionist History*, Hagley Library Studies in Business, Technology, and Politics (Baltimore: Johns Hopkins University Press, 2019). See also James Schwoch, *Wired into Nature: The Telegraph and the North American Frontier*, The History of Communication (Urbana: University of Illinois Press, 2018); Roland Wenzlhuemer, *Connecting the Nineteenth-Century World: The Telegraph and Globalization* (Cambridge; New York: Cambridge University Press, 2013); Jill Hills, *Telecommunications and Empire*, The History of Communication (Urbana: University of Illinois Press, 2007). On the telegraph’s effects on art transport, see Jennifer L. Roberts, *Transporting Visions: The Movement of Images in Early America* (Berkeley: University of California Press, 2014).

²⁴ The instability of subjectivity that Bauman generalizes as characterizing the present is a condition only available to a select few. Zygmunt Bauman, *Liquid Modernity* (Cambridge, UK; Malden, MA: Polity Press; Blackwell, 2000). See also David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Oxford; Cambridge, MA: Blackwell, 1989); Aihwa Ong, *Flexible Citizenship: The Cultural Logics of Transnationality* (Durham: Duke University Press, 1999); John Urry, *Mobilities*, Reprint (Cambridge: Polity Press, 2012). For a critical study of how design enables this asymmetry, see Chapter 6, “Facilitating Movement,” in Jennifer Kaufmann-Buhler, *Open Plan: A Design History of the American Office*, Cultural Histories of Design (New York: Bloomsbury Publishing, 2021), 141–64.

years). If it is indeed a “space of flows,”²⁵ then it is a decidedly “lumpy”²⁶ one and marked by considerable “friction.”²⁷ I find constructive scholarship (or skepticism, as in the case of historian Frederick Cooper) of globalization that draws out its asymmetries, its disjointedness, and its edges. Increased circulation has historically served the project of empire²⁸ better than that of equity. In each of the following chapters, this dissertation reads beguiling arguments for a more connected world through increased circulation against the rigid criteria that “universal” culture had to fulfill and the standards that museum spaces had to meet for this circulation to take place.

My endeavor to read the exhibition apparatus is shaped by a growing body of work on what has come to be termed critical infrastructure studies, that tries to map these particularities of so-called global flows.²⁹ Recent work by architectural historians Michael Osman and Jesse LeCavalier,

²⁵ Castells’ space of flows is more electronic communication than transportation network; while the messy materiality of these systems sadly disappears in his characterization, his argument for reading the power in the *network* rather than in any specific location is useful. Manuel Castells, *The Informational City: Information Technology, Economic Restructuring, and the Urban-Regional Process* (Oxford: Blackwell, 2002).

²⁶ Cooper’s skepticism of arguments for “modernity” and globalization”, buttressed by his scholarship on colonialism, is extremely valuable for thinking through enduring structures of empire (and historians have generally not taken up the frame of globalization with as much enthusiasm as geographers). Frederick Cooper, “What Is the Concept of Globalization Good for? An African Historian’s Perspective,” *African Affairs* 100, no. 399 (April 2001): 189–213.

²⁷ The systematic misunderstandings Tsing maps as part of her work on social mobilization, as well as her search for “odd connections” over “seamless generalizations” fits with the aims of this project. Anna Lowenhaupt Tsing, *Friction: An Ethnography of Global Connection* (Princeton, N.J.: Princeton University Press, 2005). See also Doreen Massey, “Power-Geometry and a Progressive Sense of Place,” in *Mapping the Futures: Local Cultures, Global Change* (London; New York: Routledge, 1993); Tim Cresswell, “Towards a Politics of Mobility,” *Environment and Planning D: Society and Space* 28, no. 1 (February 2010): 17–31.

²⁸ On circulation and empire, see Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1986); Sven Beckert, *Empire of Cotton: A Global History*, 1. ed (New York: Vintage Books, 2015). On globalized governance and empire, see Michael Hardt and Antonio Negri, *Empire* (Cambridge, Mass.: Harvard Univ. Press, 2020). See also James C. Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*, Yale Agrarian Studies (New Haven: Yale University Press, 1998); Michel Foucault, François Ewald, and Alessandro Fontana, *Security, Territory, Population: Lectures at the Collège de France, 1977-1978*, ed. Michel Senellart, trans. Graham Burchell (New York, NY: Picador, 2009).

²⁹ For work on defining and mapping infrastructure/s, see Susan Leigh Star, “The Ethnography of Infrastructure,” *American Behavioral Scientist* 43, no. 3 (November 1999): 377–91; AbdouMaliq Simone, “People as Infrastructure: Intersecting Fragments in Johannesburg,” *Public Culture* 16, no. 3 (September 1, 2004): 407–29; Penny Harvey and Hannah Knox, “The Enchantments of Infrastructure,” *Mobilities* 7, no. 4 (November 2012): 521–36; Brian Larkin, “The Politics and Poetics of Infrastructure,” *Annual Review of Anthropology* 42, no. 1 (October 21, 2013): 327–43; Ashley Carse, “Keyword: Infrastructure: How a Humble French Engineering Term Shaped the Modern World,” in *Infrastructures and Social Complexity: A Companion*, ed. Penelope Harvey, Casper Bruun Jensen, and Atsuro Morita

as well as Deborah Cowen, Dara Orenstein, Laleh Khalili, and others, focuses on how the material infrastructures of shipping, storage, and distribution came together in the twentieth century and their organization of our world.³⁰ A related strand of ethnographic work traces the global supply chains for commodities.³¹ Historical and theoretical work on how twentieth-century container technologies govern the movement of goods³² is augmented by other work on infrastructural spaces as sites of and for governance.³³ To explicate the role of paper in governing the circulation of museums exhibitions, I find especially instructive work that grapples with the constraints imposed by logistical media in other spheres and their forms of control by proxy.³⁴

(London ; New York: Routledge, Taylor & Francis Group, 2017); Hannah Knox, "Affective Infrastructures and the Political Imagination," *Public Culture* 29, no. 2 (May 1, 2017): 363–84; Nikhil Anand, Akhil Gupta, and Hannah Appel, eds., *The Promise of Infrastructure*, A School for Advanced Research Advanced Seminar (Durham: Duke University Press, 2018); Charmaine Chua et al., "Introduction: Turbulent Circulation: Building a Critical Engagement with Logistics," *Environment and Planning D: Society and Space* 36, no. 4 (August 2018): 617–29.

³⁰ Michael Osman, *Modernism's Visible Hand: Architecture and Regulation in America* (Minneapolis; London: University of Minnesota Press, 2018); Jesse LeCavalier, *The Rule of Logistics: Walmart and the Architecture of Fulfillment*, 2016; Deborah Cowen, *The Deadly Life of Logistics: Mapping Violence in Global Trade* (Minneapolis: University of Minnesota Press, 2014); Dara Orenstein, *Out of Stock: The Warehouse in the History of Capitalism* (Chicago: The University of Chicago Press, 2019); Laleh Khalili, *Sinews of War and Trade: Shipping and Capitalism in the Arabian Peninsula* (London ; New York: Verso, 2020); Edna Bonacich and Jake B. Wilson, *Getting the Goods: Ports, Labor, and the Logistics Revolution* (Ithaca, N.Y: Cornell University Press, 2008); Clare Lyster, *Learning from Logistics: How Networks Change Our Cities* (Basel, Berlin: Birkhäuser, 2016).

³¹ Notable ethnographies of global supply chains include Brenda Chalfin, *Shea Butter Republic: State Power, Global Markets, and the Making of an Indigenous Commodity* (New York: Routledge, 2004); Gabrielle Hecht, *Being Nuclear: Africans and the Global Uranium Trade* (Cambridge, Mass: MIT Press, 2012); Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton Oxford: Princeton University Press, 2021). See also Anna Tsing, "Supply Chains and the Human Condition," *Rethinking Marxism* 21, no. 2 (April 2009): 148–76.

³² Marc Levinson, *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*, Second Edition (Princeton: Princeton University Press, 2016); Alexander Klose, *The Container Principle: How a Box Changes the Way We Think*, trans. Charles Marcrum, 2015. See also the references to containers and city form in Lewis Mumford, *The City in History: Its Origins, Its Transformations, and Its Prospects*, A Harvest Book (San Diego New York London: Harcourt, Inc, 1989).

³³ Keller Easterling, *Extrastatecraft: The Power of Infrastructure Space*, Paperback edition (London New York: Verso, 2016); Ryan Ellis, *Letters, Power Lines, and Other Dangerous Things: The Politics of Infrastructure Security*, Infrastructures (Cambridge, Massachusetts ; London, England: The MIT Press, 2020).

³⁴ See Zieger's essay on the bill of lading in Matthew Curtis Hockenberry, Nicole Starosielski, and Susan Marjorie Zieger, eds., *Assembly Codes: The Logistics of Media* (Durham: Duke University Press, 2021). See also Michael Stamm, *Dead Tree Media: Manufacturing the Newspaper in Twentieth-Century North America* (Baltimore: Johns Hopkins University Press, 2018); Nicole Starosielski, *The Undersea Network* (Durham: Duke University Press, 2015); Bernhard Siegert, *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real*, trans. Geoffrey Winthrop-Young

After a half-century of effort to make traveling exhibitions a mainstream museum activity, certain works of art now travel in greater quantities and with higher frequency for temporary shows in specific locations. The portability of these objects is undergirded by the weight of many types of now-standardized paperwork, including exhibition agreements, insurance policies, customs forms, and object care reports, that—by proxy—govern borrowing institutions. As such, the consensus-building between intercontinental museum personnel that occurred on an unprecedented scale to facilitate this exchange, yet hidden from the public eye, can tell us a great deal about “collaborative” museum practice.

It is also a means by which to re-think approaches to writing exhibition history. The most significant contribution of postwar exhibitions was not that they managed to bring together a collection of works that had never yet been seen together. Rather, the scale at which they were carried out forced museums to engage in new forms of inter-institutional governance. The moments of friction that emerged as the French tapestries made the transatlantic journey from France to the United States in 1947 for the exhibitions at the Metropolitan Museum and the Art Institute of Chicago (but not elsewhere) resulted in protocols for object safety that were in fact metonyms for preserving diplomatic relationships. While existing histories of exhibitions rarely, if ever, include the places these displays did not go on view, including them in this way does substantial work to map the politics and constraints of exchange networks.

The traveling museum exhibitions of this dissertation are, perhaps, a vehicle for a larger critique of the mobilities and obstructions of cultural globalization, but as I hope it shows, not only are loaned museum objects *not* mere commodities, but they are also a very specific kind of cultural

(New York: Fordham University Press, 2015); Dylan Mulvin, *Proxies: The Cultural Work of Standing In* (Cambridge, Massachusetts: The MIT Press, 2021).

object.³⁵ Put plainly, *they must come back*. They are expected to be returned in “good condition”, because they are wrapped in a discourse that renders them irreplaceable (unlike, for instance, 28,800 rubber ducks lost at sea).³⁶ Yet “good condition” is a peculiar phrase. The act of moving museum objects into storage for safekeeping during World War I was a terrible testament to the fact that the very act of moving them was to hasten their deterioration. The dissertation argues that although exhibitions were championed as essential for the project of cultural peacebuilding, a burgeoning administrative discourse of object conservation facilitated forms of inter-institutional governance that restricted circulation as much as enabled it. The history of postwar circulating exhibitions, then, illuminate a shift in practices of conservation, not from artisanal to scientific measures, but to the use of administrative practices inflected by the affordances of twentieth-century globalization.

International Organizations, Conservation, and the Quest for Standardization

The Austrian exhibition loan agreements of 1949 onward, penned in direct response to the diplomatic difficulties of the French exhibition, contain the kernel of the now-standardized dossier of paperwork that regulates how objects are moved between museums, including reports on object condition, the state of museum facilities, and insurance arrangements. If it seems peculiar that, as late as 1949, these encyclopedic museums were still working out the administrative nuances of loan exhibitions, the fact is that the quantity of art that traveled from Europe for exhibition in North

³⁵ For other types of cultural mobility, see James Clifford, *Routes: Travel and Translation in the Late Twentieth Century* (Cambridge, Mass: Harvard University Press, 1997); Patricia Spyer, ed., *Border Fetishisms: Material Objects in Unstable Spaces, Zones of Religion* (New York: Routledge, 1998); Daniel T. Rodgers et al., eds., *Cultures in Motion* (Princeton: Princeton University Press, 2014).

³⁶ Despite its tongue-in-cheek title, this account is a meditation on the intertwining of currents both human-made and environmental in forging global “flows”. Donovan Hohn, *Moby-Duck: The True Story of 28,800 Bath Toys Lost at Sea and of the Beachcombers, Oceanographers, Environmentalists, and Fools, Including the Author, Who Went in Search of Them* (New York: Penguin Books, 2012).

America in the post-WWII period *was* in fact unprecedented. Works of art were sent in part for the promise of temporary accommodation while damaged home institutions were being renovated; that the objects had been grouped together in wartime storage promised the possibility of exhibitions that were grander in scope than ever before. With great quantities of art being circulated, however, came greater costs; one potential solution was to secure a larger number of borrowers to lighten each institution's financial burden. While the Met, for example, had engaged in bilateral exhibitions—i.e., loaned from one institution's collections to another, with the hope of a reciprocal exhibition—at least once a year almost from its inception,³⁷ postwar multilateral exhibitions required a measure of politically-inflected administration that was equally groundbreaking. Consequently, the role of the registrar, an administrator charged with keeping track of incoming and outgoing objects, came into its own in the latter half of the twentieth century. The dissertation, therefore, draws out the crucial role of registrars in shaping a new administrative language of conservation that conflated physical hazards with financial and political risks.

In the nineteenth and twentieth centuries, establishing standards for international exchange has largely been mediated by organizations for building consensus.³⁸ Correspondingly, the paper apparatus for circulating museum exhibitions was mediated in large part by two organizations for cultural peacebuilding founded in the wake of World War II: the United Nations Educational, Scientific, and Cultural Organization (UNESCO), an intergovernmental organization, formed to

³⁷ See The Metropolitan Museum of Art Archives, "The Metropolitan Museum of Art Special Exhibitions, 1870-2017," 2018. https://www.metmuseum.org/-/media/files/art/watson-library/museum_exhibitions_1870-2017.

³⁸ See Akira Iriye, *Global Community: The Role of International Organizations in the Making of the Contemporary World* (Berkeley: University of California Press, 2004); Michael N. Barnett and Martha Finnemore, *Rules for the World: International Organizations in Global Politics* (Ithaca, N.Y.: Cornell University Press, 2004). The work of JoAnne Yates and Craig N. Murphy on the organizational mediation of international standard-setting is also invaluable: JoAnne Yates and Craig N. Murphy, *The International Organization for Standardization (ISO): Global Governance through Voluntary Consensus*, 2009; JoAnne Yates and Craig N. Murphy, *Engineering Rules: Global Standard Setting since 1880* (Baltimore: Johns Hopkins University Press, 2019). See also Lawrence Busch, *Standards: Recipes for Reality* (The MIT Press, 2011).

facilitate international cooperation in these fields, and the International Council of Museums (ICOM), a nongovernmental organization, was initially composed of national committees of museum leaders who were similarly committed to international cooperation between museums and to further museum interests.³⁹ Albeit founded independently of each other, they quickly established a partnership agreement that would crucially guide their intertwined activities. For UNESCO, museum programming was in service of a larger bureaucratic agenda, while ICOM was focused on the interests of museums alone,⁴⁰ but ICOM and UNESCO's Museums Division would go on to work together to implement joint programs from offices within the same building.⁴¹ Early documents describe a shared commitment to enabling circulation—of objects, personnel, and ideas—in the name of peacebuilding, and as evidenced by their partnership contract, the collaborative quality of internationally circulating exhibitions appealed to both organizations.⁴²

³⁹ This structure changed in 1974, when ICOM became an independent organization in its own right, open to all museum professionals for a yearly membership fee. Aḥmad Bāghlī, Patrick J. Boylan, and Yani Herreman, *History of ICOM (1946-1996)* (Paris: International Council of Museums, 1998).

⁴⁰ “Brief History of the Organisation of the International Council of Museums,” *ICOM News* 1, no. 1 (1948): 1–2.

⁴¹ Established with the founding of UNESCO in 1946, the Museums Division was expanded and renamed the Museums and Monuments Division in 1953. It was later renamed the Division for Cultural Property, and is currently extant as the Division of Cultural Heritage. Hiroshi Daifuku, “Museums and Monuments: UNESCO's Pioneering Role,” *Museum International* 50, no. 1 (1998): 9–19.

⁴² As per Resolution 4.4 of UNESCO's Working Party, “The Director-General is instructed: 4.4.1. To provide for the exchange of information concerning museums, their techniques, modern methods of presentation and other aspects of their work. 4.4.2. To stimulate and promote and to develop a plan for organized exchanges of exhibitions and collections, including in particular, the international circulation of UNESCO exhibitions of contemporary works of art accompanied by appropriate catalogues such exhibitions to be prepared if possible by Member States, National Commissions or Co-operating Bodies, and appropriate professional organizations. 4.4.3. To seek means to enlist the co-operation of museums in all applicable UNESCO programs such as Fundamental Education, Adult Education, Arts and Sciences. 4.4.4. To investigate and report to the Third Session of the General Conference on the proposal for international co-operation between museums through the development of foundations by co-operating governments for exchanging professionals and students and books, works of art, collections, exhibits, and other materials between countries. Section 3, Article 2 of the ICOM Constitution states that “the Council shall further the exchange of cultural information across frontiers by (a) international loan exhibitions, (b) loans, gifts and exchanges of museum publications, objects and specimens between museums where it is legally possible, (c) international exchange of museum personnel, (d) traveling, fellowships and international museum training of selected personnel, (e) facilitation of travel by museum personnel and the shipment of museum material, works of art, traveling collections and publications across international frontiers, and (f) promoting and protecting the activity and welfare of museums generally and their attached responsibilities of education, inquiry and research throughout the world. Article 4.2.A.d of the partnership agreement

The foundation of the UNESCO/ICOM ethos of conservation was laid at a gathering in Rome held in mid-October 1930, which reviewed current scientific methods for examining and preserving works of art. It was convened as the first of four thematically interrelated conferences⁴³ by the International Museums Office (IMO), a bureau of the League of Nations' International Institute of Intellectual Cooperation created in July 1926, and predecessor to UNESCO's Museums Division. Discussions at the Rome forum, on topics including the scientific methods available for assessing works of art, protecting art from the elements, precautions to be taken during transportation, and improving education in conservation, all grappled with how to standardize methods for maintaining the good condition of a work of art. The archives retain only a partial record of the proceedings, which, unlike those of subsequent meetings, were not published in full in the IMO periodical *Mouseion*.⁴⁴ Yet despite these gaps, the Rome Conference left a distinct imprint on contemporary art conservation. Museum administrators, conservators, and scientists hailing primarily from Western Europe and North America met in person for the first time at this forum, and embarked on a lifetime of international cooperation, beginning with a collaboratively penned manual on the care of

pledges to promote the organization of exhibitions, especially of contemporary art, for international circulation. "ICOM's Relations with UNESCO," *ICOM News* 1, no. 1 (1948): 3.

⁴³ Subsequent meetings took up issues in the conservation of monuments (Athens, 21-30 October 1931), museography (Madrid, 28 October-4 November 1934), and archaeological excavations (Cairo, 8-14 March 1937).

⁴⁴ Marco Cardinali notes that only a selection of the proceedings was published in *Mouseion*, and over several issues rather than as a single volume: 13-14, no. 1-2 (1931); 15, no. 3 (1931); 16 no. 4 (1931); 17-18, no. 1-2 (1932); 19, no. 3 (1932). The conference program was only rediscovered recently, and Cardinali cites subsequent scholarship in Italian on topics covered at the meeting: M. Beatrice de Ruggieri, "Conferenza Internazionale per lo studio dei metodi scientifici applicati all'esame e alla conservazione delle opere d'arte," in Catalano, *Snodi di critica*, 138-44; Cardinali, "Dalla Conferenza di Roma del 1930 alla Technical Art History: Una storia non italiana," in Angela Cipriani, Valter Curzi, et al. (eds.), *Scritti in onore di Marisa Dalai Emiliani* (Rome: Campisano, 2014), 373-79. Marco Cardinali, "Technical Art History and the First Conference on the Scientific Analysis of Works of Art (Rome, 1930)," *History of Humanities* 2, no. 1 (March 2017): 226. Francesca Bewer includes a discussion of American contributions to the conference, referencing a copy of the agenda appended to a letter from IMO Secretary-General Euripede Foundoukidis to Fogg director Edward W. Forbes: Francesca G. Bewer, *A Laboratory for Art: Harvard's Fogg Museum and the Emergence of Conservation in America, 1900-1950* (Cambridge, MA; New Haven, CT: Harvard Art Museum; Yale University Press, 2010), 145-57, 291n38.

paintings.⁴⁵ These early attempts to establish a globally applicable set of standards for conservation matured into UNESCO's later endeavors to this end, beginning with a manual by a new generation of conservators that also addressed the care of paintings. Albeit ancillary to the dissertation's focus on the correspondence between paperwork and spatial changes, it is worth pointing out here that the composition of these groups of conservators as committees within UNESCO/ICOM reflected the priorities of a select group of institutions that resulted in exhibition protocols that favor paintings.⁴⁶

Attendees of the Rome meeting continued to collaborate on safeguarding both works of art and architecture, first during WWII under the Monuments, Fine Arts, and Archives program, and then in more bureaucratic form in the postwar period by establishing and taking on leadership positions within a welter of still-extant international organizations dedicated to various aspects of conservation. UNESCO and ICOM were principal among these entities, as direct successors of the IMO both philosophically through a continued commitment to peacebuilding through cultural exchange, and materially through the inheritance of the IMO's archive.⁴⁷ In particular, ICOM formed a Commission for the Care of Paintings⁴⁸ in 1948 (again privileging paintings over other art forms), followed by a Subject Committee for Museum Laboratories⁴⁹ three years later. From 1955, they began to hold joint meetings until they were amalgamated into the International Committee for

⁴⁵ First appearing as a series of articles in Volumes 41-42 of *Museion* in 1938, it was published as the *Manuel sur la conservation et la restauration des peintures* in 1939 and translated into English during the war by Foundoukidis as the *Manual on the Conservation and Restoration of Paintings* in 1940; the English edition was reprinted in 1997 with a foreword and preface by members of ICOM.

⁴⁶ Like its IMO predecessor, this 1951 manual (titled *The Care of Paintings/Le Traitement des Peintures*) appeared first as a series of articles in *Museum* (now *Museum International*), successor to IMO journal *Museion*. UNESCO's monograph series *Museums and Monuments* also takes its name from the *Museion*'s monthly supplement, which was titled *Musées et Monuments* from 1932. UNESCO, *The Care of Paintings*, *Museums and Monuments 2* (Paris: UNESCO, 1952).

⁴⁷ For more on the continuities between the IMO and UNESCO/ICOM, see Hiroshi Daifuku, "Museums and Monuments: UNESCO's Pioneering Role," *Museum International* 50, no. 1 (January 1998): 9-19.

⁴⁸ See Arthur Van Schendel, "The ICOM Commission for the Care of Paintings and the Problems of Cleaning," *Museum* 4, no.1 (1951): 63-66.

⁴⁹ The ICOM Subject Committee for Museum Laboratories functioned as a series of working syndicates tasked with specific conservation studies with the aim of making up-to-date information on the field available to member states.

Conservation in 1967, which included the merging of their working groups, and whose frequent re-naming and re-shuffling over subsequent years indicates that considering methods for the care of art in transit was a significant impetus for developing methods of preventive conservation over simply refining processes of restoration.⁵⁰ Several specialized entities for regulating conservation were also founded in the next two decades. The International Institute for the Conservation of Historic and Artistic Works (IIC) was founded in 1950,⁵¹ spawning several regional groups thereafter, one of which, the American Group, became the independent American Institute for Conservation in 1972. This was followed by the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) in 1956.⁵² Many conservation-minded museum leaders who first convened in 1930 in Rome took on key roles in several of these bureaucratic entities, maintaining close collaborative ties and continuing efforts begun in Rome to standardize methods for ensuring and maintaining the good condition of a work of art through various forms of paperwork.⁵³

Many of the actors who facilitated the early postwar exhibitions were leaders in one or more of these organizations, and their concerns as museum administrators infused how standards for exchange were established. Georges Salles, for instance, served as ICOM president in its early years

⁵⁰ The Working Group on the Care of Works of Art in Transit and Lighting was formed in 1967 but was split into two groups soon after (Lighting was later re-named Lighting and Air-Conditioning in 1975, Control of Climate and Lighting in 1978, Climate and Lighting Control in 1981, and Lighting and Climate Control in 1984). A new Working Group on Preventive Conservation was formed in 1993 as a merger of Care of Works in Transit, Lighting and Climate Control, and Control of Biodeterioration (itself formed as a new Working Group on the Bio-deterioration of Museum Collections in 1981 and renamed in 1984), and with the addition of Prevention of Disaster as a sub-group in 1996. Carla Nunes, *ICOM Committee for Conservation: Fifty Years (1967-2017)* (Paris: International Council of Museums Committee for Conservation (ICOM-CC), 2017), 14–15, 33–35.

⁵¹ First titled the International Institute for the Conservation of Museum Objects, it acquired its present title in 1959.

⁵² It was founded following a proposal at the UNESCO General Conference in New Delhi in 1956. Originally called the International Centre for Conservation in Rome and referred to informally as the Rome Centre, it was renamed as the International Centre for the Conservation and Restoration of Monuments and was christened with its current acronym at that time, which it has retained into the present despite a further change in title.

⁵³ In the field of architectural conservation, the International Council on Monuments and Sites (ICOMOS) was also established in 1965 but is not cited given its relative lack of involvement in the conservation of art objects.

(1953-1959). UNESCO and ICOM were further aided in their efforts by regional organizations through which they could operate, such as the American Association of Museums (Francis Henry Taylor served a term as its president). Many of the major actors in this dissertation spearheaded administrative conservation through ICOM's Committee for Conservation, the IIC, and ICCROM, with far-reaching consequences.

These organizations count the IMO as an antecedent either directly (as do UNESCO and ICOM) or obliquely through its meetings in Rome and elsewhere (as in the case of IIC⁵⁴ and ICCROM⁵⁵), and in turn inherited the IMO's mandate of peacebuilding through cultural exchange. As early as 1936, the IMO published a dossier of proposed regulations for international exhibitions with stipulations that certain types of vulnerable work should never go on view, that the number of times a work was moved and frequency of exhibitions on a certain subject per year should be restricted, and that exhibition schemes should be registered with the Office.⁵⁶ In other words, this was an early form of contemporary art conservation expressed as a series of explicitly administrative regulations; its successor entities for conservation would further endeavor to regulate the itinerancy of objects through the standardization of museum spaces, whose satisfactory performance in keeping objects safe would be measured through a thickening dossier of administrative paperwork.

The sheer number of organizations dedicated to conservation indicates that the relationships between conservators and their institutions, perhaps more than processes of conservation itself, were

⁵⁴ The institutionally commissioned history of IIC opens with an account of the Rome Conference and its indirect role in establishing IIC. Hero Boothroyd Brooks, *A Short History of IIC: Foundation and Development* (London: The International Institute for Conservation of Historic and Artistic Works, 2000), 3–4.

⁵⁵ ICCROM identifies its origins in the IMO's Athens Conference in 1931. Jukka Jokilehto, *ICCROM and the Conservation of Cultural Heritage: A History of the Organization's First 50 Years, 1959 - 2009*, ICCROM Conservation Studies 11 (Rome: ICCROM, 2011), 4.

⁵⁶ René Huyghe, "Coordination of International Art Exhibitions," *International Council of Museums: Second Biennial Conference: London 17-22 July 1950*. UNESCO/ICOM/BI/Conf.2/17, Paris, 30 June 1950.

seen to require sustained regulation at several scales. (A 1973 joint statement by the leadership of ICCROM, ICOM, and the IIC, responding to some confusion among their members, clarified the organizational structure of all three entities, elucidating that ICCROM's administrative focus was cooperation between governments, ICOM's was between museums, and IIC's between individual restorers/conservators.⁵⁷) Today, successful exhibition loans depend on a borrowing institution's ability to attest to its capacity for maintaining various spatial and environmental requirements, including an internal climate that hews to that of the lending institution, but heating, ventilation, and air-conditioning (HVAC) requirements for this assurance bars many museums from borrowing objects and puts great strain on those that can.⁵⁸ The seeming incongruity between the cooperative ambitions of the conservators who first convened in Rome—a meeting catalyzed, incidentally, by a traveling exhibition in 1929⁵⁹—and the current draconian protocols governing museum exchange through exhibitions today can be better understood by examining more closely how paperwork disciplines museum professionals to delimit object movement between museums.

A History of Exhibitions from Behind the Scenes

Reading through the archives for the *Masterpieces of French Tapestry* and *Art Treasures from the Vienna Collections* exhibitions, I noticed the latter exhibition being discussed in correspondence

⁵⁷ IIC News, Supplement to Studies in Conservation, Vol. 18, No. 1 (February 1973), 1.

⁵⁸ A recent example is when MoMA agreed in 2011 to loan 150 artworks to the Art Gallery of Western Australia in Perth. One key concern for conservators and registrars was how to set up an infrastructure capable of containing a stable interior space over the 18,707-kilometer trip. The exhibition was cancelled when the gallery realized that “even with ample governmental support and the prospect of attracting 240,000 visitors in the initial two shows, it was impossible (or irrational) to sustain the cost of moving artworks from New York to Perth.” (The cost ballooned from the initial \$6 million to \$11.9 million for 150 artworks.) Domínguez Rubio, *Still Life*, 205, 210, 232–34.

⁵⁹ A traveling exhibition of Russian icons organized by painter-scholar Igor Grabar, shown at locations in Western Europe and North America, included a “provocative display of restored paintings in which sections of the layers of repainting built up over the centuries were left exposed, much like the strata in an archaeological excavation,” to provoke discussion about new technical methods for cleaning pictures. Bewer, *A Laboratory for Art*, 150–51.

for the French show, which I would have missed if not for the laudatory *ICOM News* article naming both exhibitions. For instance, when it appeared that, despite all economizing, the Met would be unable to host the French exhibition on the grand scale first envisioned, Francis Henry Taylor sent a cryptic telegram to Georges Salles which indicated that a “budgetary crisis” necessitated the reduction of the exhibition, but that there was “no cause for worry”.⁶⁰ Predictably, Salles responded with deep concern about the implications of Taylor’s telegram in an extended epistle three days later. In it, he detailed suggestions for cutting installation costs, outlining where partitions were required or not, rooms in which wall-painting was most necessary, and the economical designs undertaken at the London showing of the French exhibition at the Victoria and Albert Museum earlier that year, and at the Rijksmuseum in Amsterdam in 1946. (At the V&A, he wrote, the metal frames were rented, and the backing made of tent cloth lent by the Army. (Fig. 0.4) In Amsterdam, they were made of cardboard.) He *also* discussed how the Louvre rented inexpensive tubular scaffolding to display the incoming exhibition from Austria.⁶¹ For staff at these museums, exhibitions were not experienced as separate events but as imbricated (and this type of multilateral exhibition resulted in new ways of sharing expertise). Salles’ tetchy letter was not only a crucial turning point in the fate of the French exhibition, which did go on view at the Met in its entirety, (Fig. 0.5) but also captures the types of administrative diplomacy from behind the scenes that this dissertation excavates.

What do we learn about exhibitions when we read them, not from the exhibition gallery, but from the registrar’s offices, storage facilities, loading docks, conservation laboratories, and meeting rooms of the museum? What happens when we incorporate non-museal and interstitial spaces, from

⁶⁰ Francis Henry Taylor to Georges Salles (radiogram), 18 July 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art archives.

⁶¹ Georges Salles to Francis Henry Taylor, 21 July 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art archives.

customs bureaus to train carriages to the interior of a packing crate? In the following chapters, I bring to the fore these ordinary spaces that facilitate the circulation of exhibitions. Not all museums everywhere *are* nodes in these networks, of course, and looking closely at these spaces is a means to articulate how displays of power in museums are not limited to public surveillance. While this focus on non-public spaces might appear as an evacuation of the public, my goal is to arrive at a robust means to critique how objects *arrive* in these public galleries to begin with, because their trajectories are not always self-evident. The two exhibitions I have used to think with—*Masterpieces of French Tapestry* and *Art Treasures from the Vienna Collections*—do not explicitly appear in the body of my dissertation, but the effort of parsing the politics of these documents has infused its structure.

For instance, one protracted problem in moving tapestries across the Atlantic for the French exhibition was how to assume responsibility for the risks they might face in transit, and in turn, how to assess their value. Under the original agreement, the French government was deemed responsible for the art until it arrived in the United States, when the Metropolitan Museum was to take out an all-risk insurance policy for the duration of the show.⁶² But the wording of this agreement—that insurance would “commence at ship-side in the Port of New York and remain in force during transportation from the Port of New York to the Museum, during such time as the material is in the Museum until loaded on board for return voyage at the Port of New York”⁶³—implied no other US exhibitors, and the policy had to be adjusted with the inclusion of the Art Institute of Chicago. Moreover, Met leadership discovered soon thereafter that the French had not fully insured the

⁶² Francis Henry Taylor to Henri Bonnet, 24 January, 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁶³ Memo: Material to be included in letters abroad with respect to insurance to be placed on contemplated showing of French tapestries, 22 January 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

tapestries at previous exhibitions in Europe. French organizers suggested that the Met contribute towards transportation expenses in return for following the same policy in the US, a proposal that Taylor promptly deemed too costly.⁶⁴ (In further correspondence, the French admitted they thought it wiser to insure the tapestries after all.⁶⁵) Horace Jayne, vice-director of the Met, requested that insurance premiums be limited to \$5,000 instead of an earlier estimate of \$12,000,⁶⁶ which Verlet intimated might be possible if insurance were waived on all but the privately owned pieces.⁶⁷ Finally, Taylor agreed to a proposal to pay \$10,000 to the French government to take out coverage for the entire show,⁶⁸ which would “relieve the Metropolitan Museum of all further responsibility in connection with the placing of insurance, that in the event of loss, no claims would be made against the Museum.”⁶⁹ The incident demonstrates how curious a class of object art for insurance purposes; the difficulty of assessing a standardized rate is compounded by diplomatic negotiations like this one. This exchange informed Chapter 4, in which I examine attempts to streamline the process of negotiation itself through government indemnity schemes, and to displace actuarial object assessment onto the assessment of buildings for their perceived security.

Import laws in the United States in 1948 were also quite restrictive. At this time, temporary art imports were usually entered under a museum’s exhibition bond—under which museums could

⁶⁴ Francis Henry Taylor to Pierre Verlet, 27 May 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁶⁵ Georges Salles to Francis Henry Taylor, 21 July 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁶⁶ Horace Jayne to Georges Salles, 30 July 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁶⁷ Horace Jayne to Roland Redmond (Memo: re: French Tapestries Exhibition), 31 July 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁶⁸ Cablegram from Francis Henry Taylor Taylor to the Metropolitan Museum, 6 September 1947; Loan Exhibitions-Held-1947-1948; French Tapestries; Sep-Dec 1947; L 7806. Metropolitan Museum of Art Archives.

⁶⁹ Dudley T. Easby to Claude Lévi-Strauss, 23 September 1947; Cablegram from P. Erlanger to Metropolitan Museum, 14 October 1947; Radiogram from Horace Jayne to P. Erlanger, 17 October 1947; Loan Exhibitions-Held-1947-1948; French Tapestries; Sep-Dec 1947; L 7806. Metropolitan Museum of Art Archives.

import specific art objects free of duty, provided that a bond was given to pay duties if the objects were eventually sold or used contrary to the specified regulations⁷⁰—if the museum had obtained relevant permissions from the Collector of Customs. Met secretary Dudley Easby recommended that Francois Charles-Roux, Counselor at the French Embassy in Washington, take this approach rather than directly requesting the Protocol Division of the Department of State that the tapestries be admitted without customs formalities as an international courtesy. Easby explained that this would result in fewer complications if the Embassy were to receive requests from other museums to exhibit the tapestries after the Met show.⁷¹ The capacity of the exhibition bond to essentially move the national border formed the nucleus of Chapter 2, which unpacks schemes to apply this logic at the scale of the world.

Dudley Easby's recommendations to Francois Charles-Roux were agreeable at the time, but the responsibility that came with the bond further burdened the Met as the handover to Chicago was finalized.⁷² Made anxious as a result of the diplomatic fiasco for Boston and Toledo, Taylor refused to pack and send the tapestries to Chicago immediately after the show's closure in late February 1948 as originally agreed in previous letters. Instead, he drafted a release of responsibility for the Met, to be signed by French government officials, with an accompanying letter to Verlet that read:

I cannot permit the tapestries to leave the building, *for my own protection* [my emphasis] as well as yours. While the loan exhibition in Chicago was planned and arranged prior to your return to France in December this Museum has at no time received any formal notification or instructions in this regard, consequently I must insist on this formal order since the Metropolitan Museum is responsible for their custody until released.⁷³

⁷⁰ Dorothy H. Dudley and Irma Bezold, *Museum Registration Methods*, 1st edition (Washington, D.C.: American Association of Museums, 1958), 113.

⁷¹ Dudley T. Easby to Francois Charles-Roux, 2 May 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁷² Francois Charles-Roux to Dudley T. Easby, 14 May 1947. Loan Exhibitions-Held-1947-1948; French Tapestries; 1946-August, 1947; L 7806. Metropolitan Museum of Art Archives.

⁷³ Francis Henry Taylor to Pierre Verlet, 2 March 1948. Loan Exhibitions-Held-1947-1948; French Tapestries; 1948, 1959; L 7806. Metropolitan Museum of Art Archives.

Taylor's unorthodox action would be unthinkable today, when a robust infrastructure for handling customs procedures and insurance policies governs object exchange. This notion of risk—not only to objects but to administrators—was striking, and Taylor's anxieties shaped the writing of these two chapters on how administrators dealt with messy problems of risk assessment and border control.

As I examined an image of the disembarkation ceremony for the exhibition of French tapestries in the Metropolitan Museum archives, archivist Jim Moske pointed out a stack of crates on the left, almost hidden by the sea of people. (Fig. 0.6) The cubic shape of the crates, he said, indicated that the tapestries had been folded and stacked—a practice that would never be undertaken in the present for fear of damaging the fragile work (today, they are rolled up in tubes when moved). (Fig. 0.7) The politics of packing as a germinal form of intercession between diplomacy and conservation became the subject of Chapter 1.

Finally, while the many iterations of the loan agreement for the Austrian exhibition (and, admittedly, even the Boston/Toledo blunder in the case of the French exhibition) illuminate the role of museums like the Metropolitan in building this apparatus, other documents demonstrate its power to bound it. It was Taylor who, in discussion with a Mr. Leightmeier, political director of Austrian Foreign Office in Vienna during the planning stages of the latter exhibition, decided that if the show were to travel to Canada, it would only go to the Art Gallery of Toronto (now the Art Gallery of Ontario), as the National Gallery was not fireproof and Montreal (most likely its Museum of Fine Arts) was not large enough.⁷⁴ These documents offered a glimpse into how circuits of museum circulation were forged and fortified by well-placed administrators acting as intermediaries

⁷⁴ Memo of phone call with Francis Henry Taylor, 30 November 1949. Loan Exhibitions Held 1950: Vienna, Treasures from Imperial Collection – Misc. Correspondence (1948-1950) 1947-49 L 7806. Metropolitan Museum of Art Archives.

and using the language of administrative risk management, and I have tried to call attention to these expressions and reinforcements of power throughout the dissertation.

If my descriptions have made this dissertation sound more anthropological than historical, it is perhaps because in undertaking this research I have felt more and more like an ethnographer (albeit, admittedly, of the dead).⁷⁵ The thickness of the archival paperwork made me increasingly—and sometimes uncomfortably—pry into private and unvarnished opinions now made semi-public, which offered unexpected insights into the institutional culture of museums and the personalities of those at their helm. Like an ethnographer, too, I have valued the epistemology of surprise,⁷⁶ and have attempted to make explicit how these surprises have informed my historical analysis.

Chapter Overview

The first two chapters examine how internationalist discourse was translated into the space of museum exchange and the forms of object care that ensued. Chapter 1 examines UNESCO's early efforts to build a network of exhibitions. Learning from previous museum programs—particularly MoMA's circulating exhibition programs for domestic audiences in the United States from the 1930s—UNESCO's Department of Cultural Activities aimed to exceed the museum by bringing color reproductions of “masterpieces” to schools, community centers, and other public spaces. Pulling back the curtain on damage sustained to these exhibits and the diplomatic difficulties they presented to UNESCO, I argue that packing is political. The second part of the chapter examines the resulting shift from deploying identical reproductions to circulating replicable, standardized

⁷⁵ I'm grateful to Albena Yaneva for framing archival research as ethnographic work during a 2019 conference in which I presented this work at the University of Manchester.

⁷⁶ See Richard A. Shweder, “The Surprise of Ethnography,” *Ethos* 25, no. 2: Ethnography and Sociocultural Processes: A Symposium (June 1997): 152–63.

practices for object care, through the production and dissemination of the *Manual of Travelling Exhibitions* (1953) and its successor, *Temporary and Travelling Exhibitions* (1963). Written by a MoMA curator, it shared (American) packing solutions learned by trial and error for keeping artwork safe in transit as suggestions for others responsible for circulating exhibits. However, distributed by UNESCO to training centers for museum technicians in countries as disparate as India, Mexico, and Nigeria, the *Manual* turned local solutions into norms with international reach. Often uncritically accepted as expertise by dint of being in writing, handbooks often paradoxically construct this very expertise through dissemination and replication, as in the case of the *Manual*. Providing instruction in the care of itinerant objects, it trained museum staff in the niceties of developing diplomatic inter-museum relationships.

Chapter 2 examines how UNESCO's efforts to facilitate the free flow of goods across borders dovetailed with the care of objects sent on exhibition. UNESCO designed a dedicated label to mark shipments moving between nations that had ratified the 1950 Agreement on the Importation of Educational, Scientific and Cultural Materials, indicating that customs duties were to be waived. Following this logic, ICOM created a specialized label in 1957 to be used for objects sent on loan for exhibitions, to ensure that fragile works were not opened at the border but rather sent to the museum for inspection under staff supervision to ensure object safety. An appointed committee determined which exhibitions would be granted use of the label, under the categories sponsored and approved, resulting in the overwhelming sponsorship of exhibitions in museums in Western Europe. Efforts to organize model exhibitions in India, Nigeria, Australia, and New Zealand ended in failure. Following an internal investigation into this unsuccessful project to ensure object safety ("sponsored" exhibits consistently incurred damage), the 1974 ICOM Guidelines for Loans was launched, and is

still in use. Albeit offered as suggestions, these guidelines in practice regulate how objects enter museums. The chapter argues that the ICOM label was a prototype for conserving objects in transit by treating the museum as a bonded warehouse, essentially transferring the national border from portside customs bureaus to the museum, which prompted major museums to reconfigure their receiving facilities for this purpose.

The second half of the dissertation examines how this apparatus has served to homogenize museum architecture, and the ways in which these standards are imposed by administrators. Chapter 3 shows how nascent climate requirements for borrowing museums were a matter of administrative expediency; conditions best suited for easel paintings in European museums were used as a rough standard for reducing climate differences between borrowing and lending institutions, as climate fluctuations were increasingly understood to accelerate object deterioration. Yet the building industry's overscrupulous adoption of these numbers to construct new buildings and retrofit existing spaces cultivated the sensation that a single salubrious museum climate for art exists, resulting in the inscription of narrow temperature and humidity ranges as standards in technical building manuals. For collections in non-temperate regions or that do not favor paintings, these climate conditions are unwarranted but are still presented as a universally mandated standard. I argue that the object condition report, a laboratory technique for recording examinations and restoration procedures developed as a reproducible form at Harvard's Fogg Museum in 1935, was increasingly used as an administrative document for regulating inter-museum relationships through object loans. Aided by climate-controlled art crates developed for transporting works of art in the 1960s, repeated reporting on object condition at intervals during an exhibition has come to require implicitly or explicitly reporting on the maintenance of stable environmental conditions within lending and borrowing

institutions. Museums able to maintain near-unchanging climates are classed accordingly and have access to objects deemed to require these conditions, even though these conditions were only met with the advent of air-conditioning.

Chapter 4 examines how conservators became increasingly concerned with the problem of insurance as a conservation concern writ large. It traces their administrative efforts toward building management as a form of risk management, and its effects on the homogenized construction and maintenance of museums. The chapter discusses how these concerns were taken up at the regional level, as well as by international committees in ICOM and UNESCO, resulting in a government indemnity program that is still in place today. The chapter also follows the impacts of the exhibition insurance industry on the valuation of art. Art at rest in museums is rarely insured; determining a value for apparently invaluable cultural objects essentially recast them as financial assets that now accrue value through the continued act of circulation. Borrowing institutions must now submit a standardized Facility Report to be approved for loans, which functions as a document both for building management and future construction; it can also publicly reveal more about their security than is advisable.

The chapter's coda meditates on how museum risk management is changing in the face of climate change, and the ways in which the facility report records this increasing uncertainty, even as the blockbuster exhibition continues to be a form of display antithetical to the ethos of planetary conservation. The conclusion extrapolates this thread to reflect on now-indurated infrastructures that enable the circulation of blockbuster exhibitions, which are increasingly decried as untenable for their ascendancy over museum programming curatorially, fiscally, and culturally, and have been caught up in a moment of reckoning amidst the current supply chain crisis.

Archival absences might challenge efforts to assess the “true” intentions of intellectuals who waxed lyrical about the capacities of art to foster international understanding and worked to devise an apparatus of circulation that, paradoxically, privileges some types of art and is widely conceded to be an unsustainable form of resource consumption. Yet the tyrannical outcome of material means for enforcing exhibition standards are eminently measurable through building standards and museum practices for assessing object condition. I see the evolution of museum architecture in the twentieth century as coeval with the transformation of the traveling exhibition, and the dissertation recoups a history of administration within conservation, demonstrating that the material ontologies of new paperwork for exhibition exchange produced new epistemologies for valuating objects *through* inter-institutional relationships.

Visual culture encapsulates human ingenuity at its best, while administrative paperwork is human labor at its most mundane; examining the work of the latter in aiding the circulation of the former blurs the boundaries between the two. Bringing the spheres of intellectual thought on the former—art and architectural history, aesthetics—into sustained dialogue with the latter—histories of bureaucracy, infrastructure, and technology—I aim to show how they infuse each other.

CHAPTER ONE

From Reproductions to Replication: Setting Professional Standards for Circulating Exhibitions

“I am sure you...have no idea what a sound work in public education throughout the country your exhibitions have done. [...] The circulating exhibitions [program] is the most useful and the most helpful, and actually the most economical from every point of view.”

— Grace McCann Morley, San Francisco Museum of Art, to Elodie Courter Osborn, Museum of Modern Art in New York, 8 November 1945.¹

“The Division of Trade Standards is like a taxicab. Whenever somebody hails us, we take him where he wants to go, as quickly and safely as possible. The passenger chooses the destination and, within reason, the route. We don’t presume to “Approve” his destination—we simply take him there. If he doesn’t like our driving, or if he changes his mind, we let him out wherever he says. That is one way of describing what we have been doing for twenty years, but there are still a few people who don’t understand what we do, or try to make something different of it.”

— F.W. Reynolds, Division of Trade Standards, to R.J. Gettens, Fogg Art Museum, 11 October 1946.²

In 1953, UNESCO published the *Manual of Travelling Exhibitions*, its first handbook for museum practice. It was authored by Elodie Courter Osborn, a former curator at the Museum of Modern Art in New York who had served as the first director of its Department of Circulating Exhibitions. The slim volume comprised four chapters of practical advice for planning an exhibition, drawing on the practices Courter Osborn had developed at MoMA, and was instantly successful; the

¹ Box 69:1. Outgoing Correspondence (1945 Oct-Nov). SFMOMA Archives.

² Conservation Department History Collection, b. 5, f. Gettens Correspondence to National Bureau of Standards. Harvard Art Museum Archives.

English edition (it was also published in French) went out of print within a few years. It was revised and reissued ten years later as *Temporary and Travelling Exhibitions*, which broadened the original's emphasis on art to also include discussions of other types of exhibitions. UNESCO produced several further handbooks for professional museum practice in subsequent years which made central the role of the traveling and temporary exhibition to museum functions.³

The circumstances under which the *Manual* and its successor handbook were disseminated capture how concerns about the safety of objects sent on exhibition in the mid-twentieth century instigated programs of professionalization in the museum profession, as well as how this movement toward standardization was discursively constructed. As this chapter shows, the form of the *Manual* as reproducible book, its emphasis on how to *move* art over how to display it, and revisions to its content in the reissued manual that turned suggestions into explicit directives and shifted its focus on art to science and development, all responded to an acknowledged tension between the perceived advantages of circulating original works of cultural value for “direct contact” with dispersed publics and the need to safeguard these works while in transit. UNESCO's faith that circulating exhibitions could foster peacebuilding was grounded in contemporaneous discourse on visual communication as capable of facilitating universal apprehension of culture by diverse publics; I show in this chapter that UNESCO extended this logic of universalism to promulgate reproducible manuals as capable of directing the universal application of standardized practices by diverse museum staff. Analyzing the *Manual of Travelling Exhibitions* and its revision, I argue UNESCO's increasing self-view as cultural

³ Apart from the *Manual* and its 1963 revision, UNESCO handbooks in the “Museums and Monuments” series that discuss the organization of exhibitions at length include *The Organization of Museums: Practical Advice* (1959), *Museums, Imagination and Education* (1973), and *Conservation Standards for Works of Art in Transit and on Exhibition* (1979), discussed further in Chapter 3, and which was later revised and republished as part of a different series titled Technical Handbooks for Museums and Monuments.

“standard-setting” agency shifted its programming from educating the public to training professionals, clarifying its commitment to object preservation through administration.⁴

In the first half of the chapter, I examine the milieu in which UNESCO launched its early efforts to aid the universal apprehension of culture, as manifested in a multi-year project to circulate curated collections of art reproductions sent out in identical sets to different regions of the world. The view of exhibitions as a preeminent medium for mass education was shaped by internationalist aspirations to devise universal communication systems that could transcend linguistic difference and even overcome the problem of illiteracy. But rather than focus on the role of exhibitions in public education, as others have done, I show that exhibition design was as much shaped by a desire to reduce wear in transit as it was to circulate so-called masterpieces, acting as a circumscribed form of conservation. The second half of the chapter traces the turn to professional education in conserving objects sent on exhibition, through the publication and revision of the *Manual*. While the original text was framed as suggested practices, the revised edition produced a decade later was decidedly more normative in tone. This latter handbook was quickly deployed to parts of the world in which UNESCO was concurrently carrying out technical assistance projects for museum development. In the last part of the chapter, I discuss the implications of this expanded and evidently prescriptive handbook—emblematic of UN deployment of “experts” for international development—for norm-setting in museum practice.

⁴ The term “standard-setting” is UNESCO’s own, and used to describe its regulatory instruments: conventions, recommendations, and declarations. See Abdulqawi Yusuf and Unesco, eds., *Standard-Setting in UNESCO, Volume I: Normative Action in Education, Science and Culture; Essays in Commemoration of the Sixtieth Anniversary of UNESCO* (Leiden; Boston: Martinus Nijhoff Publishers, 2007). See also the reproduction of this language in Lynn Meskell, *A Future in Ruins: UNESCO, World Heritage, and the Dream of Peace* (New York, NY: Oxford University Press, 2018), 21, 66, 81.

Universal Communication Systems

Museum leaders breaking ground in UNESCO and ICOM endorsed the objects in their care as ambassadors for peacebuilding through traveling exhibitions that could send museum holdings to dispersed publics. Particularly vocal on this front was Grace McCann Morley. Founding director of the San Francisco Museum of Art, now SFMOMA (1935-1958), she took a sabbatical to serve as the first head of UNESCO's Museums Division (1947-1949), and was later invited by the Government of India to lead the National Museum in New Delhi (1960-1965) as its inaugural director, where she also founded and served as advisor for the ICOM Regional Agency in Asia (1967-1978) and lived out the rest of her life.⁵ In an essay in the May 1947 issue of *Burlington Magazine*, McCann Morley wrote that "international cooperation seems the world's best hope for peace just now," and that museums had a vital role to play to this end.⁶ She went on to pen a series of further essays in UNESCO's journal *Museum*, that set the tone for this fledgling periodical, asserting that exhibitions advanced international understanding. Offering global publics direct access to objects that mediated between nations by communicating the universality of cultural expression, they could also facilitate more prosaic international cooperation between museum professionals through the administrative requirements of organizing this cultural exchange.⁷ "Just as circulating exhibitions furnish a pattern of cooperation likely to be extended to other museum enterprises," she averred, "temporary exhibitions undoubtedly indicate an increasing tendency on the part of museums toward active

⁵ "Thirty-Four Years of Co-Operation between UNESCO and ICOM," *Museum* XXXII, no. 3 (1980): 154–62.

⁶ Grace McCann Morley, "UNESCO and the Future of Museums." *Burlington Magazine* 89, no. 530 (May 1947): 136–37.

⁷ Grace McCann Morley, "Museums and UNESCO," *Museum* II, 2 (1949): 1–35; Grace McCann Morley, "Museums and Circulating Exhibitions," *Museum* III, 4 (1950): 261–74; Grace McCann Morley, "Introduction," *Museum* IV, 1 (1951): 5–28; Grace McCann Morley, "UNESCO's Exchange of Exhibitions Programme: The First Circulating Exhibition," *Museum* VI, 4 (1953): 282–84.

participation in contemporary life.”⁸ McCann Morley’s words might easily be mistaken for those of French art historian Henri Focillon—a founding figure of UNESCO’s predecessor, the League of Nations’ International Institute of Intellectual Co-operation—who had presented museums as “ready-made institutions of international cooperation” in the League of Nations publication *Mouseion* (which was also the precursor of *Museum*) in 1927.⁹ To arrive at their confident assertions, McCann Morley and Focillon alike drew on internationalist discourse on visual communication and public education in the museum originating in the mid-nineteenth century.

The tower of Babel, a familiar origin myth of linguistic diversity, recounts how peoples united by a common language begin to build an ambitious edifice intended to reach the heavens, until a threatened God intervenes by multiplying their languages and rendering them unintelligible to each other. If, as political scientist Benedict Anderson has argued, European nation-states emerging in the sixteenth century began to imagine their communities around national “print-languages” that facilitated differentiation, they also increasingly grappled with how to define the new forms of political exchange between these new types of community, as evidenced by English philosopher Jeremy Bentham’s reported coining of the term “international” in the late eighteenth-century.¹⁰ Nineteenth-century advocates of international cooperation viewed this linguistic diversity as a grave impediment to mutual understanding, even the root cause of conflict, and correspondingly

⁸ McCann Morley, “Introduction,” *Museum* IV, 1 (1951), 6.

⁹ Lucia Allais, “Will to War, Will to Art: Cultural Internationalism and the Modernist Aesthetics of Monuments, 1932-1964” (Unpublished PhD dissertation, Massachusetts Institute of Technology, 2008).

¹⁰ For Anderson’s theory on the relationship between print-capitalism and the European nation-state, see Anderson, *Imagined Communities*. For a discussion of the term “international” and how Bentham’s supposed mistranslation of the Latin *ius gentium* differs from that of Roman law, see Hidemi Suganami, “A Note on the Origin of the Word ‘International,’” *British Journal of International Studies* 4, no. 3 (October 1978): 226–32. A note: shortly after writing this sentence I found one constructed in an uncannily similar fashion in Rachel E. Perry, “Immutable Mobiles: UNESCO’s Archives of Colour Reproductions,” *The Art Bulletin* 99, no. 2 (April 3, 2017): 172. I decided to keep this sentence but also to point to this resonance, calling attention to the generally acknowledged imbrication of nationalism and internationalism (as well as UNESCO’s role in mediating between the two).

labored to devise systems of universal communication. Russian ophthalmologist Ludwig Zamenhof's 1887 invention of the Esperanto language was such an attempt to devise a "universal" civic language (its hopefulness captured in its nomenclature),¹¹ while the 1875 Metre Convention aimed to promote the adoption of a universal scientific language.¹² Far from being undermined by two major wars in the first half of the twentieth century, efforts to this end were redoubled and even extended beyond textual language to explore the imagined universal communicative potential of the visual image.¹³ It was in this atmosphere that UNESCO and ICOM experimented with the medium of the circulating exhibition as part of larger efforts at mass education.¹⁴

UNESCO/ICOM discourse on visual mass education echoes the belief in the universality of visual language central to foundation coursework (or "Vorkurs") at the Bauhaus throughout its existence from 1919 to 1933, the structure and content of which permeated art schools elsewhere in the world when its proponents fled Germany. The *Bauhausbücher* textbooks developed for student instruction in the course expressed the goal of universal visual expression.¹⁵ Hungarian visual artist

¹¹ For artificial languages invented during this period and how they reflected intellectual debates about identity, scientific knowledge production, standardization, and peacebuilding, see Roberto Garvía Soto, *Esperanto and Its Rivals: The Struggle for an International Language* (Philadelphia: University of Pennsylvania Press, 2015). Fittingly, the fledgling language was promoted at the 1900 Exposition in Paris (a genre also dreamed up by proponents of internationalism). British linguist Alexander Melville Bell (father of inventor of the telephone Alexander Graham Bell) likewise developed a system of phonetic symbols he called "visible speech." However, the structure of Esperanto and Bell's laborious efforts to develop a new language when phonetic languages exist both reveal the innate Eurocentrism of these "universal" projects.

¹² For a history of the International Bureau of Weights and Measures, see Terry J. Quinn, *From Artefacts to Atoms: The BIPM and the Search for Ultimate Measurement Standards* (Oxford; New York: Oxford University Press, 2012).

¹³ In 1904, artist and theorist Wassily Kandinsky promised: "If destiny will grant me enough time, I shall discover a new international language [*Sprache*] which will endure forever and which will constantly enrich itself. And it will not be called Esperanto. Its name will be painting [*Malerei*]*—*an old word that has been misused. It should have been called non-painting/counterfeit [*Abmalerei*]; up till now it has consisted of imitating." Quoted in Hans K. Roethel and Jean K. Benjamin, *Kandinsky* (Oxford: Phaidon Press, 1979), 13.

¹⁴ The ability to appeal to the illiterate through visual education appealed greatly to UNESCO. For UNESCO's film work (and connections to the British Colonial Film Unit), see Rosaleen Smyth, "Grierson, the British Documentary Movement, and Colonial Cinema in British Colonial Africa," *Film History* 25, no. 4 (2013): 82.

¹⁵ For a comprehensive overview of Bauhaus activity from Weimar to Chicago, see Hans Maria Wingler, *The Bauhaus: Weimar, Dessau, Berlin, Chicago* (Cambridge, Mass: MIT Press, 1969). For the way in which Bauhaus theorist-practitioners were influenced by Gestalt theory (which, in examining the totality of the mind, rejected the notion that apprehending visual data is culturally learned), see Roy R. Behrens, "Art, Design and Gestalt Theory," *Leonardo* 31, no.

László Moholy-Nagy, who had taught the course in the 1920s, played a central role in disseminating the school's ideals to the "New Bauhaus," along with his compatriot and émigré György Kepes, whom he invited to teach with him in Chicago. They produced a second generation of theoretical works—including Kepes' *Language of Vision* (1944) and Moholy-Nagy's *Vision in Motion* (1947)—that recapitulated the arguments of the *Bauhausbücher* texts: that visual communication could speak to the literate and illiterate alike and mediate between the world's nations as a truly international form of conversation.¹⁶ Members of UNESCO and ICOM used this language almost verbatim to describe their mission at the close of World War II. At ICOM's second biennial conference in London in 1950, chief curator of the Department of Paintings at the Louvre René Huyghe read a paper on coordinating traveling exhibitions that channeled the spirit of this utopian vision, asserting that, "unlike literature, which has to be translated, objects and pictures may be appreciated and enjoyed directly[.] Works of art are thus the most effective means of making each country realize that mankind is one."¹⁷

4 (1998): 299–303. Notable *Bauhausbücher* titles espousing this view included Walter Gropius' *International Architecture* (1925), Paul Klee's *Pedagogical Sketchbook* (1925), Wassily Kandinsky's *Point and Line to Plane* (1926), and László Moholy-Nagy's *Painting, Photography, Film* (1927).

¹⁶ Kepes' *Language of Vision* (1944), for instance, declared that "visual communication is universal and international; it knows no limits of tongue, vocabulary, or grammar, and it can be perceived by the illiterate as well as by the literate." *Language of Vision*, 13. Kepes' work inspired other works on visual communication, including American art director Paul Rand's *Thoughts on Design* (1946) and Austrian Gestaltist psychologist Rudolf Arnheim's 1954 *Art and Visual Perception* (1954). Meanwhile, Herbert Bayer, Bauhaus student, later faculty member, and designer of the Universal typeface, continued to believe long after he had left the Bauhaus that a "universal visual medium" devised through a collaboration between artists and scientists could "bridge the gap" between the world's different languages, as demonstrated in his 1967 essay, *On Typography* (1967). For critical commentary on the cultural construction of universal visual language in Europe, see Charlotte Ashby et al., eds., *Imagined Cosmopolis: Internationalism and Cultural Exchange, 1870s-1920s*, Internationalism and the Arts, volume 2 (Oxford ; New York: Peter Lang, 2019); Grace Brockington, "Universal Visual Languages in the Age of Telegraphy," in *Coding and Representation from the Nineteenth Century to the Present: Scrambled Messages*, ed. Anne Chapman and Natalie Hume, Routledge Studies in Cultural History (New York: Routledge, 2021).

¹⁷ René Huyghe, "Co-ordination of International Art Exhibitions" (Report International Council of Museums, Second Biennial Conference, London, 17-22 July 1950), 30 June 1950, 1-2. UNESCO/ICOM/BI/Conf.2/17.

Comprehensive Collections for Collective Comprehension

The quest for a single language to mediate between nations coincided with a parallel pursuit for visual completeness as an instrument of learning. Longstanding and emerging technologies of reproduction aided this ambition. Plaster casts had long been produced as part of the sculptural process, but internationalist ambitions infused them with new pedagogical significance in museums in the mid-nineteenth century. While even national museums could not acquire complete collections of originals, they could aspire to obtain encyclopedic compendia of expertly crafted reproductions.¹⁸ Comprehensive collections lent themselves to chronological display, showing how artistic techniques advanced over time and appearing to plot civilizational progress; the technique fittingly debuted at the 1851 Crystal Palace Exhibition, intended to demonstrate advancement through industry.¹⁹ This desire to build comprehensive collections for public education prompted Henry Cole, director of the South Kensington Museum (now the V&A), to organize an International Convention for Promoting Universal Reproductions of Works of Art in 1867, at the Exposition Universelle in Paris, under which fifteen European heads of state agreed to exchange casts of valuable objects of similar value housed in their national museums.²⁰ (Fig. 1.1) Almost a century later, ICOM was contracted

¹⁸ In Europe, the collections of casts at institutions from the British Museum and the South Kensington Museum in London, the Musée du Louvre and Musée de Sculpture Comparée in Paris, and the Neues Museum in Berlin were produced by a few professional plaster cast workshops such as the Atelier de Moulage at the Louvre and the Royal Plaster Cast Manufactory in Berlin. Charlotte Schreiter, “Competition, Exchange, Comparison. Nineteenth-Century Cast Museums in Transnational Perspective,” in Andrea Meyer and Bénédicte Savoy, eds., *The Museum Is Open: Towards a Transnational History of Museums 1750-1940, Contact Zones*, volume 1 (Berlin: De Gruyter, 2014), 31–44. For plaster cast-making in nineteenth-century Britain, see Rebecca Wade, *Domenico Brucciani and the Formatori of Nineteenth-Century Britain* (New York: Bloomsbury Visual Arts, 2019).

¹⁹ Meyer and Savoy, *The Museum Is Open*, 33. Thematic displays were increasingly viewed by critics as muddled and untidy, while chronological displays were seen as epitomizing order.

²⁰ The V&A’s cast collection grew out of this Convention; see Diane Billbey and Marjorie Trusted, “The Question of Casts’ – Collecting and Later Reassessment of the Cast Collections at South Kensington,” in Rune Frederiksen, ed., *Plaster Casts: Making, Collecting and Displaying from Classical Antiquity to the Present* (Berlin: de Gruyter, 2010). See also Marjorie Trusted, “Reproduction as spectacle, education and inspiration: the ‘Cast Courts’ at the ‘Victoria and Albert Museum’: past, present and future”, in Charlotte Schreiter ed., *Gipsabgüsse und antike Skulpturen: Präsentation und Kontext* (Berlin: Reimer, 2012), 355-371, 387-388; Angus Patterson and Marjorie Trusted, eds., *The Cast Courts*

by UNESCO to facilitate exchanges of “duplicates and surplus materials” that would “aid museums in making their collections universal rather than local or regional,” and replicate, “by facsimile or by approximate reproduction methods, “unica” [sic] (unique objects of great artistic, historic or scientific value) in order to preserve the indispensable documents of man’s evolution in the intellectual and cultural fields.”²¹

Reproductions invited multiplicity; the serial completeness with which they could be crafted promised pedagogical efficiency in teaching the masses, or “inauthentic audiences,” through tangible, repeatable examples of an ideal.²² The V&A’s Department of Circulations, which in fact preceded the museum’s official 1852 founding, manifested Cole’s ambition that the institution be a “schoolroom for everyone,” sending pre-curated exhibitions of materials, including reproductions, to

(London: V&A Publishing, 2018); Peter Connor, “Cast-Collecting in the Nineteenth Century,” in *Rediscovering Hellenism: The Hellenic Inheritance and the English Imagination*, ed. G. W. Clarke and J. C. Eade (Cambridge; New York: Cambridge University Press, 1989). Casts at the British Museum are discussed in Kate Nichols, *Greece and Rome at the Crystal Palace: Classical Sculpture and Modern Britain, 1854-1936*, Classical Presences (Oxford: Oxford University Press, 2015). Collections of metal electrotype reproductions were also a substantial component of the V&A’s collecting program, but have not enjoyed the same scholarly attention as plaster casts. For cast museums in France, see Françoise Bercé, “Le Musée de Sculpture Comparée de Viollet-le-Duc à Enlart,” in Léon Pressouyre (ed.), *Le Musée des monuments français* (Paris: Nicolas Chaudun, 2007), 57–89. German cast museums are discussed in Lionel G. Robinson, “The Berlin Museum of Casts,” *Art Journal* (March 1883). For American cast collections, see Chapter 3, “The American Cast Museum: An Episode in the History of the Institutional Definition of Art,” in Alan Wallach, *Exhibiting Contradiction: Essays on the Art Museum in the United States* (Amherst, Mass: University of Massachusetts Press, 1998), 38–56; Marietta Cambareri, “Italian Renaissance sculpture at the Museum of Fine Arts, Boston: The Early Years,” in Christopher R. Marshall, ed., *Sculpture and the Museum* (Farnham, Surrey; Burlington, VT: Ashgate, 2011); Pamela Born, “The Canon Is Cast: Plaster Casts in American Museum and University Collections,” *Art Documentation: Journal of the Art Libraries Society of North America* 21, no. 2 (Fall 2002): 8–13.

²¹ Julian Huxley, Director-General of UNESCO, to Chauncey J. Hamlin, President of ICOM, Letter regarding Draft Agreement Between the United Nations Educational Scientific and Cultural Organization and the International Council of Museums, 2 July 1948. Reprinted in *ICOM News* I, no. 1 (1948), 3.

²² This learning method derived from eighteenth-century Swiss education reformer Johann Heinrich Pestalozzi’s concept of *Anschaung*, translated as object lesson. Pestalozzi’s and later education reformer Maria Montessori’s teachings built on a belief that appropriate childrearing would preserve world peace, which influenced twentieth century emancipatory education movements such as those of Brazilian educator Paulo Freire. For a discussion of how “inauthentic” plaster was used to teach equally “inauthentic” audiences (art historian Kate Nichols’ term), including in the colonies, see Chapter 2, “The South Kensington Museum and the Colonial Project,” in T. J. Barringer and Tom Flynn, eds., *Colonialism and the Object: Empire, Material Culture, and the Museum* (London; New York: Routledge, 1998); Nichols, *Greece and Rome at the Crystal Palace*, 99–109. For a discussion of how the colonial object-lesson served as an instrumental aspect of developmentalist pedagogy, see Parna Sengupta, “An Object Lesson in Colonial Pedagogy,” *Comparative Studies in Society and History* 45, no. 01 (January 2003).

regional educational institutions and museums from the mid-nineteenth century until its closure in 1977.²³ (Although the activities of “Circ,” as it was called, originated as a means to improve manufacturing and exports, they followed Prime Minister Atlee’s goals for state-control and reconstruction in the post-WWII period. Peter Floud, its head from 1947 to 1960, noted that labels for these exhibitions were often deliberately descriptive and didactic; although he hoped to send shows to British dominions and colonies, asserting that “the national museum collections in London really belong to the whole Empire,” Circ activities were, for their lifetime, limited to the British Isles.²⁴)

Photographic reproductions—techniques of which also made their first public appearance at the Great Exhibition—promised even more mobility than three-dimensional sculptural objects. Their flatness distorted scale, creating commensurability between hitherto unequal objects and enabling new comparative analyses. This property inspired personal projects of collection and configuration, from Prince Albert’s commissioned photographic survey of Raphael’s works in his own possession and later in collections all over Europe following the 1851 fair, to German critic Aby Warburg’s “Bilderatlas Mnemosyne” of the 1920s.²⁵ More famously, this scale distortion inspired French Minister of Culture André Malraux’s “le musée imaginaire,” wherein the photograph’s capacity for circulation would allow viewers to hold in their imagination an (utterly personal) index

²³ Like other public education programs, “Circ” was a casualty of Thatcher government cuts. There is little scholarship on Circ’s full history, but for its programming in the post-WWII period until its closure, see Joanna S. Weddell, “Disseminating Design: The Post-War Regional Impact of the Victoria and Albert Museum’s Circulation Department” (Unpublished PhD dissertation, University of Brighton, 2018).

²⁴ Joanna Weddell, “The Prototype: The V&A Department of Circulation,” and “Draft Script of a Radio Interview with Peter Floud,” in Andreas Müller et al., eds., *Re-Reading the Manual of Travelling Exhibitions, UNESCO, 1953* (Leipzig: Spector Books, 2018), 145–53.

²⁵ Dorothea Peters, “Reproduced Art. Early Photographic Campaigns in European Collections,” in Meyer and Savoy, *The Museum Is Open*, 45–58. See also Anthony Hamber, ed., *Photography and the 1851 Great Exhibition* (New Castle, Delaware: London: Oak Knoll Press; V&A Publishing, 2018). Photographic reproductions (!) of Warburg’s project are now housed in the Warburg Institute in London).

of the world's art that was more comprehensive than any single museum could hold. Malraux first aired his idea in a speech at the opening session of UNESCO's inaugural General Conference in Paris in 1946.²⁶

Moholy-Nagy held that the photographic image would clarify the ambiguity of verbal communication and foster a new form of literacy,²⁷ and UNESCO/ICOM leaders were as captivated as Bauhaus theorists by photography's perceived truthfulness and its potential for synthesizing the arts and sciences through collage and montage. The photograph's objectivity, they surmised, would show people things as they really were, while its reproducibility would enable wide circulation. Internationalist proponents of photography experimented with the medium's capabilities in the space of the exhibition, using this practice to theorize the exhibition's potential for synthesis—of knowledge and sensory experience alike—as the ultimate *Gesamtkunstwerk*.²⁸ Former Bauhaus designer Herbert Bayer, for instance, collaborated with American photographer Edward Steichen in the early 1940s to produce compelling exhibitions for the Museum of Modern Art in New York that enveloped viewers in a “democratic surround.”²⁹ (Fig. 1.2) Kepes' groundbreaking 1951 exhibition

²⁶ Perry, “Immutable Mobiles,” 176. Following a term serving as Minister for Information (1945–1946) for President Charles de Gaulle, Malraux wrote his first book, *The Psychology of Art* (1947–1949), later revised as *The Voices of Silence* (*Les Voix du Silence*), the first part of which was published as *The Museum without Walls* (*Le Musée Imaginaire*).

²⁷ He went so far as to declare that “The illiterate of the future will be the person ignorant of the use of the camera as well as the pen.” László Moholy-Nagy, *Vision in Motion* (Chicago: Paul Theobald and Co., 1947), 208. This work was an extension of his earlier book: László Moholy-Nagy, *The New Vision* (1928, 4th Revised Edition), and, *Abstract of an Artist* (New York: Wittenborn, Schultz, Inc., 1994). For his totalizing ambitions of design, see Sibyl Moholy-Nagy, *Moholy-Nagy: Experiment in Totality*, 2d ed. (Cambridge, Mass: MIT Press, 1969). For his ties to the unified science movement (of which Otto Neurath was a key figure) through semanticist Charles Morris, see Victor Margolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946* (Chicago: University of Chicago Press, 1997).

²⁸ Herbert Bayer viewed exhibition design as a synthesis of the arts. Herbert Bayer, “Fundamentals of Exhibition Design,” *PM* 6:2 (Dec 1939-Jan 1940), 17-25. (Bayer also used mass-producible objects in his exhibits, a persuasive technique also used by the British Film Institute when circulating “educative” documentaries in low-income domestic communities and British colonies.)

²⁹ Bayer's and Steichen's collaborations on *Road to Victory* (1942) and *Airways to Peace* (1943), as well as Steichen's use of this technique for *Family of Man* (1955) are discussed in Fred Turner, *The Democratic Surround: Multimedia & American Liberalism from World War II to the Psychedelic Sixties* (Chicago; London: The University of Chicago Press, 2013). For how this technique of the “democratic surround” influenced the immersive filmic work of Ray and Charles

The New Landscape at the Massachusetts Institute of Technology, which influenced exhibition design—as well as approaches to architecture and planning—in the ensuing decades, sought to synthesize the arts and sciences through carefully crafted photomontages.³⁰ This potential for synthesis was of particular appeal to UNESCO, and the organization’s efforts to effect the same kind of synthesis can be seen in the successor handbook to the *Manual of Traveling Exhibitions*, titled *Temporary and Travelling Exhibitions*.

The promise of the photo-exhibition as a synthetic visual communication system appealed to humanists and social scientists who grappled with the role of the museum in the twentieth century, and whose efforts were often carried out in collaboration with the League of Nations which in turn shaped UNESCO projects. Educating globally dispersed publics through a profusion of serialized images, the photo-exhibition promised to extricate the museum from its acquisitive history and to untether it from a single physical site. In 1924, Austrian social scientist Otto Neurath established the Social and Economic Museum of Vienna (Gesellschafts- und Wirtschaftsmuseum) to unite urban planning with public education; the Museum served as a laboratory for developing the “Vienna method” of pictorial statistics and, through it, yet another attempt at devising a universal visual language.³¹ Extrapolating the logic of the photograph-exhibition, Neurath theorized that the goal of

Eames, including *Glimpses of the USA* (1959) and *Powers of Ten* (1966/1977), see Beatriz Colomina, “Enclosed by Images: The Eameses’ Multimedia Architecture,” *Grey Room* 2 (January 2001): 6–29.

³⁰ The pedagogical intent of Kepes’ exhibition and 1956 publication of the same name are discussed in Chapter 2, “Vision as Value,” in John R. Blakinger, *Gyorgy Kepes: Undreaming the Bauhaus* (Cambridge, MA: The MIT Press, 2019), 79–164. For the consonance between Kepes’ exhibition and the experimental designs of other visual practitioners, notably the Independent Group in Britain, see Kevin Lotery, *The Long Front of Culture: The Independent Group and Exhibition Design*, October Books (Cambridge, Massachusetts: The MIT Press, 2020). For the relationship between the exhibition and Kepes’ colleagues’ approaches to urban planning, see Ellen Shoshkes, *Jaqueline Tyrwhitt: A Transnational Life in Urban Planning and Design*, New edition, Design and the Built Environment (Ashgate Publishing Limited, 2013), 142; Farhan Karim, *Of Greater Dignity than Riches: Austerity & Housing Design in India*, Culture, Politics, and the Built Environment (Pittsburgh, PA: University of Pittsburgh Press, 2019), 133.

³¹ For the development of this language, ISOTYPE (International System of Typographic Picture Education) and its refinement by Marie Neurath, see Marie Neurath and Robin Kinross, *The Transformer: Principles of Making Isotype Charts* (London: Hyphen Press, 2009). For the diffusion of ISOTYPE in the United States through Neurath’s assistant,

the museum should be to democratically “produce copies of museums in standard series” and conceptualized exhibition halls as flexible and adaptable “universal spaces.”³² Patrick Geddes, a fellow planner from Scotland, developed a contemporaneous museum to foster world peace, called the Index Museum, which in turn derived from nineteenth-century French polymath Frédéric Le Play’s ideas for a world museum to connect French culture to that of the rest of the world.³³ Belgian bibliographer Paul Otlet, with lawyer Henri La Fontaine, embarked as early as 1910 on a project to create an international museum of world culture based on Geddes’ Index Museum, called the World

Rudolf Modley, who later worked at the Museum of Science and Industry in Chicago in the 1930s, founded Pictorial Statistics Incorporated in 1934, and co-founded Glyphs Inc. with cultural anthropologist Margaret Mead to create (yet another!) simplified pictorial language, see Charles R. Crawley, “From Charts to Glyphs: Rudolf Modley’s Contribution to Visual Communication,” *Technical Communication* 41, no. 1 (February 1994): 20–25. Otto Neurath’s role in the “Vienna Circle” of logical positivists—who strove toward the unity across fields of knowledge and endeavored to create an ambitious International Encyclopedia of Unified Science through the Mundaneum Institute—is discussed in John Symons, Olga Pombo, and Juan Manuel Torres, eds., *Otto Neurath and the Unity of Science* (Dordrecht; Heidelberg; London; New York: Springer, 2011). Neurath’s work as an urban planner is taken up in Nader Vossoughian, *Otto Neurath: The Language of the Global Polis* (Rotterdam: NAI Publications, 2011); Sophie Hochhäusl, *Otto Neurath - City Planning: Proposing a Socio-Political Map for Modern Urbanism* (Innsbruck: Innsbruck University Press, 2011). A contextualized discussion of Neurath’s work within the fields of architecture and planning in Red Vienna can be found in Eve Blau, *The Architecture of Red Vienna, 1919-1934* (Cambridge, MA: MIT Press, 2018).

³² Otto Neurath, “Museums of the Future,” *Survey Graphic* (September 1933), 458–463. Neurath imagined strategies for visual education that would allow visitors to “study the objects at their own speed” or be guided by a trained docent. Otto Neurath, “From Vienna Method to Isotype,” in *Empiricism and Sociology*, by Otto Neurath, ed. Marie Neurath and Robert S. Cohen (Dordrecht: Springer Netherlands, 1973), 214–48, https://doi.org/10.1007/978-94-010-2525-6_7. See also Loïc Charles and Yann Giraud, “Seeking the ‘Museum of the Future’: Public Exhibitions of Science, Industry, and the Social, 1910–1940,” *History of Science* 59, no. 2 (June 2021): 133–54. For a discussion of how this conception of the museum reduced architecture into a floating medium that integrated with the other ephemeral media of display, see Nader Vossoughian, “The Modern Museum in the Age of Its Mechanical Reproducibility: Otto Neurath and the Museum of Society and Economy in Vienna,” in *European Modernism and the Information Society: Informing the Present, Understanding the Past*, ed. W. Boyd Rayward (Aldershot, Hants, England; Burlington, VT: Ashgate, 2008), 241–56. See also Nerma Cridge, *Drawing the Unbuildable: Seriality and Reproduction in Architecture* (New York: Routledge, 2015).

³³ Patrick Geddes, “The Index Museum: Chapters from an Unpublished Manuscript,” *Assemblage*, no. 10 (December 1989): 65. For accounts of Patrick Geddes’ Index Museum (including the influence of Le Play), see Alessandra Ponte and Jessica Levine, “Building the Stair Spiral of Evolution: The Index Museum of Sir Patrick Geddes,” *Assemblage*, no. 10 (December 1989): 46; Helen Elizabeth Meller, *Patrick Geddes: Social Evolutionist and City Planner*, Pbk. ed., Routledge Geography, Environment, and Planning Series (London; New York: Routledge, 1993); Pieter van Wesemael, *Architecture of Instruction and Delight: A Socio-Historical Analysis of World Exhibitions as a Didactic Phenomenon (1798-1851-1970)* (Rotterdam: Uitgeverij 010, 2001); Mark Crinson, *Rebuilding Babel: Modern Architecture and Internationalism* (London New York: I.B. Tauris, 2017). For Le Play’s position on scientific observation as the gateway to truth, and his role in organizing international expositions, which also derived from the idea of a world museum, see Harry Freemantle, “Frédéric Le Play and 19th-Century Vision Machines,” *History of the Human Sciences* 30, no. 1 (February 2017): 66–93.

Palace (Palais Mondial).³⁴ Otlet briefly collaborated with Neurath in the interwar period on an effort to infinitely replicate a standardized encyclopedic museum filled with identical reproductions, that drew together their concerns with information science and social integration, respectively, and with Le Corbusier on a proposal to turn the museum into a resource for the League of Nations, which they retitled as the “Mundaneum”.³⁵ Otlet’s endeavors to collect pictorial material from all countries thus served as a precedent for UNESCO’s own efforts to this end, carried out through its Museums Division in its early years.³⁶ These approaches to museums as institutions for global dispersal and dissemination also suffused the views of UNESCO/ICOM museologists, who theorized new types that would be “flexible,” (as per Georges Henri Rivière) “dynamic,” (Jean Gabus), and capable of morphing between “minimum” and “maximum” forms as needed (André Lèveillé).³⁷

Photographic reproductions were taken up as circulatable pedagogical objects in museums, most notably by the Museum of Modern Art in New York, serving as a model for a post-war project in the same vein initiated by UNESCO. In 1931, MoMA prepared an exhibit of color reproductions of modern art, titled *A Brief Survey of Modern Painting*, for public schools in New York, which was so popular that MoMA began to provide circulating exhibition services to institutions across the

³⁴ See Alex Wright, *Cataloging the World: Paul Otlet and the Birth of the Information Age* (Oxford ; New York: Oxford University Press, 2014). The World Palace implemented Otlet and Fontaine’s Universal Decimal Classification (UDC) system that expanded on the existing Dewey Decimal System to organize information.

³⁵ Otlet’s architectural collaborator, Le Corbusier—whose unrealized Radiant City (*Ville Radieuse*) was also predicated on social reform—submitted a controversial proposal to build the League of Nations headquarters in Geneva, Switzerland (itself called the “Palace of Nations”) and would go on to contribute to the design the United Nations headquarters in New York. See the chapter “Well-Ventilated Utopias,” in Crinson, *Rebuilding Babel*, 93–142. For an argument that the World City, like World’s Fairs, was indebted to the French Beaux-Arts movement, see Carola Hein, *The Capital of Europe: Architecture and Urban Planning for the European Union* (Westport, CT: Praeger, 2004), 225. For a discussion of the “Mundaneum Affair” (Corbusier’s debate with critic Karel Teige over monumentality vs. minimalism as the universal responsibility of architects/architecture) see the reproduction of their respective positions (with an introduction by George Baird), in *Oppositions 4* (New York, 1976), as well as Eric Dluhosch’s introduction to the English translation of Karel Teige, *Minimum House* (MIT Press, 2002), vii–xxviii.

³⁶ Perry, “Immutable Mobiles,” 168.

³⁷ See ““Stones Also Die”: UNESCO and the Decolonization of Museums, 1960–1975,” in Lucia Allais, *Designs of Destruction: The Making of Monuments in the Twentieth Century* (Chicago: The University of Chicago Press, 2018).

United States.³⁸ Its 1932 *Modern Architecture* exhibition necessarily became a traveling show when MoMA reached out to other institutions to jointly mount (and share the cost) of the show. Fourteen responded positively, and the exhibit—ten models and 75 photographs—traveled in its original form for almost two years; a truncated version consisting only of photographs was circulated for a further five and a half years to institutions that could not afford the full exhibition.³⁹ MoMA's circulating exhibitions thus preceded its Department of Circulating Exhibitions, which was created in 1933 and continued to use reproductions in its programs.⁴⁰ Elodie Courter (later Osborn) served as its head, first as secretary and then as director, from 1934 to 1947, and led the development of exhibitions sent to thousands of institutions across the United States. (Fig. 1.3) UNESCO's own global project for circulating exhibitions of color reproductions launched in 1949, was indebted to the MoMA program for US audiences. The first, *Color Reproductions of Painting from 1860 to 1946*, showcased 50 works that overlapped with those in the first circulating MoMA show, handpicked by a committee of four that included MoMA curators Monroe Wheeler and René d'Harnoncourt.⁴¹

³⁸ The exhibition of 60 reproductions included commentary by director Alfred J. Barr, Jr., and was circulated to 86 venues between 1931 to 1939. "Circulating Exhibitions 1931-1954," *The Bulletin of the Museum of Modern Art* 21, no. 3/4 (1954): 4. A 1939 Rockefeller grant enabled program expansion, subsidizing the circulation of color reproductions at nominal fees. When this grant was used up in 1943, the Department worked with the Education Program to provide material for schools, which played an important role in continuing the exhibition program during WWII; exhibitions for circulation abroad were prepared with the Office of War Information. See also Rona Roob, Rachel Wild, and Jennifer Waxman, "Department of Circulating Exhibitions Records in The Museum of Modern Art Archives," *The Museum of Modern Art Archives*, 1992, <https://www.moma.org/research-and-learning/archives/finding-aids/CEF>.

³⁹ The older article, from 1940, lists the number of participating institutions as eleven. "Circulating Exhibitions," *The Bulletin of the Museum of Modern Art* 7, no. 5 (September 1940): 3-4; "Circulating Exhibitions 1931-1954," 4.

⁴⁰ "Circulating Exhibitions 1931-1954," 3-4, 6-7, 9-10.

⁴¹ Perry, "Immutable Mobiles," 168. MoMA's own International Circulating Exhibitions Program was inaugurated in 1952 through another five-year Rockefeller grant to serve Europe and Latin America. its first director, Porter A. McCray, succeeded Courter Osborn as head of the Department of Circulating Exhibitions. The International Council was formed to support and guide this program and assumed full sponsorship for it through official incorporation in 1956 when the grant ended. Notably, the Council scheduled its first annual meeting in 1957 in San Francisco to coincide with the 6th Annual Conference of the United States Commission for UNESCO; it later assumed responsibility for the design of the executive boardroom at UNESCO's Paris headquarters with Philip Johnson as architect. In 1969, the Department of Exhibitions (for local programming in New York) merged with the Department of Circulating Exhibitions (whose focus was regional) and became the Exhibition Program. By the 1990s, responsibility for international tours was folded into the Exhibitions Department, as the International Program turned its focus to other forms of international exchange. See

UNESCO circulated many more exhibitions of reproductions in subsequent years until the program finally ended in 1979.⁴²

Debates about the status of the original vis-à-vis the reproduction proliferated as techniques for the latter became increasingly sophisticated, with far-reaching effects on modes of collecting and display in museums in the twentieth century.⁴³ These anxieties pervaded official MoMA accounts from the 1950s of its programs of circulating reproductions, with the defensive assertion that “[a]ll these exhibitions utilize only the highest quality color reproductions, and are as carefully presented and prepared as exhibitions containing original works of art.”⁴⁴ (In her own *Manual*, Elodie Courter Osborn declared that “it is better to substitute a photographic reproduction of a first-rate work of art than to assemble collections of second class material for tour.”⁴⁵) MoMA exhibitions endeavored to judiciously curate a combination of originals and reproductions for its circulating exhibitions, a strategy for public education advocated by other museologists at conferences and in publications produced by UNESCO and ICOM.⁴⁶

Chapter 7: “The MoMA as an International Role Model During the Cold War: Triumph and Opposition,” in Jesús Pedro Lorente, *The Museums of Contemporary Art: Notion and Development* (Farnham ; Burlington, VT: Ashgate Pub, 2011), 199–230; Helen M. Franc, “The Early Years of the International Program and Council,” in *The Museum of Modern Art at Mid-Century: At Home and Abroad*, ed. John Elderfield, Studies in Modern Art 4 (New York: Abrams, 1994). See also Lill, Liu, and Rovanpera, “International Council and International Program Records Subseries I.A: International Program ICE-F Exhibition Files.” For Grace McCann Morley’s own efforts, see Alexandra Moschovi, “The Democratic Picture: Grace McCann Morley and Photography in the San Francisco Museum of Art,” *Classic Photo*, <https://theclassicphotomag.com/the-democratic-picture-grace-mccann-morley-and-photography-in-the-san-francisco-museum-of-art/>.

⁴² The second exhibition was also of paintings (but produced before 1860). The third was devoted to the work of Leonardo da Vinci, the fourth of Japanese stamps, the fifth of Chinese art, and the sixth of Persian miniatures. See UNESCO Bureau of General Services, Registry and Mail Division, *Index of Inactive Correspondence Files, Series 1946/1956*, 1966. <https://unesdoc.unesco.org/ark:/48223/pf0000090895>.

⁴³ On the role of wealthy private collectors on this shift, especially Joseph Duveen, see Chapter 3, “The American Cast Museum: An Episode in the History of the Institutional Definition of Art,” in Wallach, *Exhibiting Contradiction*, 38–56.

⁴⁴ “Circulating Exhibitions 1931-1954,” 9.

⁴⁵ Elodie Courter Osborn, *Manual of Travelling Exhibitions*, Museums and Monuments 5 (Paris: UNESCO, 1953), 18.

⁴⁶ Noting the concern that “spectators, confronted with imperfect replicas, may have their taste corrupted instead of trained to greater discrimination,” Huyghe, for instance, recommended always including “a few originals, carefully distinguished, to serve, as it were, as a standard of comparison; they will, by contrast, convey a better impression of the quality of the works themselves.” René Huyghe, “Co-ordination of International Art Exhibitions,” 16. In the revised

The use of reproductions also epitomized the contentious subject of the museum's role in public education. It was cheaper for institutions with limited financial resources to rent exhibitions of reproductions than of originals, while multiples of the same exhibition simultaneously traveling to several different locations enabled greater dissemination. Replicas could also potentially act as tactile object lessons for a learning public when original works could not be safely handled.⁴⁷ Huyghe declared that through methods such as these, the twentieth century museum had become "an active instead of a passive factor in society," and that those in charge of museums had the duty of making the art attractive as well as accessible to the public, developing public taste; in this regard, the exhibition "fulfils a profound need of our age" as an effective form of visual communication.⁴⁸ (Yet McCann Morley admitted that providing mass education through exhibitions was an idea that "provoke[d] controversy," eliciting "derogatory remarks about 'bargain price culture' [.]"⁴⁹) MoMA's program of circulating exhibitions aligned with the professed aims of UNESCO/ICOM to diversify the existing model of "large, very important exhibitions, among a fairly limited number of the great cities of the world" by also "go[ing] to the more remote regions of a country[.]"⁵⁰ In this manner, efforts to build the "defenses of peace" in human minds under the UNESCO/ICOM partnership attempted at first to provide universal access to the same cultural objects.

manual on traveling exhibitions, contributing author Hans C. Jaffé, assistant director of the Municipal Museums of Amsterdam, emphasized that an exhibition should contain at least one original object, for the "psychological impact it makes." H.L.C. Jaffé, "Temporary Exhibitions in Art Museums," in Grace McCann Morley et al., *Temporary and Travelling Exhibitions*, Museums and Monuments, X (Paris: UNESCO, 1963), 31.

⁴⁷ Molly Harrison, a curator at the Geffrye Museum in London who contributed several articles to UNESCO/ICOM publications, asserted that "Looking at things and learning about them intellectually is not sufficient," and as tactile objects of learning, "reproductions should not be scorned...so long as it is made perfectly clear which things are originals and which are not." Molly Harrison, "Education in Museums," in Douglas A. Allan et al., *The Organization of Museums: Practical Advice*, Museums and Monuments, IX (France: UNESCO, 1960), 89–90.

⁴⁸ René Huyghe, "Co-ordination of International Art Exhibitions," 1. 1

⁴⁹ Grace McCann Morley, "Museums and UNESCO," *Museum* Vol. II, no. 2, 1949, 11.

⁵⁰ Grace McCann Morley, "Foreword," in Courter Osborn, *Manual of Travelling Exhibitions*, 5.

Reproductions also served as a multi-pronged form of conservation. As art historian Rachel Perry points out, UNESCO's ambitious project to circulate exhibitions of color reproductions all over the world was, "in no small measure, a response to the massive spoliation of artworks by the Nazis during the war."⁵¹ The UNESCO-ICOM agreement drew the two organizations into cooperation "by stimulating, facilitating, and actively participating in the exchange of collections—especially duplicates and surplus materials in the fields of science... for universal collections."⁵² And so these leaders discussed the distribution of duplicate objects in major museums to smaller bodies, launched circulating exhibitions of both originals and reproductions, and debated the relative aesthetic merits of these serial objects.

Yet the ambition of conservation through reproductions quickly became more prosaic in scope. In his paper on traveling exhibitions read at ICOM's biennial conference in 1950, Louvre curator René Huyghe recounted endless examples of poor art handling that resulted in crumpled canvases, splintered frames, art dropped accidentally into seawater, damaged by workmen's tools, or simply left unsealed and unattended while in transit.⁵³ Valuable artifacts, having escaped the horrors of war, appeared to face more risk in their role as ambassadors for peace; reproductions could stand in for originals in more ways than one. The ICOM International Art Exhibitions Commission (the work of which will be discussed in more detail in Chapter 2) encouraged museums not only to prioritize the international circulation of contemporary works over older pieces, but also to circulate exhibitions of high-quality art reproductions.⁵⁴ For exhibits of originals and reproductions alike, McCann Morley encouraged institutions to design pre-circulatable catalogues or prospectuses of

⁵¹ Perry, "Immutable Mobiles," 170.

⁵² "ICOM's Relations with UNESCO," *ICOM News* vol. I, no. 1 (1948).

⁵³ René Huyghe, "Co-ordination of International Art Exhibitions," 16.

⁵⁴ *ICOM News* III, 4 (1950), 15.

proposed exhibitions to gauge interest, and suggested an exhibition exchange system wherein every member country might prepare a collection of contemporary paintings selected expressly for travel.⁵⁵

Moreover, in two issues of UNESCO periodical *Museum* in 1950 and 1951 on circulating exhibitions, Morley described the very challenges of traveling exhibitions that Osborn's manual would eventually tackle: packing, safe transportation, and an adaptable apparatus for "assuring practical and attractive installation under diverse conditions in different places," noting with approval that the Victoria and Albert Museum in London, the Arts Council of Great Britain, and the Museum of Modern Art in New York had devised effective systems for packing and transporting exhibitions.⁵⁶ (Figs. 1.4, 1.5) While this seemingly prosaic aspect of exhibition design has been entirely glossed over, the act of packing played a profoundly political role in the early years of UNESCO's project for circulating exhibitions of color reproductions. If it seemed as if the safety of the works while in transit almost took precedence over the content being transmitted to global audiences, it was because in deploying the *Color Reproductions of Painting* exhibition—at the same time that Huyghe and McCann Morley were expressing their concerns about object safety—UNESCO soon found packing to be a perilous problem that threatened to undermine the very peace they were endeavoring so mightily to build.

⁵⁵ See René Huyghe, "Co-ordination of International Art Exhibitions," (Report for International Council of Museums, Second Biennial Conference, London, 17-22 July 1950), 30 June 1950, 17. UNESCO/ICOM/BI/Conf.2/17. McCann Morley's recommendations may have referenced a 1949 pilot project, involving six countries. Huyghe references a report prepared by Georges Henri Rivière, 17 March 1950. The American Federation of Art (the same AFA contacted to solicit an author for the *Manual of Travelling Exhibitions*) was to handle preparing prospectuses and organizing the circulation of foreign exhibitions for the United States, and Helen Crocker Russell presented the first of these prospectuses, prepared by the Art Institute of Chicago at the request of the American Federation of Arts, at the UNESCO General Conference in Florence, May-June 1950. ICOM News III, 3 (1950), 16.

⁵⁶ Grace McCann Morley, "Museums and Circulating Exhibitions," *Museum* III, 4 (1950): 261–74 (265); Grace McCann Morley, "Introduction," *Museum* IV, 1 (1951): 5–28.

Fragile Diplomacy: Episodes in the Politics of Breakage

In June 1949, UNESCO Director-General Jaime Torres-Bodet sent out copies of a letter to UNESCO member states all over the world. (Fig. 1.6) In it, he explained that at its third conference held in Beirut in 1948, UNESCO had adopted a resolution to circulate an educational exhibition of color reproductions depicting “the development of painting from Impressionism until the present day.” Coordinated by UNESCO’s newly formed Department of Cultural Activities (CUA), it would be accompanied by a catalogue containing a brief history of the period and biographies of the artists represented, and the exhibition itself, weighing a little under a thousand kilograms, was “specially mounted, framed and packed in expertly designed cases to enable easy travelling and immediate exhibition on reception.”⁵⁷ If these states wished to participate, UNESCO would send them a prepackaged exhibition, bearing the costs for initial transportation. States would be responsible for the costs of circulating the exhibition internally, and for passing it along to an adjoining state if land borders facilitated such exchange.

Trouble arose in transit, and it is worth considering the extended case of the version of *Color Reproductions* that was sent to South Asia in its implications for international diplomacy. In December 1949, K.M. Gandhi, Secretary of the All India Association of Fine Arts in Bombay (now Mumbai) wrote to acknowledge that the exhibition had arrived in India, but that “on opening the cases, we found 15 glasses completely smashed with slight damages to some of the reproductions. [...] Glass being what it is, has been smashed presumably during transit.”⁵⁸ In a further letter, he

⁵⁷ See, for example, ALC.62660, Jaime Torres-Bodet to Minister for Foreign Affairs, Iraq, 10 June 1949. First Traveling Exhibition: Paintings 1860 – today: Iraq. See also its facsimile, Jaime Torres Bodet to Minister of Education and Industries, Government of Pakistan, 13 October 1948. 7 A 145.01 54/56 First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁵⁸ Extracts from letter from Shri K.M. Gandhi, 14 December 1949. 7 A 145.01 54/56 First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

helpfully suggested that the glass from *all* the reproductions be removed entirely, as “[t]his would prevent damage and on the whole the pictures could be seen much better[,]” adding an assurance that “the exhibits are never exposed to direct sunlight or dust and as such the removal of the glasses is not likely to cause much deterioration.”⁵⁹ Peter Bellew, coordinator of the exhibition, hastily vetoed this recommendation, however, on the grounds that “the question of glazing was very carefully gone into with experts before the exhibitions were assembled, and it was the opinion that certain reproductions, in view of the processes used, required this protection.”⁶⁰

The more pressing concern of coordinating with UNESCO’s insurers to repair this damage took several further letters between Paris and Bombay, as well as internal UNESCO memos, over the course of almost two years; this was in part because the initial letter from Gandhi from August 1950 (informing Bellew that repairs had already been initiated and requesting reimbursement for said repairs) was lost in transit, and in part because the UNESCO officer handling reimbursement for the exhibition seems not to have treated the matter with urgency despite a volley of increasingly frantic memos sent to him from Bellew’s office as the reminders for reimbursement from Gandhi to Bellew turned more frigid in tone.⁶¹ (One of the last memos reads, in polite desperation: “I think [this

⁵⁹ K.M. Gandhi to Director General of UNESCO, 13 February 1950. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶⁰ Peter Bellew to K.M. Gandhi, 3 March 1950. ALC.63075. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶¹ The correspondence on this minor insurance claim is comical in its thickness: Janak Kumari Asghar to Jean Thomas, 13 March 1950; ALC. Memo No. 494 from Madeline Probert to Jørgen Dilling-Hansen, 23 March 1950; ALC. Memo No. 508 from Peter Bellew to Jørgen Dilling-Hansen, 31 March 1950; K.M. Gandhi to Peter Bellew, 13 January 1951; ALC. Memo No. 865 from Peter Bellew, Arts and Letters, to Jørgen Dilling-Hansen, 24 January 1951; K.M. Gandhi to Peter Bellew, 30 January 1951 (containing also the following copies: K.M. Gandhi to Peter Bellew, 5 August 1950; Letter No. IC. 2356 from Balmer Lawrie and Co. Ltd to All India Association of Fine Arts, Bombay, 31 July 1950; Letter No. 0.10785 from Pitt and Scott Ltd. to Balmer Lawrie and Co. Ltd, 24 July 1950); ALC. Memo No. 883 from Peter Bellew, Arts and Letters, to Jørgen Dilling-Hansen, 9 February 1951; Madeline Probert to K.M. Gandhi, 12 February 1951; K.M. Gandhi to Madeline Probert, 9 March 1951; ALC. Memo No. 923 from Madeline Probert to Jørgen Dilling-Hansen, 22 March 1951; Madeline Probert to K.M. Gandhi, 13 April 1951; ALC. Memo No. 940 from Madeline Probert to Jørgen Dilling-Hansen, 13 April 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

delayed reimbursement] is placing Unesco in a somewhat unfavorable position vis-à-vis both the All India Association of Fine Arts and the Government authorities in India.”⁶²) Needless to say, the insurance affair did little to help UNESCO’s diplomatic cause.

Worse was to come. A few months into the exhibit’s tour of India, the All India Association of Fine Arts inquired into the possibility of purchasing it.⁶³ Bellew confided to his superior, Acting-Director of CUA Jean Thomas, that it would be good to facilitate this request, and send a fresh exhibit to other participating countries in South and Southeast Asia, as

there has been quite a bit of damage to the exhibition while it has been circulating in India. It would consequently seem a better idea to let the Indians retain this exhibition that to send on to Pakistan and probably Burma and the Philippines, an exhibition which has been considerably “shopsoiled.”⁶⁴

Yet (perhaps on hearing the cost of the exhibit) the Indians changed their minds,⁶⁵ and UNESCO decided to let the reproductions continue their Asia tour, which turned out to be another diplomatic misstep. Despite plans to transfer the exhibition to Pakistan in mid-1950, a series of delays after its showing in Kashmir resulted in its non-arrival until mid-1951.⁶⁶ Pakistani patience had worn thin at this point, as the exhibition’s non-arrival had made scheduling a program of travel impossible.⁶⁷ On opening the crates and finding their contents to be in a “deplorably broken condition and...not fit

⁶² ALC. Memo No. 923 from Madeline Probert to Jørgen Dilling-Hansen, 22 March 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶³ Janak Kumari Asghar to Jean Thomas, 13 March 1950. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶⁴ ALC. Memo No. 508 from Peter Bellew to Jean Thomas, 20 April 1950. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶⁵ Jean Thomas to J.K. Asghar, 20 April 1950; J.K. Asghar to Thomas, 12 May 1950; ALC. Memo No. 566 from Peter Bellew to Jean Thomas, 30 May 1950; Jean Thomas to P.N. Kirpal, 10 July 1950; J.K. Asghar to Jean Thomas, 14 July 1950. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶⁶ N.S. Junankar to UNESCO Director General, 9 May 1951; Jean Thomas to P.N. Kirpal, 25 June 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶⁷ Jaime Torres Bodet to Akhtar Husain, 12 September 1950; Akhtar Husain to Jean Thomas, Director of Cultural Activities, UNESCO, 2 May 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

for public exhibition,” therefore, representatives of Pakistan’s National Commission for UNESCO were deeply affronted.⁶⁸ As Akhtar Husain, Secretary of the National Commission, disclosed in a letter to Thomas,

The fact that these reproductions have been received after about two years from India has created a painful impression and I am to request that Unesco...in future should take proper precautions against the repetition of similar accidents.⁶⁹

They were little inclined, therefore, to entertain UNESCO’s request to file an insurance claim and were slow to produce a full report of the condition of the reproductions.⁷⁰ (Fig. 1.7) At first, damage to the materials were assumed to have occurred in transit, but procuring requisite documentation from the Indian Railway Authorities to substantiate this claim for insurance purposes took a further *four and a half years*, thanks to slow correspondence between UNESCO and Indian authorities.⁷¹

The situation that was not at all improved when it transpired that because the Pakistani representative who signed for the crates did not open them for inspection when collecting them from

⁶⁸ Akhtar Husain to Jean Thomas, 13 June 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁶⁹ Akhtar Husain to Jean Thomas, 13 June 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷⁰ Jean Thomas to Akhtar Husain, Secretary, Pakistan National Commission for UNESCO, 27 June 1951; N.S. Junankar to Jean Thomas, 21 July 1951; Akhtar Husain to E.J. Carter, 25 August 1951; Jean Thomas to Akhtar Husain, 18 September 1951; Akhtar Husain to Jean Thomas, 27 September 1951; Pere Bosch-Gimpera to Educational Advisor, Government of Pakistan, 19 October 1951; Akhtar Husain to Pere Bosch-Gimpera, 6 November 1951; Jean Thomas to Deputy Secretary to the Government of India, 20 November 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷¹ Most of the UNESCO correspondence here are requests for updates on the matter. P. Bosch-Gimpera to Deputy Secretary, Government of India, 14 December 1951; N.S. Junankar to E.J. Carter, 12 January 1952; Jean Thomas to Deputy Secretary to the Government of India, 29 January 1952; Jean Thomas to Deputy Secretary to the Government of India, 16 September 1952; N.M. Tagore to Jean Thomas, 16 October 1952; Jean Thomas to Deputy Secretary to the Government of India, 11 February 1953; N.S. Junankar to Jean Thomas, 6 June 1953; Jean Thomas to Secretary to the Government of India, 24 July 1953; Jean Thomas to Educational Adviser to the Government of Pakistan, 17 November 1953; Imdad Husain to Jean Thomas, 22 January 1954; Michel Dard to Secretary to the Government of India, 8 February 1954; Michel Dard to Educational Adviser to the Government of Pakistan, 9 February 1954; N.S. Junankar to Head of Arts and Letters Division, 4 March 1954; Michel Dard to Secretary to the Government of India, 16 March 1954; N.S. Junankar to Head of Arts and Letters Division, 26(?) April 1954; Michel Dard to Secretary, Ministry of Education?, to the Government of India, 17 May 1954. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

the Indian Railway Authorities, “the moral responsibility for the damage [was found to be] that of Pakistan.”⁷² “[A]t the time of taking delivery of the packages, the Deputy High Commissioner for Pakistan in India, Jullundur, was not aware that the packages were insured,” Pakistani official Imdad Husain wrote sourly to Michel Dard of CUA, “otherwise he would not have accepted the delivery of the packages without having checked their contents.”⁷³ Rather than pursue the matter of insurance further, UNESCO officials decided to “present” the exhibition to Pakistan, a euphemism for disposing of it entirely, as Dard confessed that the exhibition was “not fit for further showing, [and] certainly not be worth our while to bring it back to Paris and to have it put into condition (even if this would be possible), for circulation to another Member State.”⁷⁴

The situation was far from an unfortunate aberration, as a very similar situation unfolded at the same time—from boxes arriving damaged,⁷⁵ to drawn-out discussions about insurance,⁷⁶ to delays in shipping across national borders so protracted that they caused diplomatic tensions⁷⁷—for

⁷² Michel Dard to Educational Adviser to the Government of Pakistan, 17 May 1954; Michel Dard to Educational Adviser to the Government of Pakistan, 21 April 1955; Memo from Madeline Currail to Michel Dard, 21 April 1955; Imdad Husain to Michel Dard, 21 May 1955; Michel Dard to Secretary, National Commission of Unesco, Pakistan, 7 October 1955; Imdad Husain to Michel Dard, 19 October 1955; Imdad Husain to Michel Dard, 19 December 1955. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷³ Imdad Husain to Michel Dard, 19 December 1955. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷⁴ ALC Memo No. 2403 from Michel Dard to Mr Adams, 16 April 1956; Michel Dard to Secretary, National Commission for Unesco, Ministry of Education, Government of Pakistan, 16 April 1956. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷⁵ Ali Asghar Hekmat to Director General of UNESCO, 22 July 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷⁶ E.J. Carter to Ali Asghar Hekmat, 13 August 1951; Jean Thomas to Ali Asghar Hekmat, 8 January 1952; Jean Thomas to Ali Asghar Hekmat (telegram), 22 February 1952; Jean Thomas to Ali Asghar Hekmat (telegram), 14 May 1952; ALC Memo No. 1307 from Peter Bellow to Mr. Aboussouan, 23 June 1952. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

⁷⁷ ALC Memo No. 420 from Peter Bellew to Jean Thomas, 25 January 1950; ALC Memo No. 549 from Madeline Probert to Jean Thomas, 2 May 1950; Jean Thomas to the Minister of National Education, Turkey, 6 June 1951. 7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56.

See also Thomas to Minister for Foreign Affairs, Iraq, 4 January 1950; E.J. Carter to Minister of Foreign Affairs, Iraq, 17 November 1950; Jean Thomas to Minister of Foreign Affairs, Iraq, 21 May 1951; Jean Thomas to Minister of Foreign Affairs, Iraq, 11 September 1951; First Traveling Exhibition: Paintings 1860 – today: Iraq. UNESCO Archives.

the exhibition that was sent to be shared between Iran, Iraq, and Turkey. (UNESCO abandoned its emissary in Turkey rather than risk sending it on to Syria.⁷⁸) In trying to foster peaceful relations, UNESCO appeared to be successfully weakening them. Rachel Perry has engagingly analyzed the French bid for cultural ascendancy in the content of UNESCO's exhibitions of color reproductions at the outset, but archival correspondence shows that in the actual *deployment* of these exhibitions, the material politics of packing overshadowed the aesthetic politics of painting, and that the reproductions were certainly not the "immutable mobiles" they were intended to be.⁷⁹

It is here that we can see a shift in UNESCO's activities, from circulating art reproductions to considering how investing in professional training might itself be a worthy diplomatic endeavor, that would realistically start from and be managed by museums. If circulating exhibitions were really, as UNESCO so fervently believed, a key to peacebuilding, then it was paramount that the museum peoples of the world learn to speak a universal and standardized language of how to pack, transport, insure, and care for works of art sent as ambassadors out into the world. Here too, as in the content of the exhibitions, the near-fanatical care with which MoMA exhibitions were prepared served as a valuable precedent for UNESCO.

MoMA and the Military Science of Packing

In 1945, McCann Morley wrote a warmly appreciative letter to Courter Osborn, then head of MoMA's Department of Circulating Exhibitions, praising not only the latter's "very valuable service," but also the consummate level of care she provided to the works of art being sent on tour:

Your boxes are extremely sturdy, and you pack extremely well...[T]hanks to the kind of packing you do, you have never had the experience of opening a box of a show which you are

⁷⁸ ALC Memo 1631 from Peter Bellew to Michel Dard, 26 November 1963.

⁷⁹ Perry, "Immutable Mobiles."

sharing with other museums to discover that someone had driven a nail clear through a corner of a canvas and had ripped a hole in another by putting a pointed frame against it.⁸⁰

Having served as inaugural director of the San Francisco Museum of Art (now SFMOMA)—which was at the time a small establishment with limited collections and heavily reliant on works sent on exhibition from other institutions—prior to her UNESCO appointment, McCann Morley was well-versed in these concerns. (Fig. 1.8) (Other letters from Courter Osborn to McCann Morley contain further recommendations for protecting works of art in transit based on MoMA practices; one, for instance, included the formula of the varnish used at MoMA for the colour reproductions they circulated.⁸¹) Francis Henry Taylor, on leaving his post as at the Worcester Art Museum to take up the directorship at the Metropolitan Museum in 1940, wrote a similar note:

“I have had a great deal of experience in the last dozen years with traveling shows of one kind or another, and I think that Miss Courter has done the best job of anyone that I have seen. The exhibitions arrived on time, everything properly packed, mounted and labeled, and I was always impressed with Miss Courter’s courtesy and efficiency.”⁸²

It is worth dwelling on a 1954 account of MoMA packing practices penned by an unnamed member of its staff to appreciate the extent of McCann Morley’s and Taylor’s commendations. The writer described how borrowing institutions received objects in bespoke boxes—carefully designed to hold their contents securely—along with a hefty pile of paperwork. (Figs. 1.9, 1.10) Borrowers had to study “detailed instructions for unpacking, installing, repacking, and shipping,” with directives such as: “If plexiglass is dirty, clean with chamois provided. Any other material sets up static electricity which attracts more dust and lint.” (Clean gloves were also included for handling the

⁸⁰ Grace McCann Morley to Elodie Courter [Osborn], 8 November 1945. Box 69:1 Outgoing Correspondence, 1945 Oct-Nov. SFMOMA Archives.

⁸¹ Elodie Courter to Grace McCann Morley, 12 December 1944. Box 68:1 Museums: Museum of Modern Art, 1945. SFMOMA Archives.

⁸² “Circulating Exhibitions,” 6.

objects.) Insurance reports and the loaned objects' most recent condition reports—records of examination, analysis, and treatment—accompanied the instructions; borrowers were expected to complete condition reports of their own when returning the objects. (Chapter 3 will discuss condition reports in further detail.) In fact, the writer declared, “Many persons or institutions untrained in museum methods have received through such procedures a valuable object lesson in the respect due to works of art.”⁸³

If UNESCO was modeling its exhibitions on those circulated by MoMA's Department of Circulating Exhibitions, then interactions like those in India and Pakistan made it painfully clear why such seemingly fastidious details as a pair of gloves and a cleaning cloth were so integral to MoMA's package deal. In teaching borrowers to use these materials, as well as to review insurance forms and complete their own condition reports, MoMA was engaging in a form of professional training that the staff of UNESCO's CUA could not afford to expend their energy on, not being museum professionals themselves.

MoMA's militancy about packing derived from what it had learned (and was learning) from military experiments in the art of logistics in the first half the twentieth century. Rapid developments in the field of packaging were prompted by the outbreak of World War I, the most significant of which was the establishment of the Forest Products Laboratory as the research arm of the United States Department of Agriculture's Forest Service. Commencing research on wooden containers in 1915, it established testing methods and equipment that became “more or less standard” in the following decade, and the War Department's specifications for containers intended for overseas

⁸³ “Circulating Exhibitions 1931-1954,” 18–19.

shipping were put in place using the Laboratory's testing data.⁸⁴ In the interwar period, these packing technologies were put to commercial use and improved upon further.⁸⁵ In turn, the global scale at which WWII logistics had to be designed offered military engineers in the United States—tasked with providing an increasing quantity of supplies and equipment to theaters of war in the rest of the world⁸⁶—an urgent incentive to invest further energy in testing solutions for reliable packaging for these provisions.⁸⁷ (Figs. 1.11, 1.12) As engineers found through testing in the field and laboratory, appropriately designed packaging could ensure that valuable supplies reached theaters of war in different parts of the world intact and unspoiled. Packing for long-term preservation came into its own during this time, and museums made use of these advances when

⁸⁴ John F. Keeley, *Packing for Foreign Markets*, Trade Promotion Series 1 (Washington, D.C.: United States Government Printing Office, 1924), 1, 4. These tests were carried out in collaboration with the National Association of Box Manufacturers, the National Canners' Association, and the National Wholesale Grocers' Association, with a view to establishing standards for boxes used for these purposes.

⁸⁵ Joseph Leeming, *Modern Export Packing* (Washington, D.C.: United States Government Printing Office, 1940), 3. Leeming's book was written as an update to Keeley's.

⁸⁶ Until the advent of WWII, packaging as a form of preservation had been little studied in the United States, and yet increasing scarcity in Europe compelled the U.S. to quickly improve their systems. Engineers looked to Britain as they tested new materials and technologies, whose packaging-related slogan, "Britain Delivers the Goods!" was a source of inspiration (see Louis C. Barail, *Packaging Engineering* (New York: Reinhold Publishing Corporation, 1954), 289; Frank J. DePalma and William Q. Martin, "Packaging Development," *Army Logistician*, October 1983, 22.) and chagrin (see histories of how the British took advantage of Lend-Lease imports to maintain markets abroad: Justus D. Doenecke, *Storm on the Horizon: The Challenge to American Intervention, 1939-1941* (Lanham, MD: Rowman & Littlefield, 2003), 192; Thomas C Mills, *Post-War Planning on the Periphery: Anglo-American Economic Diplomacy in South America, 1939-1945*, 2022, 80. The British Empire had long grappled with preserving goods in a variety of climates that was honed by war; see British Standards Institution, *British Standard Recommendations for Preservation and Packaging for Tropical Theatres of War*, B.S. 1133 (London: British Standards Institution, 1943).

⁸⁷ For overviews of packaging developments in the United States during WWII (written largely by professionals in the field) including the founding of the Joint Army-Navy Packaging Board to develop standards for packaging supplies, see Joseph C. Maloney Jr., "The History and Significance of Military Packaging," DSMC Press Technical Report (Fort Belvoir: Defense Systems Management College, April 1996); Benjamin King, Richard C. Biggs, and Eric R. Criner, *Spearhead of Logistics: A History of the United States Army Transportation Corps* (Washington, D.C.: Center of Military History, United States Army, 2001), 151–53. For the crucial intertwining of packaging and transportation in WWII logistics—especially through the coded packages of supplies sent for the 1943 invasion of North Africa—see Louis C. Barail, *Packaging Engineering*, 295; James A. Huston, *The Sinews of War: Army Logistics 1775-1953* (Washington, D.C.: Office of the Chief of Military History, United States Army, 1966), 518–19. For the intersecting developments in food science and packaging engineering in the United States in response to the world wars (e.g., American Can Company, the Container Corporation of America, and Borden) see Deborah Fitzgerald, "World War II and the Quest for Time-Insensitive Foods," *Osiris* 35 (August 1, 2020): 291–309. Particularly instructive is the invention of the jerrycan: Lieutenant Colonel David C. Rutenberg and Jane S. Allen, eds., *The Logistics of Waging War: American Military Logistics 1774-1985* (Gunter Air Force Station, AL: Air Force Logistics Management Center, 1997), 123.

moving works of art out of museums and into temporary storage facilities for wartime safekeeping.⁸⁸
(Figs. 1.13, 1.14)

That MoMA adopted these practices is evident from Courter Osborn's *Manual*, which is filled with diagrams of how to prepare and pack objects for travel, teaching museum professionals how to organize objects in spaces outside the public event of the exhibition, following MoMA's methods. (Fig. 1.15) The *Manual* standardized Courter Osborn's bodily practice and circulated American packing methods honed during wartime to an international audience. For instance, a stock diagram produced by the National Wooden Box (now National Wooden Pallet and Container) Association depicting joints used in box construction, which first appeared in a trade publication that summarized the research of the Forest Products Laboratory, was replicated not only in books in the budding field of packaging engineering in the late 1940s and early 1950s, but also in Courter Osborn's own handbook, visually standardizing it.⁸⁹ (Fig. 1.16) There is, of course, some irony in the fact that although exhibitions were intended to counter the divisive devastation of war, the professional practices of exhibition conservation are indebted to forms of conservation honed during wartime circulation. While the MoMA traveling exhibition program was renowned by the end of WWII, so was Courter Osborn herself for her packing skills, as we have seen from the laudatory

⁸⁸ See Robert G. Rosegrant, "Packing Problems and Procedures," *Technical Studies in the Field of the Fine Arts* X, no. 3 (January 1942): 138–56. See also several pamphlets and booklets produced for the same purpose during this time: War Department Pamphlet No. 31-103, *Civil Affairs Information Guide: Field Protection of Objects of Art and Archives*, 12 May 1944; *Emergency Protection of Works of Art in Private Houses: Instructions Prepared by a Committee of the Association of Art Museum Directors* (Museum Press, The Metropolitan Museum of Art, New York), n.d.; *Procedure for Handling, Packing, and Removal of Art Objects in Emergency* (Museum Press, The Metropolitan Museum of Art, New York), December 1941; *Emergency Protection of Works of Art* (Notes prepared during a conference held at the Fogg Museum of Art, Harvard University, Cambridge, MA, 9-21 March 1942), Conservation Department History, b. 10, f. Pamphlets, 1939-1946. Harvard Art Museums Archives. The two latter publications recommended that box construction be in style no. 4, depicted in Bulletin no. 14, Association of American Railroads, Freight Container Bureau; the last one referenced Rosegrant's article in providing advice on packing to guard against shocks and temperature/humidity fluctuations.

⁸⁹ Keeley, *Packing for Foreign Markets*, 23; Leeming, *Modern Export Packing*, 15; Louis C. Barail, *Packaging Engineering*, 100; Walter Stern, *The Package Engineering Handbook* (Chicago, IL: Board Products Publishing Co., 1954), 210; Stern, 210; Courter Osborn, *Manual of Travelling Exhibitions*, 32.

letters she received from McCann Morley and Taylor. Through her handbook for UNESCO, her expertise traveled even further.

Manuals, Dissemination, and the Problem of Expertise

Elodie Courter Osborn's *Manual of Travelling Exhibitions* consisted of four short chapters: the first discussed the origins of the traveling exhibition, provided sample forms for scheduling exhibitions, and described methods of displaying different types of art objects; the second outlined general rules of packing art for travel and provided detailed instructions for preparing certain types of work for shipment; the third provided an overview of transport by road, rail, and sea; and the final chapter examined types of insurance, discussing certain general policies and exclusions. These topics responded explicitly to the administrative problems that UNESCO officials handling the *Color Reproductions* exhibitions grappled with, as well as similar concerns that arose in MoMA's own exhibition program.⁹⁰ It proved extremely popular, and she received warm praise for this work. Director of the Carnegie Institute Department of Fine Arts Gordon Washburn sent (in his words) a "fan note" to Osborn to congratulate her, saying that "such a book ought to be financed by the American Association of Museums or even by the Metropolitan Museum."⁹¹ The manual was also reviewed favorably by publications in the USA, Egypt, Spain, and Poland for drawing from diverse sources, showcasing both museum and non-museum exhibitions, and providing great detail in a

⁹⁰ For instance, one reason why MoMA offered the truncated version of the *Modern Architecture* exhibit (i.e., only reproductions, and at reduced scale) to smaller institutions was that models were "very expensive, easily broken and costly to transport," increasing the costs of insurance." "Circulating Exhibitions," 4. By the 1950s, the rising costs of packing and express transportation made it difficult for MoMA to offer exhibitions to secondary schools at low cost, while in general, originals were harder to circulate in part because of their higher insurance rates. "Circulating Exhibitions 1931-1954," 10, 14.

⁹¹ Gordon Washburn to Elodie Courter Osborn, 29 December 1953. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

limited number of pages.⁹² Annemarie Pope, chief of the Smithsonian Institution Traveling Exhibition Service (SITES) which served as a distributor of the manual, urged UNESCO to revise and republish “this outstanding, indispensable manual,” as SITES had been overwhelmed by the demand for it and had given out all its copies. Pope declared that there was “no other comparable handbook available,” and “this type of publication [would be] invaluable for museum curators all over the world.”⁹³ Yet it was in large part because of the intervention of Grace McCann Morley that Courter Osborn was selected as author at all.

At the Sixth Session of the UNESCO’s General Conference in 1951, a resolution was passed to prepare and circulate a brochure on the techniques of exchange of traveling exhibitions of art.⁹⁴ UNESCO contacted the American Federation of Arts, a nonprofit organization founded in 1909 to arrange traveling visual arts exhibitions, and which had at the time itself circulated almost 2000 exhibitions to locations within and outside of the USA, to solicit suggestions for a suitable author.⁹⁵ McCann Morley, who had served as the first head of UNESCO’s Museums Division, named Osborn as an “even better” choice as author of the manual than the original suggestion of Katherine Kuh (herself a pioneering museum profession, serving at the time as the first female curator of European art and sculpture at the Art Institute of Chicago).⁹⁶

⁹² Donald L. Weismann, “Review: *Manual of Traveling Exhibitions* by Elodie Courter Osborn,” *College Art Journal*, Vol. 13, No. 3, Spring 1954, 245-246. E. Gordon Rice, “Review: *Manual of Traveling Exhibitions* by Elodie Courter Osborn,” *Art Education*, Vol. 7, No. 2, February 1954, 10-11. UNESCO Press Review No. 6, 23 February 1954, 3, WS/034.9; Note concerning the *Manual of Travelling Exhibitions*. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

⁹³ Annemarie Pope to Luther Evans, 8 May 1958; Annemarie Pope to Rudolf Salat, 18 September 1958. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

⁹⁴ This was Resolution 4.121 B5 of the 1952 programme.

⁹⁵ Grace McCann Morley to Jan K. van der Haagen, 13 December 1951. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives. For statistics on AFA exhibitions, see: “A Century in the Arts,” *American Federation of Arts*, <https://www.amfedarts.org/about-the-afa/afa-history/>.

⁹⁶ Grace McCann Morley to Jan K. van der Haagen, 13 December 1951. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

The selection of the American Federation of Arts (rather than, for instance, the Arts Council) to decide on an author, and of Courter Osborn herself, had a lasting impact on the *Manual* and its successor publication. Courter Osborn's manual acknowledged the contributions of several museum professionals, most of whom worked for institutions based in New York. One was Robert Sugden, Registrar at the Metropolitan Museum of Art, who had also recently published a book on administrative practice titled *Safeguarding Works of Art* (1948). It too was divided into four chapters (on storage, packing, transportation, and insurance.) Courter Osborn's chapter on packing reproduced parts of Sugden's chapter on the same (which itself drew on an article on packing for wartime evacuation and storage by Robert G. Rosegrant, Registrar at the MFA in Boston);⁹⁷ her manual also appeared to generally lean on the structure of Sugden's work for its own. Courter Osborn's colleagues at MoMA, Dorothy H. Dudley (who we will see more of in Chapters 2 and 3) and Virginia Pearson, Registrar and Circulation Manager respectively, were acknowledged for their contributions. Courter Osborn's reliance on administrative staff, specifically registrars, at art institutions, was enshrined in her manual.

It is perhaps for these reasons—UNESCO's dire needs in the realm of packing, coupled with the administrative expertise Courter Osborn channeled to this end—that her manual diverges so dramatically from the burgeoning collection of books on exhibition design that were being written

⁹⁷ See Robert Parkinson Sugden, *Safeguarding Works Of Art: Storage, Packing, Transportation And Insurance* (New York: The Marchbanks Press, 1948), 4. Sugden's text was, significantly, reviewed by Murray Pease (Associate Curator in Conservation and Technical Research) and John. J. Wallace (Superintendent of Buildings) at the Metropolitan. Sugden himself relied on an article on packing by Robert G. Rosegrant, Registrar of the Museum of Fine Arts in Boston, which appeared in *Technical Studies in the Field of the Fine Arts*, published by Harvard University's Fogg Museum. Rosegrant served on the Massachusetts Committee of Public Safety's Committee for the Protection of Valuable Objects and authored its first Bulletin on how to evaluate and protect cultural objects. See Chapter 3 for a further discussion of the Fogg and *Technical Studies*. Dudley Easby (whom we met in the Introduction) reviewed the chapter on insurance, as did two insurance brokers, Lewis N. Lukens, Jr., and Henry H. Livingston. See Chapter 4 for an extended discussion of the collaboration between conservators, registrars, and insurance brokers in the field of risk management.

contemporaneously by exhibition designers like Sir Misha Black in Britain, and George Nelson in the United States, which focused almost entirely on problems of display and persuasion.⁹⁸ Courter Osborn, meanwhile, offered comparatively little advice on drawing in publics through enticing exhibition design. Instead, she provided detailed instructions for each of the stages of transporting works of art. The appendices at the end of her manual included sample institutional forms, general handling rules for specific objects, and a sample insurance policy for fine arts coverage. Abundant diagrams of packing solutions appeared in line with the body text for immediate reference, but the illustrations of exhibition display referenced in the text were included in a black and white block at the end of the manual.⁹⁹ The *Manual* took seriously, as registrars and conservators might (and as Courter Osborn herself did), the wear of the actual travel necessitated by a circulating exhibition, emphasizing that seemingly interstitial moments leading up to and following the exhibition shaped the reality of the event itself. Certainly, in the case of *Color Reproductions* exhibition in India and Iran, where in transit damage had occurred was of equal (if not more) political significance than where the exhibitions went on view.

⁹⁸ See Misha Black, *Exhibition Design* (London: Architectural Press, 1950), George Nelson, *Display* (New York: Whitney Publications, 1953), James Gardner and Caroline Heller, *Exhibition and Display* (New York: F.W. Dodge Corp, 1960). One exception is James H. Carmel, *Exhibition Techniques, Traveling and Temporary* (New York: Reinhold Pub. Corp, 1962), which was written after consultation with staff in UNESCO's Museums Division, and references Courter Osborn's handbook (as well as Dudley's *Museum Registration Methods*) in its included section on insurance, alongside detailed sections on exhibition design accompanied by color illustrations. Frankly, I see it as the book UNESCO might have produced if it were not operating on a shoestring budget, because Carmel also did what UNESCO staff fruitlessly urged authors of the revision to do, which was discuss methods for structural framing, in line with UNESCO's desire to make the manual relevant for "underdeveloped" nations. Carmel's supplement on structural framing systems included discussions of Struc-tube, Scissorpak, Ivelpak, E-Z Set, Adapt-A-Strut, Omni, Vizupole, Unistrut, Poli-plane, Deca-Pole, Octopus, Mero, Embru, Dexion, and Boilot, all hailed as a new form of development in which adaptable, movable structures were important. (Nathan Stolow would recommend using Dexion for storage systems. See Chapter 3, n81).

⁹⁹ To be fair by Courter Osborn, the book was constrained by funding limitations, so only a selection of the images she selected were used in the manual, and were relegated to the back of the volume to save printing costs. Raymonde Frin to Elodie Courter Osborn, 7 July 1952. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

When UNESCO embarked on the project to find a suitable author for its handbook, the intended purpose focus was far broader than Courter Osborn's specialized vision—or perhaps, to be more accurate, it was more ambiguous. The focus on art exhibitions at the outset of the project, for instance, was clear from the identification of The American Federation of Art to be contacted for author suggestions. Resolution 4.121 B5 of the 1952 UNESCO program, under which the *Manual* was commissioned, was, after all, a proposed “brochure on the techniques of the exchange of traveling exhibitions of art.”¹⁰⁰ But when UNESCO Director-General Jaime Torres Bodet read its proposed work plan, he requested that the manual be usable in technically “underdeveloped” countries, so that it could be utilized in relevant UNESCO projects; Jan K. Van der Haagen, then head of the Museums and Monuments Division, made this change accordingly (“la brochure soit utilisable même dans les pays dits arriérés”) to the original letters drafted by McCann Morley to be circulated to potential authors, which had contained no such imperative.¹⁰¹

The ambiguity of UNESCO's intended purpose surfaced again at the end of the publication process when Courter Osborn had handed in her manuscript and was working with her UNESCO editor Raymonde Frin to decide on a title. Frin suggested *Travelling Exhibitions*, and lengthened it to *Manual of Travelling Exhibitions* when it transpired that the catalogue for UNESCO's exhibition of color reproductions was titled *UNESCO Travelling Print Exhibition* (1949).¹⁰² When Osborn asked

¹⁰⁰ Grace McCann Morley to Jan K. van der Haagen, 13 December 1951. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

¹⁰¹ Jan K. van der Haagen to Jean Thomas, 22 January 1952, MUS Memo 1901; Jan K. van der Haagen to Lawrence M.C. Smith, 24 January 1952, MUS/278.546; Grace McCann Morley to Jan K. Van der Haagen (draft letter to L.M.C. Smith enclosed with letter), 13 December 1951; Raymonde Frin to Grace McCann Morley, 22 January 1952, MUS/278.552. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

¹⁰² Raymonde Frin to Elodie Courter Osborn, 30 January 1953, MUS//358.045; Raymonde Frin to Grace McCann Morley, 24 February 1953, MUS/365.925. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

for the inclusion of the subtitle, “Works of Art on Tour,” Frin replied that, “I am afraid we are going to have to stick to the titled of *Manual of Travelling Exhibitions*, we cannot confine ourselves to art.”¹⁰³ However, that was precisely the subject of the manual that Osborn had just written, and the only area of museum practice in which she had substantive experience.

At times, Courter Osborn’s personal voice becomes entangled in UNESCO’s institutional one. The handbook’s professed aspiration to reduce isolation and increase collaboration reflected UNESCO’s broad concern with disseminating technical knowledge for equitable exchange. Her introduction discussed the “moral obligation to extend educational opportunities and to make cultural values more readily accessible to all, without regard to social distinction or geographic isolation,” echoing the language of McCann Morley’s foreword, which asserted that circulating exhibitions had already brought “knowledge and enjoyment” to “remote” areas.¹⁰⁴ Courter Osborn went on in this vein to assert that

Visual communication offers an international means of communication in which language barriers begin to disappear. Information can be exchanged, problems and subjects common to several nations can be studied and through such exhibitions gain wide public attention, and that “the diffusion of knowledge for education in all fields...can be accomplished effectively through exhibitions.”¹⁰⁵

On the face of it, her language sounds exactly like that of McCann Morley and Huyghe (and, for that matter, Focillon and League of Nations/United Nations discourse more generally). Yet the actual *content* of the manual was utterly steeped in the specific, New York-based practice in which she had trained—from references to American freight company Railway Express Agency to her use

¹⁰³ Elodie Courter Osborn to Raymonde Frin, 5 March 1953; Raymonde Frin to Elodie Courter Osborn, 3 April 1953, MUS/371.726. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

¹⁰⁴ Courter Osborn, *Manual of Travelling Exhibitions*, 5, 12.

¹⁰⁵ Courter Osborn, 11.

of the word “excelsior” to refer to wood wool—which suggests that the introduction may not be quite hers, despite bearing her name. If UNESCO intended the manual as a form of “universal” communication, museum professionals who leafed through it were compelled to speak the language of MoMA’s Circulating Department, albeit in more two-dimensional form than institutions around the United States who borrowed its materials and were accosted by the included gloves and chamois.

Elodie Courter Osborn, the individual, can be further distinguished from the institutions she worked for, from differences between her original manual and its revision a decade later, as family obligations prevented her from having any role in the latter.¹⁰⁶ In so doing, UNESCO’s own shifting ambitions—from cultural “clearinghouse” to universalist, standard-setting agency—swim into focus. In the original, Courter Osborn’s authorial voice is one of offering friendly advice to her reader.¹⁰⁷ For instance, her chapter on packing opens with the suggestion that “[s]ince objects that are transported have to be unpacked, handled, and repacked by persons unacquainted with the particular items, standard methods, *if they can be devised* [emphasis mine], are much to be desired.”¹⁰⁸ Compare this with the revision from a decade later, penned, in fact, by Grace McCann Morley,¹⁰⁹ which states that “[s]ince the objects will be unpacked, handled, and repacked by persons

¹⁰⁶ Hiroshi Daifuku, program assistant for the Museums Division, contacted Osborn to take on revisions for the new edition, but she regretfully declined the offer. Hiroshi Daifuku to Elodie Courter Osborn, 23 December 1958; Elodie Courter Osborn to Hiroshi Daifuku, 14 February 1959; Elodie Courter Osborn to Hiroshi Daifuku, 17 April 1959. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. *UNESCO Archives*.

¹⁰⁷ I find the term “technology of trust” to describe very well what Elodie Courter Osborn aimed to do, in contrast with the revision of her *Manual* that came thereafter. Zeynep Çelik Alexander, “The Larkin’s Technologies of Trust,” *Journal of the Society of Architectural Historians* 77, no. 3 (September 1, 2018): 300–318.

¹⁰⁸ Courter Osborn, *Manual of Travelling Exhibitions*, 31.

¹⁰⁹ Osborn had suggested others from MoMA who might be qualified to undertake the revisions in her place: Porter McCray, Osborn’s successor in the Department of Circulating Exhibitions, Virginia Pearson, who was then a member of McCray’s staff, and Mrs. Carlus Dyer, the exhibition designer. Hiroshi Daifuku also put forward the name of Annemarie Pope, head of SITES, while also suggesting that a European writer would add non-North American experience to the revision. Despite these suggestions, however, Morley eventually took on the role, and the revision remained resolutely American. Elodie Courter Osborn to Hiroshi Daifuku, 17 April 1959; UNESCO Minute Sheet from Hiroshi Daifuku to Raymonde Frin, 23 April 1959. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. *UNESCO Archives*.

not familiar with them, *it is best to use standard methods where possible* [emphasis mine].”¹¹⁰ The difference might seem small, but the result is a more forthright, authoritative text.

This is augmented by the ways in which sample forms were presented. In the first, they were printed in the appendices as small pictorial images, their verbal instructions obscured. In the revised edition, the blurry images were replaced with clearly typed instructional forms that filled a full page, forcefully communicating the information conveyed by the list of forms accompanying objects going on tour. (Fig. 1.17) When the production of a handbook was discussed in an early UNESCO seminar in 1952, the stated goal was “not to standardize ideas, aims, or methods, for there can be no universally applicable, cut and dried formulae,”¹¹¹ but the second edition’s updates indicate that UNESCO was increasingly embracing the role of a standard-setting agency.

The original text was also preceded by three new essays that emphasized this shift. Hiroshi Daifuku, the Museums Division’s program assistant, contracted Lothar P. Witteborg, Chief of the Exhibitions Department at the American Natural History Museum in New York, to write a section on temporary science exhibitions, and Hans C. Jaffé, deputy director of the Stedelijk Museum in Amsterdam, to write a section on temporary exhibitions (that did not necessarily travel).¹¹² Daifuku himself wrote a chapter on exhibitions in “technically underdeveloped countries.” The resumes of these authors are instructive: Daifuku spent his UNESCO career engaging projects of cultural “technical assistance,” while Witteborg was contracted for his experience as a consultant for the fledgling National Museum of India in New Delhi and other provincial museums in 1959, and in

¹¹⁰ McCann Morley et al., *Temporary and Travelling Exhibitions*, 80.

¹¹¹ “International Seminar on the Role of Museums in Education,” UNESCO, 1952.

¹¹² Hiroshi Daifuku to Hans Jaffé, 26 February 1959, MUS/832.896. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

planning a new national museum in Kuala Lumpur in what was then Malaya in 1960.¹¹³ Grace McCann Morley, as we know, would become the National Museum of India's first director in 1960. Apart from Jaffé, then, all other contributors had contributed to the UNESCO project to bring "technical" skills to "backward" countries.

The new manual placed an overt emphasis not only on exhibitions as a form of technical assistance, but also on strategies for displaying the sciences, betraying UNESCO's turn from cultural peacebuilding to projects aligned with the mission of development. Daifuku's essay argued that "temporary exhibitions dealing with a single central theme will be more necessary [in "technically underdeveloped countries"] than in more stable environments."¹¹⁴ His suggested themes included health, showcases of industry and technology, ethnography, history, and natural history, and discussed the potential role of mobile museums in providing instructive shows for rural audiences.¹¹⁵ (His chapter is admittedly a curious contribution, as there is no evidence in the correspondence that such a chapter was planned or that Daifuku was to serve as a contributor.¹¹⁶)

McCann Morley also updated Courter Osborn's text to be inclusive of non-art exhibitions, replacing "works of art" with the word "objects", and including discussions of traveling exhibitions of scientific and historical interest.¹¹⁷ To this end, the revised manual also included new illustrations. The first of these was of the Hall of Oil Geology, an exhibit at the American Museum of Natural

¹¹³ McCann Morley et al., *Temporary and Travelling Exhibitions*, 11. Information from Witteborg's biographical resume sent to Hiroshi Daifuku. Hiroshi Daifuku to Lothar P. Witteborg, 23 December 1958, MUS/821.258; Luther A. Williams to Hiroshi Daifuku, 12 January 1959. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

¹¹⁴ *Temporary and Travelling Exhibitions*, 44.

¹¹⁵ *Temporary and Travelling Exhibitions*, 49.

¹¹⁶ An internal memo between staff at the Department of Cultural Activities makes no mention of Daifuku as author. Raymonde Frin to Sankichi Asabuki, 26 July 1961; Memo CA.12/7781. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

¹¹⁷ *Temporary and Travelling Exhibitions*, 58.

History in 1954, and there were also more (hard-won) examples from natural history and science museums to accompany Witteborg's text. (Fig. 1.18) If drawing museums into a collaborative network required a manual to facilitate a common language of care, UNESCO tried to make this universal across different types of museums as well.

When the new manual was published, Hiroshi Daifuku requested that several copies be sent to Nigeria to be used in conjunction with a UNESCO Pilot Project for the Training of Museum Technicians in Jos, which had just begun operations in 1963, and that a copy be sent to the UNESCO Regional Center for Education in Africa, based in Accra, Ghana.¹¹⁸ (He also later wrote to Witteborg for suggestions for a candidate to prepare exhibitions for Zimbabwe, then Rhodesia, asking if Witteborg's successor at the American Museum of Natural History might be suitably qualified and willing to travel there.¹¹⁹) The seriality of the reproductions sent on exhibition was replaced by the seriality of the manual.

The life of the *Manual* (in its revised form as *Temporary and Travelling Exhibitions*) in these contexts is not certain. At Jos, it was likely used for training programmes in conceptualizing and executing museum exhibitions (with an emphasis on archaeology) first carried out in 1964 and again in 1965 by Swiss UNESCO consultants Mr. and Mrs. Jean M. Bosserdet. The Bosserdets noted in a 1965 report that many students "do not know how to read or understand plans...the same is true for technical drawings of objects[.] We had to impose such elementary practical work as enlargement by the square system of a certain drawing or of a surface profile [and] plans shown in perspective of a

¹¹⁸ Hiroshi Daifuku to Peter Thorp, 24 December 1963, Memo CA.12/256/696, Subject: Purchase of *Temporary and Travelling Exhibitions*. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. Also Joseph A. Sawe, Joint Inspection Unit Report on the Regional Training Centre for the Preservation of Cultural and Natural Heritage at Jos, Nigeria (Geneva, December 1974), 31. JIU/REP/74/8. UNESCO Archives.

¹¹⁹ Hiroshi Daifuku to Lothar P. Witteborg, 21 September 1961, CA.12/78/2704. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives.

simple showcase.”¹²⁰ (Architectural historian Lucia Allais has described other trainings in object conservation at the Jos training centre, wherein the syllabus itself was often ill-suited to the field, such as the difficulty of gaining practice in wood treatment as there were no deteriorated wood objects to treat.¹²¹) UNESCO reports on trainings from a full decade later suggest that the UNESCO manuals—including *Temporary and Travelling Exhibitions*—were still used, unchanged, for the training programme.¹²²

But even as this handbook, intended to guide the safe passage of works of art across borders, made its way into training centres for archaeological museology in Jos and other UNESCO centres like it, the art itself did not follow suit. That the increasing standardization, or “professionalization,” of museum practices was not democratizing the circulation of the art objects at the heart of Courter Osborn’s original manual was an issue already being acknowledged by the early 1960s. To that end, UNESCO’s partner ICOM was to sponsor a pilot art exhibition to open in advance of UNESCO’s Regional Seminar on the Role of Museums in Contemporary Africa in Nigeria in 1964, planned to include works of art from different origins and periods, with the potential for training local students to act as guides, with surveys from the exhibition to be given as study materials to attendees of the UNESCO seminar.¹²³ Yet this art exhibit never materialized. (The larger pilot project—and its failure—is discussed in Chapter 2.) What *did* materialize, however, was very much in line with what

¹²⁰ Mr. and Mrs. J.M. Bosserdet, *Expanded Programme of Technical Assistance, Nigeria Training of Museum Technicians, Jos Pilot Project* (12 January to 22 April 1965), 5. WS/1265.36 (CUA). The Bosserdets, as evidenced in a later report on the new National Museum in Addis Ababa, Ethiopia, repeatedly expressed their concern that African museums needed to be modernized in line with ‘universal’ museum standards. See J.M. Bosserdet, *Exhibition Galleries at the New National Museum, Addis Ababa*, Report prepared for the Government of Ethiopia by UNESCO (Paris, 1981). Restricted Technical Report PP/1979-80/4/7.6/05. UNESCO Archives.

¹²¹ Allais, *Designs of Destruction*, 186.

¹²² Joseph A. Sawe, Joint Inspection Unit Report on the Regional Training Centre for the Preservation of Cultural and Natural Heritage at Jos, Nigeria (Geneva, December 1974), 31. JIU/REP/74/8. UNESCO Archives.

¹²³ *ICOM News* XV, no. 5-6 (1962), 67.

Hiroshi Daifuku believed “underdeveloped” nations deserved: a mobile museum attached to the Jos training centre, approved at the Twelfth General Conference of UNESCO in 1962 (to exhibit agricultural techniques, public health measures, and the scientific principles underlying modern technology) which displayed an exhibit organized by the Food and Agriculture Organization for its Freedom from Hunger Campaign.¹²⁴

Conclusions

Manuals, as paper technologies of knowledge production with varying degrees of authority, are still relatively untheorized for the work they do. The scholarship that exists is largely concerned with the production of handbooks in the sciences in Europe.¹²⁵ Historian of science Angela Creager acknowledges that they are often used to reproduce existing expertise rather than produce new knowledge, but posits that in their practical rather than theoretical orientation, manuals are also subjected to subsequent revisions in the field.¹²⁶ (Yet in Jos, frictions in the field were not sites for inventive reconfigurations, but simply attributed to an inadequacy in the trainees, demonstrating a higher relative asymmetry of power.) Some fruitful critical scholarship comes from the history of architecture, specifically an extended engagement with the politics of paper types in Bauhaus-trained

¹²⁴ For a discussion of the FAO’s predecessor, the International Institute of Agriculture, see Mark Mazower, *Governing the World: The History of an Idea* (New York: The Penguin Press, 2012).

¹²⁵ See, for example, Carla Jean Bittel, Elaine Yuen Tien Leong, and Christine von Oertzen, eds., *Working with Paper: Gendered Practices in the History of Knowledge* (Pittsburgh, PA: University of Pittsburgh Press, 2019); Ann Blair et al., eds., *Information: A Historical Companion* (Princeton: Princeton University Press, 2021). Also likely of interest is the forthcoming Pamela H. Smith, *From Lived Experience to the Written Word: Reconstructing Practical Knowledge in the Early Modern World* (Chicago: University of Chicago Press, 2022).

¹²⁶ Angela N.H. Creager, “Recipes for Recombining DNA: A History of *Molecular Cloning: A Laboratory Manual*,” *BJHS Themes* 5 (2020): 225–43. See also the full special issue, titled Learning by the Book.

German architect Ernst Neufert's standardizing oeuvre.¹²⁷ If the *Color Reproductions* exhibitions were proxies for original works—not only aesthetically, but also as object lessons in art handling—then the *Manual* was a proxy for Courter Osborn herself. But not quite, as I have shown in this chapter. Given how often standardization, particularly in the nineteenth and twentieth centuries, was mediated by international organizations, it is worth considering the *Manual* as an illustration of the ways in which UNESCO's institutional ambitions interlaced with, augmented, and overshadowed those of Courter Osborn herself.

Whatever the *Manual's* life in the training centers it was shipped to, it continues to be cited in bibliographies on museum administration, and this is its real contribution to museum practice in the last century. It clearly marked UNESCO's shift in approach to “universal” education, from public to professional, and demonstrated that packing is political. Most importantly, while it was a technology of knowledge, it was also a technology of administrative conservation, doing—more effectively—the work of the catalogues that originally accompanied or were circulated in advance of both MoMA and UNESCO exhibitions (of which the publication of the *Manual* was itself a direct extension.¹²⁸) The *Manual* set the tone for how UNESCO would engage with issues of exhibition conservation in the years ahead, making administrators out of conservators, and conservators out of administrators.

¹²⁷ Nader Vossoughian, “From A4 Paper to the Octametric Brick: Ernst Neufert and the Geo-Politics of Standardisation in Nazi Germany,” *The Journal of Architecture* 20, no. 4 (July 4, 2015): 675–98; Anna-Maria Meister, “Ernst Neufert's ‘Lebensgestaltungslehre’: Formatting Life beyond the Built,” *BJHS Themes* 5 (2020): 167–85.

¹²⁸ Kenneth Disher to Robert T. Hatt 17 June 1952. MUS/306.584. 069 A 31 Manual on Temporary and Travelling Exhibitions - UNESCO/Museum Publication. UNESCO Archives. Disher notes that “there has been for several years a project for UNESCO to issue a series of catalogues on exhibits, but for numerous reasons this was never realized and the project was then turned into the present one[.]” For a relevant discussion of how catalogues created order among unruly reproductions, see Mari Lending, “Promenade Among Words and Things: The Gallery as Catalogue, the Catalogue as Gallery,” *Architectural Histories* 3, no. 1 (December 24, 2015).

CHAPTER TWO

Border Bureaucracies: Circulating Exhibitions in the Age of Liberalized Trade

“The best reason that I know for the United States rejoining the British Empire is to get rid of the customs regulations between the United States and Canada.”

— Blake-More Godwin, Toledo Museum of Art, to Horace Jayne, Metropolitan Museum of Art in New York, 8 November 1943.¹

Geminal mid-nineteenth century aspirations for a harmonious and interconnected world blossomed in the subsequent half-century into an efflorescence of international organizations—the most notable being the League of Nations and its successor, the United Nations—that sought to impose order at the scale of the globe. A key technique for fostering harmonious relations was to advocate for diminished barriers to trade, with the view that the freer circulation of educational materials would strengthen mutual cultural understanding. In this chapter, I discuss how this trade-based approach to peacebuilding informed post-WWII efforts by UNESCO and ICOM to establish exhibitions of circulating cultural objects as the medium *par excellence* for global mass education and mutual understanding, albeit under certain conditions and when showcasing specific content. I show how these efforts reconfigured the art museum’s spatial form, as a response to the challenges of conservation posed by turning from circulating duplicable objects in favor of irreplaceable originals for exhibitions. UNESCO first addressed this challenge through the publication and widespread

¹ Metropolitan Museum of Art Archives. Godwin was discussing the exhibition, *Chilean Contemporary Art*, shown at the Toledo Museum of Art from March to May 1942, the Metropolitan Museum in July 1943, and the Art Gallery of Toronto (now Art Gallery of Ontario) later in 1943, and the challenges associated with shipping the works of art back to the United States after its Toronto showing.

dissemination of manuals to standardize practices for preparing exhibitions (as discussed in the previous chapter). This conservation challenge was complicated further by frictions at national borders. Duties for avant-garde objects—whose material and visual composition often did not conform to the limited categories of rigid tariff schedules—posed a financial burden. However, border inspections of exhibition materials by untrained customs agents threatened to undo the professionalizing work performed by the manuals and its associated experts. UNESCO and ICOM sought to resolve both issues through mechanisms of international trade.

This chapter examines the debates about the classification of individual works of art as well as the relative educative merits of entire exhibitions that established what, where, and how art could cross borders. It looks at this issue first through the case of the national US border, discussing how efforts to move museum objects freely across the Atlantic were directly tied to larger debates about the merits of liberalizing trade more generally. It then analyzes a decades-long endeavor undertaken by UNESCO and ICOM to “sponsor” (i.e., expedite the movement across borders of) exhibitions deemed to meet certain criteria for furthering cultural understanding, which shifted the national border from portside customs bureaus to inspection facilities in the bowels of museums, transforming them into the border spatial form of the bonded warehouse. I argue that attempts to facilitate the greater circulation of international exhibitions through liberalized trade mechanisms functioned (and still functions) as efforts toward object conservation by diplomatic means. While early attempts by UNESCO and ICOM to regulate the flow of exhibitions failed, the subsequent outcomes of that system, primarily the establishment of ICOM’s Guidelines for Loans, continue to be a key component of exhibition conservation and determine which museums may act as trading partners through exhibitions.

The “Civilizing” Effects of Free Trade

To facilitate the flow of exhibitions in the mid-twentieth century, UNESCO and ICOM used rhetoric deriving from that of the early internationalists of the mid-nineteenth century who served as forebears of the founders of the League of Nations. Of the advocates for various forms of internationalism, those who galvanized the free trade movement constructed a discourse that presented free trade as a crucial tool for peacebuilding and, in turn, civilizational progress. This discourse scaffolded how early twentieth century cultural internationalists² presented the merits of freely circulating artistic works: individually for permanent acquisition, and in groups for temporary exhibition. Yet the paternalistic approach to democracy-building and the instrumentalization of free trade by imperialistic actors whose values ran counter to those of idealistic cultural internationalists reflects the fraught legacy of internationalism that UNESCO and ICOM inherited and embedded in their endeavors.

In Britain, Radical member of Parliament Richard Cobden led the repeal of the Corn Laws—regulations which governed the import and export of grain—in 1846 with a threefold argument. First, he posited, free trade was democratic and benefited the Industrial Revolution’s rising classes while protectionist measures only benefited the landed class. Second, nationalism was not a force in opposition to internationalism but rather a path to it. Third (and most salient for our purposes), free trade directed individual self-interest into a channel of peaceful universal communication and exchange that would foster internationalist wellbeing rather than isolationist belligerence; in other words, free trade had a civilizing influence. Cobden’s views on the civilizing

² My use of the term “cultural internationalists” follows that of Akira Iriye, *Cultural Internationalism and World Order* (Baltimore: Johns Hopkins University Press, 1997).

effects of trade were shared by influential thinkers at home and elsewhere in Europe.³ The landmark repeal of the Corn Laws inspired a slew of commercial treaties between Western European nations in the mid- to late-nineteenth century that were so exceptionally liberal that regional exchange at the time closely resembled the European Single Market that would be established more than a century later.⁴ As significant as the trade prompted by these treaties was this attendant rhetoric that to espouse free trade was to join the forefront of civilization.

Internationalists like Cobden also expected free trade, as a mechanism for peacebuilding, to detach diplomacy from the machinations of governments, encapsulating an antipolitical approach to internationalism rooted in the utopian belief that humans tended toward peaceful solutions when free from government coercion. This conception of diplomacy regulated by trade and sanctioned by public opinion scaffolded US President Woodrow Wilson's own brand of liberal internationalism taken up in the wake of the First World War and in the formation of the League of Nations.⁵ As harmonized forms of communication, transportation infrastructures, and measurement facilitated free trade, liberal internationalists saw standardization itself as a civilizing measure.⁶ Yet by the mid-

³ For Cobden's politics in relation to other forms of internationalism, see Chapter 2, "Brotherhood," in Mazower, *Governing the World*, 38–48. Those who shared Cobden's position ranged from British economist David Ricardo to French political thinkers, the Abbé de Pradt and Benjamin Constant, while German philosopher Immanuel Kant notably opposed this view. Note: Mazower writes that the United States relaxed its own tariffs partly in response to the repeal of the 1846 Corn Laws, but other Orcutt and May indicate that this happened earlier, in the 1830s, so it is possible there was a further relaxation in the late 1840s.

⁴ Mazower, 44.

⁵ Mazower, 45.

⁶ In addition to Mazower, see Introduction and Chapter 3, "One Language for the World: The Metric System, International Coinage, Gold Standard, and the Rise of Internationalism, 1850-1900," in Martin H. Geyer, Johannes Paulmann, and German Historical Institute in London, eds., *The Mechanics of Internationalism: Culture, Society, and Politics from the 1840s to the First World War*, Studies of the German Historical Institute London (London; Oxford; New York: German Historical Institute; Oxford University Press, 2001), 8–10, 55–92. For the relationship between government and private interests in the adoption of standard time, see Ian R. Bartky, *Selling the True Time: Nineteenth-Century Timekeeping in America* (Stanford, CA: Stanford University Press, 2000).

twentieth century it was abundantly clear that free trade was also an effective tool for expansionism.⁷ While Cobden and his associates were anti-imperialists, free trade was quickly taken up as a means to force open the economies of other nations while cannily reiterating Cobden's argument that free trade "signaled the spread of civilization itself."⁸ (This rhetoric endured well into the twentieth century; arguments for trade's civilizing mission were used to promulgate the neoliberalist trade policies of the United States as late as the 1980s.)

The UNESCO manuals were symptomatic of a larger conflation of establishing shared practices to facilitate exchange with imposing imperial standards for "civilized" living.⁹ World's fairs, invented as a genre of visual persuasion at this time, epitomized and buoyed imperial internationalism through displays of technological and cultural progress that hierarchized the world's nations and presented colonial occupation and the imposition of a market economy as closing the gap between the most and least civilized.¹⁰ If UNESCO's series of manuals for museum practice

⁷ See John Gallagher and Ronald Robinson, "The Imperialism of Free Trade," *The Economic History Review* 6, no. 1 (1953): 1–15. For how British statesmen "wrote the ideals appropriate to their own liberal trading empire" (such as free trade) into the mandates plan, see Susan Pedersen, "Empires, States and the League of Nations," in *Internationalisms: A Twentieth-Century History*, ed. Glenda Sluga and Patricia Clavin (Cambridge, United Kingdom; New York, New York: Cambridge University Press, 2017), 118.

⁸ Mazower, *Governing the World*, 44, 47–48.

⁹ Jan Smuts, former prime minister of South Africa, viewed the British Empire approvingly as the proto-League of Nations, symbolizing not merely standardization but the harbinger of a "richer" life through imperial internationalism. See Chapter 1 in Mark Mazower, *No Enchanted Palace: The End of Empire and the Ideological Origins of the United Nations* (Princeton: Princeton University Press, 2009), 28–65. His position echoed that of former British prime minister David Lloyd George, who declared that "The British Empire is a league of nations." Smuts believed that British Dominions would serve as an alliance of whites that would "simultaneously respect their evolving national cultures and provide collective security [against] the restless peoples of Asia and Africa whose sheer numbers made them question their power to civilize the world." Mazower, *Governing the World*, 128, 132; Mazower, *No Enchanted Palace*, 36–37. Alfred Zimmern, who coined the term "welfare state" and one of the early users of the term "British Commonwealth," similarly saw it not as a euphemism for empire but as a "world experiment" in global community. Mazower, 82–85.

¹⁰ For a discussion of how "international" standards were synonymous with European, see Geyer, Paulmann, and German Historical Institute in London, *The Mechanics of Internationalism*, 6–10. For the role of world's fairs in promoting this form of internationalism, see Paul Greenhalgh, *Ephemeral Vistas: The Expositions Universelles, Great Exhibitions, and World's Fairs, 1851-1939* (Manchester: Manchester University Press, 1988); Robert W. Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876-1916* (Chicago: University of Chicago Press, 1984). See also Robert W. Rydell, "World Fairs and Museums," in Sharon Macdonald, *A Companion to Museum Studies*.

approached the problem of object safety by standardizing professional practice, as discussed in the previous chapter, this chapter is concerned with how conservation concerns dovetailed with those of economic liberalization, turning exhibition conservation into a series of techniques that were not only technical but also political. Proponents of circulating exhibitions used the language of liberal internationalists to assert that the free movement of museum exhibitions was a crucial and non-negotiable means to secure peace. By their logic, then, efforts to safeguard the works in transit were *also* matters of political urgency, even if this was not articulated as plainly. Yet the question of which art was worth moving at all was up for both national and international debate.

From the Bonded Warehouse to the Exhibition Bond

When cultural objects cross national borders to be displayed at temporary exhibitions in museums, they follow much the same administrative procedures for crossing the border as other traded goods. Because museum objects are borrowed rather than purchased, they follow the rules of international trade that make accommodations for quotidian commodities received from elsewhere in the world and temporarily held in designated storage facilities that permit the delayed payment of customs duties. Today, for the purposes of temporary exhibitions of cultural objects loaned from international lenders, especially those that cannot otherwise be entered into a country free of duty, the museum operates as a bonded warehouse, a spatial form that operates at and distorts the edge of the nation-state.

The bonded warehouse came into operation through the 1803 Warehousing Act in Britain, instigating far-reaching changes for commodity circulation in the former empire. Before 1803, traders were required to pay duties on all imports, even those intended for re-exportation. They

could claim their funds only after the latter transaction had been completed, disadvantaging traders who could not afford the fee. The bonded warehouse allowed traders to store imported goods free of duty until re-export or postpone the payment of duties until the goods were sold domestically, which led to expanded trade activity.¹¹ Originally limited to the Port of London, the bonded warehouse system was extended to Liverpool (the first British port to construct docks in 1709 and one of the chief ports in the country at the time) two years later, and to all British ports in 1833; similar warehousing systems existed in other parts of Europe in the nineteenth century, and a Warehousing Act modeled on the British act was passed in the United States in 1846.¹²

Exhibitions—and especially industrial exhibitions—have a long history aligned with that of the warehouse. When the first World’s Fair, the Great Exhibition of the Works of Industry of All Nations, was held in London in mid-to late 1851, exhibition commissioners worked with the Lords of the Treasury and Commissioners of Customs to have the Crystal Palace, the building in which the exhibition was housed, designated as a bonded warehouse. (Incidentally, Cobden was one of the principal organizers of the Great Exhibition of 1851, and saw it as an “architectural manifesto” for the creed of internationalism, its “magnificent prefabricated iron and soaring glass building a marvel of modern technology: open, democratic, and global.”¹³) International commodities that might otherwise have been subjected to onerous duties were able to enter without restriction and were placed under safe custody to prevent any traders from taking advantage of the situation to engage in

¹¹ E.H. Rideout, “The Development of the Liverpool Warehousing System,” *Transactions of the Historic Society of Lancashire & Cheshire* 82 (1930): 1–3; Graeme J. Milne, *Trade and Traders in Mid-Victorian Liverpool: Mercantile Business and the Making of a World Port* (Liverpool: Liverpool University Press, 2000), 80.

¹² Orenstein, *Out of Stock*, 77–78, 279–80 n41–44. The second chapter is a history of the bonded warehouse in the United States, as a prefiguring of the contemporary free zone. For the bonded warehouse system’s development in the British colony of India, and how it compared and contrasted with European and American models, see Megan Maruschke, *Portals of Globalization: Repositioning Mumbai’s Ports and Zones, 1833–2014*, *Dialectics of the Global*, volume 2 (Berlin; Boston: De Gruyter Oldenbourg, 2019).

¹³ Mazower, *Governing the World*, 44.

illicit trading. Treasury and Customs officials also agreed to waive the usual formalities, allowing the goods “to be conveyed, without examination, direct from the waterside to the place of Exhibition, where they should be opened for the first time by the Importer or his Agent, and examined in the presence of the proper officer of Customs,”¹⁴ a practice that would later be taken up for exhibitions displayed in museum as well. For the 1851 Exhibition, eight ports including London and Liverpool were designated for importing the “no less than 11,644 separate packages” of Exhibition-related goods, “many of which were of immense size, and contained from 10 to 25 distinct internal packages from as many different contributors.”¹⁵ Specific customs officials were nominated to be responsible for ensuring that these goods were exempted from examination and sent directly to the exhibition grounds at Hyde Park on their arrival. This transporting and examining a vast array of duty-free goods on site was an unprecedented undertaking but was quickly replicated.

The 1853 exhibition of the same name in New York, modeled on the London fair, was housed in a structure that was also christened the Crystal Palace and similarly classified as a bonded warehouse by the US Treasury Department.¹⁶ As the Warehousing Act in the United States had been passed less than a decade prior to the exhibition, the idea of the bonded warehouse was, as American studies scholar Dara Orenstein points out, as novel an idea as the technologies of iron and glass that made the Crystal Palace’s construction possible. Merchants posted a bond—a contract with terms laid out by Congress that Orenstein likens to a “no-interest, high-penalty credit card issued by the Treasury Department”—for twice the value of the objects, pledging to honor the duties by a certain

¹⁴ Commissioners for the Exhibition of 1851, *First Report of the Commissioners for the Exhibition of 1851: To the Right Hon. Spencer Horatio Walpole, &c. &c., One of Her Majesty’s Principal Secretaries of State*. (London: W. Clowes & Sons, 1852), xlv–xlvii. (Horatio “Horace” Walpole was the youngest son of the very Sir Robert Walpole who had unsuccessfully to introduce the system of duty-free warehousing in Britain in 1733.)

¹⁵ Commissioners for the Exhibition of 1851, xlv–xlvii.

¹⁶ Orenstein, *Out of Stock*, 67–69.

date.¹⁷ The Crystal Palace's designation as a bonded warehouse in both locations enabled exhibitors, many of whom were foreign merchants and manufacturers who would not have participated otherwise, to have their wares admitted free of duty. If an object was removed from exhibition and sold to a patron, the bond dissolved upon payment of duties; if it was damaged or stolen, the bond would be called due; and if withdrawn for export, no duties were incurred, and the bond was dissolved.¹⁸ The bonded warehouse thus "modulat[ed] the space-time of the tariff" to facilitate international trade.¹⁹ Industrial exhibitions and world's fairs in subsequent years made use of this innovation of the exhibition hall as a bonded warehouse (although protectionists opposed the bonded warehouse on the grounds that it hurt domestic manufacture and trade).²⁰

The form of the bonded warehouse supported the international exhibition's—and in turn, the museum's—dual role in building the image of the nation and facilitating international trade. Museums and exhibitions have been extensively theorized for their role in nation-building as part of an educative exhibitionary apparatus, wherein disparate spectators are conceived as a cohesive "nationalized citizenry" through their engagement with displays of objects organized as a visual argument for industrial progress "as a collective national achievement with capital as the great

¹⁷ Orenstein, 72–74.

¹⁸ Orenstein, 70. Interestingly for issues of conservation, at the London exhibition "great liberality was shown by the Commissioners of Customs in cases in which the articles exhibited had suffered detriment or waste, as in the case of silks and other goods, of which the value had been much deteriorated by exposure, and of many smaller articles of consumption...in which a considerable waste had taken place. It being clear that the diminution caused by such waste had not been the result of fraud, no duty was charged in respect of it." Some of this "diminution" was also caused in service of creating an overpowering sensory atmosphere, with "no less than 270 gallons of Eau de Cologne, Acqua d'oro, and other scents...distributed (duty free) through the building, [and] upwards of 500lbs. of snuff and 250 lbs. of tobacco in other forms...consumed by persons tasting in the Portuguese, Turkish, and American departments; [while] as much as 480lbs. of chocolate drops were consumed in the Saxon division alone, besides a large quantity in the French, and 140lbs. in the Turkish division." Commissioners for the Exhibition of 1851, *First Report of the Commissioners for the Exhibition of 1851: To the Right Hon. Spencer Horatio Walpole, &c. &c., One of Her Majesty's Principal Secretaries of State.*, xlvii.

¹⁹ Orenstein, *Out of Stock*, 70.

²⁰ Orenstein, 84.

coordinator.”²¹ To this end, as sociologist Tony Bennett and others argue, industrial exhibitions and allied museums juxtaposed allegedly superior domestic goods with inferior foreign objects (and bodies) to make a political statement.²²

Between Display and Storage in the Museum

Tony Bennett locates the art museum within an “exhibitionary complex” of public institutions—from exhibitions to arcades to department stores—that impose discipline through the spectacular display of ordered objects and bodies rather than through the solitary confinement of the carceral system, and which have firmly steered the transferal of objects and subjects from the private domain to the public arena.²³ Asserting that museum collecting is predicated on recontextualizing and re-ordering objects in relation to others, anthropologist Sharon MacDonal presents acquisition itself as part of this ethos of display, and no mere accumulation.²⁴ Yet as the scope of encyclopedic museum collections far exceeds institutional capacity for display, critics from Theodor Adorno to contemporary scholar-activists censure museums for hoarding the greater portion of their collections out of public view, “ow[ing] their preservation more to historical respect than to the needs of the

²¹ Bennett, “The Exhibitionary Complex,” 80. Bennett references Debora Silverman, “The 1889 exhibition: the crisis of bourgeois individualism,” *Oppositions: A Journal of Ideas and Criticism in Architecture*, Spring (1977), and Robert W. Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876-1916* (Chicago: University of Chicago Press, 1984).

²² Bennett, 89. Bennett also posits that competition between France and Britain for dominion in the Middle East was aided by museums showcasing the spoils of archaeological excavations to create and conflate two new historical times—national and universal—that linked “time horizons beyond the medieval period and the classical antiquities of Greece and Rome to encompass the remnants of the Egyptian and Mesopotamian civilizations” to the recent histories of emerging nation state, which simultaneously “opened up...the prospect of a universal history of civilization” and also “annexed [these universal histories] to national histories as...collections of national materials were represented as the outcome and culmination of the universal story of civilization’s development.”

²³ Bennett, 73, 85.

²⁴ Sharon Macdonald, “Collecting Practices,” in *A Companion to Museum Studies*, ed. Sharon Macdonald, Blackwell Companions in Cultural Studies 12 (Malden, MA: Blackwell Pub, 2006), 82.

present,” and “leav[ing] no room for the pleasure of looking at them.”²⁵ This view of the museum as regulatory storehouse counters that of the museum as a site of spectacle, and the tension between practices of collecting and methods of display articulated by these critics is complicated further by those object collections that circulate between museums for temporary exhibition, which is left out entirely of these discussions.

In the storage facilities in the Museum of Modern Art in New York, for instance, crates of art objects are color-coded based on their institution of origin: those in dark blue that denote a crate of MoMA’s own objects indicate by their color that these works have been moved recently. MoMA once used light blue to distinguish its crates of circulating objects; today, those lighter-hued boxes hold works that are no longer as popular. Unpainted crates hold objects that have not been sent for outside exhibition because they are deemed too fragile or because the cost of moving them is too exorbitant.²⁶ MacDonald contends, referencing anthropologist Igor Kopytoff’s notion of a cultural biography of things, that “objects in collections are less likely to be available for use or purchase than they were previously: they enter into a new stage in their biographies,”²⁷ but objects in museum collections are frequently sent to be displayed and studied elsewhere. Borrowing institutions purchase, if not the object itself, the right to display it for a period. For Kopytoff, “the hallmark of commoditization is exchange,” which suggests that museum objects are no different from other commodities. In fact, histories of storing and circulating other commodities—in other words, of warehousing—illuminate how the museum functions as a form of warehouse that facilitates a

²⁵ Theodor Adorno, “Valéry Proust Museum,” *Prisms*, trans. Samuel and Shierry Weber, 1997, 173–86, 175. Quoted in Mirjam Brusius and Kavita Singh, eds., *Museum Storage and Meaning: Tales from the Crypt*, Routledge Research in Museum Studies 14 (London: Routledge/Taylor & Francis Group, 2018), 163. See also Jane Henderson, “Beyond Lifetimes: Who Do We Exclude When We Keep Things for the Future?,” *Journal of the Institute of Conservation* 43, no. 3 (September 1, 2020): 195–212.

²⁶ Domínguez Rubio, *Still Life*, 182–83.

²⁷ Macdonald, “Collecting Practices,” 82.

specific method of liminal display. However, I contend that these objects on loan are not so much commodities as assets, using the definition provided by geographer Kean Birch and sociologist Fabian Muniesa, as “something that can be owned or controlled, traded, and capitalized as a revenue stream [through] a “durable economic rent,” wherein value is extracted from the asset not through its sale, but through “ownership and control...which usually entails limiting access to it.”²⁸ (Assets will be discussed further in Chapter 4.)

In a series of essays for the periodical *Distribution and Warehousing* published between 1922 and 1924, “historian for hire” H. H. Manchester discusses the idea and operations of the warehouse from antiquity to the time of writing. He identifies two enduring types: first, the more common interpretation of the warehouse as depository, whose essence is preservation, and second, the warehouse as depot for goods in transit. For Manchester, the warehouse as depot marks a historical break—from storage for subsistence to storage for circulation—that separates the “primitives” from the “moderns.”²⁹ Yet historians and theorists of the twentieth and twenty-first centuries see the symbiotic relationship between storage and transmission as having endured from antiquity into the present, visible in the container-forms of “granaries, banks, armories, libraries, warehouses, irrigation ditches, canals, water reservoirs, moats, water supplies, and sewage systems.”³⁰

²⁸ Kean Birch and Fabian Muniesa, eds., *Assetization: Turning Things into Assets in Technoscientific Capitalism* (The MIT Press, 2020). See also Fabian Muniesa et al., *Capitalization: A Cultural Guide* (Paris: Mines ParisTech, 2017).

²⁹ Orenstein, *Out of Stock*, 34–37. Orenstein identifies a third, “vexing” form of the warehouse as factory, which turned humans into commodities for the Atlantic slave trade. See also a discussion of Manchester’s series on warehousing in Hockenberry, Starosielski, and Zieger, *Assembly Codes*, 32.

³⁰ Citing Lewis Mumford’s “almost heroic notion of the importance of the container for the development of humanity” in which “the ancient city [took its final form as] a container of containers,” in his 1961 *The City in History*, p. 14, Alexander Klose asserts, “All the mythical container tales may be traced back to cultural practices of transportation or preservation—or more pointedly, from a media-technology perspective, as practices of transmission or storage—that have arisen since the Neolithic period and in the period of classical antiquity.” Klose, *The Container Principle*, 128–29. See also Levinson, *The Box*; Rose George, *Deep Sea and Foreign Going: Inside Shipping, the Invisible Industry That Brings You 90% of Everything* (London: Portobello Books, 2013); LeCavalier, *The Rule of Logistics*; Dara Orenstein, “Warehouses on Wheels,” *Environment and Planning D: Society and Space* 36, no. 4 (August 2018): 648–65; Osman, *Modernism’s Visible Hand*.

To these forms I add that of the museum, or rather, I suggest that the museum as storage system follows the logic of a container that also facilitates movement. As museums frequently lend objects from their collections for exhibitions elsewhere, contemporary storage is arranged to facilitate this movement. Yet these objects are often deemed to be irreplaceable, and museums must necessarily bring the warehouse principle of conservation together with that of circulation for commercial gain. Engaging with the museum as warehouse, I offer an expanded view of how museums engage in object preservation.

In the late 1930s, Clarence Stein, an architect and urban planner from New York, became increasingly concerned with how to improve the flows of museum services by standardizing interior spatial layout. At the 1938 meeting of the American Association of Museums, he called attention to the oft-ignored service sections of museums, defining each operation carefully (object receiving and recording facilities, circulating exhibits, photography services, maintenance workshops), analyzing their relationships, and using these insights to ascertain the space requirements for better organizing the flow of staff and objects alike.³¹ The talk included several diagrams for efficient flow that cited several existing museum facilities across the United States as potential models, demonstrating his working knowledge of the practical needs of museums of the time.³² (Figs. 2.1, 2.2)

Central to Stein's proposal to re-think museum flow was an acknowledgement that museums were not (or no longer) static mausoleums but dynamic warehouses of circulating aesthetic objects:

“In a modern museum there is constant flow of objects as well as people. Temporary exhibitions and

³¹ Clarence S. Stein, “Planning for Art Museum Services (Paper Read at the Annual Meeting of the American Association of Museums, Philadelphia, 19-21 May 1938),” *Museum News* 16, no. 13 (January 1, 1939).

³² For example, Stein notes the “excellent” position of registrar and recorder between receiving room and administrative offices at the Cleveland Museum of Art; the separation of workshop facilities from the main building so as to guard from fire at Cleveland, the Metropolitan Museum of Art, and the Newark Museum; and waste disposal facilities at various museums. Stein, 6, 8, 9. See also the discussion of Stein's AAM paper in Belinda Nemeč, “‘Essential cure for dying museums,’ Clarence S. Stein and study-storage,” in Brusius and Singh, *Museum Storage and Meaning*, 113.

circulating exhibits come and go. Even the permanent collection is no longer frozen for all time. Material from study-storage reserves is used to change the display exhibits periodically.”³³ The many diagrams charting object flows that accompanied his talk centered temporary and traveling exhibits and shaped his discussions of museum services including receiving rooms, storage and assembling facilities for circulating exhibits, and freight facilities.³⁴ Stein’s assessment of existing spaces—both newly installations and recent changes—and his proposals for streamlining facilities for object flow is a recognition that temporary exhibitions created new relationships between staff both within the museum and across different institutions. Central to his diagrams was the museum superintendent; that administrator was represented as an all-seeing eye.

As administrators like superintendents and registrars became central to facilitating this flow, the distance between their offices and museum storage facilities diminished (but the term “storage” belied the changing function of these facilities from one of consignment to one of circulation). The careful design of storage rooms, then, enabled the careful circulation of itinerant objects. That Stein’s proposals shaped how leaders of UNESCO and ICOM articulated the layout of public-facing exhibition galleries is well-documented.³⁵ I would venture that Stein’s concern with storage and flow

³³ Stein, “Planning for Art Museum Services,” 5.

³⁴ Stein took note of the unusually large facilities at the Baltimore Museum of Art, with recommendations for equipment (“long, wide tables; cord supply on large spools hung over tables; metal-lined bins, preferably on wheels for excelsior and packing paper; rolls of wrapping paper”) that anticipated the comprehensive manual Elodie Courter Osborn wrote for UNESCO in 1953, discussed in Chapter 1. He paid close attention to assembling and circulating storage rooms for exhibition management, noting that “the circulating secretary of the Museum of Modern Art dispersed 286 objects in 22 boxes during a typical month.” Finally, he also took pains to include mundane building details such as the dimensions of the vestibule of a freight elevator at the Toledo Museum of Art, and the height of truck platforms and dimensions of freight door openings at various museums. Stein, 9–10.

³⁵ For example, one of Stein’s early essays on museum architecture was a 1930 proposal for the “Art Museum of Tomorrow,” which borrowed language from the garden city movement of which he was a proponent. This visual language is very apparent in ICOM vice president and director of science museum Le Palais de la Découverte in Paris André Leveillé’s adaptation of Stein’s art museum plan for science museums, which proposed both “minimum” and “maximum” versions. Allais, *Designs of Destruction*, 200. (Allais talks about Stein’s work more at length in her unpublished dissertation, *Will to War, Will to Art: Cultural Internationalism and the Modernist Aesthetics of Monuments 1932-1964*, 310-315.) Stein’s essay was also cited in a chapter on museum architecture by Italian museologist and

similarly appealed to UNESCO/ICOM leaders, not for the standardizing of individual storage facilities in museums but for regulating the international flow of objects between them (or flow optimization, as cultural theorist Alexander Klose describes what he calls the “dominant concept” in management science).³⁶

Trickle-down Theories of Public Art Education

It is instructive to compare the increasing liberalization of trade in Europe in the mid-nineteenth century with the persistently protectionist economic policies of the United States during the same period. Manufacturing in the United States at the time struggled to compete with goods produced on the other side of the Atlantic; how different constituencies expressed their receptivity or resistance to liberalization anticipates current tensions between industrialized and industrializing states on the matter of free trade. The case of the United States offers insights into how works of art are still construed as commodities for commercial exchange or viewed as objects outside this realm. Protectionist policies impacted the imports of works of art—both provisionally for exhibitions and permanently for individual and institutional collections—and the border became a critical juncture at which the administrative definition of art was negotiated. Moreover, proponents of liberalized trade assembled a persuasive defense of art exhibitions as democratic mass education; protectionist policies, they claimed, hurt the nation’s poorest. The condescension with which they described and sought to assimilate these masses, too, mirrors the paternalism of the League of Nations and with

founder of the National Museum of Capodimonte in Naples, Bruno Molajoli, in a 1960 UNESCO monograph on museum organization, and the same publication included an essay by UNESCO program assistant Hiroshi Daifuku on museum storage. See Hiroshi Daifuku, “Collections: Their Care and Storage,” and Bruno Molajoli, “Museum Architecture,” in *The Organization of Museums: Practical Advice*, 1960, 146-185.

³⁶ Klose, *The Container Principle*, 169.

which the UNESCO/ICOM exhibition sponsorship scheme—described later in this chapter—was adopted. Working collaboratively to overcome protectionist policy-based obstacles to importing museum objects, museum leaders in the United States crucially defined what constitutes art and under what circumstances, using the language of border control.

Apart from a period of treasury surplus between 1830 and 1860, import taxes were levied on all foreign goods entering the United States throughout the nineteenth century, including works of art; taxes were reintroduced with the outbreak of the Civil War in 1861 and increased sharply in the subsequent two decades. The dramatic changes in the percentage of duties levied on different classes of art between 1895 and 1913—from zero to almost a fifth of the object’s value to zero again—reflected the ascendance of one or other view of the merits of imported art. The debate itself was twofold. First, was art a commodity like all others or did it occupy a separate sphere? Those favoring the tariff argued that just as these duties protected American manufacturers from competition from cheap foreign labor, so would it prevent the saturation of the American art market with poor quality decorative objects from Europe.³⁷ Those opposing the tariff argued that each work of art was unique and did not compete against each other.³⁸ Second, which constituencies benefitted most from the importation of art? Those in favor of the tariff argued that art was a luxury for the wealthy and should be taxed accordingly, and their position appeared at first to be unassailable.

³⁷ That art was like other commodities was a view apparently shared by the Italian government, who protested that the 1883 tariff—which imposed a thirty per cent tax on Italian sculpture—violated an 1871 treaty which assured no discriminatory taxes on Italian imports. The French government similarly responded to the art tariff by banning imports of American pork in 1881; while the reason cited was the threat of parasitic disease trichinosis, the pork ban was lifted alongside a corresponding decrease in art import tax from thirty to fifteen per cent. Kimberly Orcutt, “Buy American? The Debate over the Art Tariff,” *American Art* 16, no. 3 (October 2002): 84–87.

³⁸ Robert E. May, “Culture Wars: The U.S. Art Lobby and Congressional Tariff Legislation during the Gilded Age and Progressive Era,” *The Journal of the Gilded Age and Progressive Era* 9, no. 1 (January 2010): 57.

Museum leaders began to reframe this latter aspect of the debate by emphasizing how masterworks of art imported by the wealthy eventually made their way to public institutions, where they took on an educative role. Testifying in 1909 before the Ways and Means Committee, the body of the U.S. House of Representatives overseeing matters of revenue and trade, spokespeople from institutions including the Metropolitan Museum of Art in New York, the Museum of Fine Arts in Boston, and the Art Institute of Chicago argued that public institutions were patently dependent on endowments from private individuals to swell the ranks of their collections. Essentially, the cultural education provided by museums to the public relied on the “trickle-down” effects of benefits granted to wealthy connoisseurs, although museum leaders did not articulate this quite so baldly.

Their assertions were given seeming credence when financier and collector John Pierpont Morgan, who had stored his art acquisitions in Britain, began to transfer his collection to the United States in 1911 when the tariff on works over twenty years old was repealed. The Metropolitan hosted two loan exhibitions of works from his collections: an intimate display of 29 paintings in 1913 and an extensive showing of more than 4000 objects of all kinds in 1914. Morgan died shortly after the opening of the first exhibition, and the Met received a bequest of over seven thousand objects from these collections a few years thereafter.³⁹ (Secretary of the Association of American

³⁹ Bryson Burroughs, “A Loan Exhibition of Mr. Morgan’s Paintings,” *The Metropolitan Museum of Art Bulletin* 8, no. 1 (January 1913): 2–13; *Guide to the Loan Exhibition of the J. Pierpont Morgan Collection* (The Metropolitan Museum of Art, 1914), <https://libmma.contentdm.oclc.org/digital/collection/p15324coll10/id/23563>. May notes that Morgan was one of many plutocrats who began transferring art to the United States following the Payne-Aldrich revisions. Orcutt and May both assert that the Metropolitan Museum benefitted significantly from the Morgan bequest in particular, but do not discuss all the facts. Orcutt, “Buy American?,” 88; May, “Culture Wars,” 84, 87. In truth, Morgan was increasingly ambivalent about donating his collections to the Metropolitan, leaving them instead to his son Jack, who sold more than half the collection before eventually donating the remainder to the Museum. Flaminia Gennari-Santori, “Medieval Art for America: The Arrival of the J. Pierpont Morgan Collection at the Metropolitan Museum of Art,” *Journal of the History of Collections* 22, no. 1 (May 1, 2010): 81–98. Yet public posts on the Metropolitan Museum website praise Morgan’s “careful and thoughtful” contributions to the Museum’s educational programs, providing no context for the changes in tax policy nor the uncertainty surrounding the bequest (and comparative paucity as compared with initial expectations). Stephanie Post, “The Museum, ca. 1913: Celebrating J. Pierpont Morgan’s Legacy,” April 10, 2014, <https://www.metmuseum.org/blogs/digital-underground/2014/morgan-and-museum-1913>.

Painters and Sculptors John Quinn further pressed the point of connoisseurship and public access when he successfully advocated for abolishing the tariff on works of art less than twenty years old at a 1913 House Ways and Means Committee hearing, pointing out that middle-class collectors usually purchased contemporary works that were subject to tax, while wealthy collectors purchased Old Master paintings that were now free of the tariff.⁴⁰)

In arguing for the educative role of museums—a view, incidentally, that was more popular among a younger generation of museum trustees⁴¹—advocates for tax-free art imports utilized the “civilizing” vocabulary of general free trade proponents to their own ends. Growing numbers of working-class immigrants in major cities on the eastern seaboard required cultural assimilation, in the estimation of these trustees, and art museums were the most accessible form of public education available. An April 1893 issue of *Harpers Weekly*, for instance, attributed free museum exhibitions to the spread of settlement houses.⁴² They effected a sleight of hand by presenting the Western European culture of Protestant elites as national culture itself and implicitly cementing their superiority,⁴³ in a microcosm of the European imperial democracy espoused by free trade advocates in general and by proponents of freely circulating cultural materials by the League of Nations in the interwar period and UNESCO/ICOM after WWII.

The proponents of the tariff and of its exemption both staunchly believed their positions to bridge national and international interest. Those who argued for exemptions believed the United

⁴⁰ Orcutt, “Buy American?,” 88–90; May, “Culture Wars,” 84–85, 88–89.

⁴¹ Duncan, *Civilizing Rituals*, 57–58.

⁴² Editorials from the end of the nineteenth century underlined the educative role of museums, with titles such as “Duty on Art a Tax on Knowledge,” and “The Art Duty a Handicap on Education.” May, “Culture Wars,” 56–57, 76. For the role of museums in “civilizing” immigrants, see also the literature cited in Duncan, *Civilizing Rituals*, 55, 146n12. On the internationalist belief that education was integral to harmonious internationalism, see Iriye, *Global Community*, 45–47.

⁴³ Duncan, *Civilizing Rituals*, 54–56.

States still lacked cultural (and therefore civilizational) supremacy, and that duty-free acquisitions would shore up its legitimacy. For example, the American Federation of Arts, a nonprofit formed in 1909 to send out educative exhibitions of original works of art on tour from museums in major cities to other parts of the country (the same AFA with which the UNESCO Museums Division in communicated to determine an author for *The Manual of Travelling Exhibitions*, discussed in the previous chapter), lobbied for duty-free art at the 1929 Tariff Readjustment Hearings of the House of Representatives Committee on Ways and Means. Through the testimonies of museum directors and university presidents that art transcended national boundaries, the AFA argued that artistic technique and public education alike could be cultivated through free circulation of art (including through exhibitions), and that to deny such entry was “a step backward into the dark ages of ignorance and isolation.”⁴⁴ Tariffs advocates agreed with the first part of this statement but believed that the tariff, in fact, guided the public to appreciate American-made art.⁴⁵

It was no coincidence that the decorative art objects viewed as most effective for public education—to improve the skills of artisans, the quality of manufactured objects, and the tastes of the collecting public—were the very objects that Morgan and other “millionaire collectors in search of aristocratic identities” amassed over their lifetimes and later willed to major museums.⁴⁶ The drive

⁴⁴ The brief prepared by the American Federation of Arts reiterated statements from a similar brief made in 1908 by the American Free Art League, a predecessor organization of sorts. United States Congress, *Tariff Readjustment 1929. Hearings Before the Committee on Ways and Means, House of Representatives. Seventieth Congress, Second Session.* (Washington, D.C.: United States Government Printing Office, 1929), 10057–62. This ambivalence between national and international art interests was characteristic of the late nineteenth century and endured well into the twentieth. For instance, an exhibition of German art following the war with Germany in 1870–71 was received enthusiastically by French critics, who claimed that it was through the reception of French art that German artists developed further. See Rachel Esner, “‘Art knows no fatherland’: Internationalism and the Reception of German Art in France in the Early Third Republic,” in Geyer, Paulmann, and German Historical Institute in London, *The Mechanics of Internationalism*, 108–20.

⁴⁵ May, “Culture Wars,” 54–55.

⁴⁶ Duncan, *Civilizing Rituals*, 32–33, 59–64; May, “Culture Wars,” 54. For more on this shift in collecting priorities, see McClellan, *The Art Museum from Boullée to Bilbao*, 30.

to exempt imported art from duties also coincided with a relative devaluation of the educative copies and casts that originally made up a significant part of museum collections, as evidenced by the 1913 exemption of new classes of original art, while retaining a fifteen percent levy on copies.⁴⁷ Yet works produced by artists in the early twentieth century that increasingly blurred the boundary between these two categories were met with consternation at customs.

Changes to the tariff schedule made in response to protests from the arts community reflected their priorities in negotiation. They were met with brief success in the early part of the last decade of the nineteenth century in eliminating duties on *all* works of art, but after a new duty of fifteen to twenty per cent was reintroduced in 1897, later changes to the tariff schedule made in 1909 allowed duties to be waived for artworks over twenty years old, facilitating the free passage of works by Old Masters, but not the work of contemporary European artists. The tariff for more recent works was not eliminated until 1913. These priorities also changed with the establishment of the Museum of Modern Art in 1929, whose administrators lobbied for avant-garde work to be entered free of duty in the mid-twentieth century. Differentiating between classes of imported art for tax purposes would become the subject of a prolonged series of hearings in the 1950s.

What is Art (at the Border)?

Over the last two decades of the nineteenth century and well into the twentieth, policies on trade underwent significant changes, as evidenced by the many tariff-related legislation enacted between 1883 and 1930.⁴⁸ Collectors circumvented the tariff at times by adhering to the letter of the

⁴⁷ Orcutt, "Buy American?," 89–90; May, "Culture Wars," 87–88.

⁴⁸ See: Mongrel Tariff Act (1883), Wilson-Gorman Tariff Act (1894), Dingley Tariff Act (1897), Payne Aldrich Tariff Act (1909), Underwood Simmons Tariff/Revenue Act (1913), Smoot Hawley Tariff Act (1930).

law: Morgan, for instance, brought illuminated manuscripts from Europe into the United States tax-free because they were classified as books, even though they included the work of artists.⁴⁹ More often, however, these objects were denied entry. In 1936, nineteen sculptures headed from Europe to the *Cubism and Abstract Art* exhibition at the Museum of Modern Art in New York were denied entry at US Customs. These included works by Alberto Giacometti, Hans Arp, Jean Miró, and Henry Moore, and Umberto Boccioni. While they should have been freely entered under Paragraph 1807 of the 1930 Tariff Act, which covered original works of art, customs officers claimed that according to a 1916 Treasury Decision (T.D. 36309), sculpture was understood to be “imitations of natural objects, chiefly of the human form...in their true proportion of length, breadth, and thickness.” The sculptures were only released after MoMA officials paid the requisite tariff for “building materials” (the fifty-nine paintings that arrived with the sculpture were entered without incident).⁵⁰ (Fig. 2.3) This is just one example of how administrative language mediated the meaning of art when crossing borders.

In the mid-twentieth century, the most concerted effort to this end was undertaken through the joint effort of two entities formed to further liberalize stringent import regulations for art objects: the American Association of Museums Committee on Customs, and the National Committee to Liberalize Tariff Laws for Art. These efforts were realized in a 1959 amendment to the Tariff Act of

⁴⁹ Orcutt, “Buy American?,” 87.

⁵⁰ Russell Lynes, *Good Old Modern: An Intimate Portrait of the Museum of Modern Art* (New York: Atheneum, 1973), 137–41, 145. Art misrecognition at the border transcended borders. An unsigned letter dated 13th September 1949, and addressed to Philip James, Art Director for the Arts Council of Great Britain, described the commission of a new tapestry from artist Marc Saint-Saens following an exhibition at the Tate. It was classified as “tissues woven” at customs and subjected to a purchase tax (precursor to present-day value added tax) intended for luxury goods, from which original works of art were understood to be exempt. The letter writer pointed out that “a picture, after all, is merely paint covering “tissues woven” in the shape of a canvas, and the only difference [with a tapestry] is, that the woven tissue itself makes a picture, while [for a picture] the woven canvas itself has to have another substance applied by a skilled hand on top of the tissues woven,” and asked to have his tapestry be considered a picture for tax purposes. Victoria and Albert Museum Archives.

1930 (the Smoot-Hawley Act) that removed barriers to entry of works of art that included collages, abstract sculpture, and other new media, and was incorporated into the Tariff Classification Act of 1962.⁵¹ This attention to the status of modern art is attributable to the central role played in both organizations by Dorothy H. Dudley. Serving as registrar—i.e., tasked with receiving and accessioning objects into the museum’s collections—at MoMA for 33 years between 1936 and 1969, she had first-hand experience importing works of art and sending them out on exhibition. She was also the chairperson of the AAM Committee on Customs for a decade and was an executive member of the National Committee to Liberalize Tariff Laws for Art. (The role of registrars and Dudley’s key contributions to standardizing the field of museum registration is discussed further in the following chapters.) In addition to this lobbying, in fact, MoMA even assembled an informal exhibition in 1959 to point out inconsistencies in the tariff.⁵²

It is useful to understand the kinds of changes that were requested and implemented through this legislation, whether for exhibitions or permanent imports of art.⁵³ The two committees on customs and tariff law made the case for rewording several paragraphs relating to art imports (1720, 1807, 1809, 1811, and 1812) such that the law was “clear enough to eliminate all obstacles to the

⁵¹ Dorothy H. Dudley and Irma Bezold Wilkinson, *Museum Registration Methods*, 3rd edition (Washington, D.C.: American Association of Museums, 1979), 119.

⁵² “Chronology of Events Leading to Liberalization of Tariff Laws for Art,” Press Release, Museum of Modern Art, New York, accessed April 23, 2022, https://www.moma.org/momaorg/shared/pdfs/docs/press_archives/2596/releases/MOMA_1959_0162_111A.pdf.

⁵³ The AAM Committee on Customs first presented its recommendations for changing the language of the 1930 Tariff Act to the Committee on Ways and Means Committee on Ways and Means at hearings on simplifying customs administration in the early 1950s. Dudley, alongside Lillian M. Kern, registrar at the Cleveland Museum of Art, and Robert P. Sugden, General Services Manager at the Metropolitan Museum of Art, presented the case of the AAM Committee on Customs in support of H.R. 1535 (Bill to Amend Certain Provisions of the Tariff Act of 1930 and Related Laws, and for Other Purposes, 1951), introduced by Robert L. Doughton. United States Congress, *Simplification of Customs Administration* (Washington, D.C.: United States Government Printing Office, 1951), 698–702. These proposals were revised in 1957 and presented in support of bills on the free importation of artwork in 1959 introduced by Senators Jacob Javits (R-NY) and Senator Paul Douglas (D-IL) in the Senate and by Representative Frank Thompson (D-NJ) in the House (HR 2411 Free Importation of Art Works, 1959). See also Javits’ article, “Art Needs a New Passport,” *Museum News*, 15 March 1959.

free importation of original works of art and flexible enough to cope with inevitable innovations in style and material,” while also simplifying customs administration.⁵⁴ The protectionist Tariff Act of 1930 contained wording on importing works of art that, the two committees claimed, resulted in a surfeit of administrative inconsistencies. As Dudley summarized it, “[F]ree entry for sculpture depends almost entirely upon its subject matter as shown by the title, but it can be made of almost anything; painting may represent anything or nothing, but must be made of certain materials; signed etchings come in free; but lithographs, signed or otherwise, do not.”⁵⁵ These changes reflected wider concerns about originality, public education, and the role of exhibitions in museums.

Paragraph 1809 of the 1930 Act was concerned with the definition of an educational display. Certain works of art could be brought in to the country free of duty both as permanent acquisitions or for temporary exhibitions through various provisions. To bring in works not covered by these paragraphs free of duty for exhibition, however, it was necessary to do so through an exhibition bond—i.e., a guarantee that the material was not for sale, and that duties would be paid if sold, in the same vein as the exhibition bonds that made World’s Fairs possible⁵⁶—which was made possible at the discretion of the Collector of Customs.⁵⁷ Under such a bond, exhibition materials could be shared between educational—but not commercial—institutions free of duty, and had to be kept on the premises of the importing institution and produced for periodic inspection by customs officials. Yet even this transferral between institutions required explicit permission from the Collector of Customs. The recommended change here was twofold. First, since institutions had to establish their

⁵⁴ United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session* (Washington, D.C.: United States Government Printing Office, 1959), 16915.

⁵⁵ United States Congress, 16915.

⁵⁶ The bonds were initially binding, but after 1953 became limited to a period of five years. Dudley and Bezold, *Museum Registration Methods*, 199. See Part II: Article 12.

⁵⁷ Dudley and Bezold, 198.

non-commercial character to enter exhibition materials under bond at all, this second permission required to circulate materials between institutions was redundant and could be waived. Second, non-profit exhibitions were often held at commercial institutions, so if material entered under exhibition bond could be shown at such venues with explicit permission, it would benefit educational institutions, increase public access to these educational and cultural materials, and reduce paperwork.⁵⁸ Cultural and commercial institutions could engage in mutually favorable—rather than oppositional—functions facilitated by shared exhibition materials whose status was temporarily suspended between the two realms.

Another paragraph (1720) allowed the duty-free entry of “models of inventions and of other improvements in the arts, to be used exclusively as models and incapable of any other use.”⁵⁹ A model was legally defined as “an object...from which working machines, devices, or structures are to be made.”⁶⁰ Yet two court cases involving the importation of miniature steamships for exhibition interpreted the term “model” to broadly refer to a creative sketch in the first case, and to narrowly describe a precise blueprint for construction in the second, resulting in different pronouncements for whether they were dutiable.⁶¹ The proposed amendment to paragraph 1720 was a clause that

⁵⁸ United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session*, 16915–16. United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature, 16 July 1959* (Washington, D.C.: United States Government Printing Office, 1959), 18.

⁵⁹ According to Dudley’s testimony, the paragraph originated in the 1883 Tariff Act, and was carried into the subsequent Tariff Acts of 1890, 1894, and 1897 with slight emendations. United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature, 16 July 1959*, 15.

⁶⁰ The language of this definition dates to Treasury Decision 22981 (1901). United States Congress, 15–16.

⁶¹ In a 1904 case, two miniature steamships brought in for an exhibition at the United States offices of the Hamburg-American Line in 1904 under Paragraph 1720 had instead been assessed at Customs as “articles or wares...composed wholly or in part of iron and steel,” at a forty-five per cent duty, with the view that these ships had not served as actual models for the building of full-scale vessels. The Circuit Court adjudicated that “shipbuilding is of itself an art,” and the miniature craft had no other function but to serve as models of improvement in this art, so the decision was overturned. See *Boas v. United States*, 128 F. 470 (1904). <https://cite.case.law/f/128/470/> The language of the 1897 Tariff Act under which the entry of the miniature ships was assessed read, “Models of inventions and of other improvements in the

emphasized the role of exhibitions: “to be used exclusively as models *and as exhibits in exhibitions at any college, academy, school, or seminary of learning, and society established for the encouragement of the arts, science, or education, or any association of such organizations*, and incapable of any other use.”⁶²

[italics in original, indicating proposed insertions] This was intended, firstly, to broaden the definition of models to include architectural and other models, and secondly, to ensure that not only museums and schools but also even commercial entities might import such models for educational or cultural displays free of duty, instead of under permanent exhibition bond.

One paragraph (1807) was concerned with the importation of original works of art. As such, it contained language that endeavored to differentiate between “originals” and “replicas”, the latter of which were dutiable. For instance, the paragraph included a list of traditional artists’ materials (“bronze, marble, stone, terra cotta, ivory, wood, or metal”) of which original art was imagined to be made. Yet contemporary artists often inventively employed other materials to create new works—such as paper collages—that were disqualified from inclusion, and were entered instead under paragraphs not intended to cover art, such as Paragraph 1413 for “manufactured works of paper” (which entailed a 17 ½ per cent *ad valorem* tax under the assumption that the work at hand was

arts, including patterns for machinery, but no article shall be deemed a model or pattern which can be fitted for use otherwise.” *Customs Tariff Act of 1897* (New York: R.F. Downing and Co., 1906), 110. The language of the 1909 Tariff Act was amended in response to this case, and this language carried through to the 1913, 1922, and 1930 Tariff Acts. Yet the U.S. Court of Customs and Patent Appeals had ruled in a 1929 case that for an object to be deemed a model, it must have been used in the construction of some larger object (*United States v. American Brown Boveri Electric Corporation* (17 CCPA (Customs) 329 (1929))). As such, a second case involving the importation of miniature steamships in 1935 ruled that they were not models and therefore not entitled to duty-free treatment. (*Cunard Steamship Co. v. United States* (22 CCPA (Customs) 615 (1935))). United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature, 16 July 1959*, 16. For a further discussion of models of inventions that details how difficult it was to reach a consensus, see Andrew W. Mellon, *Treasury Decisions Under the Customs, Internal Revenue, Industrial Alcohol, Narcotic and Other Laws*, vol. 57 (United States Government Printing Office, 1930), 30–43, 488–91.

⁶² United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session*, 16915.

worth a few cents, not thousands of dollars).⁶³ Here the recommended change was to decouple materiality from aesthetic and commercial value by including the words “in any other media” in the list of materials.

The relationship between materiality and originality—at least as it was perceived at the border—was also contingent on the artist’s medium. Paintings and drawings were admitted based on their manufacture from traditional artists’ materials, but were not limited by their representation of natural or abstract subjects. Sculpture could be made of a wider array of materials, but was often stopped on account of its form. A Treasury Decision of 1916 (T.D. 36309) defined original sculpture as “imitations of natural objects, chiefly the human form...in their true proportion of length, breadth, and thickness[.]” Although the legal controversy surrounding the 1927 importation of Romanian artist Constantin Brancusi’s abstract sculpture, *Bird in Space*, is cited as prompting a widespread acceptance of art as no longer having to be figurative to be considered free of the tariff, the Treasury Decision (T.D. 43063) following the *Bird in Space* case still required sculpture to represent a natural form, albeit not in exact proportions.⁶⁴ While Justice Byron S. Waite, who adjudicated the case, recognized that “there has been developing a so-called new school of art, whose exponents attempt to portray abstract ideas rather than to imitate natural objects,” customs officials were still required to follow the 1916 ruling and deny entry to overtly abstract sculpture.⁶⁵ (The U.S. Customs Court finally held that the terms “sculptures” and “statuary”...may include “abstract” subjects or so-called modern art,” in a decision made as late as 1958.) To definitively resolve this

⁶³ United States Congress, 16915.

⁶⁴ See Walter J. Derenberg and Daniel J. Baum, “Congress Rehabilitates Modern Art,” in Franklin Feldman and Stephen E. Weil, *Art Works: Law, Policy, Practice* (Practising Law Institute, 1974).

⁶⁵ *Ebeling & Reuss Co. v. United States* (93 Treas. Dec. No. 26, p. 46, C.D. 2009), 20 June 1958. United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature, 16 July 1959*, 17.

issue, the proposed amendment was simply, “made in any form.” Furthermore, the Committee successfully petitioned to reverse a Customs Court decision of 1954 that allowed only three casts of sculpture (the original and first and second replicas) free entry. The language was also changed to include a wider variety of printing processes in the production of original prints, an increase from three to ten sculptural casts in addition to the sculptor’s model.⁶⁶

Paragraph 1811 was concerned with the definition of antiquity. It allowed duty-free imports of archaeological and art objects produced before 1830. In this case, however, the recommended change—that the wording be changed to an age requirement of 100 years for antique articles, as in tariff acts prior to 1930⁶⁷—was opposed by the New York Antique Dealers and the American Association of Antique Dealers on the grounds that the traditional test of antiquity of objects would be materially changed.⁶⁸ For instance, furniture began to be machine-made in 1840, and many pieces produced in this manner were replicas of furniture from the eighteenth century. The proposed change would essentially allow for these machine-made reproductions produced between 1830 and 1859 to be entered free of duty as antiques, when they were currently dutiable as copies. (A similar argument was also made about silverware.) According to several spokespeople for the Association, having the definition of antiquity be a moving target that changed from year to year would not only make the work of customs officials in identifying a genuine antique difficult, it would also depreciate the value of pre-1830 antiques while granting entry to cheap facsimiles.⁶⁹ The definition of antiquity, then, depended on administrative expediency.

⁶⁶ United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session*, 16915.

⁶⁷ United States Congress, 16916.

⁶⁸ United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature*, 16 July 1959, 47–48, 51.

⁶⁹ United States Congress, 52–54.

This is accentuated by the fact that the AAM Committee on Customs further requested that their proposed wording change (i.e., to change the age requirement to 100 years, rather than to have been made before 1830) not apply to the cultural objects of “primitive peoples.” They requested that the requirement for proof of antiquity for these objects be merely *fifty* years, arguing that “the cultures represented by such objects have disappeared, diminished, or changed radically,” that, “in the absence of records it is often impossible to be certain of the age of such material,” that, “the very preservation of such material frequently depends upon its possession by a museum, especially when it is no longer valued by its makers,” and that “objects more than 50 years old are almost nonexistent because of the perishable materials used and the corrosive effect of climate and vermin in the local environment.” As these objects were largely used for study and display, they did not compete with American products, and an age of 50 years was “more than enough to bar all modern commercial products and imitations made for the tourist trade.”⁷⁰ A further amendment was the deletion of the word “artistic” before the word antiquities, so that the status of these objects would not continually be questioned. This requested change, unlike the previous one, passed without objection.⁷¹

Some changes were merely about semantics. For instance, the term “gobelin” had come to refer broadly to all fine art tapestries to be used expressly as wall-hangings. Paragraph 1812, which was concerned with the importation of fine art tapestries, was carefully worded to combat the alleged practice by importers of classifying consumer fabrics as art to evade duties after the 1898 Act.⁷² Yet the capitalization of the word now narrowly granted free entry only to those tapestries certified as

⁷⁰ United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session*, 16916.

⁷¹ United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature*, 16 July 1959, 19.

⁷² United States Congress, 48. For the practice of classifying consumer goods as art, see May, “Culture Wars,” 70.

being produced in one of the two Manufacture Nationale des Gobelins factories in Paris and Beauvais, under the direction of the French Government, denying similar entry to works by modern artists.⁷³ A change to a lowercase ‘g’, however, was enough to elevate their works from ostensible consumer fabric to definitive fine art.

The AAM Committee on Customs and the National Committee to Liberalize Tariff Laws for Art sought to guarantee the permanent entry of as many types of (original) art as possible. For museum exhibitions, there was—as has been discussed—a further method by which to enable free entry: the exhibition bond. Through it, otherwise dutiable material could be entered freely for exhibition purposes, although it admittedly entailed several restrictions and formalities.⁷⁴ Both liberalized legislation and the exhibition bond offered a further advantage (although its significance was not emphasized in these hearings): the ability to apply to have customs examination take place on the museum’s premises, which reduced the chance of damage caused by an untrained customs inspector. For example, one amendment to the paragraph on antiquities was to allow for antique frames to be entered at any port of entry, not simply those specified for antique furniture.⁷⁵ This was to ensure that museums importing paintings in antique frames could request to have the works

⁷³ Similarly, a piece of sculpture with the French title “Masque” was first denied free entry on the grounds that a mask is not a “natural” object, but was later admitted when it was shown that “masque” could also be translated as “masker” or “masquerader.” United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session*, 16915–16.

⁷⁴ In a statement dated 18 February 1929 written in support of the bill to liberalize tariff law for works of art, Blake-More Godwin declared that “the necessity of giving permanent exhibition bond on their importations of contemporary art and furniture...is an unqualified nuisance besides being an expense which should not be imposed upon educational institutions.” United States Congress, *Tariff Readjustment 1929. Hearings Before the Committee on Ways and Means, House of Representatives. Seventieth Congress, Second Session.*, 10061.

⁷⁵ United States Congress, *Congressional Record: Proceedings and Debates of the 86th Congress, First Session*, 16916. At the time, antique furniture could only be entered at one of nine major ports in the contiguous United States, and in Hawaii. United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature*, 16 July 1959, 19.

directly to them for unpacking and customs, rather than at ports specified for antique furniture.⁷⁶ Through these debates about original art and their ostensible reproductions at these hearings, not only were the benefits of the exhibition bond extended to more forms of art, administration and conservation were discursively and practically conflated. UNESCO/ICOM concurrently undertook a similar undertaking to facilitate ease of movement for exhibition materials traveling internationally; comparing its ambiguous outcome to this work carried out in the United States illuminates the strong current of nationalistic paternalism underneath the discourse of idealistic internationalism that strategically served some institutions and legitimized some types of art over others.

Circulating Education, From Films to Exhibitions

Efforts by the League of Nations to remove impediments to the circulation of educational film also provided a model for UNESCO/ ICOM's exhibition programs. The League became a forum for discussions on using film in child development and the new field of adult education (which emphasized educating impoverished, rural, and illiterate members of society).⁷⁷ A 1924 memorandum for the League's Committee on Intellectual Co-operation (CIC) penned by Julien Luchaire, Inspector General of Public Education in France and Director of the Committee's newly formed International Institute of Intellectual Cooperation (IIIC) in Paris, offered a linguistic model

⁷⁶ United States Congress, *Hearing before the Committee on Finance, United States Senate, 86th Congress, 1st Session on H.R. 2411, An Act to Amend Paragraph 1629 of the Tariff Act of 1930 so as to Provide for the Free Importation of Tourist Literature, 16 July 1959*, 47. (The importing museum did have to bear the cost of travel expenses of customs examiners.) Dudley and Bezold, *Museum Registration Methods*, 197.

⁷⁷ Zoë Druick, "The International Educational Cinematograph Institute, Reactionary Modernism, and the Formation of Film Studies," *Canadian Journal of Film Studies* 16, no. 1 (Spring 2007): 82. See also Andrew Higson, "Cultural Policy and Industrial Practice: Film Europe and the International Film Congresses of the 1920s," in Andrew Higson and Richard Maltby, eds., *Film Europe and Film America: Cinema, Commerce and Cultural Exchange; 1920 - 1939* (Exeter: University of Exeter Press, 1999), 117–31; Andrew Higson, "A Film League of Nations," in *Gainsborough Pictures*, ed. Pam Cook, *Rethinking British Cinema* (London: Cassell, 1997), 60–79.

that was taken up almost without alteration by UNESCO/ICOM to present exhibitions as a universally comprehensible medium that could strengthen international understanding. Titled “Relations of the Cinematograph to Intellectual Life,” Luchaire’s report described film as an “intrinsically international” medium with the potential capacity to “become a great new universal art[.]”⁷⁸ League officials like Luchaire imagined a freely circulating “pedagogic cinema” that bypassed protectionist tariff systems, and able to foster “the mutual understanding of peoples.”⁷⁹ In Luchaire’s view, the then-silent medium of film could overcome barriers of language; moreover, concerns about commercial success would oblige producers to consider the reception of their works across cultures. “The consequence,” he declared with optimistic naïveté, “is that the national character of films is reduced to almost nothing.”⁸⁰

The “national character” of film did, in fact, present challenges for international exchange. As film scholar Richard Maltby notes, “By the mid-1920s, cinema was recognized as both a commodity of national and international trade and as a form of communication, and as such both liable to regulation and at least potentially a form of art.”⁸¹ This tension, heightened by the rapid ascendance of the American film industry, manifested in intellectual debates about the role of film at

⁷⁸ Julien Luchaire, “Relations of the Cinematograph to Intellectual Life,” Memorandum submitted to the International Committee for Intellectual Co-operations, 28 July 1924, reprinted in William Marston Seabury, *Motion Picture Problems: The Cinema and the League of Nations* (New York: Avondale Press, 1929), 235–64. Luchaire’s assertion of film’s potential as a universal medium is taken up by several film scholars. See Richard Maltby, “The Cinema and the League of Nations,” in Higson and Maltby, *Film Europe and Film America*, 93; Druick, “The International Educational Cinematograph Institute, Reactionary Modernism, and the Formation of Film Studies,” 82. See also Lee Grieveson, *Cinema and the Wealth of Nations: Media, Capital, and the Liberal World System* (Oakland: University of California Press, 2018), 198.

⁷⁹ See League of Nations International Educational Cinematographic Institute, *Report to the Council on the Third Session of the Governing Body of the Institute*, January 2, 1931, C.694 M.291, League of Nations Archives, Geneva.) In this manner, the circulation of cinema was intended to “transcend the nation-state” and contribute to the establishment of a new world order. See also Grieveson, *Cinema and the Wealth of Nations*, 197–98.

⁸⁰ Richard Maltby, “The Cinema and the League of Nations,” in Higson and Maltby, *Film Europe and Film America*, 93. Original in Marston Seabury, *Motion Picture Problems*.

⁸¹ Maltby, “The Cinema and the League of Nations,” in Higson and Maltby, *Film Europe and Film America*, 85–94.

a series of congresses and trade barriers to limit American film imports to Europe. Luchaire sought to resolve this tension by bringing cultural controls to bear on these commercial concerns: his report co-opted proposals made at a 1923 film industrialists' congress to create an international entity for studying issues pertinent to the nascent film industry, such as intellectual property rights, taxation and censorship, under the purview of the League.⁸² In other words, Luchaire proposed a standard-setting agency for judging which films would be granted permission to circulate freely. But when an International Educational Cinematograph Institute (IECI) was established following an Italian proposal to fund and maintain it, the Institute's location in Rome rendered it a useful propaganda tool for Fascist policies.⁸³ Later articulations by ICOM/UNESCO about the persuasive potential of traveling exhibitions, particularly in remote regions (as discussed in the previous chapter), echo Mussolini's reported beliefs on the relationship between education and persuasion, such as his view that the IECI could serve as an information center and clearinghouse for educational films of all kinds—scholastic, hygienic, historical, archaeological, artistic—to “transform conditions of intellectual and material life of humanity” in the world's rural areas.⁸⁴ The IECI was peculiarly placed, fusing universalist and Fascist ambitions, and shaping a discourse on the persuasive qualities of filmic “mass” education that elided its propagandistic qualities.

⁸² Luchaire was aided by others like William Marston Seabury, who saw film as “a new public utility” for peaceful development, and was inspired by the regulatory work of the League's Opium Committee. Higson and Maltby, 93–94, 118–20; Grievson, *Cinema and the Wealth of Nations*, 199.

⁸³ Prime Minister Benito Mussolini believed that the cinema was “l'arma più forte” (the strongest weapon) for political persuasion, and his government had already established an agency, LUCE (L'Unione Cinematografica Educativa), in 1924 to use film for educational purposes in Italy. See Elaine Mancini, *Struggles of the Italian Film Industry during Fascism, 1930-1935*, James Hay, *Popular Film Culture in Fascist Italy: The Passing of the Rex*, 16, Druick, 83-84. See also <https://atom.archives.unesco.org/international-educational-cinematographic-institute-ieci> for a summary of IECI history.

⁸⁴ Higson and Maltby, “*Film Europe*” and “*Film America*,” 82–116. Debates on the IECI's role took place at a European conference on the Educational Cinema in Basel in December 1927. The report, by an unnamed French official, also suggested that the Institute was expected to receive a donation of 50 million francs from Rockefeller. Report, 21 November 1927, MPA, Reel 3, 1927, League of Nations file.

Language on films and exhibitions as mass media developed simultaneously. The IECI conducted surveys on the effects of cinema on children, including questions on “physical fatigue and emotional states provoked by film, frequency of attendance at cinemas, and views on war.”⁸⁵ The language mirrored that used to discuss the potential of museums to facilitate effective mass education—including solutions to the problem of “museum fatigue” such as clearly delineated paths, seating, and the museum docent. Some museum projects for mass education, meanwhile, derived directly from those undertaken using educational films. The British Film Institute, known for the productions it developed for dissemination through mobile cinema vans in rural parts of the British Isles and its colonies alike, allegedly modeled programs and pedagogies on those at the IECI (and even used product samples as object lessons, albeit in a protectionist effort to teach the value of “buying British”).⁸⁶ The mobile museum, a contained traveling display unit which essentially extended the property line (and public reach) of the museum, derived from the mobile cinema vans

⁸⁵ Druick, “The International Educational Cinematograph Institute, Reactionary Modernism, and the Formation of Film Studies,” 85. The survey results were published in the IECI journal, the *International Review of Educational Cinematography*, to present film in a positive light under the guise of neutrality (League of Nations, International Committee on Intellectual Co-operation, Report by the Director of the International Educational Cinematographic Institute on Point 6 of the Agenda, 20 July 1929, Geneva: C.I.C.I./214). This ultimately worked in favor of those with commercial interests. See Higson and Maltby, “*Film Europe*” and “*Film America*,” 99–100, 104. See also, “The Cinema and Children,” *IREC*, vol. 2, no. 1, January 1930, 43; “Immorality, Crime, and the Cinema,” *IREC*, vol. 2, no 3, March 1930, 327; Albert Hellwig, “The Cinematograph and Crime,” *IREC*, vol. 2, no 3, March 1930, 254.

⁸⁶ Druick, “The International Educational Cinematograph Institute, Reactionary Modernism, and the Formation of Film Studies,” 84–85. She cites the *International Review of Educational Cinematography* 4.7 (July 1932); “The Film in National Life,” *International Review of Educational Cinematography* 4.9 (September 1932): 717. On the similar use of film through a partnership between the US Department of Agriculture and Ford Motor Company, see Grieveson, *Cinema and the Wealth of Nations*, 29. On the debt that UNICEF’s founding owes to the interventions of the Rockefeller and Carnegie Foundations in health education through hygiene cinema (and particularly the roles of Raymond Fosdick and Ludwik Rajchman, see: Iriye, *Global Community*, 49; Daniel Laqua, ed., *Internationalism Reconfigured: Transnational Ideas and Movements between the World Wars* (London; New York: I.B. Tauris; Palgrave Macmillan, 2011), 50; Mazower, *Governing the World*, 143–50; Sunil S. Amrith, *Decolonizing International Health: India and Southeast Asia, 1930–65* (New York: Palgrave Macmillan, 2006); Grieveson, *Cinema and the Wealth of Nations*, 185–87; Eric A. Stein, “Colonial Theaters of Proof: Representation and Laughter in the 1930s Rockefeller Foundation Hygiene Cinema in Java,” in *Empires of Vision: A Reader*, ed. Martin Jay and Sumathi Ramaswamy, Objects/Histories (Durham: Duke University Press, 2014).

developed for colonial mass education and then taken up for what UNESCO called “fundamental education” programs.⁸⁷ (Figs. 2.4, 2.5, 2.6)

Before Italy exited the League of Nations in 1937, the IECI worked to pass the 1933 League of Nations Convention for Facilitating the International Circulation of Films of an Educational Character, exempt such films from import duties, first drafted in 1930 and which went into effect two years later.⁸⁸ Its preamble stated the League’s ambition “to facilitate the international circulation of educational films of every kind, which contribute towards the mutual understanding of peoples, [...] and consequently encourage moral disarmament or which constitute especially effective means of ensuring physical, intellectual and moral progress.”⁸⁹ The convention, which required that such films be certificated as educational by the IECI, was ratified in 1936.⁹⁰ This certification was a model

⁸⁷ On the use of cinema vans for UNESCO programs, see *The Use of Mobile Cinema and Radio Vans in Fundamental Education* (Paris: UNESCO, 1949). On mobile museums touted by UNESCO, see Kenneth B. Disher, “Mobile Museum Units,” *Fundamental Education*, Vol. II, No. 4 (Dec 1950); “Museums and Circulating Exhibitions,” “Circulating Exhibitions in the Museums of Poland,” and “Mobile Museums in Poland,” in *Museum*, vol. 3, no. 4 (1950), 265-85; “Educational Programmes of National History Museums in the United States,” *Museum*, vol. 5, no. 1 (1952), 11-23; “Recent Developments in Mobile Units,” *Museum*, vol. 5, no. 3 (1952), 186-95; “Expandable Mobile Museum for Arid Zones,” *Museum*, vol. 7, no. 2 (1954), 127-40; “Renovation of Museums in Poland,” *Museum*, vol. 8, no. 1 (1956), 35-43; “The Virginia Museum of Fine Arts’ Artmobile, Richmond, Virginia,” *Museum*, vol. 8, no. 2 (1956), 125-131; “The Campaign in the Member States of UNESCO,” and “Publicity,” in *Museum*, vol. 11, no. 1 (1958), 14-55, 58-68; “Editorial,” and “The Museums of Nigeria,” *Museum*, vol. 16, no. 3 (1963), 121-148; “Museum Notes,” *Museum*, vol. 17, no. 3 (1964), 152-168; “Training Center for Museum Technicians in Africa, Jos (Nigeria),” and “An experimental mobile museum for Tropical Africa,” *Museum*, vol. 18, no. 3 (1965), 121-129; “Traveling exhibitions and mobile museums,” *Museum*, vol. 19, no. 3 (1965), 156-59; “The Birla Industrial and Technological Museum, Calcutta,” *Museum*, vol. 20, no. 3 (1967), 179-82; “Mobile science exhibitions of the Birla Industrial and Technological Museum, Calcutta,” *Museum*, vol. 21, no. 4 (1968), 294-300; “Museum Notes,” *Museum*, vol. 23, no. 4 (1971), 274-84; “Conclusion,” *Museum*, vol. 24, no. 3 (1972), 185-86; “The Linder museobus,” *Museum*, vol. 24, no. 4 (1972), 232-35; “An Asian view of conservation,” *Museum*, vol. 27, no. 4 (1975), 157-60; “The modern museum: requirements and problems of a new approach,” *Museum*, vol. 28, no. 3 (1976), 131-44. Mobile museums also make an appearance in most handbooks in UNESCO’s *Museums and Monuments* series. Carmel’s exhibition handbook dedicates several full-page spreads to (non-museal) mobile exhibitions: James H. Carmel, *Exhibition Techniques, Traveling and Temporary*. (New York: Reinhold Pub. Corp., 1962), 154-161.

⁸⁸ Grieson, *Cinema and the Wealth of Nations*, 384 n64. “Preliminary Draft International Convention for the Abolition of Customs Barriers against Educational Films,” I.C.E./C.E.P./5, Geneva, 30 January 1930.

⁸⁹ Convention for Facilitating the International Circulation of Films of an Educational Character (1933: repr. London: His Majesty’s Stationery Office, 1935), 2.] See the British Library for a procès-verbal of the League convention: <https://discovery.nationalarchives.gov.uk/details/r/6bd984ce-4f68-464d-b4a2-1cda26a1ab45>

⁹⁰ Higson and Maltby, “*Film Europe*” and “*Film America*,” 99.

for later efforts by UNESCO/ICOM to devise an exhibition sponsorship scheme. Despite the failure of the League of Nations, its engagement with film presaged UNESCO's preoccupation with mass media and its ambition to serve as a "cultural system complementing an interconnected capitalist world system."⁹¹

ICOM's Attempts to Sponsor Exhibitions

After the end of the Second World War, UNESCO sponsored a similar agreement for facilitating the distribution of educational films and audio-visual materials.⁹² Further, the language, organizational structure, and ambitions for the circulation of film—as a form of "fundamental education" for the illiterate, evaluated by national committees for quality control, and perceived value as a means to "mutual understanding"⁹³—was used almost verbatim to argue for the utility of freely circulating materials more generally perceived to have educational, cultural, or scientific use. UNESCO's Agreement on the Importation of Educational, Scientific, and Cultural Materials, better known as the Florence Agreement (based on the League's film convention, was approved in 1950, and came into force in May 1952, under which contracting nations granted duty-free entry to a wide range of materials, upon which a specifically designed label was affixed.⁹⁴ (Fig. 2.7) UNESCO leaders were hopeful that these objects could serve to advance literacy and expand worldviews. This

⁹¹ The League's use of cinema presaged the UN's media policies and strategies. Grieveson, *Cinema and the Wealth of Nations*, 196. It also helped that 200+ League employees became part of the UN. Mazower, *Governing the World*, 153.

⁹² For links between the League and UNESCO's film work see Zoë Druick, "Reaching the Multimillions: Liberal Internationalism and the Establishment of Documentary Film," in Lee Grieveson and Haidee Wasson, *Inventing Film Studies* (Durham: Duke University Press, 2008).

⁹³ Grieveson and Wasson, 80.

⁹⁴ After two meetings in Geneva, in 1967 and 1973, the General Conference of UNESCO revised it in November 1976 and adopted the Nairobi Protocol, which enlarged the scope of the agreement by extending its benefits to new technological supports. Meanwhile, the Conference of Allied Ministers of Education in London during the war, one of the predecessors to UNESCO itself, urged that member governments take measure to ease the international circulation of books. See Céline Giton: *Weapons of Mass Distribution: UNESCO and the Impact of Books*, 55.

scheme was buttressed by other endeavors including an arrangement to have packages of delicate scientific measuring instruments receive customs clearance at the sending or receiving laboratories rather than in customs depots, and an agreement with the Universal Postal Union and International Air Transport Association to provide favorable rates for informational materials.⁹⁵

To this end, the UNESCO Department of Mass Communication's Division of Free Flow of Information published, with the assistance of the Intelligence Unit of The Economist, in London, a small manual titled *Trade Barriers to Knowledge* in 1951 (updated in 1956). It discussed how tariff and trade regulations affected the movement of educational, scientific, and cultural materials from one country to another. The manual's introduction argued propagandistically for UNESCO's efforts to eliminate obstacles to the international circulation of educational, scientific, and cultural materials as drawing on a long history of courageous intellectual liberalism in Western Europe.⁹⁶ The introduction laid out how political controls on cultural and educational materials in early modern Europe were imposed in response to the invention of mechanical printing, whereupon states imposed a licensing requirement that limited the number of printing presses and created a state-approved monopoly on disseminating books. Intellectuals declared their support of "unlicensed" printing as a form of personal freedom (and aid to critical thinking) of which John Milton's *Areopagitica* (1644) was perhaps the best known. Licensing was replaced by taxation in the eighteenth century, which greatly impeded the production of cheap newspapers and pamphlets read by the masses; the introduction included a quote from French philosopher Felecite Robert de Lamennais, protesting newspaper licensing in France in 1848, that "One must have money, much

⁹⁵ UNESCO, *Trade Barriers to Knowledge* (Paris: UNESCO, 1956), 11–19.

⁹⁶ UNESCO, 5.

money, to enjoy the right to speak. We are not rich, and so must be silent.”⁹⁷ *Trade Barriers to Knowledge* reiterated the position of liberal internationalists on both sides of the Atlantic that taxes disadvantaged the poorest the most.

ICOM sought to apply similar protocols to museums in general, and to international exhibitions in particular. In the US, for example, the American Association of Museums arranged special shipping rates with five steamship groups for art objects being brought from Europe to the U.S. for exhibition purposes, calculated by their dimensions rather than in proportion to their value.⁹⁸ ICOM members also made recommendations to UNESCO that included inducing railroads of different countries to accept as personal luggage cultural material *en route* to international exhibitions.⁹⁹ Most significantly, ICOM launched an effort to establish a specialized customs label modeled on that designed under the Florence Agreement to accompany objects for those traveling exhibitions. Yet the goal of this label was not circulation as much as conservation, and ultimately functioned as the very regulation it claimed to undo.

At ICOM’s second biennial conference in London in 1950, René Huyghe, chief curator of the Louvre Department of Paintings, discussed the dangers an object could face while in transit (he knew them well, having directed the evacuation of the Louvre’s collection during WWII). Yet his paper seemed to indicate that coordinating art exhibitions was a far greater challenge. Among other dangers, he pointed out allowing art to be inspected at the border by careless customs officials threatened to undo the careful work of trained museum professionals to pack and transport the works. He recalled several cases of Louvre works—for example, a series of Rembrandt drawings

⁹⁷ UNESCO, 5.

⁹⁸ The Committee on Freight Rates published a report with the rates consented, the names of the steamship groups, and their ports of call in Europe. ICOM News IV, 1 (1951).

⁹⁹ ICOM News VI, 5-6 (1953), 41.

taken to the Netherlands, a panel painting by Giovanni Bellini lent to Italy—being taken off the train by customs officials at the border on multiple occasions, and not being able to trace the works until several hours later. Huyghe asked, “Is it not tantamount to careless stewardship to be prepared, for the sake of an exceptional but transitory return, to risk the wealth which we should be concerned to increase?”¹⁰⁰

ICOM’s efforts to mitigate this risk were largely spearheaded by the Commission for International Art Exhibitions, instated in 1950 through a resolution passed at the same ICOM conference at which Huyghe read his paper. The Commission was set up to support the circulation of exhibitions they viewed as emphasizing the interdependence of civilizations, which they believed would further understanding. These were to be prioritized over those showcasing the holdings of a single museum, the work of a single artist, or that were local or national in scope.¹⁰¹ It was planned as a committee of thirteen directors, curators, and scientific personnel selected for their experience in preserving and sending works of art on exhibition. Of the thirteen, nine were to be permanent members from countries in which issues in organizing international exhibitions arose regularly (the USA, the UK, Italy, France, Belgium, Switzerland, the Netherlands, Germany, and Austria), while the remaining four rotated between countries in which these issues were held to arise less frequently (the Scandinavian countries were grouped together, as were Poland/Czechoslovakia, Spain/Portugal, and Latin America).¹⁰²

¹⁰⁰ René Huyghe, “Coordination of International Art Exhibitions,” *International Council of Museums: Second Biennial Conference: London 17-22 July 1950*. UNESCO/ICOM/BI/Conf.2/17, Paris, 30 June 1950, 2. Germain Bazin, René Huyghe’s successor at the Louvre, also shared a report at ICOM’s 1953 General Assembly in Milan, Italy on the incidents befalling loaned art when passing through customs. *ICOM News* VI, 5-6 (1953), 34.

¹⁰¹ *ICOM News* VI, 1 (1953), 15, 18.

¹⁰² Originally there were to be twelve members, and Germany/Austria were to be given a rotating seat as well, but this was changed within a year. *ICOM News* III, 5-6 (1950), 38; *ICOM News* IV, 4 (1951), 29.

Just as this view was inherited from the League's proponents of film, the Exhibitions Commission was also very similar to the IECI as a standard-setting institution. It was tasked with "reducing the risks [posed] by unduly frequent transportation" to art sent on international tours, by "issu[ing] recommendations on the subject, place, and number of exhibitions held each year necessitating the movement of old masterpieces, namely of pictures and drawings[.]"¹⁰³ It was anticipated to "centralize information on the conditions under which international exhibitions are held," paying attention to occurrences of damage and "issuing a warning to institutions that may have been guilty of negligence," while "direct[ing] the efforts of museums and collectors into such projects as it deems to be most compatible both with scientific and cultural interests and with the safety of works of art[.]" It was also envisioned as a means for professionalizing exchange between museums, with a mandate to "enquire into and to *define* [emphasis mine] the methods of examining, insuring, packing, transporting exhibitions, etc., best calculated to safeguard works of art."¹⁰⁴ The Commission's activities, global in ambit, were appreciably slanted by the fact that "the wealth of art treasures" possessed by a country determined the Commission's choice of delegates from that nation.

At its first meeting in November 1952, information gathered from the various countries represented on the Commission was used to apprise delegates of the "unequal geographical distribution of the places in which important art exhibitions [were] held," as well as the unfortunate predominance of certain institutions and of certain types of subjects. The appraisal was blunt:

The far Eastern countries, India, the Near East, Africa, and Latin America (except for Mexico and Brazil) are virtually outside the circuit of important international art exhibitions. In spite of their exemplary museums the Scandinavian countries do not often figure within the circuit, neither do Australia and Canada. Activity is centred in the United States and Western Europe (mainly France, the United Kingdom, Italy, the Netherlands, and

¹⁰³ *ICOM News* III, No. 4 (1950), 15.

¹⁰⁴ *ICOM News* III, 5-6 (1950), 38.

Switzerland). Privileged cities are Amsterdam, Brussels, London, New York, Paris, Venice.”¹⁰⁵

Some hypothetical examples of exhibitions with an international theme were discussed; suggested examples included, among others, Fauvism, abstract art, and cubism, and comparative exhibitions of baroque art (the one non-European suggestion was “masterpieces of the Empire of the Andes”).

At the Commission’s second meeting in 1955, two very different circulating exhibitions from that year were judged to be “of truly scientific and educational importance.”¹⁰⁶ *Etruscan Art and Civilization*, organized by a group of French and Italian archaeologists to showcase the cultural and economic aspects of the lives of this ancient people who served as a gateway to Greek culture for the Romans and their impact on Western European culture, went on view in several “privileged” exhibition centers. Meanwhile, *The Triumph of Mannerism*, organized by the Council of Europe as the first comprehensive survey of the style, exhibited at the Rijksmuseum 518 works of art drawn from 155 museum and private collections to present a narrative of unified European culture across time. These real and imagined exhibitions, despite their diverging subject matter, were esteemed for their presentation of a long and continuous history of (Western European) cultural interdependence, hoped to help reconstruct fractured relationships *within* Europe in the post-WWII period.

This impulse to classify exhibitions by their purported scientific and educational value—which was not so different from the role of the IECI—congealed into a dedicated scheme deployed to this end, wherein the Commission classified and subsequently “sponsored” exhibitions that met with its approval to resolve the problem of simultaneously increasing and decreasing the flow of objects across borders, the former for strengthening goodwill, and the latter for object safety. It was

¹⁰⁵ *ICOM News* VI, 1 (1953), 15, 17.

¹⁰⁶ *ICOM News* VIII, 6 (1955), 17.

ICOM's first sustained attempt to assign value to exhibitions through the objects that comprised them, informed by assessments of the potential risks of traveling exhibitions.

In its early years, the Commission's primary "control" was to produce a report on anticipated exhibitions to be held in the upcoming year through information gathered from members of the Commission.¹⁰⁷ At its third meeting in March 1956, the Commission proposed a new system to overcome the paradox of circulation: an exhibition sponsorship scheme. ICOM's national committees were encouraged to submit proposals for multilateral exhibitions (i.e., those involving more than two countries for lending, borrowing, or both) for evaluation by a subgroup of four to five experts from the Commission.¹⁰⁸ The expectation was that multilateralism would increase international understanding. These experts would then class the exhibitions in one of three categories: *patronée*, or sponsored (i.e., of primary interest or most in line with the Commission's metric of compatibility), *agrée*, or approved (i.e., of secondary but recognized interest), and registered (recorded but not supported). The Commission's proposed motions developed at the meeting—to develop a system of "free cooperation" by which member nations would submit their exhibition proposals to be classified, reducing the "inconsiderate multiplication of international art

¹⁰⁷ "The Director of ICOM sent all members of the Commission by letter dated October 20, a) a note specifying the aims, composition and working method of the Commission, b) a number of revised exhibition forms, requesting the members to add the required information and send the forms to Dr. Martin who could then establish a list of the exhibitions to be held between October 1954 and October 1956. The same documentation was sent to the Chairmen of 25 National Committees whose countries were not represented in the Commission (Australia, Canada, Ceylon, Colombia, Cuba, Czechoslovakia, Denmark, Ecuador, Egypt, Finland, Greece, Haiti, India, Japan, Liban [Lebanon], Mexico, Norway, New Zealand, Peru, Philippines, Portugal, Syria, Thailand, Turkey, Union of South-Africa." *ICOM News* VIII, 4-5 (1955), 35. Martin's first report was compiled in 1954, read at the Commission's second meeting in Paris, October 9-10, 1954, his second report (15 pages) was produced in 1955, titled "International Art exhibitions for the period 1954-1956 – a recapitulation." Martin also produced two versions of the questionnaire used to gather information about the exhibitions.

¹⁰⁸ ICOM adopted a series of resolutions recommending that National Committees intercede with the governments of their respective countries, to influence them to ratify the agreement on the importation of educational, scientific, and cultural material. *ICOM News* Vol. 6, no. 5-6 (1953), 41.

exhibitions” and resulting harm to objects—were passed at ICOM’s General Assembly held in Geneva, Switzerland that July.¹⁰⁹

In 1957, the Commission established a specialized customs label—modeled on that designed under the Florence Agreement—to accompany art for exhibitions classified as sponsored or approved.¹¹⁰ (Fig. 2.8) It contained a directive that packages of art sent for these exhibitions be cleared through customs unopened under the agreement and be delivered directly to participating institutions. Between 1957 and 1967, fourteen lists of sponsored exhibitions were published in *ICOM News*, which constituted apportioning over 2000 labels for 24 exhibitions.¹¹¹ The scheme was ultimately an abject failure, but that is precisely what made it a resounding success. As with the UNESCO label, the ICOM label served firstly as a political technique to liberalize trade by waiving duties, to mitigate the isolationism of the preceding years of war, and secondly as a form of conservation by shifting the border to the museum for objects to be unpacked under the guidance of conservators. But thirdly, functioned as a form of cultural policing, albeit still disguised as a form of conservation. Objects for exhibitions, imported for temporary display at a series of museums before being sent back to their institution of origin, were subject to wear and tear proportional to their perceived value, and the label was intended to direct these objects toward select institutions. It was explicitly expected, therefore, to regulate the content and destination of exhibitions.

¹⁰⁹ *ICOM News* IX, 5-6 (1956), 39-40, 47.

¹¹⁰ This was established after at a meeting of 52 governmental experts in Geneva, held 21-29 October 1957, discussing the possibility of extending the facilities afforded by the Florence Agreement to exhibitions sponsored or approved by the Commission, following a request made earlier that year from ICOM President Georges Salles (in a letter dated 15 July 1957) asking UNESCO to consider “the slowness and complication of customs formalities which often expose[d] works of art to unnecessary dangers through lengthening the time of travel, storing them in buildings unsuitable for their conservation or causing them to be handled by non-qualified persons.” The experts agreed that exhibitions sponsored or approved by ICOM should be given the privileges of Article III and that customs inspection should be allowed to occur at the place of exhibition, using a special label adapted from the one used by UNESCO for scientific instruments. [See French, not in English.] *ICOM News* XI, 1 (1958), 21.

¹¹¹ *ICOM News* XXI, 3 (1968), 54.

The Commission's subgroup of experts met to classify the list of exhibitions brought to their attention for the first time in July 1957, selecting ten to be sponsored, seven to be approved, and one to be registered.¹¹² (Fig. 2.9) Perhaps this was a function of the exhibitions submitted to be classified, but four of the ten sponsored were showcases of single artists, and almost entirely to be held in the "privileged" cities that the Commission had identified.¹¹³ (However, the works could *come in* from elsewhere, indicating the relative power of these European institutions in aggregating cultural objects while putting up barriers to their dispersal outside certain circuits.)

Despite the cultural standing of the Museum of Modern Art in New York, the first MoMA exhibition to be named (albeit on the "approved" list) was a show on the work of contemporary Spanish artist Joan Miró, in the third round of exhibitions approved by the Commission in 1958, and one of only two exhibitions destined for the United States. In fact, Grace McCann Morley urged Porter McCray, Director of Circulating Exhibitions (and successor to Elodie Courter Osborn) to consider including publicity that would make it a demonstration case for the United States.¹¹⁴ Yet even future lists yielded very few exhibitions destined for museums outside Western Europe.¹¹⁵ The

¹¹² *ICOM News X*, 5 (1957), 13-14. The four experts consisted of Piero Gazzola, standing in for Guglielmo de Angelis d'Ossat, Director General of Antiquities and Fine Arts in Italy, Rome (both were founding members of ICOMOS and ICCROM); Trenchard Cox, Director of the Victoria and Albert Museum, London; Kurt Martin, Director of the Staatliche Kunsthalle, Karlsruhe; and René Wehrli, Director of the Kunsthhaus, Zurich. The other members were J Ainaud de Lasarte, Director of museums in Barcelona; O Benesch, Director of the Graphische Sammlung Albertina, Vienna; Grace McCann Morley, Director of the San Francisco Museum of Art; and A.B. de Vries, Director of the Mauritshuis, The Hague. Observers were Hiroshi Daifuku of UNESCO's Museums and Monuments Division, F. Hoveyda of UNESCO's Mass Communications Division, V.S. Kemenov, Permanent USSR Delegate to UNESCO, and F. Prantl, of the National Museum, Prague.

¹¹³ The only exception was Poland, but even here there was a strong network of museums. At the meeting, the following exhibitions were approved: Matisse (Lyon, 1958); the graphic art of Mantegna (Rome, Milan, Venice, 1958); Michel Awaerts (Rotterdam, 1958); Roman paintings (Zurich 1958). *ICOM News XI*, 1 (1958), 21.

¹¹⁴ Letter to Porter McCray from Grace McCann Morley dated April 17, 1959, Museum of Modern Art archives, IC/IP IV.F.13.

¹¹⁵ Lists V and VI from 1960 yielded one for Canada, and the rest for Western Europe, with some lenders from other parts of the world. List VIII, from 1963, only sponsored shows in western Europe. List XII, from 1967, the last year of the program, still only sponsored shows in western Europe. The last list from that same year approved only one exhibition each for Czechoslovakia and Canada.

Commission's ostensible goal was to vet the quality of international art exhibitions and reduce harm to museum objects by only sponsoring a small quantity. Instead, it reinforced privileged political networks. During a meeting of the Commission in 1963, members *themselves* acknowledged that exhibitions were often given the "sponsored" classification to bolster relations between directors and organizers of exhibitions and the ICOM subcommittee, undermining its mission of impartiality.¹¹⁶ Yet little attention was paid to the relationship between this unwanted outcome and the panel of experts selected to judge entries: all museum directors and curators from museums in the UK, France, Italy, Germany, the Netherlands, and Switzerland.¹¹⁷

In the face of growing objection from non-European ICOM members, however, the Commission attempted three pilot exhibitions to model how art might be transported to and shown outside of Western Europe (albeit still showcasing European subject matter). These pilot exhibitions were planned to contain a training component in exhibition conservation. The first attempt was in 1961. Grace McCann Morley had been appointed as the first director of the National Museum of India in New Delhi, and first head of ICOM's Regional Agency in Asia. She initiated a discussion on sponsoring an exhibition in India.¹¹⁸ But this proposal was abandoned with the establishment of a

¹¹⁶ *ICOM News* XVI, 4-6 (1963), 63.

¹¹⁷ First committee: G. de Angelis d'Ossat, Director General of Antiquities and Fine Arts in Rome, Trenchard Cox, Director of the Victoria and Albert Museum in London, K. Martin, Director of the Staatliche Kunsthalle in Karlsruhe, and R. Wehrli, Director of the Kunsthaus in Zurich, with the 1958 addition of G. Bazin, Chief Conservator at the Louvre in Paris, and replacement of Wehrli by A.B. de Vries, Director of the Mauritshuis, The Hague. In 1966 the experts were Bazin, Cox, Martin, and P. Eeckhout (Belgium) and G. Vigni (Italy). In 1967 Martin was replaced by A. Hentzen of the German Federal Republic. *ICOM News* X, no. 5 (1957), p. 13; *ICOM News* XI, no. 1 (1958), p. 21; *ICOM News* XIX, 4 (1966), p. 28; *ICOM News* XX, no. 4-5 (1967), p. 167

¹¹⁸ *ICOM News* XIV, 5-6 (1961), 40. These discussions were initiated at the meeting of the International Advisory Committee on the Major Project ("Project 4A") on Mutual Appreciation of Eastern and Western Cultural Values, 19-23 June 1961, and the exhibition was intended to embody "east-west interdependence" themes like the one held at the Musée Cernuschi, Paris, in 1958-1959. See Madeleine Paul-David, "East-West: An Exhibition at the Musée Cernuschi, Paris," *Museum International* 12, no. 2 (1959): 68. McCann Morley had experience organizing an exhibition that filled this mandate, *Art in Asia and the West*, which ran for a little over a month in late 1957 at the San Francisco Museum of Art. Paul-David critiques the Orientalist attitudes of the exhibition, which were also present in earlier endeavors for "east-west" exchange. As Druick writes, the 1926 congress in Paris on film, for example, had "recommended" that

permanent gallery of Western art at the museum obtained by gift, exchange, or long-term loan.¹¹⁹ (The notion of a temporary exhibitions gallery, notably, was itself an importation.¹²⁰)

The second attempt was for an exhibition in Nigeria in 1964, at the same time the revised manual for traveling exhibitions *Temporary and Travelling Exhibitions* (discussed in the previous chapter) was being circulated. The Commission proposed a pilot multilateral exhibition to open in advance of UNESCO's Regional Seminar on the Role of Museums in Contemporary Africa held in Nigeria in 1964. It was aimed at the general public and was planned to include works of art from different origins and periods, with the potential for training local students to act as guides, with surveys from the exhibition to be given as study materials to attendees of the UNESCO seminar.¹²¹ But while the exhibition was sponsored, it never materialized. The exhibition location too was listed as "Africa" rather than the actual countries, as if the solutions to problems of international exhibitions described by the commission could be monolithically applied to the whole continent.

The last attempt was made to plan a pilot exhibition to take place in two museums each in Australia and New Zealand. *Romantic Painting in Europe* was planned to consist of about 50 works of art, lent by a dozen countries, touring for a year. It was to be accompanied by a specialist on packing and transport who would help train technicians in these museums. It was planned in greater detail than either of the other proposals because the Commission insisted that despite existing biases in the minds of European museum personnel, that museums in this part of the world were "as

"Western films shall portray in a simple, romantic, ethical, and entertaining manner the history, culture, science, and powerful industrial developments of the Western nations—the heritage of humanity—and that the film should likewise serve to reveal the ancient culture, and all the wonders of the East." Seabury, *Motion Picture Problems*, 361. Druick, "Reaching the Multimillions," 73, 385n67. The language of "progress" betrayed the imperialist—and Orientalist—logic at work and the conflation of Western European and "universal" culture.

¹¹⁹ *ICOM News XXV*, 5-6 (1962), 76.

¹²⁰ Kristina Kate Phillips, "A Museum for the Nation: Publics and Politics at the National Museum of India" (unpublished PhD dissertation, University of Minnesota, 2006), 168.

¹²¹ *ICOM News XV*, no. 5-6 (1962), 67.

modern and well-equipped” as those in Europe.¹²² Yet neither country had had major exhibitions of the type and frequency found in Europe. At first, it was hoped to coincide with the opening of the National Gallery of Victoria in Melbourne in mid-1968.¹²³ It was postponed for 1970, then 1971.¹²⁴ Ultimately, it was abandoned, despite being given the green light by authorities in New Zealand, as distance was deemed to make the enterprise too costly. Yet it is worth asking, distance relative to what? The ICOM label illuminated how museums, founded as part of a colonial apparatus, were not intended to enable the democratic circulation of goods and materials, but to support their inexorable extraction from the world’s colonies into the very cities in which exhibitions were now agglomerated. Members of the Commission admitted that museums who could afford the costs did not always apply to receive the ICOM labels, while “for a large majority of countries, the cost of organizing extensive exhibitions was virtually prohibitive.”¹²⁵

Things came to a head in 1971, when a joint meeting of the Conservation and International Art Exhibition Committees was held to examine the conditions under which ICOM gave patronage to exhibitions, as the commission had received many complaints following after objects loaned to sponsored exhibitions were returned in a damaged state.¹²⁶ (The Commission had, in the previous decade, also turned its attention to methods of packing and transport, a concern that grew out of work by two ICOM members: Canadian chemist Nathan Stolow and Japanese physicist Kenzo Toishi. In 1964, the Commission set up a working group to study the problems of risks to art while traveling to international art exhibitions, comprising Stolow, Toishi, Richard Buck of the United

¹²² *ICOM News* XXIV, no. 1 (1969), 50.

¹²³ *ICOM News* XX, no. 4-5 (1967), 168.

¹²⁴ *ICOM News* XXI, no. 3 (1968), 54; *ICOM News* XXI, no. 4 (1968), 72; *ICOM News* XIX, no. 4 (1971), 40-41.

¹²⁵ *ICOM News* XVI, no. 4-6 (1960), 63.

¹²⁶ *ICOM News* XXIV, 4 (1971), 66.

States, Madeleine Hours of France, and Garry Thomson of the UK.¹²⁷) At the meeting, it was recommended that a joint working party conduct research standards for exhibitions, which would be incorporated as criteria governing the granting of ICOM patronage to exhibitions.¹²⁸ Stolow, who headed the working group, would go on to write UNESCO's handbook on exhibition conservation in 1979 (discussed in Chapter 4).

The working group collaborated to produce the *ICOM Guidelines for Loans* (1974), the first international standard set forth by ICOM for regulating the temporary display in museums of original objects that originate from, and will eventually be returned to, other collections. It covers in brief the following aspects of exhibition administration: borrower's responsibilities, prerequisites for condition reporting, insurance requirements, customs formalities, packing standards, transportation agreements, potential escorts, protection from environmental hazards, security needs, and precautions to be taken during photography and reproduction. The guidelines compressed into a few short pages the conclusions drawn from ICOM's and UNESCO's research and negotiation regarding exhibitions undertaken in the quarter-century prior. Albeit intended "more [as] a statement of intent than a code of practice,"¹²⁹ and thus ultimately an aspirational document, it is used today as a baseline checklist for determining loan agreements.

While ICOM still provides patronage for exhibitions, it is more a nominal guarantee than definitive endorsement. What remains of this effort, then, is the continued expediting of exhibition materials from customs bureaus to unpacking facilities in select museums, through simplified variations on the exhibition bond (still named as such in the United States, and termed Temporary

¹²⁷ *ICOM News* XVII, 1-3 (1964), 41.

¹²⁸ *ICOM News* XXIV, 4 (1971), 66.

¹²⁹ *ICOM News* XXIX, 3 (1976), 52-53.

Importation Relief in the European Union) for approved temporary exhibition, that have become standard practice thanks to these efforts to shift the border to the bowels of the museum. It is worth returning to the question Louvre curator René Huyghe asked at that early ICOM meeting: “Is it not tantamount to careless stewardship to be prepared, for the sake of an exceptional but transitory return, to risk the wealth which we should be concerned to increase?”¹³⁰ In asking this question, Huyghe conflated two types of peril: dangers to object safety and financial risk. Producing the *ICOM Guidelines for Loans* required that UNESCO/ICOM working groups consider this question from both angles, and managing the paradox of risk to art while enabling the freedom to circulate art itself required that ICOM turn its attention to problems of insurance, the subject of Chapter 4.

Conclusions

Exhibitions place commodities in a state of suspension—or assetizes them—and the museum-as-bonded-warehouse spatializes this suspension. The more recent configuration of this form of warehouse is the freeport, a site for permanent storage controlled by border agents whose location hovers ambiguously between national boundaries.¹³¹ Those critiquing the freeport see it as “a place of un-seeing” wherein the objects stored inside are “no longer work[s] of art to be seen and enjoyed [but] simply financial value congealed,” and argue that it is a form separate from that of the museum.¹³² But this is not entirely true; it is simply a question of magnitude of access. Owners of the

¹³⁰ René Huyghe, “Coordination of International Art Exhibitions,” *International Council of Museums: Second Biennial Conference: London 17-22 July 1950*. UNESCO/ICOM/BI/Conf.2/17, Paris, 30 June 1950, 2.

¹³¹ Orenstein sees these zones as “self-enclosed,” or impervious to the outside world, and asserts that they are a testament to the imperialism of free trade by “nesting” the global in the national.. Orenstein, *Out of Stock*, 14, 107. This description is curiously akin to Lucia Allais’ description of the goal of conservation as containment. Allais, *Designs of Destruction*, 177–80.

¹³² Stefan Heidenreich, “Freeportism as Style and Ideology: Post-Internet and Speculative Realism, Part I,” *E-Flux Journal* 71 (March 2016), <https://www.e-flux.com/journal/71/60521/freeportism-as-style-and-ideology-post-internet-and-speculative-realism-part-i/>; Stefan Heidenreich, “Freeportism as Style and Ideology: Post-Internet and Speculative

works in freeports and their clients are free to organize viewings (and even sales) within the freeport—in an extreme version of the types of commercial activities like assembling and packaging that are permissible bonded warehouses for more prosaic commodities—but the taxes attached to the transaction are not levied until the art leaves the facility. Most often, it never does, but that does not mean the freeport entirely eliminates the presence of the human body. Freeports do not judge which art may circulate, but instead select which humans might enter and exit.

In the late nineteenth century, wealthy collectors who had purchased works from Europe stored their collections in warehouses or secondary residences overseas purchased expressly to avoid paying high tariffs. These workarounds are not so different in logic from that of the freeport. An additional strategy was to loan these works to museums to be shown on exhibition. In this manner, Queen Victoria had viewed works from J.P. Morgan’s personal collection, worth \$30 million, before it was brought over to the United States.¹³³ Today, works sent on exhibition to museums are granted a variety of protections to evade taxation. Article 12-G of the New York General Business Law now exempts art works sent into the state for certain exhibitions from seizure, following a controversial case in which an exhibition of sculptor Naum Gabo’s work on view at Albright-Knox Gallery in Buffalo in 1968 was confiscated when it transpired the works had been forcefully appropriated by

Realism, Part II,” *E-Flux Journal* 73 (May 2016), <https://www.e-flux.com/journal/73/60471/freeportism-as-style-and-ideology-post-internet-and-speculative-realism-part-ii/>; Brusius and Singh, *Museum Storage and Meaning*, 17–18. Heidenreich’s essays respond to a prior e-flux article (and now book of the same name): Hito Steyerl, *Duty free art: art in the age of civil war* (London; New York: Verso, 2019). For media on Yves Bouvier and the Geneva freeport, see Sam Knight, “The Bouvier Affair,” *The New Yorker*, January 31, 2016; Graham Bowley and Doreen Carvajal, “One of the World’s Greatest Art Collections Hides Behind This Fence,” *The New York Times*, May 28, 2016, <https://www.nytimes.com/2016/05/29/arts/design/one-of-the-worlds-greatest-art-collections-hides-behind-this-fence.html>; Pascal Henry, *The Black Box of the Art Business*, Documentary, 2018, <https://www.youtube.com/watch?v=5TSE2TcMduc>.

¹³³ May, “Culture Wars,” 77.

members of the Nazi Party during WWII.¹³⁴ Yet the decision was made to guarantee lenders that works sent on exhibition would be returned to them, regardless of the legality of their acquisition. When determining estate tax for personal property, works of art loaned by the deceased owner to museums are not included in the calculus.¹³⁵ The processes of sending works of art for circulating exhibitions illuminates all the ways in which museums are allowed to function as exceptional border spaces while upheld as vital centers for civic education and preservers of public patrimony.

¹³⁴ Feldman and Weil, *Art Works: Law, Policy, Practice*, 737. For a recent example of this kind of diplomatic decision, see Graham Bowley, “Officials Say Russian Art, Seized by Finns, Should Return Home,” *The New York Times*, April 8, 2022, <https://www.nytimes.com/2022/04/08/arts/design/finland-russia-art-seizure.html>.

¹³⁵ Feldman and Weil, *Art Works: Law, Policy, Practice*, 861.

CHAPTER THREE

Conditioning Art, Action, and Air: Conservation as a Problem of Ad/Ministration

“We have a long way to go before the scientist, the conservator, the curator and the art historian can really work together. Only this morning various examples have been mentioned; for instance, this problem of humidity. Now, it is not enough for the scientist to say, “Oh well, we can give you broad limits between 20 and 80.” That is not good enough. The conservator must have a more precise, let me call it, guess, and the scientist must learn, because he alone can do it, to balance up probabilities, possibilities, dangers, advantages, and then give, we will say, a limit of 30 to 35, 40 to 45 – pinning the figure down. The curator cannot, since he is not competent to make a guess, so scientists must take the risk.”

— Harold Plenderleith, closing remarks at the International Institute for Conservation Delft Congress, 1964¹

Delivering a talk on art conservation as a curative process at the 1935 meeting of the American Association of Museums,² director of Harvard University’s Fogg Museum Edward W. Forbes declared that it was “as unethical for a restorer to retain for his own private use any wonderful discovery which he makes as it would be for a doctor to conceal from the world some great discovery which he might make to enable him to cure, let us say, cancer or tuberculosis.”³ Scientists at the Fogg’s Department of Conservation and Technical Research were developing new methods to assess and improve the health of works of art—which suffered from anthropomorphized disorders like bronze disease, a contagious form of corrosion—afforded by laboratory techniques including x-

¹ IIC News, Vol.3, No.2, August 1964, 9.

² Now the American Alliance of Museums.

³ Edward W. Forbes, “The Preservation of the Integrity of Works of Art: An Issue in Training.” *Museum News* 13, no. 19 (1936), 8. The history of secrecy that Forbes takes issue with is contextualized in Alisha Michelle Rankin and Elaine Yuen Tien Leong, eds., *Secrets and Knowledge in Medicine and Science, 1500-1800*, 2016.

radiography, which was beginning to be used to diagnose tuberculosis. And as x-rays made transparent the bodies of both animate and inanimate beings, so did Fogg researchers make apparent their findings for a decade to an international audience in the museum's journal *Technical Studies in the Field of the Fine Arts*.⁴

Art historians present Fogg conservators as heralding the current epoch of ministrative conservation centered on scientific processes of diagnosis and cure.⁵ (Indeed, these conservators have narrated, even overstated, their own history as such.⁶) In this chapter, I contend that the more significant contribution of this new cadre of museum professionals was to aid the substantial reorganization of the *administration* of object preservation. Fogg proselytizers and their disciples established replicable techniques of scientific observation, a standardized lexicon of analysis, and accredited professional training programs for conservators. Additionally, they liaised closely with other emerging classes of museum personnel established in the mid-twentieth century in response to the increasing demand for circulating museum exhibitions to establish the conditions under which objects could be authorized to travel safely to other institutions. By recuperating the role of the circulating exhibition in shaping museum practice, I show that the work of these purported

⁴ For an overview of laboratory methods for object analysis developed at the Fogg, see Bewer, *A Laboratory for Art*. For an image-based analysis of how the transparency enabled by x-rays served as a metaphor for progress in the discourse of modern architecture, see Beatriz Colomina, *X-Ray Architecture* (Zürich: Lars Müller Publishers, 2019).

⁵ As well as the work of Bewer, see Cardinali, "Technical Art History."

⁶ In a retrospective 1975 interview for what is now a magisterial oral history project conducted by the American Institute for Conservation and the Foundation for Advancement in Conservation, George L. Stout described the Fogg's inquiries into object condition, as well as the contempt with which these methods were first received: "That was [considered] as naughty as to inquire about the digestive system of an opera singer." FAIC oral history interview with George Leslie Stout, Richard Buck, and Katherine Gettens by W. Thomas Chase and Joyce Hill Stoner, September 4, 1975, quoted in Joyce Hill Stoner, "Changing Approaches in Art Conservation: 1925 to the Present," in *Scientific Examination of Art: Modern Techniques in Conservation and Analysis* (Arthur M. Sackler Colloquium on Scientific Examination of Art: Modern Techniques in Conservation and Analysis, Washington, D.C.: National Academies Press, 2005), 40–57.

diagnosticians is more accurately characterized as the managerial disciplining of, rather than therapeutic caring for, art objects and their custodians.

In the early decades of the twentieth century, conservation scientists increasingly grasped that the rapid fluctuation of climate that occurred while objects were in transit gravely threatened the wellbeing of works made of hygroscopic materials, i.e., those that readily absorbed moisture from the air, such as wood and paper.⁷ In response, the conditions that these scientists worked to establish—in collaboration with other museum staff—for authorizing the safe travel of these objects were largely environmental. Yet little attention has been paid to the discourses that influenced these decisions, as compared with the extensive literature on the acquisition, classification, and even return, of museum collections. The intersecting histories of the development of climate controls in the built environment and on the management of public health, with their attendant discourses of comfort, vitality, and moral progress, demonstrate how forcefully ministrations and administrations have intertwined in the realm of human health. I draw on this work to explicate how contemporary conservation norms in the museum were established in the mid-twentieth century as an administrative solution to the challenges of globalized circulation, arguing that the harmful notions about object safety they perpetuate are stamped with that period's prejudices about human health.

⁷ Objects suffered considerable damage, ironically, when they were moved for purposes of safekeeping during WWI; the British Museum laboratory was created by the British government's Department of Scientific and Industrial Research in 1920 partly to conduct research into the causes of, and provide restoration services in response to, damage incurred by storing works of art in damp and badly ventilated repositories such as the London Underground. Paul Clemen (ed.), *Protection of Art During War: Reports Concerning the Condition of the Monuments of Art at the Different Theatres of War and the German and Austrian Measures Taken for Their Preservation, Rescue and Research. Vol 1: The Western Front* (Leipzig, 1919); Société de l'Histoire de l'Art Français. *Congrès d'Histoire de l'Art: Compte-rendu analytique, organisé par la Société de l'Histoire de l'Art Français. Paris, 26 September-5 October 1921* (Paris, 1922), 228-30 (this was the resolution of the conference to address conservation and restoration issues and establish an international agreement on the protection of monuments and works of art); Harold Plenderleith (with additions by Andrew Oddy), "A History of Conservation," *Studies in Conservation* 43 (1998), 129-30. Cited in Bewer, *A Laboratory for Art*, 151, 271n1, 291n39.

Diagnosis: Defining Object Condition

The Fogg ethos is captured by efforts to standardize how the care of objects was carried out in the museum through the careful calibration not only of newfangled laboratory equipment but also of the human diagnostician's sight and speech. This calibration began with the condition report, a document for chronicling processes of object examination, analysis, and treatment, or in other words, for recording its health. (Fig. 3.1) While object treatment records date back to the eighteenth century,⁸ Fogg conservators devised the first reproducible form in 1933, further developing pre-printed worksheets in 1937 for recording technical examinations, microchemical analysis, and treatment that were to be supplemented by data from microscopic specimens and photographs taken at the same time.⁹ Conservator George L. Stout, first head of the Fogg's conservation department (and founding editor of the Fogg's journal, *Technical Studies in the Field of the Fine Arts*), shared templates of the condition report in the journal in 1935, both blank (Fig. 3.2) and completed (Fig. 3.3),¹⁰ and again in condensed form (Fig. 3.4) in 1939.¹¹ *Technical Studies* was the premier means for circulating innovations in the field for a decade before publication was cut short by World War II in 1942, and ensured the international dissemination and adoption of the condition report as a conservation practice in the interwar years.¹²

⁸ Morwenna Blewett, "Notes on the history of conservation documentation: Examples from the UK and USA," in Joyce Hill Stoner and Rebecca Anne Rushfield, eds., *The Conservation of Easel Paintings* (New York, NY: Routledge, 2012), 281–84; Hero Boothroyd Brooks, "Practical Developments in English Easel-Painting Conservation, C1824-1968 from Written Sources" (unpublished dissertation, University of London, 1999).

⁹ Before 1933, examination and restoration reports at the Fogg were typed on index cards, with occasional much longer paper reports by conservator Roger A. Lyon. Bewer, *A Laboratory for Art*, 157, 293n65. Blewett briefly notes that the advent of photography (also used in medical diagnoses) aided condition reporting. Blewett, 284. It is also likely that new technologies of mass duplication also aided this reproducibility. See JoAnne Yates, *Control through Communication: The Rise of System in American Management* (Baltimore, MD: Johns Hopkins Univ. Press, 1993).

¹⁰ George L. Stout, "A Museum Record of the Condition of Paintings," *Technical Studies in the Field of the Fine Arts* 3, no. 4 (1935): 200–216.

¹¹ George L. Stout, "General Notes about the Condition of Paintings," *Technical Studies in the Field of the Fine Arts* 7 (1939): 159–66.

¹² Bewer, *A Laboratory for Art*, 158.

While working to disseminate the replicable condition report in *Technical Studies* during the late 1930s, Stout also ventured to develop technical terms that would accurately describe paint condition. He spent several subsequent decades refining this terminology, including making the first attempt to define craquelure, or crack patterns, on a painting,¹³ the shapes of which hinted at the artwork's age.¹⁴ His student Richard D. Buck, who replaced him as head conservator in 1948, further developed this work. Buck subsequently established the Intermuseum Conservation Association—the first regional conservation laboratory in the United States—in 1952, taking Fogg conventions for producing detailed documentation with him. In the late 1950s, he began to craft what would become an authoritative glossary for describing the condition of not only paintings but also art objects in general, descriptions of which strove to be as precise as linguistically possible: “a dent is a simple concavity; a dig implies that some material has been displaced; a gouge, that material has been scooped out; a chip, that material has been broken away.”¹⁵ Buck's initial glossary, which was refined further over the next two decades, is striking not only for its technical fastidiousness, but also for debuting not in a journal or handbook by or for conservators, but in the first edition of *Museum Registration Methods*, the first handbook for museum registrars in the United States.

¹³ George L. Stout, “Classes of Simple Paint Structure,” *Technical Studies in the Field of the Fine Arts* 6, no. 4 (1938): 221–39; F. Ian G. Rawlins and George L. Stout, “Brief Methods of Describing Paint,” *Technical Studies in the Field of the Fine Arts* 9, no. 1 (1941): 37–46. George L. Stout, “Description of Film Cracks,” *Bulletin of the American Institute for Conservation* 14, no. 2 (April 1974): 9–14; George L. Stout, “A Trial Index of Laminal Disruption,” *Journal of the American Institute for Conservation* 17, no. 1 (January 1977): 17–26.

¹⁴ Max J. Friedländer and Tancred Borenius (trans.), *On Art and Connoisseurship* (London: Bruno Cassirer, 1942) 193–4. Cited in Spike Bucklow, “The classification of craquelure patterns,” in Hill Stoner and Rushfield, *The Conservation of Easel Paintings*, 285.

¹⁵ Richard D. Buck, “Article 3: The Inspection of Art Objects and Glossary for Describing Condition,” in Dorothy H. Dudley and Irma Bezold Wilkinson, *Museum Registration Methods*, 2nd edition (Washington, D.C.: American Association of Museums, 1968), 164–70. Buck, “Specific Applications: F: Inspecting and Describing the Condition of Art Objects,” Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1979, 242.

The registrar became an official title in the latter half of the nineteenth century, and an established position in American museums in the early twentieth.¹⁶ It referred to a staff member tasked with receiving and accessioning objects into the museum's collections. The increasing circulation of objects through museum exhibitions made the registrar's position correspondingly central to museum operations. Specifically, as I have also briefly discussed in the introduction, registrars were needed to oversee the unprecedented quantities of art traveling from Europe to the United States for exhibition in the post-WWII period, while their damaged home institutions were being renovated. This influx precipitated a request for a manual for object registration at the Registrars Section of the 1952 annual meeting of the AAM.¹⁷

Dorothy H. Dudley, registrar at MoMA in New York (who we met in Chapter 2), and Irma Bezold Wilkinson, registrar at the Metropolitan Museum of Art in New York, came together to write the new manual. The resulting *Museum Registration Methods* was published in 1958 and covered, in detail, topics including the registration department's function and layout, methods of registration, keeping track of incoming and outgoing material, storage and care, handling loans, packing and shipping, and specialized situations. It has since become the preeminent handbook for administrative practices in the museum. Condition reporting is now firmly established as an administrative function as well as a technical one, as evidenced by the section on condition reporting in the sixth edition of *Museum Registration Methods* published in 2020, which retains much of Buck's original language.¹⁸

¹⁶ Rebecca A. Buck, Jean Allman Gilmore, and American Association of Museums, eds., *MRM5: Museum Registration Methods*, 5th edition (Washington, D.C.: AAM Press, American Association of Museums, 2010), 2–3.

¹⁷ Kenneth Starr, "Foreword," Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1979, vii.

¹⁸ Although Buck is no longer cited at the end of the glossary, see the language used in Marie Demeroukas, "5E: Condition Reporting," John E Simmons and Toni M Kiser, *MRM6: Museum Registration Methods* (American Alliance of Museums, 2020), 249–60. See also the 2015 edition of *Basic Condition Reporting* (first published in 1982), which does

Furthermore, a recognition that assessments of object condition were functions of both the technical and administrative domains led conservators themselves to think holistically about the spatial layouts of museum facilities outside the laboratory. Fogg chemist Rutherford J. Gettens (the first chemist to be a full-time staff member of a U.S. art museum¹⁹), who served as co-editor of *Technical Studies* with Stout, joined the postwar exodus from the Fogg in 1951 to establish a new laboratory for technical studies at the Freer Gallery of Art. Gettens was known for the meticulous records he kept of his experiments,²⁰ and he was described in his obituary by Stout as an archetypal scientist, in “steady occupation” with what he saw through his microscope, “the head raised occasionally as he seemed to seek something in clouds above the elms.”²¹ Yet Gettens’ “heavy lenses” did not render him myopic enough to see the laboratory (Fig. 3.5) as the exclusive domain for assessing object condition. In 1959, the year after Buck produced his first glossary for reporting condition, Gettens published an article in *Studies in Conservation* on a simple piece of equipment required for evaluating condition: the examination table.²² In it, he included two images: the first was an illustration of the table in the Gallery’s laboratory and the second was a photograph of a table recently designed for use in a storage room, so that the entire staff could gather to look at objects being considered for purchase, brought in by visitors, and in storage. (Fig. 3.6)

Perhaps a coincidence, or perhaps more evidence of the synergies between laboratory and storage facility is that Clarence Stein, who we met in the previous chapter and who theorized so

still cite Buck’s original glossaries. Deborah Rose Van Horn, Heather Culligan, and Corinne Midgett, *Basic Condition Reporting: A Handbook* (Lanham, MD: Rowman & Littlefield, 2015).

¹⁹ Hill Stoner, “Changing Approaches in Art Conservation: 1925 to the Present,” 41.

²⁰ Bewer, *A Laboratory for Art*, 157.

²¹ Clements L. Robertson and George L. Stout, “In Memoriam: Rutherford John Gettens, 1900-1974,” *Bulletin of the American Institute for Conservation of Historic and Artistic Works* 15, no. 1 (November 1974): 4.

²² The article constituted part of a paper that Gettens read at the 53rd Annual meeting of the American Association of Museums in Charleston, SC, May 1958. Rutherford J. Gettens, “Examining Tables in Use at the Freer Gallery of Art,” *Studies in Conservation* 4, no. 1 (February 1959): 23.

extensively on the role of storage for circulation, cited the Freer Gallery as the single institution to have successfully implemented by 1944 the museological strategy of “dual installation”—as he called his proposal for dividing collections into main galleries thoughtfully catered to a general audience, with niche collections displayed in separate storage facilities aimed at a specialist audience, while still accessible to curious members of the general museum audience²³—with the Fogg receiving an honorable mention.²⁴ (Fig. 3.7) Gettens, of course, worked at both institutions. Notably, Stein observed that this latter form of installation (which he also called study-storage) was well-suited for fragile collections in need of conservation, such as the works from Asia at the Freer, only a small proportion of which were placed in the galleries with the remainder in accessible storage.²⁵

Yet despite efforts to train staff in standardized assessment procedures, the examination of object condition could not (and cannot) but be imprinted with both individual and collective aesthetic predilections. For instance, the condition report developed at the Fogg was not entirely standardized: the forms for paintings and works on paper were distinct from an early stage, yet the report forms and index cards optimized for paintings were also used for three-dimensional objects (such as sculpture) until separate forms for these objects were created in the 1940s.²⁶ In fact, given the highly individual nature of art objects, the replicable condition report may only offer a partial diagnosis of condition, hindered by its own standardization.²⁷ Moreover, the definition of good condition *itself* may perhaps be too culturally and temporally variable to be standardized. Buck

²³ Clarence S. Stein, ‘Form and Function of the Modern Museum (From a Paper Read at the Annual Meeting of the American Association of Museums, Toronto, 30 May-1 June 1934),’ 15 October 1935, 6. Cited in Belinda Nemeč, ‘“Essential cure for dying museums’: Clarence S. Stein and study-storage,” in Brusius and Singh, *Museum Storage and Meaning*, 106.

²⁴ Clarence S. Stein, “Study Storage: Theory and Practice,” 15 December 1944, 9-12. Cited in Brusius and Singh, 110.

²⁵ Brusius and Singh, 111.

²⁶ Bewer, *A Laboratory for Art*, 157, 293n65.

²⁷ Blewett.

mused—over the course of two decades or more—on a painting by Italian painter Tiziano Vecelli, more familiarly known as Titian, that American artist Benjamin West had declared to be “totally ruined” in 1818, only for Italian art historian Lionello Venturi to determine its condition as “exceptionally good” in 1928. Examining how such wildly differing analyses could be possible, Buck acknowledged that issues like permanent damage and its antecedents (otherwise known as insecurity) are easily perceived, but that diverging aesthetic tolerance of disfigurement (such as “departure from the original figure” and the Italian partiality for surface patina) contributed to the contradictory assessments of West and Venturi.²⁸

The burgeoning scholarly field of technical art history examines how scientific modes of object conservation in the museum, which germinated in the late nineteenth century and gained ascendance at institutions like the Fogg, have animated contemporary practices of object care.²⁹ This

²⁸ Although published in 1971, the article is a revision of a paper presented at the Art Technical Section of the American Association of Museums annual meeting in Minneapolis, MN, May 1952. Buck recommended that conservation decisions be made based on evaluations of damage and insecurity rather than perceived disfigurement, which he considered “an unreliable basis for judging condition.” Richard D. Buck, “What Is Condition in a Work of Art?,” *Bulletin of the American Group, International Institute for Conservation of Historic and Artistic Works* 12, no. 1 (October 1971): 63–67.

²⁹ Conservation chemist David Bomford introduced the term in 1998 and expanded on the subject in subsequent publications. David Bomford, “Introduction,” in *Looking through Paintings: The Study of Painting Techniques and Materials in Support of Art Historical Research*, ed. Erma Hermens, Annemiek Ouwerkerk, and Nicola Costaras (London: Archetype Publications, 1998), 9–12; David Bomford, “The Purposes of Technical Art History,” *IIC Bulletin* 1 (2002): 4–7; David Bomford, “Forbes Prize Lecture,” *Studies in Conservation* 53, no. 3 (2008): 198–203. A portion of this scholarship recounts the work of laboratory-based museum staff to argue for technical art history as a viable—even urgent—field of study, bolstered by an ever-expanding archive of FAIC oral history interviews. See Maryan Ainsworth, “From Connoisseurship to Technical Art History: The Evolution of the Interdisciplinary Study of Art,” *Getty Conservation Institute Newsletter* 20, no. 1 (2005): 4–10; Joyce Hill Stoner, “Turning Points in Technical Art History in American Art,” *American Art* 26, no. 1 (March 2012): 2–9; Joyce Hill Stoner, “Vignettes of Interdisciplinary Technical Art History Investigation: Supplemented by the FAIC Oral History Archive In Honor of Roger H. Marijnissen,” *CeROArt*, no. HS (June 10, 2015).) Some are painstakingly researched biographies of figures whose contributions are still being recouped, such as Dominique Deneffe, Dominique Vanwijnsberghe, and Institut royal du patrimoine artistique (Belgium), eds., *A Man of Vision: Paul Coremans and the Preservation of Cultural Heritage Worldwide: Proceedings of the International Symposium Paul Coremans Held in Brussels, 15-17 June 2015*, Scientia Artis 15 (International Symposium Paul Coremans, Brussels: Royal Institute for Cultural Heritage, 2018). More recent work is often grounded in critical theories of art. Apart from Bewer, see the section, “Forum: Materials and Techniques in Art History,” in *History of Humanities* 2, no. 1 (March 2017), 173–270, Erma Hermans, “Technical Art History: The Synergy of Art, Conservation and Science,” in *Art History and Visual Studies in Europe: Transnational Discourses and National*

scholarship, explicating the mutually constitutive relationships between the arts and sciences in the museum, firmly situates itself in the laboratory and magnifies how modes of seeing, doing, and valuing are modulated by scientific equipment.³⁰ But while the laboratory was certainly a newly incorporated facility in museums in the early twentieth century, it was by no means the only one. As discussed in the previous chapter, circulating exhibitions prompted a conceptual reconsideration of the art museum as a dynamic warehouse optimized for strategic object circulation rather than simply accumulation, manifesting materially in the redesign of spaces for receiving, unpacking, and storing objects. As I will discuss in the following chapter, the museum building was also retrofitted over time to augment practices of risk management in the loan of objects. The emergence of registrar's offices or the redesign of storage rooms, also reflecting changes in function vis-à-vis itinerant objects, are then as much part of a history of museum conservation as the advent of the museum laboratory. Replicability is as much the aspiration of administrators seeking to regulate procedures as it is of laboratory scientists seeking to validate them. To limit our analysis of the work of object care performed by conservation scientists to what transpired in the laboratory is to discount the forms of inter-institutional standardization they initiated to enable circulating exhibitions.

Progress in techniques for art conservation responded directly to the increased movement of objects between museums for traveling exhibitions, and Buck's glossary, developed alongside a

Frameworks (Leiden; Boston: Brill, 2012); Caroline Fowler, "Technical Art History as Method," *The Art Bulletin* 101, no. 4 (October 2, 2019): 8–17.

³⁰ These arguments are bolstered by scholarship in the history of science that locates the (European) origins of the mutually constitutive relationships between the arts and sciences more generally in the early modern period, in ways that subverted the Aristotelian concepts of *episteme*, *praxis*, and *techné*, see Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago, Ill.: University of Chicago Press, 2004); Pamela O. Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance*, Paperbacks ed (Baltimore: Johns Hopkins Univ. Press, 2004); Lissa Roberts, Simon Schaffer, and Peter Dear, eds., *The Mindful Hand: Inquiry and Invention from the Late Renaissance to Early Industrialisation*, History of Science and Scholarship in the Netherlands, v. 9 (Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, 2007).

contemporaneous reconfiguring of museum spaces to facilitate inter-institutional object flow, signals the condition report's shift from technical to administrative document. (Edward Forbes' own interest in conservation was piqued by his observations of changes occurring in a series of early Italian paintings he acquired as a young man, which rapidly deteriorated after he brought them over to the United States.³¹) The relationships cultivated in museums between conservation scientists and registrars, founded on an emerging shared language for condition reporting and collaborative practices of assessment, were crucial for determining the conditions under which valuable objects could be allowed to travel for circulating exhibitions.

Scientists have long worked to further administrative ends—and have served explicitly as administrators—especially in the realm of public health. Historians emphasize the distinction between cure as a form of care and as a means of control, a difference at its most stark when the biopolitical ad/ministrative eye is turned toward the poor and the colonized.³² These coercive forms

³¹ Bewer, 13.

³² Historians of the hospital in Western Europe and the United States have commented on practices to control the poor by means of health administration. While Michel Foucault has discussed the origins of the 'medical gaze,' more pertinent here is scholarship that considers his notion of biopolitics/biopower as exerted within the hospital. See Thomas A. Markus, *Buildings & Power: Freedom and Control in the Origin of Modern Building Types* (London; New York: Routledge, 1993); Thomas Schlich, "Surgery, Science and Modernity: Operating Rooms and Laboratories as Spaces of Control," *History of Science* 45, no. 3 (September 2007): 231–56; Sven-Olov Wallenstein, *Biopolitics and the Emergence of Modern Architecture* (New York: Princeton Architectural Press, Buell Center/FORuM Project, 2009); Joy Knoblauch, *The Architecture of Good Behavior Psychology and Modern Institutional Design in Postwar America*, 2020. For critical extrapolations of the concepts of biopower and governmentality in relation to their exertion in French, Dutch, and British colonies, see Ann Laura Stoler, *Race and the Education of Desire: Foucault's History of Sexuality and the Colonial Order of Things* (Durham: Duke University Press, 1995); Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton, N.J.: Princeton University Press, 1999). The dual role of the ad/ministrator is most explicit in the context of colonial health policy. For a selection of work on British and American colonial public health policy in Asia and Africa, see Megan Vaughan, *Curing Their Ills: Colonial Power and African Illness* (Stanford, Calif: Stanford University Press, 1991); David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993); Mark Harrison, *Public Health in British India: Anglo-Indian Preventive Medicine 1859 - 1914*, Cambridge History of Medicine (Cambridge: Cambridge Univ. Press, 1994); David McBride, *Missions for Science: U.S. Technology and Medicine in America's African World* (New Brunswick, N.J: Rutgers University Press, 2002); Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2006); Robert Shannan Peckham and David M. Pomfret, eds., *Imperial Contagions: Medicine, Hygiene, and Cultures of Planning in Asia* (Hong Kong: Hong Kong University Press, 2013).

of governmentality, not for self-regulation but for regulation of the other, inform my reading of inter-institutional disciplining prompted by circulating exhibitions. Reinscribing social relationships between museum staff and recouping the administrative conservation work of circulating exhibitions is to acknowledge the very real consequences these processes have for what objects are apprehended by whom. The next section discusses the environmental conditions put in place by ad/ministrators to govern the movement of art objects for circulating exhibitions, illuminating the working biases that they used to make their decisions that drew from contemporaneous discourses of human health.

Field Trials: Establishing “Appropriate” Climate

Scientists’ grasp of how external environments conditioned the wellbeing of objects has closely tracked contemporaneous developments in the relationship between climate and human health. Often, sweeping changes to indoor climate were made based on a partial understanding of environmental phenomena, coupled with widely held prejudices about appropriate climates. In the early decades of the twentieth century, engineers found that industrial processes and their human manufacturers alike were sensitive to humidity control. While the particulars of this sensitivity were not yet fully understood, the promise of productivity precipitated the installation of air-conditioning in American factories. Early air conditioning systems in museums installed at the turn of the twentieth century were also in fact systems for controlling humidity that operated under the assumption that conditions for object health were analogous to those for human health.

That maintaining the good condition of a work of art was contingent on controlling the object’s environmental conditions was discussed in germinal form at the first International Conference for the Study of Scientific Methods in the Examination and Conservation of Artworks

held in Rome in October 1930, widely considered by technical art historians to have been a crucial catalyst for the field, and discussed in further detail in the introduction. At the Rome Conference, Superintendent of Buildings and Grounds at the Cleveland Museum of Art John McCabe gave an early talk on the importance of humidification and ventilation in art museums.³³ In it, he recounted the “disintegration of both canvas and panel paintings as well as general material in the decorative arts department” during dry winter months, and how in response to this deterioration the Museum of Fine Arts in Boston had installed humidity and air-filtering systems in 1908 after the construction of its current building on Huntington Avenue, perhaps the first in the United States to do so. He also discussed his involvement in a two-year humidification trial prior to this installation led by an expert engineer, at the conclusion of which they claimed that “the degree of humidity best suited to paintings and other works of art, not to mention visitors, was between 55 and 60%, regardless of the temperature or time of year.”³⁴

To McCabe, it was clear that climate control depended not only on mechanical innovations but also on a meticulously disciplined team of caretakers. The Cleveland Museum’s humidification and heating system was installed under McCabe’s supervision in 1915, and many other museums installed similar systems around this time,³⁵ but McCabe emphasized that “the success of such a system greatly depends on the people responsible for it,” noting that it was necessary to monitor any

³³ John McCabe, “Humidification and Ventilation in Art Museums,” *Museum News* 9, no. 5 (1 September 1931), 7-8. Translated as “Humidification de l’air et aération dans les Musées,” in *Mouseion* XV no.3, 54-57 (1931), and re-translated with some changes to the text as “Air humidification and Aeration in Museums (1931),” in Sarah Staniforth, ed., *Historical Perspectives on Preventive Conservation*, Readings in Conservation (Los Angeles: Getty Conservation Institute, 2013), 131–33.

³⁴ McCabe re-translation in Staniforth, 132. Curiously, the phrase “not to mention visitors” is not in the original text in *Museum News*, suggesting that it was added later to the French text, either by McCabe or a *Mouseion* editor.

³⁵ The Yale University Art Gallery installed steam heating a few years after the MFA. Mark Aronson, “The Conservation History of the Early Italian Collection at Yale,” in Patricia Sherwin Garland (ed.), *Early Italian Paintings, Approaches to Conservation: Proceedings of a Symposium at the Yale University Art Gallery, April 2002* (New Haven; London, 2003), 30-53. Cited in Bewer, *A Laboratory for Art*, 268n29.

new technicians until they were familiar with all phases of providing adequate humidification, and that “the superintendence service must cooperate closely with the curators in order to maintain the exhibited objects in perfect condition.”³⁶

His claims about environment, however, were inaccurate. McCabe himself admitted in his talk that “humidity has a disastrous effect on armor, unless it is coated in a wax varnish,” and that “the same applies to objects in Egyptian collections,” suggesting that the galleries in which these works were placed be equipped with *dehumidifiers*. Yet the desire to fix a uniform, regulable set of climate conditions—a recurring theme in museums as environment became a more central focus of conservation research—led McCabe to dismiss the health of those works of art seen as ancillary to canvas and panel paintings. McCabe’s imposed climate standard echoed the Fogg condition report optimized for assessing paintings over three-dimensional objects: it was established with the comfort of some objects in mind while other objects were obliged to endure it. McCabe’s talk at the Rome Conference anticipates how critical (and injurious) standardized administrative procedures would become for the care of objects.

McCabe was also imprecise in his terminology regarding humidity. What he referred to was more accurately termed *relative humidity* (RH), defined as the amount of moisture in a given volume of air relative to its maximum capacity at a certain temperature. While 55-60 per cent RH in a volume of air at one temperature is a different quantity of moisture from that in a quantity of air at another temperature, most organic materials have an equilibrium water content largely determined by RH and only slightly influenced by temperature. For this reason, scientists generally describe ideal

³⁶ McCabe re-translation in Staniforth, *Historical Perspectives on Preventive Conservation*, 132.

climate conditions in the museum using the term *relative* humidity, not humidity, and I follow their terminology in the rest of this chapter.

Around the same time that McCabe exhorted museum colleagues to “take the issue of aeration and humidification into consideration,” staff at the scientific laboratory at the National Gallery in London conducted two experiments that would further contribute to the widespread installation of air-conditioning. Pollution had long been a health issue in London—for works of art as well as for humans³⁷—and in the 1930s chemist Ian (“F.I.G.”) Rawlins and his colleague T.R. Keeley tested atmospheric pollution in the building. Moreover, taking into consideration that at least half of the National Gallery’s collection consisted of fragile wood panel paintings, they examined the moisture content of small samples of fir, oak, elm, and beech placed in strategic locations, recording the weight of these samples every month to gauge the input and output of moisture.

Rawlins and Keeley concluded that while the recorded fluctuations in moisture were “normal for London,” they were also “severe enough to impose considerable strains on panels, especially those known to be of delicate construction.”³⁸ As they explained, wooden supports of paintings expanded and retracted in response to changes in moisture in the air, which was restrained up to a point by the three layers above it (the gesso primer, paint, and varnish). If stressed beyond that point, most likely in dry conditions below 40 per cent relative humidity (RH), panels were at risk of catastrophically

³⁷ See chemist Michael Faraday’s report in 1850 on the deleterious effects of pollution on works of art in the National Gallery in London. Charles Eastlake, Michael Faraday, and William Russell, *Report of the Commission Appointed to Inquire into the State of the Pictures in the National Gallery* (1850). Reprinted in Staniforth, 270–75.

³⁸ T. R. Keeley and F. Ian G. Rawlins, “Air Conditioning at the National Gallery, London,” *Museum International* 4, no. 3 (September 1951): 195. See also S.T.O. Stillwell and R.A.G. Knight, “An Investigation into the Effect of Humidity Variations on Old Panel Paintings on Wood,” in *Some Notes on Atmospheric Humidity in Relation to Works of Art*, Courtauld, 1934, 17–34.

rupturing. They recommended air-conditioning to reduce fluctuations in moisture content in these wooden panels, and to “inhibit the energy changes which would otherwise occur[.]”³⁹

Like McCabe, they framed the problem as one of carefully calibrated humidity levels, to be addressed through mechanical and human means alike. Wetness was not (in their estimation) as dangerous as excessive dryness, apart from causing varnish to “bloom” and gesso grounds to loosen; the risk of mold increased at a relative humidity of higher than 68 per cent, but largely if the air was stagnant. On deducing that the average moisture-content of the panels throughout the year was about 11 per cent, and on inserting this figure in the equilibrium curve for wood as a function of the relative humidity of the atmosphere in which the sample was placed, they calculated the optimum value for RH in the National Gallery to be between 55-60 per cent,⁴⁰ which corresponded with the estimations set by building engineer J.A. MacIntyre in 1934, who also noted, however, that “the maintenance of the plant and control gear cannot be left to the ordinary attendant.”⁴¹

The National Gallery was further impelled to verify these laboratory tests during a live wartime experiment, when they moved much of their collection into a disused slate in Wales for safekeeping during WWII. From 1941 to 1946, the canvas and panel paintings were held under stable environmental conditions (63°F/17°C at 58 percent RH, as determined by the pre-WWII experiments) carefully monitored by National Gallery staff, and the paintings required little of the assiduous treatment that had been typical before the move.⁴² (Fig. 3.8) Yet all the old symptoms of

³⁹ Keeley and Rawlins, 196.

⁴⁰ Keeley and Rawlins, 196.

⁴¹ J. MacIntyre, “Some Problems Connected with Atmospheric Humidity,” in *Some Notes on Atmospheric Humidity in Relation to Works of Art*. Cited in Michalski, in Staniforth, *Historical Perspectives on Preventive Conservation*, 166, 168.

⁴² As the authors noted, “Before the war, a technician was employed for some eight months out of every year to deal with such defects as cracking, blistering and flaking. During the first year in exile (1941-1942) his work was reduced to approximately one month, and it became progressively less each year, until in 1945 his visit proved a formality and there was nothing for him to do.” Keeley and Rawlins, “Air Conditioning at the National Gallery, London,” 194. For a detailed firsthand account of the moving of pictures from London to the quarry, see Martin Davies and Ian Rawlins,

cracking, blistering, and flaking resurfaced upon the paintings' return to the Gallery, and in response the Gallery's conservation scientists took the initiative to install air conditioning in 1950, maintaining the environment at a temperature of approximately 20°C at 50 per cent RH to mimic conditions in the underground quarry.⁴³ (Fig. 3.9)

The hypotheses that preceded the climate experiments at the National Gallery and the conclusions that Keeley and Rawlins drew from their observations are much clearer than those of McCabe, who did not include details of the experimental trials that resulted in what is the first known recommendation for humidity levels in museums. Yet the widespread international turn towards air-conditioning in museums that followed these experiments is founded just as weightily on untested assumptions about the relationship between museum climates and the objects they hold. These assumptions are apparent in a 1950 document commonly known as the Weaver Report, compiled by an external committee of auditors on conservation practices at the National Gallery and which generalized from Keeley's and Rawlins' conclusions. The report determined, without sufficient evidence, that the climate conditions of 20°C at 50 per cent RH—which had been tested specifically to accommodate the wooden panel paintings (and polluted air quality) of the National Gallery—applied to all paintings (and indeed all art objects). Further, it assumed that improvements in condition were the result of specific temperature and RH conditions, rather than the fact that these conditions had been held stable over the course of the experiment.⁴⁴ These assumptions were

"The War-Time Storage in Wales of Pictures from the National Gallery, London," *Transactions of the Honourable Society of Cymmrodorian* (London, 1946). Reproduced in Staniforth, *Historical Perspectives on Preventive Conservation*, 139–54.

⁴³ See also other investigations into air-conditioning in museums conducted during the subsequent decade: A.E.A. Werner, "Heating and Ventilation," *Museums Journal* 57 (1957), 159-166; L. Logan Lewis, "Air Conditioning for Museums," *Museum X* no. 2 (1957), 132-147, Harold J. Plenderleith and Paul Philippot, "Climatology and Conservation in Museums," *Museum XIII* no 4 (1960), 202-289.

⁴⁴ J. P. Brown and William B. Rose, "Humidity and Moisture in Historic Buildings: The Origins of Building and Object Conservation," *APT Bulletin* 27, no. 3 (1996): 15. An expanded version of their essay is here: <https://cool.culturalheritage.org/byauth/brownjp/humidity1997.html#fn13>

reinforced in conservator Harold J. Plenderleith's 1956 essay, *Conservation of Antiquities and Works of Art*, which, like the Weaver Report, was published in the newly formed International Council of Museums' (ICOM) journal *Museum* (now *Museum International*) and widely circulated to conservators, just as the Fogg condition report did in *Technical Studies* several decades prior.⁴⁵

The composition of the Weaver Committee likely had far more effect on the hardening of standards than the rigor of testing at the National Gallery. At the time of the audit, discussions were under way for the founding of the International Institute for the Conservation of Museum Objects, now the International Institute for the Conservation of Historic and Artistic Work (IIC), which I have discussed in the introduction. It was Plenderleith who suggested the names of George Stout of the Fogg, as well as Belgian conservator Paul Coremans, founding director of the Royal Institute for Cultural Heritage (KIK-IRPA⁴⁶) in Brussels, to serve on the Weaver Committee.⁴⁷ Both accepted, and were in London in August 1947 for this purpose; they also spent this time discussing plans for founding the IIC with "F.I.G." Rawlins at the National Gallery, making plans at the same time for Coremans and Rawlins to visit the US in the autumn for another IIC-related meeting.⁴⁸ Coremans, Plenderleith, Rawlins, Gettens and others, would also meet again in Brussels the following year. (Fig. 3.10) The Weaver Committee, then, was not particularly impartial; at the very least, the National Gallery came under scrutiny by an amicable group of auditors. Stout eventually became the IIC's first president.⁴⁹ London was proposed for the IIC's headquarters, so Rawlins was voted in as

⁴⁵ Reprinted 1971 and reproduced in *Preventive Conservation*, p.288-301.

⁴⁶ The acronym stands for Koninklijk Instituut voor het Kunstpatrimonium - Institut Royal du Patrimoine Artistique.

⁴⁷ Boothroyd Brooks, *A Short History of ICC*, 11, n60.

⁴⁸ Boothroyd Brooks, 12, n63.

⁴⁹ Rawlins (and possibly others) expressed a preference for this. Boothroyd Brooks, 14, n79.

General Secretary/Vice President, and Plenderleith as its first treasurer.⁵⁰ Plenderleith would also go on to head ICCROM when it was founded. Finally, both the Weaver Report and Plenderleith's essay were circulated across the world through their publication in ICOM publication *Museum*, the philosophical successor to the Fogg's *Technical Studies* journal.

The propensity to generalize from a specific set of experimental circumstances derived from an assumption that climate conditions seemingly suited for (some) humans were equally salubrious for inanimate objects. The quest to ascertain suitable climate conditions for humans has historically been situated in the environments of two key sites: the hospital and the factory. Architectural historians have expanded at length on how the nineteenth-century hospital in Western Europe and North America was spatially arranged to heal patients through the control of environmental factors such as ventilation, temperature, and exposure to sunlight, a practice which continued for some decades after the miasma theory of disease was abandoned in favor of the germ theory in the late nineteenth century.⁵¹ (Indeed, many assert that the modern architectural movement in these two regions was molded by contemporaneous discourses of the relationship between health and environment, particularly in the treatment of tuberculosis.⁵²)

⁵⁰ Boothroyd Brooks, 14, n83. A note signed by Richard Buck (26 April 1948) opined that “the Treasurer should be a British resident to avoid financial tangles” and that one of the other two leaders “should be physically near the Treasurer in order to make an efficient team.”

⁵¹ For an excellent discussion of the relationship between modern hospital architectures and theories of healing grounded in case studies from the United States, as well as an extensive bibliographic essay on the subject, see Jeanne Susan Kisacky, *Rise of the Modern Hospital: An Architectural History of Health and Healing, 1870-1940* (Pittsburgh, PA: University of Pittsburgh Press, 2017). For general scholarship on architecture and hospital design by architectural historians, see the work of Annemarie Adams on hospitals in Canada in the same period, Harriet Richardson and Christine Stevenson on general British hospital design from the seventeenth to the twentieth centuries, and older work by Adrian Forty, Anthony D. King, and Jeremy Taylor on pavilion design in Britain (believed to reduce mortality through improved ventilation), as well as John D. Thompson and Grace Goldin's overview of the social and architectural history of hospitals on both sides of the Atlantic.

⁵² See Margaret Campbell, “What Tuberculosis Did for Modernism: The Influence of a Curative Environment on Modernist Design and Architecture,” *Medical History* 49, no. 4 (October 1, 2005): 463–88; Paul Overy, *Light, Air & Openness: Modern Architecture between the Wars* (London: Thames & Hudson, 2007); Mirko Zardini, Giovanna Borasi, and Margaret Campbell, eds., *Imperfect Health: The Medicalization of Architecture* (Montréal: Canadian Centre for

Yet the imposition of appropriate climate conditions in the museum appears to have derived from considerations of somatic comfort in service of productivity, not healing. When American air conditioning engineers investigated the possibility of mechanically generated environments of comfort in the early twentieth century, they did so in the milieu of the cotton mill. In fact, the term air conditioning itself, coined by American textile mill engineer Stuart Cramer in 1906 and adopted by his competitors, originally referred to systems for controlling humidity (it was not until the 1930s that machinery for refrigeration became a key component).⁵³ It is pertinent that he named his system in an effort to differentiate his endeavors to maintain a predetermined relative humidity mechanically from prior attempts to simply add moisture to the air, and that the term derived from yarn conditioning, in which the textile fibers were exposed to moist atmospheric conditions while in storage prior to being processed.⁵⁴ (Like canvas and paper, cotton is a hygroscopic material, readily absorbing and desorbing moisture from the air.) The values of 78°F/25°C and 50 percent RH, widely used by 1925 as the norm for air-conditioning in the United States,⁵⁵ derived from laboratory experiments conducted by the American Society of Heating and Ventilating Engineers into conditions of comfort most efficiently achieved by mechanical means (at higher humidity levels, engineers found that more energy was required to cool the moisture in the air than to cool the air

Architecture : Lars Müller Publishers, 2012); Colomina, *X-Ray Architecture*. One could argue that any architectural history of modern architecture that centers on architects' sustained consideration of climatic factors takes this stance.

⁵³ See Chapter 1, "It's Not the Heat, It's the Humidity," and Chapter 5, "Mass Production, the Residential Market, and the Window Air Conditioner, 1928-1940," in Gail Cooper, *Air-Conditioning America: Engineers and the Controlled Environment, 1900-1960*, Johns Hopkins Studies in the History of Technology, N.S., 23 (Baltimore: Johns Hopkins Univ. Press, 1998), 7–28, 110–39.

⁵⁴ Cooper, 19.

⁵⁵ On the values that became a norm in the US, see Walter Fleisher, "Air Conditioning Old Buildings," *Refrigerating Engineering* 58 (December 1950), 1184. Cited in Cooper, 102 204n102. See also Chapter 3 in Cooper, "Defining the Healthy Indoor Environment, 1904-1929," 51-79.

itself).⁵⁶ So-called ideal conditions, then, were predicated on the efficiency of the machine required to produce them.

Air-conditioning was associated by its proponents in the United States with physical, mental, and moral progress, and was used to discipline the workforce in normalized activities of labor and leisure under standardized climate conditions.⁵⁷ These notions of progress echoed contemporaneous, deterministic views on the relationship between climate and civilization—albeit one defined by ideal temperatures rather than by humidity levels for optimal labor efficiency—that invariably placed the author’s place of origin at the forefront of human advancement.⁵⁸ (These texts also constructed the tropics as hastening fatigue and the inhabitants of these regions as lagging in evolutionary progress.⁵⁹) Comfort itself is a fraught term, then, as its theorists—like the authors of the Weaver

⁵⁶ Cooper, 14. ASHVE is now incorporated into the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The shift to the latter title reflects how differently environmental control was understood at the end of the twentieth century.

⁵⁷ Marsha E. Ackermann, *Cool Comfort: America’s Romance with Air-Conditioning* (Washington, D.C.: Smithsonian Institution Press, 2002), 4, 40. On the convergence between social and mechanical conditioning, see also Elizabeth Shove, *Comfort, Cleanliness and Convenience: The Social Organization of Normality* (Oxford: Berg, 2003); Daniel A. Barber, “After Comfort,” in *LOG 47: Overcoming Carbon Form* (Anyone Corporation, 2019); Daniel A. Barber, *Modern Architecture and Climate: Design before Air Conditioning* (Princeton: Princeton University Press, 2020). For a longer history of the normalization of certain conditions of ‘comfort’ in Britain and the US, see John E. Crowley, *The Invention of Comfort: Sensibilities and Design in Early Modern Britain and Early America*. (Baltimore; Boulder: Johns Hopkins University Press, 2003).

⁵⁸ A prime example is Ellsworth Huntington, *Civilization and Climate* (New Haven: Yale University Press, 1915). See also the later publication, Sydney F. Markham, *Climate and the Energy of Nations* (London: Oxford University Press, 1944). Huntington, an American, determined that physical activity was most effectively accomplished when the daily average temperature fell between 60° and 65°F, and that American weather was the world’s most conducive to progress. Sydney F. Markham, hailing from Britain, considered the ideal temperature for human progress to fall at a mean annual temperature of 70°F. *Civilization and Climate* was republished with new material in 1924, and reprinted several times over subsequent decades, the most recent being in 1971.

⁵⁹ Critical works on climate determinism in relation to colonization include Anne Godlewska and Neil Smith, eds., *Geography and Empire* (Oxford, UK ; Cambridge, Mass., USA: Blackwell, 1994); David Arnold, *The Problem of Nature: Environment, Culture and European Expansion* (Oxford; Cambridge, MA: Blackwell, 1996); Felix Driver and Brenda S.A. Yeoh, “Constructing the Tropics: Introduction,” *Singapore Journal of Tropical Geography* 21, no. 1 (March 2000): 1–5; Nancy Stepan, *Picturing Tropical Nature* (Ithaca, N.Y.: Cornell University Press, 2001); Felix Driver, “Imagining the Tropics: Views and Visions of the Tropical World,” *Singapore Journal of Tropical Geography* 25, no. 1 (March 2004): 1–17; Felix Driver and Luciana de Lima Martins, eds., *Tropical Visions in an Age of Empire* (Chicago: University of Chicago Press, 2005). For scholarship that takes a critical stance on the climate determinism of ‘tropical architecture,’ particularly as articulated by Otto Koenigsberger, Maxwell Fry, and Jane Drew, see Jiat-Hwee Chang, *A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience* (London ; New York: Routledge, 2016); Jennifer Ferng et al.,

Report—generalized from a set of particular climatic circumstances to impose a disciplinary norm masked as a concern for health. McCabe’s assertion that “a museum whose air is properly humidified is much less tiring to visit than a building where there is no such system,”⁶⁰ or Keeley’s and Rawlins’ reassurance that, “Fortunately, the optimum figures [for object health] of 55 per cent RH and around 66°F are comfortable for human beings,”⁶¹ cannot be disentangled from the cultural discourses attached to climate, comfort, and progress at the time (especially as contemporary conservation scientists now acknowledge that the best conditions for preserving art may be very far outside those bearable by humans.⁶²

At the same time, this presentation of assumptions about climate is complicated by Louvre curator René Huyghe’s presentation at the second biennial conference of the International Council of Museums in 1950, portions of which have been discussed in previous chapters. Exhorting his colleagues to consider the urgency of ensuring object safety in coordinating international art exhibitions, he echoed the sentiments of the Weaver Report as he enumerated the horrors wrought upon paintings caused by atmospheric variations. Yet he also noted that

several of the most modernly equipped museums have, at great expense, installed air-conditioning. [...] It may of course be objected that, in museums not provided with such equipment, works of art are already exposed to more or less considerable variations depending on the season, and that their movement could hardly entail greater strains. This would be a mistake; there is a certain regularity in climatic variation in any one place, a sort of rhythm to which the materials exposed to these variations have gradually become adapted.⁶³

“Climatic Design and Its Others: ‘Southern’ Perspectives in the Age of the Anthropocene,” *Journal of Architectural Education* 74, no. 2 (July 2, 2020): 250–62; Warwick Anderson, “Decolonizing the Foundation of Tropical Architecture,” *ABE Journal*, no. 18 (March 26, 2021).

⁶⁰ McCabe, in Staniforth, *Historical Perspectives on Preventive Conservation*, 133.

⁶¹ Keeley and Rawlins, “Air Conditioning at the National Gallery, London,” 196.

⁶² Domínguez Rubio, *Still Life*, 159, 166.

⁶³ René Huyghe, “Coordination of International Art Exhibitions,” *International Council of Museums: Second Biennial Conference: London 17-22 July 1950*. UNESCO/ICOM/BI/Conf.2/17, Paris, 30 June 1950

If some museum professionals, like Huyghe, believed it was better to stabilize *any* conditions than to subject them to extreme variation, it does not explain the insistence upon maintaining a narrow range of environmental conditions within the museum, which has only grown more stringent with time. Since the late 1980s, museums have been classed by their ability to adhere to a single standard with minimal climate fluctuations from 20°C maintained at 50% relative humidity.⁶⁴ As a result, museums invariably request that architects and engineers construct their designs for both renovations and new facilities to meet this environmental requirement.⁶⁵

Yet as we have seen in the introduction, the newly formed ICOM, in partnership with the freshly minted UNESCO, took up a mandate for peacebuilding in the aftermath of WWII, which included encouraging exhibitions of loaned objects to promote cooperation between museums and educate museumgoers about the world's diverse cultures. To ensure the good health of increasingly itinerant objects required maintaining conditions as close to those of the object's museum of origin throughout its sojourn to and from other institutions such that it would appear—to the object—that no migration had occurred.

The standards being put in place, then, were in service of controlling the internal climates of *other* institutions. Exhibition exchange galvanized museums (that could do so) to synchronize their

⁶⁴ In the second edition (1986) of his landmark 1978 publication on the interior climate of museums, British research chemist Garry Thomson—reluctantly—distinguished between what he termed Class 1 Museums (able to maintain a relative humidity of 50-55 ±5%) and Class 2 Museums (40-70% RH, often smaller museums, historic houses, and churches), noting that “there is something inelegant in the mass of energy-consuming machinery needed at present to maintain constant RH and illuminance, something inappropriate in an expense which is beyond most of the world's museums.” Garry Thomson, *The Museum Environment*, 2nd ed. (London: Butterworth-Heinemann, 1986), 267–68. In 2003, a chapter on museums was included in the ASHRAE Handbook, which ranks them from Class AA (precision control) to Class D (relaxed control). American Society of Heating, Refrigerating and Air-Conditioning Engineers, ed., “Chapter 20: Museums, Libraries, and Archives,” in *2003 ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Applications*, Inch-Pound ed (Atlanta, GA: ASHRAE, 2003). Cited in Domínguez Rubio, *Still Life*, 233–35, 356n6.

⁶⁵ Jo Kirby Atkinson, “Environmental Conditions for the Safeguarding of Collections: A Background to the Current Debate on the Control of Relative Humidity and Temperature,” *Studies in Conservation* 59, no. 4 (July 2014): 205–12.

interiors to the point of global homogeneity. Even amidst a growing consensus among conservation scholars that this is an unreasonable requirement, necessitating as it does an energy-intensive heating, ventilation, and air-conditioning (HVAC) system, the doubtfulness of its efficacy for conserving all collections, and the prevalence of deeply unsustainable building maintenance practices even in institutions for which the standard is unreasonable, these standards continue to be enforced for ease of administrative facilitation.⁶⁶ In the following section, I discuss further how the museum interior came to be so uniform across nations.

Containment: Designing Climate-Controlled Storage for Transit

As the implications of a stable environment for object health became clearer, museums were increasingly unwilling to lend precious objects to institutions that could not guarantee the provision of similar climate conditions to their own. For a second generation of conservation research scientists working in the mid-twentieth century, then, maintaining object safety required an investigation not only into methods for preserving the integrity of an object's surface, but also into how to maintain environmental conditions to which it had become acclimatized in its "home" museum, even while in transit. Most compelled to conduct innovative research to this end were museum researchers located in regions perceived as geographically distant from exhibition "centers" and subject to considerable variations in climate throughout the year, yet also able to bear the financial investment required to establish a place on this international exhibition circuit.

⁶⁶ Stefan Michalski, "The Ideal Climate, Risk Management, the ASHRAE Chapter, Proofed Fluctuations, and Toward a Full Risk Analysis Model" (Experts' Roundtable on Sustainable Climate Management Strategies, Tenerife, Spain: The Getty Conservation Institute, 2007), 1.

A recognition that assessments of object condition were functions of both the technical and administrative domains led conservators themselves to think holistically about the spatial layouts of museum facilities outside the laboratory. Particularly illuminating are the efforts undertaken by Nathan Stolow, research chemist at the National Gallery of Canada in Ottawa. Stolow was equally influenced by advances in conservation at the Fogg and the National Gallery in London. His growing interest in the chemistry of art preservation led him to make contact with Rutherford Gettens, who at that point had just left the Fogg but not commenced work at the Freer, and who advised him to “try to contact museum colleagues in Europe rather than in America, [as] museum conservation activity in America was at a low ebb in this period.”⁶⁷ Stolow, who at that point held a master’s degree in chemistry, undertook dedicated doctoral research at the intersection of chemistry and art at the University of London’s Courtauld Institute of Art, whose establishment was owed to work at the Fogg.⁶⁸ He wrote his dissertation on a timely topic: solvent action in the cleaning of old paintings, a contentious aspect of art restoration that had recently come under scrutiny in the wake of *Cleaned Pictures, 1936-1947*, a controversial 1947 exhibition of restored art at the National Gallery in London, after which critics asserted that the “cleaning” wrought irreparable damage upon the paintings. (It was in response to this furor, in fact, that the National Gallery was compelled to

⁶⁷ Stolow, “Notes on my career in conservation,” National Gallery of Canada Archives.

⁶⁸ Bewer notes that “Among the better-known instances of the Fogg’s influence overseas was the Courtauld Institute, established in London in 1932 to provide training for art professionals: it modeled itself on the Fogg as a laboratory for the fine arts.” Also, “The Courtauld embarked on one of the earliest scientifically based conservation training programs a year later, and the following year created a Laboratory of Scientific Research with Daniel Thompson, Forbes’s former assistant, as its research and technical advisor. He later became director, and finally held a chair in the history of the technology of art.” Bewer 174, n 130, n131, n133, n134. For more on the Fogg’s role in shaping the Courtauld, and on other international responses to the Fogg in the 1920s and 30s, see Kathryn Brush, *Vastly More than Brick and Mortar: Reinventing the Fogg Art Museum in the 1920s* (Cambridge, MA: Harvard Art Museums, 2003), 185-99.

appoint the Weaver Committee to conduct an investigation into the matter;⁶⁹ Stolow's advisor, Stephen Rees Jones, had also worked directly with the very restorer—Helmut Ruhemann—whose fervent cleaning methods had come under fire.⁷⁰)

On completion of his degree in 1956, Stolow was hired by the National Gallery of Canada to direct its newly-formed Conservation and Scientific Research Division, founded after two external reviews of its restoration practices by art historian William G. Constable,⁷¹ which recommended that an integrated conservation laboratory be established in the Gallery.⁷² With financial support from the Gallery and the Carnegie Corporation of New York, Stolow undertook a year-long tour of existing European and American museum conservation facilities and modeled the National Gallery of Canada's fledgling Department of Conservation and Scientific Research on a combination of practices, amenities, and technologies used in these institutions. Visiting the National Gallery in London as part of his "Grand Tour" in 1956, Stolow noted that its conservators considered air-

⁶⁹ In his FAIC oral history interview, he discussed how his PhD was directly related to the picture cleaning controversy at the National Gallery. *Foundation of the American Institute for Conservation of Historic and Artistic Works, Stolow oral history interview with Joyce Hill Stoner conducted 25 October 1976*, 2.

⁷⁰ Ruhemann "moved from Berlin to London, and worked on a freelance basis on National Gallery paintings and held a part-time post as Technical Consultant at the Scientific Department when it opened at the Courtauld Institute of Art in the autumn of 1934." Boothroyd Brooks 5. Rees Jones (1909-1996) served as assistant to Ruhemann in the Department of Technology at the Courtauld Institute of Art since 1946), succeeded Ruhemann in a full-time capacity as Lecturer-in-Charge in 1951, was Head of the Department until his retirement in 1976, and was awarded a Chair in 1975. He became a Fellow of IIC in 1952. Boothroyd Brooks, 38-39, n239: "Honorary Fellowship: Professor Stephen Rees Jones," *IIC Bulletin* (February 1989), 2-3. "Obituary of Stephen Rees Jones," *IIC Bulletin* (February 1997), 1-2. He also served as IIC Treasurer that same year.

⁷¹ W.G. Constable was also at the Rome Conference, and was then Assistant Director of the National Gallery, London. He became the first Director of the Courtauld Institute of Art in 1932, which he gave up in 1938 to become Curator of Paintings at the Museum of Fine Arts, Boston, Massachusetts." Boothroyd Brooks 4, n9: J.J. Byam Shaw, "Profile [of WGC]," *IIC News*, 1 (September 1960), 24-26. Rutherford J. Gettens, "Encomium for W.G. Constable," published as "William George Constable – Honorary Fellow," *Studies in Conservation*, 15 (1970), 401-402. N.S. Brommelle, "Obituary of W.G. Constable," *IIC Bulletin*, 1 (July 1976), 1-2. The first review of the National Gallery of Canada took place in 1931, and the second in 1956.

⁷² For more detail on the Constable Report, Stolow's itinerary in Europe and the United States, and overview of his work at the National Gallery of Canada and later as founding director of the Canadian Conservation Institute (1972-1976), see Marion C. Barclay, "The National Gallery of Canada and Nathan Stolow," *Journal of the Canadian Association for Conservation* 37 (2012): 22-40.

conditioning to be vital for conservation.⁷³ In addition, he took notes on restoration equipment, laboratory layout, and gallery lighting arrangements, as well as storage facilities.

Condition was an enduring concern for Stolow, evidenced by recommendations he made at international gatherings of conservation experts from his early days at the National Gallery of Canada. His first recommendations appeared purely technical. At a 1958 conference on conservation held at the Brooklyn Museum (which will be discussed in further detail in the following chapter) under the auspices of the Rockefeller Foundation, the first such in North America, he argued for further research into an improved system of condition reporting; he made suggestions on how new scientific devices could be used for scanning material properties like reflected colors, roughness and gloss at every point over the surface of a work of art, and offered an noted advances made in the colorimetry of paintings, wherein colors in a painting had been standardized such that they could be measured against an international color system.⁷⁴

He also seemed most concerned with normalizing the figure of the scientist in the museum (he himself was first scientist hired by the National Gallery in Ottawa in 1957). He bookended his 1958 talk with the admonition that scientists were more likely to perform poorly if “kept away...by more than arm’s length” from conservators, and that “the smooth operation of the unit” required that “the scientific and conservation branches be not isolated too much from one another.”⁷⁵ He

⁷³ Nathan Stolow to Alan Jarvis, 11 October 1956; Nathan Stolow to Alan Jarvis, 29 October 1956. Stolow, Nathan, *Documentation 1963-1964 (Book 1)*, National Gallery of Canada Library and Archives. Stolow toured facilities including the Tate (Britain), the National Gallery in London, the Fogg, the Museum of Fine Arts in Boston, the Cleveland Museum of Art, the Metropolitan Museum of Art, and the Freer Gallery of Art in Washington, D.C. He met with Buck, Gettens, and others during his travels.

⁷⁴ Nathan Stolow, “Research into Pure and Applied Science for Conservation.” Paper read at an exploratory conference in the conservation of works of art, held at the Brooklyn Museum, New York, under the auspices of the Rockefeller Foundation, 24 October 1958.

⁷⁵ Nathan Stolow, “Research into Pure and Applied Science for Conservation” (*Exploratory Conference on Conservation, Brooklyn Museum, 1958*), 1, 9. Brooklyn Museum Archives: DIR 1958-59; *Exploratory Conference in Conservation*.

took pains to spatially articulate as floorplans the inter-human relationships he described in Brooklyn, as well as to widely circulate these drawings. Two months into his tenure at the Gallery, Stolow submitted a memorandum to its Director, Alan Jarvis, outlining estimates for the new Division, which included a schematic for a modest single-room laboratory-office wherein an easel and picture examination area jostled with a microscopy table.⁷⁶ (Fig. 3.11) It was a temporary measure, for the Gallery was slated to move to a new location, and the staff at the time consisted only of Stolow and the Gallery's conservator, Mervin Ruggles. A few years later, he included a floorplan of the Division's new quarters in an essay on its research.⁷⁷ (Fig. 3.12)

Like Forbes,⁷⁸ Stolow engaged in public outreach using medical analogies to acquaint his audience with the niceties of conservation. (Fig. 3.13) Newspaper accounts capture the ministrative aspects of his work, and his characterizations of art as enfeebled, susceptible to poor health, and in need of preventive and palliative care. They describe conservation as the “diagnosis [and] treatment of ailing pictures,” conservators as technically precise “art surgeons,” and climate-controlled storage as “hospital beds.”⁷⁹ On exhibitions, one paper noted that “old masters... don't take kindly to travelling unless properly wrapped up – an attitude shared by younger works of art,” while another

⁷⁶ Nathan Stolow, “Memorandum to the Director: Report and Estimates for Department of Conservation and Scientific Research” (June 4, 1957), National Gallery of Canada Library and Archives.

⁷⁷ Nathan Stolow, “Conservation and Scientific Research at the National Gallery of Canada,” *Professional Public Service* 42, no. 2 (February 1963): 4–7.

⁷⁸ Bewer, *A Laboratory for Art*, 73.

⁷⁹ Angela Burke, “He exposes fake old masters,” C-I-L (Canadian Industries Limited) Oval: A magazine of industrial chemistry, December 1957; Carl Weiselberger, “Diagnosis, Treatment of Ailing Pictures,” *The Ottawa Citizen*, 27 March 1958; Brian Magner, “Diagnosing the ills of Canada's sick paintings,” *Globe and Mail Magazine*, 16 June 1960; Carl Weiselberger, “No Bed Shortage Here,” *Ottawa Citizen*, 3 June 1961. National Gallery of Canada Library and Archives.

referred to silica gel, inserted into traveling containers of art to regulate humidity levels, as “tablets” that assuaged the “headache” caused by transporting art.⁸⁰

Stolow was just as engrossed with the challenge of standardizing *ad-*ministration, particularly through strategies of containment. Illustrative of this fixation are his early efforts to reform the layout of storage facilities at the National Gallery. He produced lengthy memos on problems of storage based on what he had seen on his conservator’s tour of museum facilities. He made recommendations for the types of storage racks to be used,⁸¹ requesting that these facilities also be air-conditioned, and drawing up floorplans depicting better storage arrangements.⁸² (Fig. 3.14) While the report was dismissed at the time as “too elaborate” for the National Gallery’s capacities,⁸³ the Gallery’s storage rack facilities were later upgraded.⁸⁴

Yet Stolow did not simply devote himself to thinking about containment within the Gallery’s new Department of Conservation and Scientific Research. He also sought to establish conservation techniques for exhibitions that followed the logic of containment, with globally consequential results. He commenced research into the design of a climate-controlled container for

⁸⁰ Richard Carver, “Dr. Nathan Stolow: Guards lives of Old Masters,” *The Ottawa Journal*, 22 February 1964; Lenore Crawford, “National Gallery Course Gives Hints on Care and Restoration of Painting,” *London Evening Free Press*. National Gallery of Canada Library and Archives.

⁸¹ Specifically, he recommended slotted angle steel strip shelving systems from British firm Dexion. Dexion was used in other conservation and reconstruction projects across the world, such as emergency shelters after earthquakes in Greece (1953) and Skopje (1963) and for a shelter over the archaeological remains excavated at Akrotiti, Greece during 1967-79. *Thera: Pompeii of the ancient Aegean*. Christos G. Doumas, 1983. Dexion systems were also used by exhibition designers for their flexibility and ease of construction, to build grandstands for Ghana’s independence celebrations, and equipment platforms for the 1956 Winter Olympics in Italy. See James H. Carmel, *Exhibition Techniques, Traveling and Temporary*. (New York: Reinhold Pub. Corp., 1962).

⁸² Memo from Nathan Stolow to Messrs. Grower and Veit, 3 July 1958; Memo from Stolow to Buchanan (copies to Jarvis, Hubbard, Veit, Wardlaw), “Storage and Related Problems in the National Gallery of Canada,” 15 August 1957. Stolow, Nathan, Documentation 1958-1962 (Book 4). National Gallery of Canada Library and Archives.

⁸³ Memo from Buchanan to Jarvis and Veit, 22 August 1957. Stolow, Nathan, Documentation 1963-1964 (Book 2) National Gallery of Canada Library and Archives.

⁸⁴ Nathan Stolow, Report, Minutes of the 88th Meeting of the Board of the NGC, 16-17 April 1958, p.886. Stolow, Nathan, Documentation 1954-1959 (Book 3). National Gallery of Canada Library and Archives.

transporting art in direct response to a 1963 resolution proposed to ICOM by its New Zealand delegation, which recommended investigating the design and construction of air-conditioned display cases for the protection of works of art on loan.⁸⁵ In 1965, he published a joint report on his findings for what was then ICOM's two committees on museum laboratories and on the care of paintings.⁸⁶ The following year, his report was published as a short book with funding from UNESCO, titled *Controlled Environment for Works of Art in Transit*. In turn, this work was published in the 1968 and 1979 editions of *Museum Registration Methods*—in which Richard Buck's glossary for assessing condition appeared—underscoring the exchange between the administrative functions of the registrar and those of the conservator.⁸⁷

In it, he detailed the results of his experiments in devising a suitable container for travel, sketching out a didactic articulation of the “ideal container” for moving works of art, which was in essence as impermeable as humanly possible to design.⁸⁸ Stolow's ideal container was to be made of plywood, coated in waterproof paint, its interior lined first with heat-sealed polyethylene film and then with expanded foamed plastic, and its plywood lid tightly closing on rubber gaskets for

⁸⁵ Nathan Stolow, “Report of Chief, Conservation and Scientific Research,” Annual Report (Ottawa: The National Gallery of Canada, 1963), 1218; Nathan Stolow, *Controlled Environment for Works of Art in Transit* (London: Butterworths, 1966), 45. Stolow drew on studies conducted to maintain constant RH in a closed package of art in transit: Kenzo Toishi, “Humidity Control in a Closed Package,” *Studies in Conservation* 4, no. 3 (August 1959): 81–87. Harold J. Plenderleith and Paul Philippot, “Climatology and Conservation in Museums,” *Museum International* 13, no. 4 (December 1960): 284. Nathan Stolow, “Some Studies on the Protection of Works of Art during Travel,” and Kenzo Toishi, “Relative Humidity in a Closed Package,” International Institute for the Conservation of Historic and Artistic Works, *Recent Advances in Conservation: Contributions to the IIC Rome Conference, 1961*, ed. Garry Thomson (London: Butterworths, 1963), 9–12 and 13–15.

⁸⁶ Nathan Stolow, “Report on Controlled Environment for Works of Art in Transit,” ICOM Report 65/21 (Washington, D.C. and New York: International Council of Museums, Committee for Museum Laboratories, 1965).

⁸⁷ Stolow, “The Ideal Container and the Travel of Works of Art,” in Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1968, 254–60. Updated: Stolow, “Specific Applications S: The Ideal Container for Travel of Humidity-Sensitive Collections,” Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1979, 389–94.

⁸⁸ Stolow, *Controlled Environment for Works of Art in Transit*, 42–44. This eventually lengthened into over a hundred pages of meticulously categorized instructions in a later work, also published by Butterworths: Nathan Stolow, *Conservation and Exhibitions: Packing, Transport, Storage, and Environmental Consideration* (London; Boston: Butterworths, 1987). See also “Fundamental Case Design for Humidity Sensitive Collections,” *Museum News* Vol. 44 (Washington, D.C., 1966): 45–52

airtightness, and its ideal shape was to be “as cubical as possible.”⁸⁹ (Fig. 3.15) It evidenced that circulating original works of art necessitated not an expansive “museum without walls” but a tightly-controlled, miniature museum with walls within walls. (Fig. 3.16) Administratively attentive to the disciplining of museum staff, he also laid out regulations for uncrating objects at receiving institutions (including holding off for a day to allow for temperature equilibrium, as well as storing packing materials under the same conditions while the objects were on exhibition).⁹⁰

The report described how the internal climate of a container could be stabilized using a range of materials, from craft paper to polystyrene, but Stolow asserted that the most effective of these, based on laboratory testing, was to line the container’s interior walls with trays of silica gel, those small beads of silicon dioxide now ubiquitously used as a desiccant in packages of moisture-sensitive items.⁹¹ At the time, silica gel was beginning to be made available as a commercial desiccant, its remarkable capacity for storing water earning it the moniker “the magic sand with a thirst.”⁹² Stolow’s experiments, however, tested its capacities for humidity “buffering”. He found that inserting trays of silica gel into the interior walls of the container could maintain constant moisture levels despite variations in temperature (i.e. they helped keep the RH constant) by absorbing and

⁸⁹ Stolow, *Controlled Environment for Works of Art in Transit*, 42.

⁹⁰ *Controlled Environment*, 43-44. Also see *Conservation of Easel Paintings*, p.670.

⁹¹ Although the existence of silica gel was known prior to the twentieth century, its properties as a commercial desiccant were harnessed by American chemist Walter Albert Patrick, who patented his method for inexpensively making the water-absorbent beads in 1919. He founded the Silica Gel Company of Baltimore, which later became a division of the Davison Chemical Company. Stolow’s publication indicates that he used Davison silica gel for his experiments. “Silica Gel,” *Time*, vol. 7, no.1, 4 January 1926; Patent US1297724A, <https://patents.google.com/patent/US1297724A/en>; Walter Albert Patrick Papers 1901-1968, Smithsonian Institution Special Collections, <https://invention.si.edu/walter-albert-patrick-papers-1901-1968>.

⁹² Silica gel consists of an “internal network of interconnecting microscopic pores, yielding a typical surface area of 700-800 square meters per gram: or, stated another way, the internal surface area of a teaspoon full of silica gel is equivalent to a football field.” Steven Weintraub, “Demystifying Silica Gel,” *The American Institute for Conservation of Historic & Artistic Works, Objects Specialty Group Postprints* 9 (2002): 172-73. “Magic Sand with a Thirst,” *Popular Science*, June 1941, 86-89; Kenneth M. Swezey, “Home Experiments Explain the Magic of Cold from Chemistry,” *Popular Science*, October 1941, 197-199.

releasing moisture from the air inside the container. The capacity of silica gel to absorb up to forty per cent of its weight in moisture, while still appearing dry to the touch and remaining relatively impervious to temperature change, rendered it a capable buffer between moisture-sensitive art and fluctuating external environments. His design for stabilizing the internal climate of art containers through panels of preconditioned silica gel beads inserted into the container walls is still used by museums today.

While Stolow advanced and refined techniques of exhibition conservation, he was not the first to experiment with the use of humidity buffering. He frequently cites the earlier research of Japanese conservation physicist Kenzo Toishi (1913-2014), head of the Department of Conservation Science at the Tokyo National Research Institute for Cultural Properties in Japan and fellow member of both the IIC and the ICOM Committee for Museum Laboratories. In 1959, Toishi published an essay on controlling humidity in a closed package with the use of “Kaken gel,” a substance similar to silica gel in its humidity buffering properties.⁹³ Toishi and Stolow both presented their work at the IIC’s first conference on conservation, held in Rome in 1961 as a “reprise” of sorts of the 1930 conference. As their papers make clear, they were both dealing with similar issues of damage to objects sent on exhibition during the late 1950s.⁹⁴ It is worth considering how the geographical conditions from which they worked played a role in their innovations.

⁹³ Toishi, “Humidity Control in a Closed Package.” Toishi cites a 1956 article in Japanese (which does not appear in current bibliographies of exhibition conservation). Kenzo Toishi and Toshiko Kenjo, “An Attempt to Control Relative Humidity of a Sealed Package,” *Scientific Papers on Japanese Antiquities and Art Crafts (Kobunkazai no kagaku)* 12 (1956), 28-36). In their 1960 review of climatology and conservation, Harold J. Plenderleith and Paul Philippot discuss the properties of silica gel as a chemical drying agent, crediting Toishi with using silica gel as a humidity-adjusting agent. Plenderleith and Philippot, “Climatology and Conservation in Museums,” 284.

⁹⁴ Nathan Stolow, “Some Studies on the Protection of Works of Art during Travel,” and Kenzo Toishi, “Relative Humidity in a Closed Package,” International Institute for the Conservation of Historic and Artistic Works, *Recent Advances in Conservation: Contributions to the IIC Rome Conference, 1961*, 9–12 and 13–15. Stolow describes a shipment of contemporary paintings being returned to Canada from the 5th Bienal de São Paulo in 1959 that remained closed for approximately two months, and their internal relative humidity increased to a degree that it supported the growth of

While the success of Stolow's experiments using silica gel as a humidity buffer constitutes a scientific advancement, the exact specifications for the internal conditions to be maintained in these containers—namely, a temperature of 20°C at 50% relative humidity—rendered this exhibition conservation a technique of *administrative* control. Stolow's numbers derived, of course, from the conditions at the National Gallery in London, despite Ottawa's different atmospheric conditions from those in London; Ottawa was not nearly as polluted a city as London was in 1950, and its climate also oscillated much more violently between humid summers and bitterly cold winters.

It is significant that Stolow did not conduct concurrent tests to verify if these conditions were in fact best for the objects in the Gallery's collections. If it seems strange that a trained chemist should place such great faith in the unassailability of these numbers for climate control, it is because Stolow was not working solely as a scientist. Administratively, it was only under these conditions that the National Gallery of Canada might exchange objects with institutions setting the terms for climate. To this point, it is also significant both Canada and New Zealand were (and still are) British dominions, or self-governing nations that consider the British head of state their own, and that have adopted other technical standards, from the metric system to building material specifications, for commercial exchange more generally.

mold, specifically *Aspergillus niger* and *Rhizopus nigricans*. At the time, he suggested treating the container and art with fungicide, lining the container with polyethylene, and using multiple containers as a buffer. However, citing an accident that occurred to a shipment of canvas paintings sent from Europe to Ottawa via New York, he noted that improper polyethylene use resulted in moisture condensation, undermining this buffering action. Similarly, Toishi describes the corrosion of bronze Buddhas sent from Japan to the U.S. and Thailand caused by surface condensation, and damage to paintings in the Matsukata collection sent in 1959 from Japan to France caused by fluctuations in relative humidity, resulting in the deformation of an enclosing wooden container and appearance of condensation such that mold grew on the point of contact between container and artwork. Both discussed the effects of fluctuations in relative humidity on works of art, and both described similar experiments in designing better containers (except that Toishi used Japanese rather than Canadian woods, pointing to the challenges of true standardization). Toishi's original report on this damage appears in *IIC News*, vol.1, no.2, September 1960, 18-19.

Prescriptions: Synchronizing Interior Climate

Recognizing that his climate-controlled container would be rendered ineffective if the internal climate within a borrowing museum did not match that of the lending institution, Stolow proceeded to attempt an inter-institutional disciplining at the scale of the world. He led a team from Ottawa to design the carefully climate-controlled Fine Arts Gallery in the Man as Creator pavilion at Expo 67 in Montreal. The building itself was intended as a model, designed to outlast the Expo by “incorporat[ing] the latest advances in service concepts and environmental controls” and overcome, in Stolow’s words, the ‘reluctance by major museums to lend important works of art and national treasures.’⁹⁵ A 30-page report he published in ICOM journal *Museum International* in 1968 included diagrams of the building’s eight air-conditioning systems and a detailed elevation of a typical air-conditioning unit, along with an additional stand-by system. He also included a detailed plan of the building’s ground floor service facilities; by contrast, the exhibition area itself received far less emphasis.⁹⁶ (Fig. 3.17) The attention paid to the mechanical design of the ‘well-tempered environment’ rivals (even presages) architectural historian Reyner Banham’s treatise on the subject.⁹⁷ It was so successful in maintaining its interior climate that it eventually became the home of the Musée d’Art Contemporain de Montréal (MACM) after the Expo, until the MACM was relocated to its current home in the Place des Arts in 1992.

Moreover, the report emphasized that a successful loan depended not only on the air-conditioning plant’s ability to maintain temperature and humidity levels, but also on uniform

⁹⁵ Nathan Stolow, “The Technical Organization of an International Art Exhibition,” *Museum International* 21, no. 3 (September 1968): 183., 184.

⁹⁶ Stolow, 200–202.

⁹⁷ Reyner Banham, *The Architecture of the Well-Tempered Environment*, 2nd ed (Chicago: University of Chicago Press, 1984).

actions that were carefully calibrated by administrative documents. Stolow's team sent letters to all lenders requesting that they send condition reports and/or photographs indicating the state of the objects prior to loan, noting that "such records were vitally important for maintaining correct amounts of condition during the entire exhibition."⁹⁸ The specially prepared loan agreement reinforced this requirement with a clause stating that lenders were expected to provide a condition report of works of art. This report fully described each artwork's state at the time of shipment, with recent relevant photographs. It also included a clause stating that the Fine Arts Pavilion in Montreal could elect to have the works assessed by its own conservator at the time of shipment to ensure unequivocal agreement regarding object condition prior to the exhibition.⁹⁹ While the agreement allowed lenders to stipulate their preferred relative humidity conditions for their works, sometimes requiring smaller climate-controlled display cases, the gallery as a whole was carefully maintained at 20°C and 50 per cent RH.

Stolow's report included reproductions of these condition reports, loan agreements, and insurance policies. (Fig. 3.18) However, he did not use these reports in the same spirit of analytical inquiry in which Fogg conservators used their reproducible technical examination worksheets 30 years prior. The first Fogg condition reports facilitated technical modes of observation, to be paired with new methods for microscopy and radioscopy. In Montreal, condition reports were paired with loan agreements and insurance policies to ensure that lenders and borrowers alike observed administrative protocols. Media scholars have long examined how paperwork "disciplines its practitioners," as architectural historian Lucia Allais describes it, through the constraints of its forms

⁹⁸ Stolow, "The Technical Organization of an International Art Exhibition," 198.

⁹⁹ Stolow, 207.

and the limitations it places upon those who use it.¹⁰⁰ With the condition report developed for Expo 67, Stolow was able to discipline from afar museum staff he could not otherwise control.

“Particular attention,” Stolow noted, “was to be given to all service areas, e.g., unloading facilities for cases, packing areas, workshops, studios for emergency conservation treatment and service elevators, and to heights of ceilings, fire-proofing and security systems.”¹⁰¹ To that end, Stolow describes in meticulous detail how conservators at the Fine Arts Gallery carried out their own examinations of objects’ condition upon arrival. Expedited in climate-controlled security-guarded vans from Montreal’s airport, docks, and railway station, the containers of precious cargo were transported to the Fine Arts Gallery for customs clearance, in the vein described in Chapter 2. The containers ensured that the objects caught not a whiff of the *mal aria*, or more accurately, the badly *conditioned* air, of a sluggish portside customs bureau. On unpacking these objects, conservators subjected them to a thorough examination, and established a condition record system for future reference, using the reproducible condition report form. Service areas of the Gallery were designed and clustered to optimize unpacking, examination, and photography, and included dedicated storage spaces for works of art awaiting examination, documentation, and installation.¹⁰²

¹⁰⁰ Allais, *Designs of Destruction*, 36. For further scholarship on the relationships between paperwork, bureaucracy, and governance, see Annelise Riles, ed., *Documents: Artifacts of Modern Knowledge* (Ann Arbor: University of Michigan Press, 2006); Cornelia Vismann, *Files: Law and Media Technology*, trans. Geoffrey Winthrop-Young (Stanford University Press, 2008); Ben Kafka, *The Demon of Writing: Powers and Failures of Paperwork* (New York: Zone Books, 2012); Hull, *Government of Paper*. For paperwork specifically in relation to the classification museum collections, see Hannah Turner, *Cataloguing Culture: Legacies of Colonialism in Museum Documentation* (Vancouver Toronto: UBC Press, 2020). For discussions of paperwork oriented toward materiality and the white-collar workplace, see Yates, *Control through Communication*; Lisa Gitelman, *Paper Knowledge: Toward a Media History of Documents*, Sign, Storage, Transmission (Durham; London: Duke University Press, 2014); Craig Robertson, *The Filing Cabinet: A Vertical History of Information* (University of Minnesota Press, 2021). For a consideration of ‘properly patterned language’ and its aesthetics, see Riles, *The Network inside Out*.

¹⁰¹ Stolow, “The Technical Organization of an International Art Exhibition,” 183.

¹⁰² Stolow, 199–202.

Conservators recorded the daily conditions of loaned objects *and* the climatic health of the gallery, armed with examination lamps and magnifying glasses for the former and portable psychrometers (used to determine atmospheric humidity) for the latter. (Fig. 3.19) At the end, each object had acquired a lengthy file comprised of the loan agreement form; condition reports from before the loan; examinations on arrival, during the exhibition, and upon the exhibition's closing; and related photographs and correspondence produced during the entire duration. During this time, the building, too, had amassed a record of internal conditions for the duration of the exhibition. The object condition reports functioned as a record, less of conservation methods applied over time—as at the Fogg in the 1930s—and more of the sustained good health of both the object and its building-container. Supported by the daily building climate reports, condition reports were to be used in case of damage to determine if badly conditioned air—or a poorly acclimatized conservation professional—was at fault. But as Stolow noted with relief, not one insurance claim was made after the final condition reports were dispatched to lenders.¹⁰³

Side Effects: Standards and their Problems

The Expo 67 gallery was an attempt to set an administrative standard for lending institutions, setting climate and condition standards that are so commonplace today. The same year as the Montreal Expo, Stolow led a seminar for Canadian museum personnel to establish uniform climatic standards across Canada and participated in a meeting held by the International Institute of Conservation in London on the international establishment of these conditions, serving as

¹⁰³ Stolow, 202–5.

administrative enforcer of standardized climatic control.¹⁰⁴ But when he liaised with the Department of Public Works to monitor and control the NGC's own air-conditioning system, he himself observed how difficult it was to maintain RH at 50 per cent and temperature at 20°C. At the time, he simply negotiated the installation of a monitoring system to record fluctuations in condition. Later, when the Gallery shifted from the Victoria Memorial Museum building it had occupied since 1911 to its "temporary" housing in the now-demolished Lorne Building on Elgin Street in Ottawa in 1960, where it remained for almost two decades, Stolow still critiqued the inconsistent application of air-conditioning in the building and protested that the system in use was faulty.¹⁰⁵

It took him a decade to shift his stance. In a 1977 interview, he discussed his intentions to finally test commonly held assumptions in conservation about controlled climate, asking, "What is the rationale for insisting on 50% RH?"¹⁰⁶ Even if Stolow did not recognize it, the standard was imposed by a logic of administration. Museum conservation scientists besides Stolow have also freely admitted to this fact. Garry Thomson, conservation chemist at the National Gallery in London, conceded in his own 1978 manual on museum climate that establishing the "proper" relative humidity both in a container and within a museum was a matter of compromise, not of science. "The lending museum," he wrote, "may very properly demand conditions reasonably close to its

¹⁰⁴ National Gallery of Canada Public Relations Office, "Press Release: Gallery Scientists Tackle Air Problems," 5 January 1967. Stolow, Nathan, Documentation 1963-1964 (Book 7), National Gallery of Canada Library and Archives.

¹⁰⁵ "Staff Reports: Chief of Conservation and Scientific Research," *Minutes of the 91st Meeting of the Board of the National Gallery of Canada, 3-5 November 1959*, 1019. Stolow, Nathan, Documentation 1954-1959 (Book 3), National Gallery of Canada Library and Archives. Nathan Stolow, "Report on Physical Environment of the NGC for Board of Trustees National Museums Corporation Meeting, 27-28 January 1969"; "National Gallery Sends Precious Painting to Expo 70," National Gallery of Canada Newsletter, 10 March 1970. At the same time, the Lorne Building's "huge roof-top air conditioning plant" was pointedly noted in local newspapers. "Ideal air for art also good for collector," *Globe and Mail*, 18 February 1967. Stolow, Nathan, Documentation 1963-1964 (Book 7), National Gallery of Canada Library and Archives.

¹⁰⁶ Joyce Hill Stoner, Nathan Stolow Oral History Interview, Foundation of the American Institute for Conservation of Historic and Artistic Works, October 25, 1976, National Gallery of Canada Library and Archives.

own. This will strengthen a trend towards median RH values (50 or 55%).”¹⁰⁷ In other words, museums already endowed with disproportionate quantities of cultural treasures could set terms that were not in fact best suited for all objects and for all climates, compelling museums elsewhere to follow their specifications.

Ultimately, these stipulations, applied to enable commensurate environments between institutions for commensurate exchange, may have done more harm than good for objects at rest. Stefan Michalski, conservation scientist at the Canadian Conservation Institute (founded by Stolow in 1972) noted in a 1993 essay that “by the 1960s and 1970s, designers worldwide demanded specifications by which to build,” but that the 50-55 per cent RH number was based on “naïve” conceptions of humidity.¹⁰⁸ Those who set these standards knew these numbers emphasized mechanical phenomena at the expense of chemical phenomena, as recommended fluctuations corresponded more to the capacities of air-conditioning units for stabilizing climate than to object needs. Still, these numbers have become so calcified that, to Michalski, “non-conformity became transgression.” In his view, environmental rigidity has had truly disastrous effects. While it was assumed that mechanical systems “could do no harm... even if it did insignificant good,” the opposite was true:

In cold climate, humidification was wrecking buildings. Historic walls were gutted in dubious attempts to install vapour barriers and machinery. Deviations from the specifications consumed inordinate amounts of staff time in detection and response. And what of the artifact loans denied, grants determined, and new buildings justified by the magic numbers? What exactly was it all in aid of?¹⁰⁹

¹⁰⁷ Thomson, *The Museum Environment*, 116.

¹⁰⁸ Staniforth, *Historical Perspectives on Preventive Conservation*, 166.

¹⁰⁹ Staniforth, 166.

The past decade has seen a turn in the literature on conservation, with many beginning to recommend passive methods utilizing wall systems that serve as humidity buffers—in much the same fashion as silica gel cassettes did in exhibition crates—instead of air-conditioning, and to request the relaxation of precise climate control standards.¹¹⁰ Still, as long as exchange takes place, object condition will continue to be displaced from exterior object surface to interior building climate, and will be monitored from afar with the use of condition and risk assessment reports, general facility reports conservation recommendations, and loan agreements.¹¹¹ To think seriously about reversing these conditions requires looking beyond the laboratory and into the registrars' offices and storage rooms in which enforcement really transpires.

Conclusions

The forms of globalized exchange made possible by circulating exhibitions have required new regulatory modes, and new agents have come into being to execute these functions. In a 1977 essay for ICOM journal *Museum International*, a little over two decades after his first forays into conserving objects in transit, Nathan Stolow defined the coalescing category of exhibition conservation as “those technical and administrative measures taken to preserve works of art, museum objects, [and] artifacts while on display, in transit or more generally during all phases of an exhibition programme.”¹¹² This, he opined, required an exhibition conservator, defining this new museum agent as one able to work at the intersection of conservation, curation, and engineering,

¹¹⁰ That these “passive” techniques are now the subject of extended discussion is evident in the conference proceedings from the environmental session of the IIC Hong Kong Congress 2014, published in *Studies in Conservation* Vol. 61 (2016), Issue Supplement 1: The Indoor Environment.

¹¹¹ Barbara Ramsay, “Travelling exhibitions and transporting paintings,” in Hill Stoner and Rushfield, *The Conservation of Easel Paintings*, 661.

¹¹² Nathan Stolow, “Recent Developments in Exhibition Conservation: Policies and Directions,” *Museum International* 29, no. 4 (December 1977): 192–206.

and moreover, able to skillfully liaise with the registrar, exhibition coordinators, designers, and curators. His proffered diagram (Fig. 3.20) supported this definition of the effective exhibition conservator as an administrator, tasked with maintaining good relationships with other institutions through contributions to the smooth internal management of the museum.

In his essay, he discussed the challenges of objective condition reporting (suggesting that one person be responsible for assessing condition at all points), and recommended that examination techniques for assessing condition be further standardized.¹¹³ Two years later, when he published a handbook in UNESCO's *Museums and Monuments* series, *Conservation Standards for Works of Art in Transit and on Exhibition*, he continued to lament the fact that "subjective observation may result in different features being reported, or a certain condition suppressed," and that "this is particularly the problem with travelling exhibitions,"¹¹⁴ also citing Buck's glossary of terms relating to condition and deterioration of art.¹¹⁵ Almost two decades after Dudley and Bezold wrote their first handbook for registrars, he still strongly believed that there was still work to be done to improve administrative reporting on object condition, a need very much precipitated by increased object movement for circulating exhibitions. Furthermore, that spaces for registration and storage were still central to this reporting is evidenced by the fact that Stolow's UNESCO manual included no images of laboratories or restorers' studios but *did* include two model floorplans of a registrar's office and a storage vault in addition to detailed drawings of two designs for lining an object container with screens of silica gel.¹¹⁶ (Fig. 3.21)

¹¹³ Stolow, 198, 205.

¹¹⁴ Nathan Stolow, *Conservation Standards for Works of Art in Transit and on Exhibition*, Museums and Monuments 17 (Paris: Unesco, 1979), 33.

¹¹⁵ Stolow, 34. He cites Buck, "What Is Condition in a Work of Art?"

¹¹⁶ Stolow, *Conservation Standards for Works of Art in Transit and on Exhibition*, 35, 39. For more on storage, see also Hiroshi Daifuku, "Collections: Their Care and Storage," in Allan et al., *The Organization of Museums: Practical Advice*, 119–25. Allais discusses containment in ways that tie back to the conservation concerns of warehousing in Allais, *Designs*

Stolow's concerns about the role of storage for exhibitions were also echoed by architects working in the museum field. In 1979, the year UNESCO published Stolow's exhibition conservation guide, it also published another manual on museum collections storage, the second in a new series called *Technical Handbooks for Museums and Monuments* and the result of its first International Conference on Museum Storage held in Washington, D.C., in 1976. The handbook's authors were two Boston-based architects, E. Verner Johnson and Joanne C. Horgan, who had a long history of museum-related design and presented a draft of their manuscript at the ICOM International Committee for Architecture and Museum Techniques at their inaugural meeting in Cologne in 1977.¹¹⁷ Johnson and Horgan opened their analysis with a flowchart of the relationships between different spaces in the museum, from service yard and loading dock to storage by means of the centrally located registrar's office.¹¹⁸ (Fig. 3.22) They placed the conservation laboratory closest to the storage facilities, corresponding to Stolow's own concern about the relationship between conservation and storage.

This chapter has proposed that procedures for conservation during an exhibition are not simply ancillary to preventive conservation (namely, the concern with regulating the museum environment to minimize object restoration) or a derivative practice of it. Rather, I see exhibition conservation as an antecedent of contemporary preventive conservation. Subjecting fragile objects to the violent climatic fluctuations of travel undermines the work of minutely regulating objects' home environments, and preventive conservation itself developed to mitigate through environmental

of Destruction, 177. See also Jonah Rowen, "Strategies of Containment: Iron, Fire, and Labor Management," *Grey Room* 76 (September 2019): 24–57.

¹¹⁷ At the time, a second handbook dealing specifically with storage in the light of local conditions in developing countries was also being prepared for publication in 1980–81. (But Stolow's was published before anything like this.)

¹¹⁸ E. Verner Johnson and Joanne C. Horgan, *Museum Collection Storage*, Technical Handbooks for Museums and Monuments 2 (Paris: Unesco, 1979), 13.

means a series of socio-cultural (not to mention economic) conditions that preceded it. Yet perhaps because the administrative aspects of conservation, or because exhibition conservation is seen as somehow peripheral to other museum tasks, the role of exhibitions are not made central to the history of preventive conservation, despite the need to maintain the material immutability of the object in the face of increasing global mobility. We must reinscribe transit into our appraisal of conservation practices, acknowledging what Stolow has called the “care continuum” of conservation, i.e., that conservators have an array of responsibilities from which exhibition conservation cannot be disengaged.¹¹⁹ To do so, we must critically extricate the term “care”¹²⁰—or ministration—from the often-injurious administrative practices of regulation masked as the concern for object comfort, both in transit and at rest.

¹¹⁹ The call to reinscribe transit into discussions of art can be found in Roberts, *Transporting Visions*, 9; Stolow, *Conservation Standards for Works of Art in Transit and on Exhibition*, 13.

¹²⁰ Maria Puig de la Bellacasa, “Matters of Care in Technoscience: Assembling Neglected Things,” *Social Studies of Science* 41, no. 1 (February 2011): 85–106; Michelle Murphy, “Unsettling Care: Troubling Transnational Itineraries of Care in Feminist Health Practices,” *Social Studies of Science* 45, no. 5 (October 2015): 717–37; Aryn Martin, Natasha Myers, and Ana Viseu, “The Politics of Care in Technoscience,” *Social Studies of Science* 45, no. 5 (October 2015): 625–41; Hannah Le Roux, “Comfort, Violence, Care: Decolonising Tropical Architecture at Blida, 1956,” *ABE Journal*, no. 17 (September 2, 2020).

CHAPTER FOUR

Nail to Nail, Wall to Wall: Exhibition Insurance and Building Management

“We can, of course, arrange to show the Chilean Exhibition here at any time that you desire, [but] I believe that there is a moral responsibility for the Metropolitan Museum as well as yourself in regard to shipping to Buenos Aires at the present time. I am particularly bitter about this in view of the fact that my trunk with all my dress clothes and two boxes of books and photographs, which I can never replace, are at the present moment resting lightly on the bottom of the Caribbean.”

— Francis Henry Taylor, Metropolitan Museum of Art, to Blake-More Godwin, Toledo Museum of Art, 2 March 1943.¹

“Designed by I.M. Pei[,] Cornell University’s new art museum was opened in May 1973. [...] Great attention has been paid to equipment for the control of climatic conditions and to elaborate security and fire prevention devices in the hope of attracting exhibitions of rare and valuable works of art from elsewhere.”

— “Museum News: North America,” *ICOM News* XXVI, no. 3 (1973), 125.

When the *Masterpieces of French Tapestries* exhibition was being prepared for shipment from France to the United States in 1947, one major concern for Francis Henry Taylor, director of the Metropolitan Museum of Art, was that of insurance. As you may recall from the introduction, the French government had not insured this exhibition—the first to be circulated internationally after World War II—when it was loaned to museums in Amsterdam, Brussels, and London. Negotiating what portion of the art was to be insured, for how much, and precisely when responsibility for the

¹ Metropolitan Museum of Art Archives. Godwin would later exasperatedly discuss with Taylor the customs formalities of this same exhibition (see Chapter 3 epigraph).

art would transfer from the French to the Americans were all subject to heated debate. There were no standard insurance rates or established procedures to use as a guide, and that the tapestries were insured at all is a testament to their great value. President of the American Association of Museums Joseph Veach Noble recounted almost thirty years later, in 1974, that foreign governments who were “desirous of bringing their public relations up in regard to the United States” in the postwar period often did not request insurance. Yet as exchange became a “two-way street where America was as interested as the foreign governments in exchange, the foreign governments began to feel more inclined toward not being self-insured and requiring first token amounts of insurance...and then later full insurance.”² Veach was not speaking idly but testifying at a congressional hearing on a proposed federal indemnification program that would essentially reinstate self-insurance for institutional exchange, as commercial insurance had risen to what even major museums in the United States considered prohibitive levels.

In this chapter, I frame exhibition insurance as a problem of conservation, attending to how conservators and registrars in museums in the United States endeavored, in collaboration with insurance professionals, to mitigate increasing insurance costs through effective risk management. Mediated by UNESCO, ICOM, and the AAM, and expressed to a significant degree as a problem of building management, these efforts illuminate how the design of museum buildings was increasingly dictated by non-architects in the mid- to late-twentieth century. The construction of the I.M. Pei-designed Johnson Museum of Art at Cornell University at the same time as the hearings on

² *Hearing before the Subcommittee on Select Education of the Committee on Education and Labor, House of Representatives. Ninety-Fourth Congress, First Session on H.R. 7782. To Amend and Extend the National Foundation on the Arts and Humanities Act of 1965, to Provide for the Improvement of Museum Services, and to Provide Indemnities for Exhibitions of Artistic and Humanistic Endeavors, and for Other Purposes.* (Washington, D.C.: United States Government Printing Office, 1975), 44.

indemnification is an early example of this turn to spatially prioritize requirements for secure object exchange in the museum. The paperwork these administrators devised to regulate their buildings has been adopted by institutions elsewhere in the world, encouraging a standardized approach to building security for objects in circulation as well as those more permanently stationed. (Yet the turn to digitization has also unintentionally exposed museums to further risk, as some technologically inexperienced registrars fill unsecured versions of these documents online.) Museum conservation methods increasingly follow the techniques of risk management, and this chapter elicits the historical antecedents, and future ramifications, of this phenomenon.

The General Facility Report in Current Museum Practice

In June 1988, the Registrars' Committee³ of the AAM collectively produced a new piece of paperwork, the Standard Facility Report. It was intended to streamline the process of ascertaining, to the furthest extent possible, how safe loaned objects would be on a borrowing institution's premises.⁴ It consisted of 18 pages of questions divided into eight sections; questions on staff practices and training were supplemented by requests for photographs of the building's exterior and storage areas used for loans, and floor plans with locations of fire extinguishers and temporary exhibition spaces clearly marked. There was a small box for lender comments, which would become more substantial in subsequent versions.⁵ The report's queries provided the armature for the probing interrogation to

³ See Rebecca A. Buck, *History of the Registrars [sic] Committee: 25 years* (Washington, D.C.: American Association of Museums Registrars Committee), 2002.

⁴ There is no written secondary source material on the history of the General Facility Report (formerly the Standard Facility Report). In 2019, when the latest version of the GFR was published, Darlene Bialowski provided an overview of this history from information she had personally gathered from her colleagues' archives. My account of the document's history is based on the recording of this overview and an interview with her in November 2021.

⁵ Collections Stewardship of the American Alliance of Museums, *The Updated General Facility Report*, 2020, 10:03, <https://youtu.be/AIXvTjMXB98>.

come. Revised in 1998 to offer more clarity to borrowers, it was expanded to ten sections spread over 26 pages, with a new cover page for institutional information, questions on geographic location to more accurately determine external environmental risks, detailed questions on the building envelope and interior, and a space for signatures, which converted it into a contract.⁶ Since its inception, it has been updated each decade by the Registrars' Committee—now Collections Stewardship—of the AAM. In 2008, it was renamed the General Facility Report (GFR) and as of 2019, comprises 30+ pages of questions that act as a form of pre-clearance for exhibition loans. It has also gradually been adapted for museums in other countries and is now in common use in Europe and Oceania.⁷

Each revision is an increasingly granular inquiry into spatial changes in museums: the 2008 version modified its questions to capture information on the spate of renovations and additions to existing buildings and new construction, the increasing use of off-site storage facilities, and upgraded climate control systems.⁸ The new questions on off-site storage were prompted by the May 2004 fire in the east London warehouses of Momart—a private firm specializing in art storage, transportation, and installation, and whose clients include several major British museums and Buckingham Palace—which destroyed works of modern art estimated at approximately £50,000,000.⁹ Each revision also reflects a mounting anxiety about the environmental hazards of climate change. Designed in the wake of Hurricane Ivan in 2004, and Hurricanes Katrina, Wilma, and Charley in 2005, the 2008 GFR demands to know how institutions mitigate against potential loss from such catastrophes. The

⁶ For the 1998 version, see Roxana Adams, *Revised Standard Facility Report* (Washington, D.C.: American Association of Museums Technical Information Service), 1998. A version of this form can be found here:

⁷ For example, the United Kingdom Registrars' Group published its first report in 1995. See David McNeff, "Facilities reports," in Mike Sixsmith, ed., *Touring Exhibitions: The Touring Exhibitions Group's Manual of Good Practice* (Boston: Butterworth-Heinemann, 1995), 156–60.

⁸ Collections Stewardship of the American Alliance of Museums, *The Updated General Facility Report*, 14:46-15:47. For the 2008 version, see: http://sceti.library.upenn.edu/dreyfus/docs/Standard_Facility_Report.pdf.

⁹ Collections Stewardship of the American Alliance of Museums, 13:20-13:30.

2019 version consists of comprehensive and abbreviated forms; whether institutions can fill the shorter form or must submit to the searching gaze of the longer document rests entirely on spatial concerns (i.e., that the borrowing institution owns no external storage facilities, and will not be displaying loans outdoors or in a secondary facility) and environmental factors (i.e., that it is not located in an earthquake, flood, hurricane, tornado, or wildland-urban interface zone). In the 2019 revision, reminders to include floor plans and climate readings in the responses, and questions on the surrounding environment, are relocated to the front of the document. (Fig. 4.1) In this manner, the GFR is a critical document for determining whether a loan is feasible and the rates at which loaned objects will be insured. A tool for insurance underwriters to evaluate risk management systems and to determine insurance quotes for fine art collections (in conjunction with numbers including the ten highest-valued objects, the total insurance value of the permanent collection, loss history, and exhibition schedule), the GFR thus becomes part of an art institution's insurance record.¹⁰

Yet just as climate controls set for objects in motion have come to dictate terms for objects at rest (discussed in Chapter 3), the GFR has transmuted from serving only as paperwork for exhibition loans to governing a range of institutions and objects by paper. The most recent form can be used by a broader class of institutions, with more questions about institution type, parent organizations, and contractors, as well as options to discuss objects intended not only for exhibition but also for long-term loan or study. To that end, it asks for more details about features like climate control for *all* the spaces that objects might occupy, including the outdoor and off-site storage.¹¹ (Fig. 4.2) Future iterations are slated to appear in multiple languages and to be adapted for use in other countries for

¹⁰ Collections Stewardship of the American Alliance of Museums, 14:05-14:25.

¹¹ Collections Stewardship of the American Alliance of Museums, 35:50-45:09.

facilitating smoother exchanges with American museums.¹² Through the efforts of the AAM's Collections Stewardship, the General Facility Report aspires to be a one-size-fits-all document for governance.

And that is not all. Darlene Bialowski, who worked on the 2019 revision as former chair of the Registrars Committee, goes so far as to describe it as a valuable *self*-assessment tool for regularly inspecting the museum's physical specifications, security and engineering systems, and staff practices, even if it does not even engage in object exchange.¹³ Describing the GFR as a "microscopic look" at an institution's configuration and activities, she asserts that a regularly updated copy "increase[es] the professionalism of your place of employment."¹⁴ She advises registrars to keep in contact with the museum's insurance agents for questions about environmental zone identification, contractors on heating and plumbing, and chiefs of the local fire department and police station on security features like alarms and fire hydrants, even "offer[ing] a year's complimentary membership in exchange for assistance" in completing relevant sections of the form.¹⁵ If it seems that registrars are expected to take a keenly architectural interest in their place of employment as part of their job, the AAM assures us that architects and designers, too, "will want to use this form as a handy checklist for construction and engineering."¹⁶ In Bialowski's view, the GFR can be a tool for design professionals to assess risk, illuminate existing security weaknesses, identify priorities for improvement, and even cut costs.¹⁷

Bialowski advises registrars to keep copies on a local server, a flash drive, and a physical ring binder. She counsels them to keep a regular schedule of maintenance, both for the document and the

¹² Collections Stewardship of the American Alliance of Museums, 55:48.

¹³ Collections Stewardship of the American Alliance of Museums, 19:25.

¹⁴ Collections Stewardship of the American Alliance of Museums, 53:20-53:37.

¹⁵ Collections Stewardship of the American Alliance of Museums, 50:42.

¹⁶ "General Facility Report," AAM Bookstore, <https://www.aam-us.org/programs/about-aam/bookstore/>.

¹⁷ Collections Stewardship of the American Alliance of Museums, *The Updated General Facility Report*, 20:05-20:33.

building whose life it tracks. She recommends using the binder to also hold on to “notes, memos, post-its, about changes as they occur, [such as] new staff, gallery reorganization, changes in security access to storage,” and even “information you can’t figure out where else to file.” But the GFR’s comprehensive aspirations threaten to undermine the security of the institutions it documents. She frequently emphasizes, and asks participants to *also* repeat—“Say it with me now!”—that registrars must treat the GFR as a confidential record, cautioning that she found “more than one completed facility report on the internet” in a recent search.¹⁸

The General Facility Report is indeed a “multi-purpose” tool, as Bialowski declares, in more ways than the AAM registrars enumerate. Media historians Cornelia Vismann and Craig Robertson have evocatively portrayed how the physical technologies of the ring binder and the filing cabinet serve humans as prosthetic mind, and institutional memory.¹⁹ The registrars who grappled with the 2008 GFR as a Word document and PDF distributed in a format incompatible with those used in their institutions, as well as Bialowski’s recent internet searches, recall media scholar Lisa Gitelman’s descriptions of knowing via the virtual document.²⁰ It is a contractual document, and its signatories are no longer the only users bound by its dictates. It governs not only the architectural features and interior facilities of the institution that requires its completion, but also those of the institutions to which it is sent; not only of extant buildings but also of those to be built. It is worth considering the capacity of the GFR, devised though it is by non-architectural agents, to “build [the museum] with words” alongside the architectural specification and the building contract.²¹

¹⁸ Collections Stewardship of the American Alliance of Museums, 48:45-52:45. However, see also Bernadine Bröcker Wieder, “The Case for Digital Facility Reports,” *American Alliance of Museums Blog*, 10 February 2020. <https://www.aam-us.org/2020/02/10/the-case-for-digital-facility-reports/>.

¹⁹ Vismann, *Files*; Robertson, *The Filing Cabinet: A Vertical History of Information*.

²⁰ See Chapter 4, “Near Print and Beyond Paper: Knowing by *.pdf,” in Gitelman, *Paper Knowledge*.

²¹ Tilo Amhoff, Nick Beech, and Katie Lloyd Thomas, eds., “Building with Words,” *Architectural Research Quarterly* 16, no. 3 (September 2012): 195–96.

Most importantly, the General Facility Report makes a risk assessment. It helps determine whether an exhibition will be approved, just as individuals are assessed for favorable life insurance rates or deemed creditworthy for a bank loan. It reflects decades of administrative effort to quantify the risks and rewards of moving museum objects transnationally, in an echo of the marine merchants who first turned the process of risk-sharing into “assurances” or what we now call insurance. Yet as the profitable underwriting of risk increasingly benefitted from regulating lives and environments, the General Facility Report likewise serves both as an archive and as a forecast of administrative efforts to regulate museum staff and buildings to mitigate risks to itinerant objects. In the following sections, I uncover portions of this archive, to show how ambitions for object circulation served as an invitation for actuarial thinking to intervene in the field of conservation.

The Path from Marine to Exhibition Insurance

Exhibitions are a central component of museums large and small, and insurance comprises a significant percentage of the costs incurred. Collections of artworks going on exhibition are insured under a marine or inland marine policy form, often written on an annual floater basis, that provides all-risk coverage.²² As a form of movable property, exhibition materials are insured under transport insurance policies that derive from the structures of marine insurance. Economic historians date marine insurance at least as far back as the thirteenth century in Europe, acknowledging that it was used contemporaneously, and possibly earlier, in other trading civilizations.²³ It is in fact the oldest

²² Irving Pfeffer, “Insuring Museum Exhibitions,” *Hastings Law Journal* 27, no. 5 (1976): 1124. See also Patricia Nauert and Caroline M. Black, *Fine Arts Insurance: A Handbook for Art Museums* (Savannah, GA: Association of Art Museum Directors. Fine Arts Insurance Committee, 1979), 8–9.

²³ Christopher Kingston, “Governance and Institutional Change in Marine Insurance, 1350-1850,” *European Review of Economic History* 18, no. 1 (February 1, 2014): 1–18; Christopher Kingston, “Marine Insurance in Britain and America, 1720–1844: A Comparative Institutional Analysis,” *The Journal of Economic History* 67, no. 02 (June 2007).

extant form of any insurance, because it was the act of moving goods across the high seas that forged the concept of risk. While the term as used today denotes generalized exposure to danger, risk in the original sense referred to the specific circumstances under which commercial goods sent by sea might be damaged or destroyed. To cope with this uncertainty, merchants purchased from each other a percentage, or “premium,” of the contingent capital they hoped to receive in the event of a loss, though a marine insurance policy. In his account of how merchants employed this novel instrument for sharing risk, historian Jonathan Levy shows how marine contingencies—from “perils of the seas” to “acts of God”—were turned into a commodity that could be disaggregated from the objects being transported.²⁴ The etymology of the term reflects this usage.²⁵ Modern marine insurance—i.e., as a branded market—percolated through Edward Lloyd’s London coffeehouse in the late seventeenth century, whose proprietor obligingly supplied both brews and shipping news to the merchants and vessel owners who gathered there to negotiate their insurance contracts.²⁶

Unlike other later forms of insurance—e.g., life, fire, casualty—which are concerned only with specific perils, marine insurance is often assured against “all risks” peculiar to transportation, albeit with some exceptions, which will be discussed shortly.²⁷ Insurance policies for exhibitions

²⁴ For discussions of the mechanisms of early marine insurance, see “Introduction,” Adrian Leonard, ed., *Marine Insurance: Origins and Institutions, 1300-1850*, Palgrave Studies in the History of Finance (Houndmills, Basingstoke Hampshire; New York, NY: Palgrave Macmillan, 2016); Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge, Mass: Harvard University Press, 2012).

²⁵ Economic historian Jonathan Levy traces “risk” to the sixteenth-century French *risqué*, which in turn derives from the thirteenth-century Italian *rischio*; while earlier origins are unclear, all possible roots of the term appear in maritime commercial contexts. Philosopher François Ewald contends that the term comes from the Italian *risco*, referring to a reef, or “that which cuts,” connoting a tangible risk to cargo at sea. Levy, *Freaks of Fortune*, 3; François Ewald, “Insurance and Risk,” in *The Foucault Effect: Studies in Governmentality: With Two Lectures by and an Interview with Michel Foucault*, ed. Graham Burchell, Colin Gordon, and Peter Miller (Chicago: University of Chicago Press, 1991), 198–99. See also Peter L. Bernstein, *Against the Gods: The Remarkable Story of Risk* (Chichester, New York: Wiley, 1998).

²⁶ There now exist many works on various facets of Lloyd’s operations, but for an overview of its early history, see Charles Wright and C Ernest Fayle, *A History of Lloyd’s from the Founding of Lloyd’s Coffee House to the Present Day* (London: Published for the Corporation of Lloyd’s by Macmillan and Company Limited, 1928).

²⁷ Earl Appleman, *Inland Marine Insurance*, McGraw-Hill Insurance Series (New York: McGraw-Hill, 1934), 10; William H. Rodda, *Marine Insurance: Ocean and Inland*, 3d ed (Englewood Cliffs, N.J: Prentice-Hall, 1970), 9.

transported by non-marine means today also include this “all risks” endorsement.²⁸ (This latitude of underwriting facility is counterpoised, however, by the exceptionally rigid standardization, almost from inception, of terms and accompanying policies used in marine insurance; ensuring clarity of communication across the Atlantic, the regulated language of insurance was essentially an early form of international governance, albeit practiced by merchants and not politicians.²⁹)

Until the advent of railroads in the nineteenth century, ocean transportation was the primary means by which commercial goods were carried in bulk over great distances, at least in the Western hemisphere; until 1921, “marine insurance” was synonymous with *all* transportation insurance.³⁰ The term “inland marine,” when it was originally used, referred to policies covering transportation via rivers and canals. In the twentieth century, the First World War, followed by new modes of transportation and a general increase of wealth, created unprecedented demands for insurance in the United States for transport that did not involve travel by water.³¹ Although this new transportation

²⁸ Appleman, *Inland Marine Insurance*, 3–5.

²⁹ For an overview of how marine insurance became standardized across nations (and has remained as such) for the past half millennium, see Kingston, “Governance and Institutional Change in Marine Insurance, 1350-1850,” 1–18. See also Hannah Farber, *Underwriters of the United States: How Insurance Shaped the American Founding* (Williamsburg, Virginia; Chapel Hill: Omohundro Institute of Early American History and Culture; University of North Carolina Press, 2021); Farber, “The Political Economy of Marine Insurance and the Making of the United States,” *The William and Mary Quarterly* 77, no. 4 (2020): 581. Many thanks to Jon, who always asks good questions.

³⁰ Appleman, *Inland Marine Insurance*, 2; Rodda, *Marine Insurance*, 5–6. Appleman notes that “modern researchers claim to have found some evidence of the existence of a primitive form of transportation insurance against land risks in the trading loan of the Babylonians and Hindus.”

³¹ Appleman, *Inland Marine Insurance*, 6–8, 11–12; Rodda, *Marine Insurance*, 39–44. Before WWI, the low risks of rail transport and the ease with which it could be made the “object of judicial process” resulted in little need for insurance for goods carried by rail. This changed when railroads were requisitioned for the war effort, and the government’s slow response to claims of loss and damage led to shippers paying insurance premiums to have losses paid with promptitude, a habit that did not change after the war ended. The automobile increasingly became a viable mode of transporting goods across short distances, but company owners were similarly unforthcoming with claims payments, also necessitating that shippers insure their goods. Finally, an increase in personal wealth “created a demand for increased [casualty] insurance on personal property of a portable nature,” such as jewelry and furs, property carried by travelers and traveling salesmen, and cultural items such as films, musical instruments, and theatrical property while in transit. To Appleman’s list, Rodda also adds the development of chain stores, as the forms of coverage elicited protest from fire and casualty insurers that it constituted a form of encroachment by inland marine insurers. This led to the formation of the Interstate Underwriters Board in 1929, which allowed fire companies to give chain stores blanket coverage on a fluctuating basis over an entire chain. The Casualty-Marine-Merchandise Agreement was signed on 1 July 1930, and the Inland Marine Underwriters

was distinctly non-marine, the only insurers equipped at the time to underwrite its risks (not only for their experience but also as their charters were broad enough to allow for writing miscellaneous contracts) were marine companies; this lack of regulation was owed to the competitive insurance market that developed through Lloyd's.³² However, the dated term "inland marine" is still in use (as is some archaic language of the marine insurance industry in current insurance contracts, to enshrine certain key legal precedents).³³

Inland marine insurance has developed its own unique policies—drawing also on precedents in fire and casualty insurance—which enables underwriting the risks peculiar to the objects sent for exhibition by non-marine modes of transport in addition to those sent by sea, covering the entire duration of the journey. Marine insurance policies were intended to cover goods only while in transit (i.e., while aboard the ship), unless the policy explicitly provided insurance "from the loading thereof." Marine underwriters were often unwilling to extend coverage to include time on the wharf, as the perils thence were not of the sea but of human misadventure. The practices of those who *did* extend this coverage in the late nineteenth century developed into what is now called the "warehouse to warehouse" clause. As warehouses were increasingly constructed at some distance from seaports, this clause constituted a germinal form of inland marine insurance as it extended the policy to goods

Association was formed on 1 January 1931. Conferences between fire, casualty, marine insurers were held in the early 1930s to define what could be insured under an inland marine policy; they adopted the Nation-Wide Definition and Interpretation of the Insuring Powers of Marine and Transportation Underwriters, or National Convention of Insurance Commissioners, on 2 June 1933, with revised versions adopted in June 1952 and again in 1976. See also Appendix A for the Articles of Agreement Among Fire, Marine, and Casualty Insurers in Appleman, 169-181.

³² Appleman, *Inland Marine Insurance*, 9–10; Rodda, *Marine Insurance*, 25. For instance, fire insurance companies of the time could not cover sprinkler leakage or windstorms, but today, many companies offer multiline insurance contracts.

³³ Rodda, *Marine Insurance*, 12. The word "thief" at sea (which refers to a pirate) vs. on land is a case in point. Unlike deliberate robbery, petty pilfering is not covered by old marine insurance policies, and this exclusion has been translated to inland marine contracts as well.

awaiting or being prepared for shipment.³⁴ In Chapter 2, I described how museums act as bonded warehouses; fittingly, most policies for museum exhibition materials follow the warehouse clause to be applied “wall to wall” (otherwise known as “nail to nail”), in reference to the space-time between the moment when a picture is taken off one wall and when it is re-hung on another. This covers “all risks” of transport, as with marine insurance, from when objects leave lenders to when they are returned. This policy is both unique to and crucial for museums; in her discussion of insurance in *The Manual of Travelling Exhibitions*, Elodie Courter Osborn (whom we met in Chapter 1) noted that “the principal threat of damage to art objects occurs when a work is moved from its permanent resting place.”³⁵ Inland marine insurance now covers all transportation risks, not only via waterways but also on land and in the air, and is also applied to objects at rest before or after their journey, and this extension of coverage implicates museum buildings as components of object transportation.

The “floater” policy is also a significant feature of inland marine insurance that has been adapted—as the fine arts floater—for exhibitions. Instead of covering specific property for a precisely determined time period and location, floaters cover goods that will fluctuate in location and amount. This policy automatically protects shipments even if the shipping date is unknown, and does not

³⁴ Appleman, *Inland Marine Insurance*, 3–5, 9–10; Rodda, *Marine Insurance*, 6–7. Appleman lists some special cases that preceded the clause’s implementation: “*Boehm v. Combe*, 2 M. & S. 172 (1813), where bullion was insured by land from London to Harwich and by sea to Gottenburgh; *Jacob v. Gaviller*, 7 Com. Cas. 116 (1902), where a prize fox terrier was insured from Mersey to Bombay and thence by rail to Lahore; *Hyderabad v. Willoughby*, L.R. 2 Q.B. 530 (1899), where gold was insured from the mine in India 40 miles to railway, thence by rail to Bombay and by steamer to London.”

³⁵ Courter Osborn, *Manual of Travelling Exhibitions*, 53. Insurance lawyer Irving Pfeffer notes that apart from general risks like fire hazards (including associated smoke and water damage) and negligent placement in inappropriate locations, “Borrowed works of art are most vulnerable to the perils associated with transportation. Insurance claims for damage to works of art generally stem from negligence on the part of museum employees, packers, and shippers from the time a painting is removed from its “nail” on the wall, until it is remounted on its new “nail.” Of the losses reported by fine arts museums in a recent survey, more than 88 percent represented values of less than a thousand dollars, [most of which] resulted from mishandling of objects. The majority of claims involved insurance company settlements.” Pfeffer, “Insuring Museum Exhibitions,” 1131–32. Outrage at potential encroachment into forms of coverage usually handled by fire and casualty insurers, which led to the 1933 Convention (see n31) also derived from a version of this coverage, as chain stores were increasingly covered from warehouse to store.

require a shipment reports to come into effect; different premium limits can be set for different locations.³⁶ Museums choose the fine arts floater policy when participating in an exhibition program requiring many shipments during a given year, when not all objects for an exhibition travel together from one location to the next, or when exhibitions are extended beyond their original dates of closing. To maintain their policy, museums list at regular intervals the values of the insured goods, items returned (and therefore cancelled from the policy), and reports of damage.³⁷ Albeit deriving from marine insurance, inland marine policies are more flexible than the latter and more liberal with regards to assumption of risk; following from this, coverage of museum collections during ocean transit can be added to a fine arts floater instead of drawn up separately if desired.³⁸ When museum materials are sent on exhibition, then, they are insured under a marine or inland marine policy, often written on an annual floater basis, that provides all-risk coverage, following this history of insuring goods in transit at sea and then on land.

Insurance as a Technology of Regulation

Foucauldian philosopher François Ewald has theorized how juridical ideas of responsibility were supplanted by the actuarial concept of risk, transforming the governmentality of the modern French welfare state.³⁹ Historians and sociologists have followed on from this position to excavate

³⁶ Appleman, *Inland Marine Insurance*, 12, 129–30; Rodda, *Marine Insurance*, 49; Sugden, *Safeguarding Works Of Art*, 65–66, 72–73. The dealer’s fine arts floater is very similar to a jeweler’s block policy.

³⁷ Courter Osborn, *Manual of Travelling Exhibitions*, 53.

³⁸ Courter Osborn, 53. One exhibition-specific exception is when the loaned items are on fair grounds or at an exposition (unless specifically described as such in the policy or by endorsement) to avoid the complications of a damage suit brought against a government, state, or municipality. For this purpose, specialized contracts or endorsements like The World’s Fair Policy exist (or must be drawn up). Sugden, *Safeguarding Works Of Art*, 69.

³⁹ François Ewald, *Histoire de l’État providence: les origines de la solidarité* (Paris: Grasset, 1996), translated as François Ewald, *The Birth of Solidarity: The History of the French Welfare State*, ed. Melinda Cooper, trans. Timothy Scott Johnson (Duke University Press, 2020); François Ewald, “The Values of Insurance,” trans. Shana Cooperstein and Benjamin J. Young, *Grey Room* 74 (March 2019): 120–45; Ewald, “Insurance and Risk.” See also Michael C. Behrent,

how insurance of all types has historically organized political, economic, social, and cultural life through the increasing reliance on statistical thinking.⁴⁰ Scholars have shown how the life insurance industry's efforts to mitigate risk have come to imperceptibly regulate our lives by normalizing structures of surveillance from annual medical checkups to driver training programs.⁴¹ Likewise, examinations of health insurance (particularly in the United States⁴²) and of workplace casualty

“Accidents Happen: François Ewald, the ‘Antirevolutionary’ Foucault, and the Intellectual Politics of the French Welfare State,” *The Journal of Modern History* 82, no. 3 (September 2010): 585–624; Rachel Z. Friedman, *Probable Justice: Risk, Insurance, and the Welfare State* (Chicago: University of Chicago Press, 2020).

⁴⁰ Most scholarship on quantification has focused on Europe and the United States. See Ian Hacking, *The Emergence of Probability: A Philosophical Study of Early Ideas about Probability, Induction and Statistical Inference* (Cambridge; New York: Cambridge University Press, 1975); Ian Hacking, *The Taming of Chance* (Cambridge; New York: Cambridge University Press, 1990); Theodore M. Porter, *The Rise of Statistical Thinking: 1820 - 1900* (Princeton, NJ: Princeton University Press, 1986); Theodore M. Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton: Princeton University Press, 1995); Lorraine Daston, *Classical Probability in the Enlightenment* (Princeton, N.J.: Princeton University Press, 1988); Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society* (Chicago: University of Chicago Press, 1998); Alain Desrosières, *The Politics of Large Numbers: A History of Statistical Reasoning*, trans. Camille Naish (Cambridge, MA: Harvard University Press, 1998); Silvana Patriarca, *Numbers and Nationhood: Writing Statistics in Nineteenth-Century Italy* (Cambridge: Cambridge University Press, 2002); William Deringer, *Calculated Values: Finance, Politics, and the Quantitative Age* (Cambridge, Massachusetts; London, England: Harvard University Press, 2018). (See also “Statistical Communities in Daniel J. Boorstin, *The Americans: The Democratic Experience*, 1st ed. (New York: Random House, 1973), 165–244; Frank H Knight, *Risk, Uncertainty and Profit*, 1921.) A fascinating exception to this Western-centric scholarship is Arunabh Ghosh, *Making It Count: Statistics and Statecraft in the Early People's Republic of China* (Princeton, New Jersey: Princeton University Press, 2020).

⁴¹ For historical work on life insurance in the United States on the antebellum period, the turn of the twentieth century, and the post-WII period, respectively, see Sharon Ann Murphy, *Investing in Life: Insurance in Antebellum America*, 2013; Daniel B. Bouk, *How Our Days Became Numbered: Risk and the Rise of the Statistical Individual* (Chicago; London: University of Chicago Press, 2015); Caley Horan, *Insurance Era: Risk, Governance, and the Privatization of Security in Postwar America* (Chicago; London: The University of Chicago Press, 2021). For a sociological treatment, see Viviana A. Rotman Zelizer and Kieran Joseph Healy, *Morals and Markets: The Development of Life Insurance in the United States*, Legacy Editions (New York: Columbia University Press, 2017). Histories of life insurance in Britain in the eighteenth, nineteenth, and twentieth centuries, respectively, are examined in Geoffrey Clark, *Betting on Lives: The Culture of Life Insurance in England, 1695 - 1775* (Manchester: Manchester University Press, 1999); Timothy L. Alborn, *Regulated Lives: Life Insurance and British Society, 1800-1914* (Toronto; Buffalo: University of Toronto Press, 2009); Liz McFall, *Devising Consumption: Cultural Economics of Insurance, Credit and Spending*, 2016. See also Timothy L. Alborn and Sharon Ann Murphy, eds., *Anglo-American Life Insurance, 1800-1914* (London: Pickering & Chatto, 2013).

⁴² For a sociological and several historical accounts of health insurance in the twentieth-century United States, see Jill S. Quadagno, *One Nation, Uninsured: Why the U.S. Has No National Health Insurance* (New York: Oxford University Press, 2005); John E. Murray, *Origins of American Health Insurance: A History of Industrial Sickness Funds* (New Haven: Yale University Press, 2007); Christy Ford Chapin, *Ensuring America's Health: The Public Creation of the Corporate Health Care System* (Cambridge: Cambridge University Press, 2015); Nancy Tomes, *Remaking the American Patient: How Madison Avenue and Modern Medicine Turned Patients into Consumers* (Chapel Hill: University of North Carolina Press, 2016).

insurance on both sides of the Atlantic⁴³ map how the goals of the profession increasingly shifted from underwriting risks to using various forms of surveillance to determine which bodies could make claims for their wellbeing. Efforts to manage risk by administrators in the museum that crystallized as the General Facilities Report were a similar form of surveillance, used to determine institutional suitability for object loans.⁴⁴

Insurers have labored to reduce risk by altering not only human behavior but also the design of the built environment. Historians of property insurance—which was forged in the flames of the Great Fire of London in 1666—look at how insurance companies sought to regulate buildings (in the form of stipulations to build with slow-burning materials, install fire alarms and sprinklers, and submit to regular building inspections, if owners wished to qualify for insurance) more closely than scholars of other insurance types.⁴⁵ As I show in this chapter, museum conservators readily took up this regulatory role in the mid-twentieth century, employing many of the same strategies. Some of this work on mitigating fire-related disaster intersects with a recent body of work on environmental

⁴³ For accounts of casualty in European and in the United States, respectively, both examining the late nineteenth to early twentieth centuries, see Julia Moses, *The First Modern Risk: Workplace Accidents and the Origins of European Social States* (Cambridge University Press, 2018); Nate Holdren, *Injury Impoverished: Workplace Accidents, Capitalism, and Law in the Progressive Era* (Cambridge University Press, 2020).

⁴⁴ The process has remarkable resonance with that described in works like the following: Josh Lauer, *Creditworthy: A History of Consumer Surveillance and Financial Identity in America*, Columbia Studies in the History of U.S. Capitalism (New York: Columbia University Press, 2017); Benjamin Wiggins, *Calculating Race: Racial Discrimination in Risk Assessment*, 1st ed. (Oxford University Press, 2020), <https://doi.org/10.1093/oso/9780197504000.001.0001>. See also Bernard E. Harcourt, *Against Prediction: Profiling, Policing, and Punishing in an Actuarial Age* (Chicago: University of Chicago Press, 2007); Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: Public Affairs, 2019). Scholarship on surveillance and quantified big data illuminates the legacy of actuarial thinking in the present.

⁴⁵ See Scott Gabriel Knowles, *The Disaster Experts: Mastering Risk in Modern America*, 2013. Knowles examines modern fire insurance in the United States from the nineteenth century to the present; for earlier histories that discuss the design of the “fire mark” that distinguished insured buildings from those that were not, see Harry M. Johnson, “The History of British and American Fire Marks,” *The Journal of Risk and Insurance* 39, no. 3 (September 1972): 405; Robin Pearson, *Insuring the Industrial Revolution: Fire Insurance in Great Britain, 1700-1850* (Aldershot, Hants, England; Burlington, VT: Ashgate, 2004). For a history that locates the origins of fire insurance before the Great Fire of London, see Robert Evans, “The Early History of Fire Insurance,” *The Journal of Legal History* 8, no. 1 (May 1987): 88–91.

risks,⁴⁶ following scholarship on what is termed “risk society,” or the view that modernity is defined and organized by the preponderance of human-generated risk.⁴⁷ Albeit not explicitly engaged in architectural analysis, discussions of future climate-related disasters in scholarship on environmental risk are valuable for understanding evaluations of risks to the built environment, and architectural historians have begun to explicate the role of architects and architecture in modulating risk along these lines.⁴⁸ Moving art for circulating museum exhibitions, too, is one such manufactured risk.⁴⁹ Histories of insurance are very much histories of how contemporary capitalism came into being,⁵⁰ even though insurance was not recognized as a form of commerce in the United States until 1944.⁵¹ Scholars of art history have also turned to the world of insurance to explicate the economic workings

⁴⁶ See Andrew Lakoff, ed., *Disaster and the Politics of Intervention* (New York: Columbia University Press, 2010); Michael R Powers, *Acts of God and Man: Ruminations on Risk and Insurance*, 2014; Rebecca Elliott, *Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States*, Society and the Environment (New York: Columbia University Press, 2021); Stephen J. Collier and Andrew Lakoff, *The Government of Emergency: Vital Systems, Expertise, and the Politics of Security* (Princeton, New Jersey: Princeton University Press, 2021).

⁴⁷ See Mary Douglas and Aaron B. Wildavsky, *Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers* (Berkeley: University of California Press, 1982); Mary Douglas, *Risk and Blame: Essays in Cultural Theory* (London: Routledge, 1994); Ulrich Beck, *Risk Society: Towards a New Modernity* (London; Newbury Park, CA: Sage Publications, 1992); Anthony Giddens, “Risk and Responsibility,” *Modern Law Review* 62, no. 1 (January 1999): 1–10; Tom Baker and Jonathan Simon, eds., *Embracing Risk: The Changing Culture of Insurance and Responsibility* (Chicago: University of Chicago Press, 2002); Arwen Mohun, *Risk: Negotiating Safety in American Society* (Baltimore: Johns Hopkins University Press, 2013); Fabian Muniesa, *The Provoked Economy: Economic Reality and the Performative Turn* (London: Routledge, 2015); Emily C. Nacol, *An Age of Risk: Politics and Economy in Early Modern Britain* (Princeton, NJ: Princeton University Press, 2016); Jamie L. Pietruska, *Looking Forward: Prediction and Uncertainty in Modern America* (Chicago: The University of Chicago Press, 2017).

⁴⁸ See Chapter 2, “Risks,” in Barber, *Modern Architecture and Climate*, 64–101. See also articles by Amy Thomas, Dasha Kuletskaya, Charles Rice, Elliott Sturtevant, and Alexandra Quantrill, in the forthcoming issue of *Architectural Theory Review*, “Terms and Conditions: Financialized Space.”

⁴⁹ John Kerr, *Securitization and Policing of Art Theft: The Case of London*. (Routledge, 2020), 37.

⁵⁰ See Michael Zakim and Gary J. Kornblith, eds., *Capitalism Takes Command: The Social Transformation of Nineteenth-Century America* (Chicago; London: The University of Chicago Press, 2012); Jens Beckert, *Imagined Futures: Fictional Expectations and Capitalist Dynamics* (Cambridge, Massachusetts: Harvard University Press, 2016).

⁵¹ Rodda, *Marine Insurance*, 35–36.

of the art world, as evidenced by recent work on the relationships between art and speculation⁵² and on actuarial thinking by artists and art institutions.⁵³

While scholars of insurance have not yet turned their attention to the niceties of inland marine policies and their derivatives, their assessments of these other spheres can illuminate how exhibition insurance organizes museums, given the centrality of exhibitions to the operations of major, and even smaller-sized, institutions. Traveling museum exhibitions, I argue, instigated actuarial appraisals of museum objects by administrators—primarily conservators and registrars—that blurred distinctions between actuarial and aesthetic value. We can see this in the way that terms which once held specific meaning in marine insurance now describe concerns in object preservation, and, more importantly, through conservators' efforts to manage exhibition risks (i.e., to both reduce insurance premiums and ensure object longevity) through the standardization of building design. Insurance premiums, determined as much by perceived “creditworthiness” (in the vein described by historian Josh Lauer) of borrowing institutions as the perceived value of objects sent on loan, could be made at favorable rates if the museum building was verified as appropriately secure.

Well into the late mid-twentieth century, museums rarely purchased insurance for the entirety of their collections.⁵⁴ They were, however, increasingly obliged to provide coverage for

⁵² Marina Vishmidt, *Speculation as a Mode of Production: Forms of Value Subjectivity in Art and Capital* (Brill, 2018); Sophie Cras, *The Artist as Economist: Art and Capitalism in the 1960s* (New Haven: Yale University Press, 2019).

⁵³ For a discussion of art insurance in the long nineteenth-century in Britain, see (especially) Chapter 2: “Circulating Risks – Insuring Exhibitions,” on actuarial interventions by the Fire Offices’ Committee and the South Kensington Museum (now V&A), and Chapter 3, “*Ars longa, vita brevis* – The Fine Art & General Insurance Company, Ltd,” in Avigail Moss, “Peculiar Risks: Art and Insurance, 1780–1914” (University of Southern California, 2022). On drawing as actuarial thinking, see Matthew C. Hunter, “Graphic Making, Actuarial Knowing: Transfer and Countertransference in Frederic Edwin Church’s South American Drawings,” *West 86th: A Journal of Decorative Arts, Design History, and Material Culture* 23, no. 1 (March 2016): 56–78; Matthew C. Hunter, “The Cunning of Sir Sloshua: Reynolds, the Sea, and Risk,” *Grey Room*, no. 69 (October 1, 2017): 80–107.

⁵⁴ Feldman and Weil, *Art Works: Law, Policy, Practice*, 698–99. Private American museums were more likely to purchase partial insurance, than state-owned European museums, with the understanding the “the State is its own insurer.” *The Organization of Museums: Practical Advice*, Museums and Monuments 9 (Paris: UNESCO), 1960, 32. See also Irving Pfeffer and Ernest B. Uhr, “The Truth about Art Museum Insurance,” *Museum News* 52, no. 6 (March 1974): 23–31.

borrowed works held on their premises, which, as we have seen, required negotiating rates agreeable to both lending and borrowing parties. The potential for movement, in fact, necessitated this valuation, consistent with Levy's presentation of marine insurance as a technology that quantifies risk as a commodity traded independently of the itinerant object to which it is attached. Unlike traded goods, however, objects sent on exhibition return to the place from which they were borrowed. These objects are not so much commodities as assets. Museum administrators themselves describe the objects as such.⁵⁵ I use "asset" not as art critic Rosalind Krauss does, which I see as essentially describing a commodity.⁵⁶ I lean on the definition provided by Birch and Muniesa, which (as I described earlier) is "something that can be owned or controlled, traded, and capitalized as a revenue stream [through] a "durable economic rent," wherein value is extracted from the asset not through its sale, but through "ownership and control...which usually entails limiting access to it."⁵⁷ Per Birch and Muniesa's definition, museum objects can be fruitfully "assetized" through loans, for which borrowing institutions pay not only for the short-term possession of an object but also for its insurance.⁵⁸ The first cost is correlated to the object's aesthetic value, while the second is an actuarial appraisal of the risk of loaning the object to borrowing institutions (insurance costs are, after all, as much determined by the appraisal of borrowers as the objects to be borrowed). The second cost is

⁵⁵ In his 1948 book on safeguarding works of art (and specifically in the chapter on insurance), Robert P. Sugden, who served as Building Services Manager (essentially, as registrar) at the Metropolitan Museum of Art from 1908 to 1953, writes: "One of the fundamental obligations of the governing body of a museum is to provide maximum control and protection of the art assets in its custody." Sugden, *Safeguarding Works Of Art*.

⁵⁶ See Rosalind Krauss, "The Cultural Logic of the Late Capitalist Museum," *October* 54 (1990): 3–17.

⁵⁷ Birch and Muniesa, *Assetization*. See also Muniesa et al., *Capitalization*. Although architectural historian Michael Osman does not explicitly theorize the process of assetization, his account of the role of architecture in assetizing perishable produce, creating a futures market by stabilizing its value through climate control, fits this conception. See Chapter 2, "Cold Storage and the Speculative Market of Preserved Assets," in Osman, *Modernism's Visible Hand*, 45–80.

⁵⁸ As communications scholar Domínguez Rubio points out, moving works of art "allows museums to reap handsome exhibition and loan fees, something that is especially tempting for those artworks that would otherwise be "inactive" in storage rooms," and goes on to note that MoMA, for example, receives about 6 million USD each year just in loan fees. Domínguez Rubio, *Still Life*, 185–86.

interpreted, however, as part of the value of the object, so aesthetic and actuarial values of museum objects are conflated through objects' circulation as loaned assets. I see this conflation—a consequence of assetization—as a socialized process of commensuration, as sociologists Wendy Espeland and Mitchell Stevens define it; simply, as “the transformation of different qualities into a common metric.”⁵⁹ In the calculative face of insurance which makes objects commensurate through the metric of money, more so than in the presence of the replicable photograph, the aura of allegedly original objects must dissipate.

Risk in the actuarial sense intersects with its use as a conservation concern. This may be in part because certain key exceptions to all-risk policies are also problems of object preservation. To reiterate, an all-risk policy—in any form of transportation insurance—provides coverage against risks “peculiarly incidental to the carriage of goods in boats or craft,” and does not include coverage for damage that occurs inevitably from wear and tear or deterioration.⁶⁰ In other words, “It covers a risk, not a certainty.”⁶¹ One such certainty is the gradual deterioration of a museum object resulting from environmental action or pollution, and, as a certainty rather than a risk, it is excluded from coverage in insurance policies.⁶² Other exclusions include wear and tear, damage caused by pests, and even damage caused by repair, restoration, or retouching.⁶³ As such, exhibition loan agreements usually

⁵⁹ Wendy Nelson Espeland and Mitchell L. Stevens, “Commensuration as a Social Process,” *Annual Review of Sociology* 24, no. 1 (August 1998): 313–43. There is a robust body of work on commensuration in the social sciences, but I owe my reading of commensuration largely to historian Caitlin Rosenthal’s discussion of the term in relation to practices of management and enumeration. See Chapter 4, “Human Capital,” in Caitlin Rosenthal, *Accounting for Slavery: Masters and Management* (Cambridge, Massachusetts: Harvard University Press, 2018), 121–56; Caitlin Rosenthal, “Numbers for the Innumerate: Everyday Arithmetic and Atlantic Capitalism,” *Technology and Culture* 58, no. 2 (2017): 529–44. In grappling with social processes of commensuration as they unfold in the museum, I also find useful sociologist Franck Cochoy’s neologisms “qualculation” and “calculation,” which capture the intertwining of calculation and judgement.

⁶⁰ Appleman, *Inland Marine Insurance*, 55–56.

⁶¹ *British and Foreign Marine Insurance Co. v. Gaunt* [1921] 2 AC 41, Lord Sumner. Cited in Appleman, 55.

⁶² See Stolow, *Conservation and Exhibitions*, 28; Pfeffer, “Insuring Museum Exhibitions,” 1135.

⁶³ Sugden, *Safeguarding Works Of Art*, 70.

include a clause that conservators at borrowing institutions must not undertake repairs without the explicit written permission of the lender; the repairs they do undertake must be carried out with extreme caution by experienced staff.

Another such “certainty” excluded from coverage in all-risk policies is that of “inherent vice,” generally defined in marine insurance law as the intrinsic capacity of a commodity to deteriorate naturally without external cause.⁶⁴ Inherent vice as an exception to insurance coverage has a troubled history in marine insurance law;⁶⁵ however, as a concern for museum conservators of art and other objects, it has specific meaning. The term is defined by conservators using language very similar to that used in insurance: conservation scientist Nathan Stolow refers to inherent vice in his handbook, *Conservation and Exhibitions*, as “hidden or subtle structural weaknesses in an object,” observing that this “inevitably leads to damage as a result of handling and movement.”⁶⁶ In art conservation, this translates to some perceived defect of material composition, rather than the natural tendency of objects to degrade over time. For instance, sculpture crafted from inadequately cured wood has a

⁶⁴ For Lord Diplock’s definition, following *Soya v. White*, see Özlem Gürses, *Marine Insurance Law* (Abingdon, Oxon ; New York, NY: Routledge, 2015), 159, 180. See also Johanna Hjalmarsson and Jennifer Lavelle, “Thirty Years of Inherent Vice – From *Soya v White* to the Cendor MOPU and Beyond,” in *Maritime Law Evolving: Thirty Years at Southampton* (Hart Publishing, 2013). For a discussion of how the controversial 2011 Cendor MOPU case, in which insurers rejected a claim of loss of an insured oil rig owing to structural failure—or “inherent vice”—of the rig, contributed to a temporary reclassification of inherent vice (i.e., not as a concurrent peril to be excluded from marine policies, but as an *alternative* to perils of the sea) see Ayça Uçar, *Perils of the Seas and Inherent Vice in Marine Insurance Law* (Milton Park, Abingdon, Oxon; New York, NY: Routledge, 2021).

⁶⁵ On the relationship between the development of marine insurance policies and the transatlantic slave trade, and on debates regarding (death by) insurrection as a form of “inherent vice” specific to slaves that ostensibly made them uninsurable, see Anita Rupprecht, “Inherent Vice’: Marine Insurance, Slave Ship Rebellion and the Law,” *Race & Class* 57, no. 3 (January 2016): 31–44. See also a discussion of inherent vice as it pertains to slavery in the Dutch Republic in Karin Lurvink, “The Insurance of Mass Murder: The Development of Slave Life Insurance Policies of Dutch Private Slave Ships, 1720–1780,” *Enterprise & Society* 21, no. 1 (March 2020): 210–38. For the United States case, see Levy, *Freaks of Fortune*. On the centrality of slavery to structures of modern capitalism, see Ian Baucom, *Specters of the Atlantic: Finance Capital, Slavery, and the Philosophy of History* (Durham: Duke University Press, 2005); Rosenthal, *Accounting for Slavery*.

⁶⁶ Stolow, *Conservation and Exhibitions*, 28.

higher propensity to split, and cheap paper deteriorates more quickly.⁶⁷ If a heavy teapot has a thin handle, increasing its risk of breakage, this too is considered inherent vice.⁶⁸

But if insurance derives from statistical calculations of possible risk,⁶⁹ one salient feature of the modern “insurance era” is that the goal of underwriting risk has given way to that of regulation. Inherent vice is a case in point, as a material problem of production that is instigated, and therefore satisfactorily addressed, by artists themselves. As risk in the actuarial sense intersected with its use as a conservation concern, conservators engaged in the attempted regulation of artists’ bodies, to mitigate an uninsurable risk. As evinced by the correspondence and press cuttings in his archives, Stolow spent a considerable portion of his time fielding questions on materiality from practicing artists, entreating them to consider abstaining from using certain materials, and contributing to committees on artist standards. Canadian abstract painter Tony Urquhart regularly sent Stolow queries for advice while he was a resident artist at the University of Western Ontario.⁷⁰ Through

⁶⁷ Pfeffer, “Insuring Museum Exhibitions,” 1135.

⁶⁸ Simmons and Kiser, *MRM6: Museum Registration Methods*, 489-490 (ebook).

⁶⁹ Ewald is clear that the actuarial notion of risk pairs not with danger or peril, but with “chance, hazard, probability, eventuality or randomness on the one hand, and those of loss or damage on the other—the two series coming together in the notion of accident.” While in the juridical view, accident is attributed to a fault (that may have had intention, and might have been averted), the insurer’s calculation accepts that, irrespective of human agency, “accidents occur at a particular, specific rate.” In Ewald’s view, insurance is not a form of juridical reparation, but a form of probabilistic rationality. Ewald, “Insurance and Risk,” 199–202.

⁷⁰ In late 1960, Urquhart wrote to Stolow, asking if he “might be interested & [sic] willing to look over the sample of [Liquitex] ground I am sending you, and to advise me about its permanence.” Tony Urquhart to Nathan Stolow, 6 October 1960. Stolow responds, “If you want to use this relatively new material...I am afraid you would have to take the risk yourself[.] What I would be worried about...is the possibility of the loss of adhesion between the Liquitex ground and the canvas after a period of time. This no one knows yet, and I certainly could not supply the answer to this within the near future, as...a fair bit of testing is involved to prove this point.” Stolow to Urquhart, 11 October 1960. In early 1962, Urquhart sent in a new query for advice about a commercially produced matte varnish, while also informing Stolow that “I have given up preparing canvas with “Liquitex [and] have reformed to rabbit skin glue and oil base.” Urquhart to Stolow, 28 February 1962. Stolow responds, “Many artists have this problem of how to apply a protective varnish and yet eliminate the glossy effect. Those of us practicing in the conservation of works of art field have solved the problem but I am afraid the solution may be a costly one. A 10% solution (by weight) of Lucite 46, put out by Dupont, dissolved in sulphur-free Xylene (sold by British Drug Houses in Toronto) can be used as a spray. [...] Most artists would perhaps solve the problem by not varnishing at all but then how can a painting be adequately protected from the dirt and grime of city air if there is no protecting layer of varnish.” Stolow to Urquhart, 2 March 1962. National Gallery of Canada Archives and Library.

correspondence with British painter Gluck—whose fixation with securing the longevity of artistic output through better standards is well-documented⁷¹—Stolow also supplied technical information to the British Standards Committee on Artists’ Materials.⁷² Canadian abstract painter Ted Godwin of the Regina Five, however, displayed a distinctly *laissez-faire* attitude toward new materials in his correspondence with Stolow.⁷³ That Godwin’s cavalier attitude was more the norm than Gluck’s obsession and Urquhart’s diligence is clear from Canadian press articles over several years on artist-induced obsolescence that aired Stolow’s excoriating views on the subject.⁷⁴ (As we have seen in Chapter 3, Stolow often gave lengthy newspaper interviews from his laboratory as a form of public education.) Stolow also offered commentary on the draft text of *Is Your Contemporary Painting More*

⁷¹ Gluck’s “paint war” over the quality of paint standards was so all-consuming that it led to no painterly output from 1953 to 1967. See Amy De La Haye and Martin Pel, eds., *Gluck: Art and Identity* (New Haven: Yale University Press, 2017); Diana Souhami, *Gluck, 1895-1978: Her Biography* (London: Weidenfeld & Nicholson, 1988).

⁷² Stolow shared as portion of his PhD dissertation with Gluck in a letter dated 27 March 1960. Gluck responded with several technical questions about cold-pressed linseed oil, difference in paint hue when painted in different directions (both pet obsessions) and paints used by Canadian artists. Gluck to Nathan Stolow, 7 October 1960. In Stolow’s answers to these questions, he invites Gluck to “please took [sic] me up, Room 709, as I am always interested in discussing art technical matters with painters.” Stolow to Gluck, 10 March 1961. See also Annual Report, National Gallery of Canada, 1959-60, 34. National Gallery of Canada Archives and Library. A discussion of twentieth-century efforts—individual and institutional—to set standards for contemporary artists’ materials is beyond the scope of this dissertation, but for Stolow’s efforts in Canada and elsewhere, see Marion Barclay, “Materials Used in Certain Canadian Abstract Paintings of the 1950s,” in Denise Leclerc, *The crisis of abstraction in Canada: the 1950s* (Ottawa: National Gallery of Canada, 1992), 208-215. For efforts in Britain, which were instigated at mid-century by Gluck, see previous note. For efforts at the Fogg Museum at Harvard University in the interwar period, see Bewer, *A Laboratory for Art*.

⁷³ In one such letter, Godwin describes using a product called Perma-Gel; unlike Urquhart, whose query about Liquitex was concerned with permanence, Godwin asked Stolow for advice on creating a particular artistic effect: “I want to suspend the pigment particles in varying depths of the canvas and create a deeper, more lustrous, glowing from within “type” [sic] of surface.” He signs off with, “Stop shaking your head.” Ted Godwin to Nathan Stolow, 20 March (?) 1966. National Gallery of Canada Archives and Library.

⁷⁴ In one article, Stolow is quoted as saying, “Some artists have used household or car paint and even sand in their paintings,” which is “a tremendous problem to the person charged with seeing that these paintings are preserved.” Brian Magner, “Art Laboratory to Probe Works,” *The Ottawa Journal*, 25 September 1958. In another piece, Stolow is described as pointing out a tissue paper-encrusted piece, lamenting that “Some of these modern paintings can hardly be restored at all.” He asserts that “present-day artists, by and large, couldn’t care less whether their paintings last or not,” blaming “the typically modern attitude that it’s up to someone else to look after their paintings,” but resignedly admits, “It’s hard to control artists in regard to what materials they use, [so] we’ll just try to let them know as much as possible about the different materials available now, and hope they’ll choose wisely.” Eileen Turcotte, “Artists Using Poor Material,” *The Ottawa Journal*, 1 March 1960. See also “Obsolescence in Art,” *Kingston Whig-Standard Ontario*, 3 March 1960. National Gallery of Canada Archives and Library.

Temporary Than You Think?, a book aimed at artists by paintings conservator Louis Pomerantz, who established the conservation laboratory at the Art Institute of Chicago in 1956 and who similarly struggled with the insouciance of contemporary artists toward the longevity of their work.⁷⁵

These conservators also devoted their energies to regulating the bodies of each other, other museum staff, connoisseurs, and the museum-going public through education, to mitigate the natural (but uninsurable) deterioration caused by careless or ignorant handling. This education often took the form of didactic exhibitions on conservation. In 1954, Sheldon and Caroline Keck—two conservators who had met at Harvard taking coursework with Edward Forbes and George Stout at the Fogg, and who had established the Brooklyn Museum’s first conservation laboratory two decades earlier—mounted the extensive *Take Care* exhibit in the Museum’s special exhibitions galleries. (Fig. 4.3) With sections titled “Examination” and “Treatment,” the exhibition introduced viewers to the scientific methods and ethos of Fogg-esque conservation. With sections like the one on “Home Care”—accompanied by Caroline Keck’s first book, *How to Take Care of Your Pictures*, which was produced expressly to be sold at the exhibition—the Kecks sought to establish these same methods in the homes of private collectors as well.⁷⁶ They also produced their first short film on restoring

⁷⁵ In the preface, he writes, “I recognize that there exist some artists who have no interest in the physical durability of their work of art, and who take a nihilistic approach. Of them I would only request that they mark their paintings “Temporary Only,” so that everyone else concerned will be properly forewarned.” And in the opening of the first chapter, he describes the array of materials used by contemporary artists, ranging from “a rubber tire from a baby carriage” to “stuffed birds nailed to canvas, [and] a deerhead nailed to plywood,” concluding that it is “[s]mall wonder that what conservators call “inherent vice” (or a guarantee of deteriorating effects due to the use of faulty materials and craftsmanship) is so frequently encountered in contemporary painting.” Louis Pomerantz, *Is Your Contemporary Painting More Temporary Than You Think?* (Chicago, IL: Chicago Chapter, Artists Equity Association, 1962).

⁷⁶ Jean D. Portell, “Paul Coremans and Sheldon and Caroline Keck: A Collegial Friendship That Influenced the Development of Conservation Education in North America,” in *A Man of Vision: Paul Coremans and the Preservation of Cultural Heritage Worldwide: Proceedings of the International Symposium Paul Coremans Held in Brussels, 15-17 June 2015*, ed. Dominique Deneffe, Dominique Vanwijnsberghe, and Institut royal du patrimoine artistique (Belgium), Scientia Artis 15 (Brussels: Royal Institute for Cultural Heritage, 2018), 236. Portell also writes in the notes, “Many years later Caroline told me that during the publication process MoMA’s director, Alfred Barr, took Sheldon aside and asked if he would agree to being named the author instead of his wife. Sheldon declined and reported the incident to Caroline – adding that he, himself, would *never* write a book like that.” 249, n10.

paintings, titled “A Future for the Past,” which was aired four times a day during the exhibition’s run.⁷⁷ (Fig. 4.4) Louis Pomerantz, who had worked with the Kecks at the Brooklyn Museum in the early 1950s before moving to the Art Institute, designed the traveling exhibition *Know What You See* for the Renaissance Society at the University of Chicago in 1970.⁷⁸ (Fig. 4.5) Stolow himself curated an exhibit, *Progress in Conservation* (Fig. 4.6) (amidst his fraught departure from the National Gallery of Canada to found the Canadian Conservation Institute) in early 1972, which also traveled to art institutions in sixteen cities across Canada between 1972 and 1974.⁷⁹ Yet for all this, humans could only ever be expected to be unpredictable and fallible, so Stolow, Pomerantz, the Kecks, and others also worked to assure the safety of art objects through the regulation of museum buildings.

Building Management as Self-Insurance

Discussions of insurance first appeared in handbooks on moving works of art for exhibitions, such as Robert Sugden’s 1948 *Safeguarding Works of Art* and Elodie Courter Osborn’s 1953 *Manual of Traveling Exhibitions*, discussed in Chapter 1. Museum conservators, too, took on what was

⁷⁷ Portell, 236. Appropriately, the Brooklyn Museum digitized the film in 2021 as part of a further conservation process; the original in the museum’s archives cannot be viewed because of its outdated format. See Sharra Grow, “Two Recently Digitized Conservation Films from the Brooklyn Museum Archive,” International Institute for Conservation of Historic and Artistic Works (IIC), August 27, 2021, <https://www.iiconservation.org/content/two-recently-digitized-conservation-films-brooklyn-museum-archive>. (This, apparently, is a form of inherent vice for audiovisual material. The film can now be viewed on demand here: Caroline K. Keck and Sheldon Keck, *A Future for the Past* (Brooklyn Museum, 1954), <https://www.youtube.com/watch?v=6gfQPy-ndp4>.

⁷⁸ Louis Pomerantz, “Know What You See: The Examination of Paintings by Photo-Optical Methods (Exhibition Catalogue),” 1970. It was circulated regionally by the Illinois Arts Council, and from 1976, nationally by the Smithsonian Institution Traveling Exhibition Service through the sponsorship of the Foundation of the American Institute for Conservation. It traveled for over a decade in this form (and continued to circulate after Pomerantz’ death) with the aid of a National Endowment for the Arts grant. Several issues of the *Newsletter of the American Institute for Conservation of Historic and Artistic Works* discuss the circulation of the exhibition: <https://www.culturalheritage.org/publications/aic-news/online-archive/>.

⁷⁹ This included the Musée de Quebec, New Brunswick Museum (July 1972), Beaverbrook Art Gallery (15 August-15 September 1972), Sir George Williams University, Montreal (1-31 January 1973), Art Gallery of Windsor (16 September-14 October 1973), Agnes Etherington Art Centre (16 November-10 December 1973), and Confederation Art Gallery (15 March-15 April 1974).

essentially an actuarial role by attempting to regulate buildings alongside the actions of humans associated with the production and preservation of art objects, hoping, perhaps, that buildings would prove less intransigent than artistic bodies. Historians have shown how dedicated insurance agents intervened in the design of the built environment to calculate eligibility for insurance premiums and the value thereof,⁸⁰ but the efforts of Stolow, the Kecks, and others were just as much a form of *self-disciplining* as imposed regulation, prefiguring Darlene Bialowski's presentation of the 2019 General Facility Report as a tool for self-assessment. (We have seen in Chapter 3 how Nathan Stolow sought to precisely control the interior climate of the NGC, including his relentless inspections of climate conditions and equally persistent, even self-flagellating, appraisals of them as "deficient."⁸¹) In fact, their efforts at building management were a technique for self-insurance.

Climate control was certainly perceived as an important feature of museum buildings for self-insurance, as the natural deterioration of objects caused by environmental factors was (and is) not covered by insurance policies. But more comprehensive in their approach to regulating buildings than Stolow were Caroline and Sheldon Keck. Founding members of the International Institute for Conservation when it was instated in 1951, they were also central figures in the professionalization of conservation training methods both in the United States from the late 1950s, and in Mexico as experts invited by UNESCO to establish the Latin American Center for Conservation of Cultural Property in 1966.⁸² Admittedly, their initial efforts do not appear particularly striking. In October 1958, a few years after they mounted their first exhibition, they hosted an intimate exploratory

⁸⁰ On the way agents set stipulations for building materials, security devices, and inspections to qualify for fire insurance, see Knowles, *The Disaster Experts*. On how insurance agencies financed suburbanization, see Horan, *Insurance Era*. See also descriptions of nineteenth-century Aetna field agents in Hunter, "Graphic Making, Actuarial Knowing."

⁸¹ See Chapter 3, on Stolow's many reports on the physical environment of the National Gallery of Canada for its Board of Trustees' meetings.

⁸² Joyce Hill Stoner, "Caroline Keck, 1908–2007," *Studies in Conservation* 53, no. 1 (January 2008): 73–75; Portell, "Paul Coremans and Sheldon and Caroline Keck," 241–48.

conference on conservation at the Brooklyn Museum, funded by a grant from the Rockefeller Foundation, to define the trajectory of the field and “combat the general inertia” towards the work of conservation.⁸³ The conference sessions were framed as an opportunity to share new research and debate issues such as professional and public education and technical standard setting. One session was devoted to conservation and the law, over which lawyer (and Secretary of the Metropolitan Museum of Art) Dudley T. Easby presided, while a Kingman Putnam of A.R. Lee & Co. Insurance Adjustors was invited to comment alongside the group of conservation heavyweights.

In 1962, the Kecks produced a second film, “The Hidden Life of a Painting,” for a week-long Exposition of Painting Conservation for professionals which showcased demonstrations of different techniques each day of the week in the vein of a trade fair.⁸⁴ While their first film from 1954 focused minutely on the technical process of restoring a painting, the second film opens with a brief introduction on the fragility of paintings, and the role of conservators as preserving these works for future generations, before cutting to an image of a newspaper article on the fire that had ripped

⁸³ Letter from Edgar C. Schenck, Director of the Brooklyn Museum, to Nathan Stolow, 3 June 1958. National Gallery of Canada Library and Archives. The 12 participants (in addition to Caroline and Sheldon Keck) were Alfred H. Barr, Jr., Director of the Museum of Modern Art; Richard Buck, Director of the Inter-Museum Conservation Laboratory; William G. Constable, President of the International Institute for Conservation; Paul Coremans, Director of the Central Laboratory of Belgium; Dudley Easby, Jr., Secretary of the Metropolitan Museum of Art, Robert L. Feller, National Gallery of Art Fellow at the Mellon Research Institute in Pittsburgh; Rutherford J. Gettens, Curator at the Freer Gallery; John M. Graham, Curator at Colonial Williamsburg (and former Curator at the Brooklyn Museum), Murray Pease, Conservator at the Metropolitan Museum of Art; James Roth, Restorer at the William Rockhill Nelson Gallery of Art, Nathan Stolow, Head of Conservation at the National Gallery of Canada; and George L. Stout, Conservator at the Isabella Stewart Gardner Museum. In addition, John Coolidge, Director of Harvard’s Fogg Museum; Harry S. Francis, Curator at the Cleveland Museum of Art; Henri Marceau, Director of the Philadelphia Museum of Art; Kingman Putnam of A.R. Lee & Co., Insurance Adjustors; Charles Seymour, former president of Yale University; Craig Smyth, New York University Institute of Fine Arts; and John P. Harrison of the Rockefeller Foundation, were invited to comment. See also Portell, “Paul Coremans and Sheldon and Caroline Keck.” As a direct result of the conference, New York University Institute of Fine Arts founded its Conservation Center in 1960 (Coolidge and Seymour were invited to the conference with a similar hope; however, did not take up the mantle as Smyth did).

⁸⁴ Held from the 22nd to the 26th October 1962, the program for the five days was (1) examination of paintings, (2) consolidation of paintings on fabric supports, (3) consolidation of paintings on rigid supports, (4) treatment of paint surfaces, and (5) care of a collection. “Exposition of Painting Conservation: Materials, Methods, Machines,” *Bulletin of the American Group. International Institute for Conservation of Historic and Artistic Works* 2, no. 2 (April 1962): 6. See also “The Brooklyn Exposition,” *Museum News*, Vol. 41, No. 5 (January 1963), 30-31.

through the Museum of Modern Art in New York in 1958.⁸⁵ The narrator intones that the conservator's expertise is "unexpectedly challenged by the problems left by a fire," and as the image on the screen then turns to a painting of two ships disfigured by a laceration almost a third of the length of the canvas, he adds, "...or the slash of vandalism."⁸⁶

The camera then alights upon Caroline Keck, who introduces the Exposition and its aims before returning to the subject of the MoMA fire. "Fire extinguishers," she says, "if you recall the [Museum of] Modern Art catastrophe, are frighteningly [sic] important." She continues, "Mr Louis Pomerantz advised which types are safest to install near paintings," voicing over footage first of foam and soda-acid fire extinguishers and then of a bespectacled Pomerantz in a suit, who solemnly schools an unseen audience from a standing position next to a table holding an assortment of labeled extinguishers.⁸⁷ (Fig. 4.7) A four-page article by Pomerantz on suitable portable fire extinguishers was also distributed to attendees of the exposition.⁸⁸ Assessing claims in the case of fire damage required adequate evidence that appropriate protective equipment was on hand and maintained,⁸⁹ of course, and for conservators the problem of mitigating unintentional damage from the fire extinguishing equipment itself also loomed large. Following Pomerantz's cameo, the camera cuts to

⁸⁵ It is ironic that the fire broke out during an update of MoMA's air-conditioning on 15 April 1958; repairmen stopped for a smoke break and a drop cloth caught fire, ignited several open cans of paint, and spread through the museum. A panel from Claude Monet's *Water Lilies* series was destroyed, and Jackson Pollock's *Number 1, 1948* sustained smoke damage. The fire also sparked the formation of MoMA's conservation department (it had until then relied on the services of the Kecks and others), and its first Chief Conservator Jean Volkmer restored the Pollock. "1958: MoMA on Fire," *MoMA Through Time*, https://www.moma.org/interactives/moma_through_time/1950/moma-on-fire/.

⁸⁶ Caroline K. Keck and Sheldon Keck, *The Hidden Life of a Painting* (Brooklyn Museum, 1962), 1:04-1:32, https://www.youtube.com/watch?v=twMPXpWC_4. This film was also digitized as part of the Brooklyn Museum's conservation project.

⁸⁷ Keck and Keck, 6:25-6:33.

⁸⁸ See Jean Portell contribution on the Brooklyn Museum expo on "Exhibiting Conservation, 1960s," *AIC Collaborative Wiki*, https://www.conservation-wiki.com/wiki/Exhibiting_Consevation_1960%27s.

⁸⁹ Fire insurance now also covers damage from smoke and from water used to extinguish the fire, following two rulings in 1859 (*Whitehurst v. Fayetteville Mutual Ins. Co.*, 51 N. C. 352) and 1901 (*Boak Fish Co. v. Manchester Fire Assurance Co.*, 84 Minn. 419, 87 N. W. 932) that fire *can* indeed be deemed the direct cause of loss when the latter elements are the actual cause of loss, and is now used to apply to inland marine losses. Rodda, *Marine Insurance*, 26.

silent footage of Caroline Keck in deep conversation with another suited gentleman, and Keck-as-narrator continues, “Mr. George W. Nixon, who spoke to us on fine arts insurance, had never realized what a variety of materials we need in our work.” Keck herself spoke at the expo on museum housekeeping, which she describes in the film as “a lot like your housekeeping, only more complicated and with much more paperwork.”⁹⁰

If “The Hidden Life of Paintings” served as a potential bridge between regulating bodies and regulating buildings through its references to insurance and Pomerantz’s specifications for portable fire extinguishers, the summer seminar Caroline Keck organized on museum security at the New York State Historical Association (now the Fenimore Art Museum) at Cooperstown more boldly discussed controls for museum buildings.⁹¹ To this event, she invited two conservation scientists—Nathan Stolow and fellow chemist Robert Feller, director of what is now the Carnegie Mellon Research Institute⁹²—to speak on environmental security and the effect of light on objects.⁹³ The other invited speakers were Joseph Chapman, a retired agent of the Federal Bureau of Investigation, who discussed physical security, and insurers Huntington T. Block (at that time an independent agent) and John B. Lawton (a fine arts insurance underwriter with Aetna), who co-presented on aspects of their field relevant to fine arts institutions. Including Stolow and Feller with these non-

⁹⁰ Keck and Keck, *The Hidden Life of a Painting*, 9:50-9:56.

⁹¹ The seminar was held 13-18 July 1964. Frederick L. Rath, Jr., “Foreword,” in Caroline K. Keck, *A Primer on Museum Security* (Cooperstown, NY: New York State Historical Association, 1966), v. The Kecks later “inaugurated and jointly ran the Cooperstown conservation training program under the auspices of the State University College at Oneonta and the New York State Historical Association from 1969 to 1981.” Hill Stoner, “Caroline Keck, 1908–2007,” 73. Keck was not the first to discuss museum security; Richard Foster Howard, inaugural director of the Birmingham Museum of Art in Alabama wrote a short booklet in 1958. He pays some attention to architectural features, but mainly focuses on training guards and managing visitors, some of which reads peculiarly today in light of the historical/geographical context in which he was writing. Richard Foster Howard, *Museum Security* (American Association of Museums, 1958).

⁹² It was at the time called the Research Center on the Materials of the Artist and Conservator, at the Mellon Institute.

⁹³ In fact, Stolow had to give both talks as Feller was unable to attend, making him the sole representative for the field of conservation. Frederick L. Rath, Jr., “Foreword,” in Keck, *A Primer on Museum Security*, v. Stolow and Feller had worked together in the past, most notably on a 1959 paper (with Elizabeth H. Jones) on pictures varnishes and their solvents for the Intermuseum Conservation Association, founded by Richard D. Buck.

museum professionals indicates that Keck was expanding her interpretation of preventive conservation to include museum security; she took it upon herself to turn the seminar transcriptions into another book published two years later, which she sent to fellow conservators as a guide.⁹⁴

Keck herself discussed an assortment of concerns that drew together the main themes of the other presentations.⁹⁵ She not only vividly described environmental and human hazards in museums, but also likened paintings with discolored surface films to “sooty children,” and shuddered at storage rooms where “worst of all, dirt can accumulate in embedding layers.”⁹⁶ (Fig. 4.8) Meanwhile, squeaky-clean white cube MoMA, with its daily gallery checks (and weekly checks by a *different* examiner), exhaustive photographic documentation of galleries, and staff trained to swiftly nip any hint of delinquency in the bud, was her “pride and joy.”⁹⁷ Her implied argument, that these hazards were to be mitigated with all the force of a well-regulated clinical environment, attests to the long-standing imbrication of the medical and actuarial gazes⁹⁸ and aligns her undertakings with Stolow’s ad/ministrative activities.

⁹⁴ In a letter dated 23 August 1966, Caroline Keck relates to Nathan Stolow that the book has been sent to Phoebe Dent Weil [at the Istituto Centrale del Restauro in Rome], and to Norman Brommelle [at the V&A in London]. National Gallery of Canada Library and Archives.

⁹⁵ That Caroline Keck was familiar with UNESCO museum manuals is clear from the opening line of her introduction, in which she calls *The Organization of Museums* (1960) “quite excellent,” but laments that it contains but one reference to museum security—appropriately, in a chapter on museum administration. Keck, *A Primer on Museum Security*, vii.

⁹⁶ Keck, 60, 67, 76.

⁹⁷ In 1953, Elodie Courter Osborn wrote, “If possible, photographs should be taken for “before and after” comparison of any questionable items. These are invaluable should a claim for insurance be necessary.” Courter Osborn, *Manual of Travelling Exhibitions*, 36. By the time of Expo ’67, thanks to Stolow’s efforts, this procedure was no longer optional.

⁹⁸ See Mary Douglas, *Purity and Danger: An Analysis of Concept of Pollution and Taboo* (London; New York: Routledge, 1966); Douglas and Wildavsky, *Risk and Culture*; Ian Hacking, “Risk and Dirt,” in *Risk and Morality*, ed. Aaron Doyle and Diana Ericson (University of Toronto Press, 2003). As Hacking writes on portfolios of risk, “The United States is impure, evil, immoral, dirty, untouchable, because it does not have universal health care.” Hacking, 35. Compare with Stolow’s language Keck’s description of painting “sickness” and “diagnosis” in Keck and Keck, *The Hidden Life of a Painting*, 4:30. Keck famously spoke her mind without reservation, but her correspondence with Stolow suggests that they remained on excellent professional terms throughout their lives, which I think speaks volumes about their shared faith in regulatory procedures. See also Caroline K. Keck, “Security Depends on People,” *Curator: The Museum Journal* 10, no. 1 (March 1967): 54–59.

Joseph Chapman discussed strategies for averting theft—and in his view most theft was avoidable—as a form of preventive conservation. He noted that buildings retrofitted as museums, such as historic houses and palaces, contained “built-in security headaches,” but spoke approvingly of a museum he had visited in the south of France as an example of “a few recent structures [that] have been planned so exactly for their proposed function that they contain every conceivable security precaution.” He cited systems that governed its hours so exactingly that the museum was “open only some three hours each day.”⁹⁹ He recommended trimming adjacent shrubbery to ensure a clearance of at least six feet from the base of the building, asserting that dense foliage could shroud not only “questionable activities” but also, on two occasions in his experience, dead bodies. He also advised that the museum’s exterior and parking areas be brightly illuminated at night and advocated for what can only be described as deliberately policing the activity in surrounding structures, asking seminar participants to examine the activities therein and to exercise caution during periods of construction, as tools for building could just as easily be used for despoliation.¹⁰⁰

He recommended interior features such as visitor count systems, bag checks, and designs to control visitor flow, and that staff conduct regular scans for maintenance issues, consult with lock manufacturers to acquire unique hardware, and install a variety of alarms.¹⁰¹ His recommendation that museum staff maintain good relationships with local police to ensure assistance in case of a security breach—“Make friends, invite these people to the museum, let them become familiar with its personnel, with its collections, and with its problems”¹⁰²—anticipated Bialowski’s advice several

⁹⁹ Keck, *A Primer on Museum Security*, 4.

¹⁰⁰ Keck, 5. In general, Chapman’s presentation is laced with as much paranoia as one might expect from an FBI agent; he takes pains to detail multiple accounts of thievery and destruction by museum personnel as well as by visitors, and paints the museum as a felicitous environment for visitors to fall asleep, have a heart attack, “go berserk,” and expire altogether.

¹⁰¹ Keck, 6–12. Chapman’s presentation accords with Howard’s view of security.

¹⁰² Keck, 3.

decades later that registrars offer them free membership in exchange for assistance in completing relevant sections on security in the General Facility Report.

In their joint session, Huntington T. Block and John B. Lawton recommended governing both their own and other institutions' buildings through paperwork, perhaps inspiring Stolow's later efforts to gather information about object condition for Expo '67 in Montreal. (Fig. 4.9) They asserted, as he would in Montreal, that "a loan agreement should spell out the condition of the work at the time it left the owner's custody, its original value, [and] the responsibility of the borrower for prudent care of the work while in his custody," given the difficulty of establishing responsibility in the absence of documentation.¹⁰³ Emphasizing the unique characteristics of each museum, and that an underwriter, "usually in a city far from the museum," could only assess a favorable premium by "visualiz[ing] what he is insuring," they advised following up on Chapman's advice on building management by sending images of the museum's internal and external features to insurers and familiarize them with the museum staff: "If the museum has a fine packing room, see to it that the insurance representative gets down there and shakes the hand of the man who is the carpenter[.]"¹⁰⁴ In outlining these suggested practices, as well as recommending that museums establish rules for lending, such as "insisting that loans be housed in a fireproof building, that there be guard service, careful handling," they not only sketched out the core ambition of the ICOM Guidelines for Loans (established in 1974, and discussed in Chapter 2), but also introduced the nucleus of the General Facility Report to the seminar attendees gathered at Cooperstown.

¹⁰³ Keck, 19.

¹⁰⁴ Keck, 15–16. The processes of documentation they (and Chapman) describe resonate peculiarly with the diagrams compiled a century prior by Aetna field agents, as depicted in Hunter, "Graphic Making, Actuarial Knowing," 70–72.

Block recommended that museums have their own conservation laboratory, and that the insurance company was made aware of its existence, as “all these data create the kind of picture that can make the insurance rate go down.”¹⁰⁵ In other words, the conservation laboratory served as a form of self-insurance. Block was perhaps preaching to the choir, for conservators were particularly attuned to the role insurance could play in mediating their relationship with the itinerant objects entrusted to them. In 1961, three years prior, Block had shared his views on purchasing insurance in the conservation laboratory, alongside former Corcoran Gallery of Art curator Eleanor Quandt, in the very first issue of the American Institute of Conservation’s journal.¹⁰⁶ To be clear, they were discussing the purchase of insurance (specifically, a form of inland marine insurance called a bailee policy) *in addition to* any policies purchased by the owner of works sent for treatment, to protect conservators from liability in case of damage that occurred to works—by fire or theft, for instance, but not by malpractice—while in their care.¹⁰⁷ In her companion article, Quandt clarified how her bailee policy premiums fluctuated to accommodate the change in total value of works in her care as objects moved in and out of the conservation facilities, underscoring how accustomed she and other (insured) conservators were to the uncertainties and risks associated with moving objects.

¹⁰⁵ Keck, *A Primer on Museum Security*, 16.

¹⁰⁶ Huntington T. Block, “Insurance in the Conservation Laboratory, I,” *Bulletin of the American Group. International Institute for Conservation of Historic and Artistic Works* 1, no. 2 (April 1961): 5–7. See also Eleanor S. Quandt, “Insurance in the Conservation Laboratory, II,” *Bulletin of the American Group. International Institute for Conservation of Historic and Artistic Works* 1, no. 2 (April 1961): 7–9. At that time, the AIC was the American Group of the International Institute for Conservation. See Introduction for the history of the IIC. Boothroyd Brooks, *A Short History of ICC*. The *Bulletin* was renamed in 1972 to reflect this change, and in 1977 was renamed again as the *Journal of the American Institute of Conservation*.

¹⁰⁷ As Block explains, conservators are like any bailee entrusted with the care of other people’s property, i.e., in the case of a claim, they are liable for negligence. Fortunately (at least in Block’s view) there’s a policy for that. Block, “Insurance in the Conservation Laboratory, I,” 5. An alternative to a bailee policy would be to request a waiver of subrogation (i.e., a waiver of the right to sue the conservator for negligence) from the object owner’s insurance company. See the discussion of this in “AIC News,” *AIC Newsletter*, Vol. 4, no. 3, May 1979, 1. See, in a similar vein, Kyran McGrath, “Are Your Trustees Protected?” *Museum News* vol. 52, no. 6 (March 1974), 36.

Years later, the American Institute for Conservation's Insurance Committee¹⁰⁸ was to take up both points with AIC members, i.e., that they should purchase their own liability protection (and preferably the exclusive-to-AIC Conservators Package Policy¹⁰⁹) and to ensure they did not take in property of more value than covered by their policies until they had "completed and returned an amount of similar value."¹¹⁰) Conservators were thus steadily acculturated into a professional practice of conservation mediated by insurance requirements that delineated both their workflow and the movement of objects in and out of their facilities. They were encouraged to engage in mental processes of actuarial commensuration (i.e., seeing objects not as unique works of art but as assets that were interchangeable for insurance purposes) and of liability avoidance, which also infused the stringent language of exhibition contracts that limited the extent of repairs to be undertaken by a borrowing institution.

Registrars were similarly tasked with the care of peripatetic property, as the General Facility Report testifies. In his presentation at the Cooperstown seminar, Block recommended that attendees consult what was then the first edition of *Museum Registration Methods* by registrars Dorothy Dudley and Irma Bezold. Block and Lawton would go on to review a new section on insurance for the second edition in 1968 and compile a glossary of terms (including a definition of inherent vice exactly as it was described in marine insurance).¹¹¹ They also advised museums to invest in the forms of self-insurance provided by "a sound, fire-proof building, fire watches, gallery guards, night

¹⁰⁸ The Insurance Committee was one of the first subgroups formed when the AIC came into its own in 1972, as an organization separate from the UK-based IIC.

¹⁰⁹ *AIC Newsletter*, Vol. 4, no. 3, May 1979, 1.

¹¹⁰ *AIC Newsletter*, Vol. 8, no. 4, August 1983, 18. By this point Huntington T. Block was more than just its eponymous founder; members were instructed to call the company and "ask for Beverly Strasser or Lois Craig."

¹¹¹ Namely, as "the quality by which an object damages itself or deteriorates without external help." Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1968, 142; Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1979, 152. The bibliography would cite Keck's book, along with the two UNESCO manuals on traveling exhibitions, and Sugden's book, as well as James Carmel's book on exhibition techniques.

watchmen, alarm systems, carefully trained and supervised handlers, and conservation facilities.”¹¹²

Block, like Stolow, encouraged conservators to see registrars as administrative allies in their quest to protect objects. His presence at the museum security seminar also presaged the inclusion of Senior Vice President at what is now AON Huntington T. Block Insurance, as a key contributor to the revised 2019 General Facility Report,¹¹³ and the fact that, today, object loans are often dependent on an institution holding a policy with Huntington T. Block, the company.¹¹⁴ The essays that Huntington T. Block, the individual, penned—some in collaboration with Lawton—drew conservators and registrars together in actuarial absorption.¹¹⁵

Institutional Interventions in Risk Management

It is a testament to Caroline Keck’s farsightedness that the AAM, ICOM and UNESCO *all* convened working groups in the late 1960s and early 1970s to review how to better manage the risks of loaning works for shared exhibitions such that insurance premiums—rising steeply in response to increasing circulation—might be lowered. The rates by this point were so high that ICOM President

¹¹² Dudley and Bezold Wilkinson, *Museum Registration Methods*, 1968, 132.

¹¹³ Appropriately, Minett advised that more detailed questions be asked in future versions of the GFR about building construction, renovations, and additions. Collections Stewardship of the American Alliance of Museums, *The Updated General Facility Report*.

¹¹⁴ Interview with Sebastian Encina, Collections Manager, Kelsey Museum of Archaeology, University of Michigan, 15 October 2021. As current Chair of the Collections Stewardship of the AAM, Encina led the committee on updating the General Facility Report in 2018 (and has experienced having loans denied until the Kelsey Museum changed insurers).

¹¹⁵ Huntington T. Block and John B. Lawton, “Museum Insurance,” *Curator: The Museum Journal* IX, no. 4 (December 1966): 289–97; Huntington T. Block, “Insurance: An Integral Part of Your Security Dollar,” *Museum News* 50, no. 5 (January 1972): 26–29; Huntington T. Block and Carl G. Allen, “Should Museums Form a Buyer’s Pool for Insurance?,” *Museum News* 52, no. 6 (March 1974): 32–35; Huntington T. Block, “Insuring Artwork and the Artist,” in *The Business of Art*, ed. Lee Evan Caplin (Paramus, NJ: Prentice Hall Press, 1982); Huntington T. Block, “Appraising and Insuring Your Collections,” in *Caring for Your Collections*, ed. Arthur W. Schultz (New York: Harry N. Abrams, 1992). See also, by former MoMA registrar, David Vance, “A Proposed Standard Insurance Policy,” *Museum News* 48, no. 1 (September 1969): 21–26. The draft policy was circulated following the recommendation of the Association of Art Museum Directors’ Committee on Insurance and Subrogation in May 1967 that the question of a standard museum insurance be pursued in the Registrars’ Section of the AAM (the same group that would draft the GFR in 1988. For contemporaneous work on the subject in South Asia, see, by Director of the Museum Research Bureau in India, Anil Roy Choudhury, *Art Museum Documentation and Practical Handling* (Hyderabad: Choudhury & Choudhury, 1963).

Jan Jelinek, in an editorial for *ICOM News* in 1971 titled “The Age of Robbery,” went so far as to include insurance in his estimation of what constituted theft: “The organisers of a prestige exhibition launch a spectacular advertising campaign, extending even to the packets containing a popular brand of cigarette, and they do their level best for the purpose to inflate the insurance value of the works on loan.”¹¹⁶ After all, a higher valuation in the present could favorably augment the assetization of a museum object. Separately but simultaneously, the three groups reviewed the same questions of how best to regulate the flow of exhibitions. Although comprising different groups of stakeholders, one non-museal figure was central to all three working groups: a lawyer and professor of insurance in the Department of Business Administration at the Virginia Polytechnic Institute and State University named Irving Pfeffer.

Pfeffer was contracted in 1972 as a consultant by the Fine Arts Insurance Committee of the Association of Art Museum Directors (AAMD) to gather information on the insurance experience of art museums across the United States. The survey uncovered the “startling” fact that the aggregate loss between 1971 and 1973 was less than five per cent, which was miniscule when compared with the standard values within the larger field of inland marine insurance, which fell between 42 and 65 per cent.¹¹⁷ (However, as we will see in the final section, this was not the full story.) Through the AAMD, Pfeffer and the Metropolitan Museum of Art’s inaugural Chief Financial Officer Daniel Herrick produced educational materials on insurance in the years thereafter, most notably in the form of a risk management manual.¹¹⁸

¹¹⁶ ICOM News for 1971 v24n4, 41-42

¹¹⁷ Nauert and Black, *Fine Arts Insurance: A Handbook for Art Museums*, 73.

¹¹⁸ Irving Pfeffer and Daniel K. Herrick, *Risk Management Manual*, 2 vols. (New York: Association of Art Museum Directors, 1974). See also Association of Art Museum Directors Museum Insurance Conference, 19 October 1974 (audio), Guggenheim Museum Archives. Part 1: https://archives.guggenheim.org/repositories/3/archival_objects/69366. Part 2: https://archives.guggenheim.org/repositories/3/digital_objects/4262.

During this same time, possibly because of his work with the AAMD, Pfeffer was invited by ICOM to chair a newly formed working party on insurance. ICOM had begun its inquiry into insurance in mid-1969 when its Executive Council met in Paris to discuss its international services, and the “increasingly exorbitant cost of insurance covering permanent collections and travelling exhibitions” loomed large.¹¹⁹ Addressing the problem was also a strategic move in their view. ICOM representatives recounting their efforts to increase permanent resources for the organization later that year, at the American Association of Museums conference in San Francisco, raised the same concern about “exorbitant” costs. “[I]f ICOM could help to find a solution to that problem,” they declared, “it...would be an additional justification of its mission and could undoubtedly bring it considerable extra resources.”¹²⁰ A four-person taskforce gathered preliminary information on insurance for past exhibitions at a meeting of the International Committee of Art Exhibitions (the same Exhibitions Committee that launched the ill-fated exhibition sponsorship scheme) in December 1970 at ICOM headquarters in Paris. They quickly realized, however, that their work would be expedited by the inclusion of a lawyer versed in the particulars of insurance.¹²¹ Thus Pfeffer entered the picture as Chairman of a much-expanded Working Party on Insurance (on which Stolow and Herrick also served as members).¹²² It convened thrice at the ICOM Secretariat in Paris in 1972 and 1973 (its last

¹¹⁹ ICOM News vol. 22 n3, 1969, 32.

¹²⁰ ICOM News vol. 22 n4, 1969, 46.

¹²¹ ICOM News v24n1, 1971, 40..

¹²² The committee comprised Irving Pfeffer (Chairman); Paolo Cadorin, chief conservator at the Kunstmuseum, Bâle, Switzerland; Peter Cannon-Brookes, City Museum and Art Gallery, Birmingham, UK; Daniel K. Herrick, Vice President for Finance (i.e., Chief Financial Officer) at The Metropolitan Museum of Art, New York, USA; Hubert Landais, Musée du Louvre, Paris, France [also Inspector General of French Museums, and Chairman of the French National Committee of ICOM]; Xavier de Salas, Director, Museo del Prado, Madrid, Spain; Nathan Stolow, National Gallery of Canada, Ottawa, Canada; Ary Robert (Bob) de Vries, Director of the Mauritshuis, The Hague, Netherlands. *ICOM News* XXVII, no. 3-4 (1974), 77.

meeting held jointly with the Exhibitions Committee),¹²³ and it launched several projects for the Exhibitions Committee and newly formed International Committee on Museum Security¹²⁴ to develop.¹²⁵ Most notably, ICOM's *Guidelines for Loans*, published in *ICOM News* in 1974 alongside several articles on insurance was produced through the efforts of this working party.¹²⁶

Finally, UNESCO *also* convened three meetings of a separate Committee of Experts between 1972 and 1974 on a much broader theme—Insurance and Other Forms of Coverage of Risks to Works of Art—following the 1970 UNESCO Convention on the illicit import, export, and transfer of ownership of cultural property.¹²⁷ Pfeffer and Herrick served on this committee also, while the Chair of the UNESCO committee Hubert Landais (Inspecteur Général de Musées de France) had worked with them on the ICOM committee. The first UNESCO meeting reviewed general issues of risk, and the second focused on issues of theft. The third meeting, which convened in early July 1974 at UNESCO headquarters in Paris, was concerned specifically—like the AAMD and ICOM

¹²³ The first meeting was late January 1972. See *ICOM News* XXIV, no. 4 (1971), 76; *ICOM News* XXV, no. 1 (1972), 30. The second meeting was held 5 July 1972, *ICOM News* XXV, no. 2 (1972), 89. The last meeting was held 21 July 1973. *ICOM News* XXVI, no. 4 (1973), 157; *ICOM News* XXVII, no. 3-4 (1974), 78.

¹²⁴ Formed in 1977, the still-extant ICOM International Committee on Museum Security had 33 initial members from 14 countries, and produced the following book: Robert G Tillotson and Marthe de Moltke, *Museum Security/La Sécurité Dans Les Musées* (Paris: International Council of Museums, 1977).

¹²⁵ These future projects included a study on reducing the cost of insurance premiums and promoting government guarantees (i.e., indemnity schemes) in place of commercial insurance for exhibitions, plans for nominating an expert committee to arbitrate disputes between museums in case of loss or damage to objects on loan, and efforts to define risk analysis in the museum and related concepts such as security and surveillance. *ICOM News*, vol. 27, no. 3-4, 1974, 78.

¹²⁶ The guidelines, still in effect, recommend all the components now familiar to exhibition insurance: that the borrower provide a form of insurance or indemnity acceptable to the lender (unless the lender chose to arrange their own insurance cover), “nail to nail” in coverage, providing full coverage of the declared value in the event of total loss and providing for the cost of replacement, repair, and depreciation, in the case of partial loss or damage, and a waiver of subrogation. *ICOM News* v27n3-4, 1974. <https://icom.museum/wp-content/uploads/2018/07/Loans1974eng.pdf>. Through the efforts of this working party, the Exhibitions Commission's (now the International Committee for Exhibition Exchange) purpose was reevaluated in light of the disastrous sponsorship scheme and reanimated with an insurance focus. See *ICOM News* vol. 24, no. 4 (1971), 66, 76; *ICOM News* vol. 27, no. 1-2 (1974), 39.

¹²⁷ The experts consisted of Hubert Landais as Chairman, H. Cancino, Mexican Permanent Delegate to UNESCO and G. Mokhtar, Egyptian Antiquities Organization, as Vice-Chairmen, and committee members Hernán Crespo Toral, Director of the Museo Arqueológico del Banco Central del Ecuador in Quito; Abdoulaye (?) S. Diop of the Ministry of Culture, Senegal; George Fox of the National Gallery, London; Daniel Herrick; Irving Pfeffer; C.F. Yamada, National Museum of Western Art, Tokyo. *ICOM News* vol. 27, no. 3-4, 1974, 86.

meetings before it—with how to minimize insurance costs.¹²⁸ As with UNESCO’s efforts to waive customs duties for select materials, the meeting was hoped to liberalize global cultural exchange, as insurance costs “constituted one of the most serious handicaps to such exchanges.”¹²⁹ (As we shall see in the last section, this was a theme that would also be taken up on the other side of the Atlantic to make the case for a government indemnity program for loan exhibitions, thanks to the efforts of Pfeffer and Herrick.)

A major concern across all three initiatives was how to bring down insurance premiums for exhibitions through effective risk management. At the UNESCO meetings, all agreed that the risks to objects in transit were greater than those to objects at rest. In addition to fire and water damage, vandalism, and theft, objects in transit also risked being lost, and being damaged during handling or due to unsuitable environmental conditions.¹³⁰ As Landais unhappily conceded:

¹²⁸ This followed Resolution 3.411 passed at UNESCO’s 17th session in 1972, which authorized the Director-General “to study practical arrangements which could be adopted nationally and internationally: (i) to reduce the risks to works of art, particularly the risk of theft, and (ii) to reduce the cost of covering such risks[.]” The first two meetings were held in Brussels, 13-15 September 1972, and 19-22 November 1973. Final Report, UNESCO Committee of Experts on Insurance and Other Forms of Coverage of Risks to Works of Art (8-12 July 1974, Paris), SHC/74/CONF.614/7, Paris, 8 August 1974, 1. See also *ICOM News* vol. 27, no. 3-4, 1974, 86.

¹²⁹ “Final Report (1974),” 1.

¹³⁰ As Landais noted, “Permanent collections belonging to the French State have never been insured, but some local authorities have taken out policies, mainly against theft, fire and damage against water. [...] In the case of temporary exhibitions, however, the risks are different and, generally, more difficult to foresee; packing, transport, the hanging of pictures, and so on involve handling, which should be covered by insurance: climatic variations may be the cause of considerable damage.” Hubert Landais, “Museums and Insurance,” UNESCO Committee of Experts on Insurance and Other Forms of Coverage of Risks to Works of Art (8-12 July 1974, Paris). SHC/74/CONF.614/4, Paris, 5 July 1974, 1-2. Pfeffer agreed that “Transportation damages, deterioration due to climatic changes, loss by vandalism, theft, and illicit traffic in cultural property have become more serious concerns during the past quarter century.” Irving Pfeffer, “Strategies for insurance cost reduction in museums,” UNESCO Committee of Experts on Insurance and Other Forms of Coverage of Risks to Works of Art (8-12 July 1974, Paris). SHC/74/CONF.614/3, Paris, 20 May 1974, 1. (Landais’ and Pfeffer’s papers were also reproduced in *ICOM News*, vol. 27, no. 3-4, 1974, 79-85.) George Fox’s assessment, while in essence a reiteration of these views, employed more hyperbolic language: “As soon as a work of art is moved, even within a museum, it undergoes additional risks. When it moves out of a museum to a loan exhibition, the extra risks are considerable. It may be destroyed, perhaps by an accident in transit. It may be lost on route. It may be stolen either en route or in the slight chaos that sometimes attends the mounting and dismounting of temporary exhibitions. It may be damaged by a mishap in packing or unpacking [or] through unsuitable environmental conditions in transit or while on exhibition. It probably even suffers from an extra threat of vandalism, as the publicity surrounding an important exhibition could attract the mentally unbalanced.” George Fox, “The Coverage of Risks of Works of Art,”

The reason why some premiums seem heavy is that real risks are still too often involved – risks which it is easier to enumerate than to eliminate, arising both from lack of proper preparation on the part of too many exhibition organizers, and from exhibitions hastily mounted in unfavourable conditions and in the absence of any proper, internationally recognized and respected regulations concerning the movement of works of art from the cultural heritage of different countries.¹³¹

Some suggestions for addressing these risks were patently unfeasible, such as the proposed universal central registration system for all works of art (essentially a more ambitiously scaled version of the color reproduction catalogue project.¹³² George Fox, Chief Executive Officer of the National Gallery in London, suggested that “a set of ideal loan conditions defining the various risks and the ways to deal with them...be drawn up and internationally accepted,” which would include condition reporting systems, agreed-upon types of packing, transport specifications (including for security), customs examination (to take place at the museum), insurance or indemnity, and physical and environmental security conditions, while also admitting that “if every exhibition had to conform to a set of ideal loan conditions there would in fact be few if any exhibitions.”¹³³ Landais suggested that “preferential rates for museums which conform to the requisite safety standards” be established.¹³⁴

In the ICOM meetings, of course, they were devising just such a set of conditions in the form of the ICOM *Guidelines for Loans*, with the understanding that—given the experience of the ill-fated sponsorship scheme—enforcement by overt institutional means was impossible. Instead, regulation was exercised more discreetly. As Pfeffer noted, “while presently no generally agreed-upon standards exist for the content of special exhibitions...informally, museum directors agree that loans

UNESCO Committee of Experts on Insurance and Other Forms of Coverage of Risks to Works of Art (8-12 July 1974, Paris). SHC/74/CONF.614/2, Paris, 7 June 1974, 8.

¹³¹ Landais, “Museums and Insurance,” 7.

¹³² “Final Report,” 3. This approach was also recommended in other fora; see also Pfeffer and Uhr, “The Truth about Art Museum Insurance,” 28.

¹³³ Fox, “The Coverage of Risks of Works of Art,” 9.

¹³⁴ Landais, “Museums and Insurance,” 4.

of valuable objects should be made only for exhibitions that have cultural or scientific merit.”¹³⁵ As we have seen from Chapter 2, regulating exhibitions by judgements of the perceived quality of their content was extremely challenging; far easier was to review them on the perceived quality of existing institutional infrastructures for circulation.

Across all meetings, Pfeffer maintained—and others agreed—that the more promising means of mitigating risk was the increase of security measures in museums, not only through training but also through the same types of architectural features discussed at the Cooperstown seminar.¹³⁶ This was a more viable alternatives to commercial insurance than the assumption of risk (i.e., retaining the consequences of loss without transferring it to an insurer) either by taking no real measures at all, or through a self-insurance plan such as the establishment of a financial reserve fund, bartering for insurance with other institutions, which was only feasible between institutions with objects perceived to be commensurate in value, such as the Accord established between the Metropolitan Museum and the Louvre in 1972).¹³⁷ He presented risk reduction as “the most effective technique for risk management,” especially as it would have “a double impact because of the museologist’s prime concern...with preservation of the collection rather than with financial indemnity in the event of

¹³⁵ Pfeffer, “Insuring Museum Exhibitions,” 112. After all, as Pfeffer noted, one of ICOM’s stated goals was “to keep a watching brief on the quality, technical methods and the co-ordination of international exhibitions in which museums take part[.]” International Council of Museums, Statutes § 3, art. 6 (1969).

¹³⁶ Fox noted that “[T]he security measures adopted for temporary exhibitions should be as good as or even (because of extra crowds and other unusual circumstances) better than those normally accepted as being suitable for permanent collections of the particular works involved.” Fox, “The Coverage of Risks of Works of Art,” 5. Landais agreed that “the sole objective should be to provide the maximum security for works of art.” Landais, “Museums and Insurance,” 1.

¹³⁷ Pfeffer, “Strategies for insurance cost reduction in museums,” 6-7. On the Metropolitan-Louvre Accord, see Pfeffer, “Insuring Museum Exhibitions,” 1127–28. “The Impressionist Epoch” exhibition (13 December 1974–16 February 1975) was the first exhibition under this accord. Henry Kamm, “Accord Will Permit Joint Displays and Facilitate Loans,” *New York Times*, 16 December 1972; The Metropolitan Museum of Art Archives, “The Metropolitan Museum of Art Special Exhibitions, 1870-2017,” 2018. https://www.metmuseum.org/-/media/files/art/watson-library/museum_exhibitions_1870-2017.

loss.”¹³⁸ Pfeffer’s assertions echoed those uttered at the Cooperstown seminar, and served as a model for the forms of risk reduction measured so minutely by the General Facility Report.

Pfeffer also wrote several articles introducing art museum professionals to risk management, the “newly-emerging profession devoted to identifying, measuring, controlling, and financing risk...by means of a form of research inquiry which adopts a benefit/cost approach.”¹³⁹ It required first identifying said risks by obtaining data “from a safety engineering inspection of the premises, a review of the financial and registration records, and discussion with staff members in the various areas of museum operations. After the risks have been identified, their probable effects are estimated, controls are considered.” For fine arts museums, managing risk involved making choices including prevention (i.e., facilities and features from fire hydrants to sprinklers to properly hinged doors that reduce the chance and severity of loss), avoidance (e.g., refusing to loan to institutions believed to have inadequately regulated facilities, as facilitated by the General Facility Report), protection (i.e., the work of security guards and police in recovering an item and conservators in restoring a damaged work), transfer (e.g., purchasing an appropriate all risk insurance policy), combination (i.e., pooling risks, as marine merchants originally did), neutralization (or hedging, largely through bookkeeping adjustments, and a less than optimal approach in the fine arts), and evasion (e.g., pleading relief, as in the case of a government indemnity scheme).¹⁴⁰ Pfeffer’s tutelage¹⁴¹ led museums to increasingly use a combination of most methods (and I will discuss the last approach in the final section). He recommended addressing the complex task of risk identification through systematic checklists, then

¹³⁸ Pfeffer, 7.

¹³⁹ Pfeffer, “Insuring Museum Exhibitions,” 1136.

¹⁴⁰ Irving Pfeffer, “Fine Arts: A Problem in Risk Management,” *California Management Review* XV, no. 2 (Winter 1972): 119–20.

¹⁴¹ See his encouragement to use a combination in Pfeffer, “Strategies for insurance cost reduction in museums,” 2.

classifying these risks based on the potential and predictability of loss, estimating the “probable maximum loss (PML)” to establish insurance rates.¹⁴² His philosophy of risk management whose “objective is not to indemnify the owner of a lost or damaged work of art, which is impossible where the work is ‘priceless,’ but rather to provide funds for purchasing alternative items in order to try to maintain the quality of the museum collection,”¹⁴³ muddled the distinction between aesthetic and actuarial valuation.

The UNESCO, ICOM, and AAMD meetings all spurred the production of handbooks on the inter-related concerns of security and insurance writ large to clearly communicate existing policies and encourage “consistent and uniform practices” for the future.¹⁴⁴ One was *Museum Security/La Sécurité dans les Musées* (1977) by Robert G. Tillotson, chair of ICOM’s International Committee on Museum Security formed in response to the meetings on insurance. It covered topics discussed in the meetings and contained a dedicated chapter to architectural planning that could well have been written by Joseph Chapman of the FBI. Tillotson recommends starting as early as the site selection; like Chapman, he touts the advantages of the urban museum’s “municipal protective forces” such as nearby fire stations and police stations over the isolated historic house in the countryside.¹⁴⁵ General design recommendations include circulation plans for public areas that eliminate blind spots (and thus the added need for guards), and nonpublic areas on separate floors. Other sections of the book deal both exterior architectural features (such as specifications for doors

¹⁴² Pfeffer, “Strategies for insurance cost reduction in museums,” 3.

¹⁴³ Pfeffer, “Strategies for insurance cost reduction in museums,” 2.

¹⁴⁴ See the recommendations made to this end in “Final Report,” 1; Pfeffer, “Strategies for insurance cost reduction in museums,” 12.

¹⁴⁵ Chapter 11: Architectural Planning, in Tillotson and Moltke, *Museum Security/La Sécurité Dans Les Musées*, 164–77. It opens with a quote—“The idea is crazy. Fill a space with fragile, priceless objects. And invite the public in.”—from Roger Yee, “Smoke Gets in Your van Eycks,” *Progressive Architecture* (March 1975), 78. <https://usmodernist.org/PA/PA-1975-03.pdf>.

and windows with hinges on the inside to provide better perimeter protection) and interior features (such as protection against fire, and the use and placement of sprinklers).¹⁴⁶ The book also included a bibliography of recent articles on the subject, two of which were penned by Chapman.¹⁴⁷ It is worth comparing the recommendations in this book with those in Robert Sugden's and Elodie Courter Osborn's slim volumes, as the best practices they described for preparing traveling exhibitions were now being applied to general museum practice.

The second of these books to result from the UNESCO, ICOM, and AAMD meetings was *Fine Arts Insurance: A Handbook for Art Museums* (1979), written by two registrars (Patricia Nauert of the Los Angeles County Museum of Art, and Caroline M. Black of the Santa Barbara Museum of Art) following the AAMD meetings.¹⁴⁸ While commercial fine arts insurance was the main subject of the book, it first devoted a chapter to introducing the concept of risk management, following the same lines as Irving Pfeffer's articles (unsurprisingly, as he was consulted on the text, as were Huntington T. Block and John B. Lawton).¹⁴⁹ It also cited Tillotson's book in the bibliography, along with much of the literature discussed here that was produced through the three meetings. That the field of risk management has been thoroughly embedded in the museum profession, and *especially* the field of conservation, is clear from the fact that today, researchers at the Stolow-founded

¹⁴⁶ Tillotson and Moltke, 42, 60, 78.

¹⁴⁷ Joseph Chapman, "Concepts in Achieving Security for Your Collection," *Proceedings of the 18th Annual Conference, Mountain-Plains Museums* (Lincoln: University of Nebraska State Museum, 1971), 26-28; Joseph Chapman, "Stepping Up Security," *Museum News*, Vol. 44 (November 1965), 18-21. Architect Smita Baxi, Grace McCann Morley's trusted colleague at the National Museum of India who served with Tillotson on the Committee for Museum Security, also wrote several articles on museum security that were cited in the bibliography.

¹⁴⁸ Their role was likely influenced by the fact that the chair of the AAMD Fine Arts Insurance Committee at the time was Paul Chadbourne Mills, Director of the Santa Barbara Museum of Art. See "Foreword," Irving Pfeffer, "The Insurance Experience of Fine Arts Museums," 1974.

¹⁴⁹ Others consulted included Susanne Sack, chair of the AIC Committee on Insurance from its inception in 1976, who had trained under the Kecks and at the time of writing the handbook was the Brooklyn Museum's chief conservator, and Marie Malaro, who had begun working for the Smithsonian Institution as legal counsel in 1971 and would write *A Legal Primer on Managing Museum Collections* (1985) and *Museum Governance: Mission, Ethics, Policy* (1994).

Canadian Conservation Institute apply these methods of risk management to their approach to preventive conservation. This includes Stefan Michalski, whom we met in the previous chapter, and whose evaluation of the consequences of prescriptive climate controls explicitly uses the language of risk management:

What is the ideal climate for a historic tool made of iron and wood? Or a watercolor on display that we know fades much more slowly at low RH? If by ideal, one means perfect, there is none. [...] Common sense and experience teach us to approach such dilemmas from the perspective of questioning, rather than seeking ready answers: What can go wrong? Which problem is biggest? How can I reduce it? Risk management formalizes this intuitive approach. The originator of the magic numbers in museum climate control, Rawlins (1942) admitted in his influential article an “inability to suggest a minimum temperature at which a building should be maintained.” [...] He concludes, however, by finding “acceptable conditions...are 60°F, 60%. (Which incidentally, is easy to remember.)” What had begun as an argument based on avoiding what can go wrong—that is, a risk based argument—became a single set of easy-to-remember numbers—namely, an ideal target. By the 1970s, specifications formalized the tiny size of this ideal target at $\pm 3\%$ RH , $\pm 1^\circ\text{C}$, based not on any collections needs analysis but on the switching differentials of the best available HVAC systems. No one really understood the costs that would emerge.¹⁵⁰

Attempts to manage risks for international exhibitions, formalized through the efforts of UNESCO, ICOM, and the AAM, increasingly led to standardized administrative designs on museum buildings; conservation researchers like Michalski are now using the same methods to try to undo its effects.

Coda: Catastrophe, Commensurability, and the Political Economy of Circulation

Fifty years ago, on the 23rd of June 1972, the torrential rain of Hurricane Agnes caused the Chemung River to overflow; the resulting floodwater devastated the Corning Museum of Glass in upstate New York. It “broke hundreds of objects, saturated over half the Library [sic] (and all the rare books), ruined equipment, and covered galleries, cases, offices, furniture, and files with a thick

¹⁵⁰ Michalski, “The Ideal Climate,” 9. See also R. Robert Waller, *Cultural Property Risk Analysis Model: Development and Application to Preventive Conservation at the Canadian Museum of Nature* (Göteborg: Göteborg Acta Universitatis Gothoburgensis), 2003.

layer of slime.”¹⁵¹ (Fig. 4.10) When Irving Pfeffer carried out his survey of the insurance experience of art museums between 1970 and 1972, and discovered that losses amounted to less than five cents per insurance dollar, he did not know that several institutions experiencing major losses in those years (including the Corning Museum) had not responded. “Had those figures been included,” chair of the AAMD Fine Arts Insurance Committee Paul Chadbourne Mills admitted later, “the loss ratio would have been several times the premiums paid.”¹⁵² Yet even with the inclusion of these institutions, Mills asserted that the loss ratio would have been about 37%, or “only a little more than half the formula figure of 65% and still far below the recent actual rate of 58%.” Mills was speaking here more in the vein of a risk manager than as a museologist, however. Risk managers, noted Pfeffer ruefully, focused so resolutely on the probability of economic loss that their analysis “fail[ed] to consider the possibility of irreplaceability.”¹⁵³

If, as I have argued earlier, the act of actuarial appraisal diminishes the aura of the original, I want to argue here that it is paradoxically burnished by catastrophe. Or, as it is called in insurance terms, total loss, wherein the cost of repairing something is deemed more than the cost of replacing it. But of course, it is in this moment that an art object’s irreplaceability becomes abundantly clear, and its insurance assessment exposed as a legal fiction to enable circulation. Put fancifully: evacuated of actuarial value, the artwork’s aesthetic value returns in full. Put practically: works of art deemed total losses are removed from market circulation and become the property of the insurance company,

¹⁵¹ Thomas S. Buechner, “Foreword,” in John H. Martin, *The Corning Flood: Museum Under Water* (Corning, NY: The Corning Museum of Glass, 1976).

¹⁵² Nauert and Black, *Fine Arts Insurance: A Handbook for Art Museums*, 73.

¹⁵³ Pfeffer, “Strategies for insurance cost reduction in museums,” 4. Elsewhere, he observed that the very irreplaceability of works of art imbued them with “powerful psychological significance. The owner of an objet d’art has a unique relationship to his property: authenticity and originality are crucial.” Pfeffer, “Fine Arts: A Problem in Risk Management,” 117.

whereupon they are once again carefully stored in climate-controlled warehouses.¹⁵⁴ (This is certainly not the case for other consumer goods.) While conservators could hope to rectify damage caused by poor handling or seek creative solutions to combat the effects of inherent vice, there was absolutely nothing they could do in the face of catastrophe. In this sense, the work of museum administration, including that of conservation, is to preserve a work's actuarial value as much as its aesthetic value.

The risk of catastrophe raised fears about valuation that veered back toward the aesthetic. As Hubert Landais wondered in the UNESCO meetings, "Is it possible to be perfectly sure whether the damage amounts to 15% or 50% of the insured value? What criteria should be followed, how can assessment be made, and who will make such an assessment?"¹⁵⁵ Secretary General of ICOM Luis Monreal similarly asked, in an issue of *ICOM News* from that same year, "It is easy to estimate the cost of restoration but how does one calculate the depreciation of an object in terms of a cultural specimen?"¹⁵⁶ Total loss was highly improbable, but aesthetic incommensurability in the face of catastrophe was reflected in the disproportionately high premiums in commercial art insurance.¹⁵⁷ The aesthetic value of art troubled its actuarial appraisals, as a single catastrophic event could cost "more than a decade of collected premiums," which made it difficult for companies to remain within

¹⁵⁴ See Feldman and Weil, *Art Works: Law, Policy, Practice*, 702. The work of the Salvage Art Institute, created by artist Elka Krajewska, responds to this reality, bringing totaled art claimed and warehoused by insurance company AXA Art back into public view to spark conversation about value. AXA also provides her with documentation that traces the work's journey from damage to declaration of loss to transfer of ownership. www.salvageartinstitute.org. See also how total loss is defined for works by artists for whom the instructional document is the art, not the physical work, by fine arts insurance specialist Laura Murphy Doyle, "The Issues Involved with Damaged Art by Living Artists," *Chubb Personal Insurance: Insights on Art*. https://appraiserart.com/wp-content/uploads/2015/08/Damaged_Art_Claims.pdf.

¹⁵⁵ Landais, "Museums and Insurance," 3. See also the UNESCO committee of experts' discussion of "the difficulties of obtaining agreed valuations, particularly with respect to depreciation after damage." "Final Report (1974)," 2.

¹⁵⁶ Luis Monreal, "Notes on Insurance," *ICOM News* vol. 27, no. 3-4, 1974, 76.

¹⁵⁷ In the wake of 9/11, and in the face of increasingly severe climate-related disasters, scholars are turning to consider risk management as determined not only by calculi of probability, but by imagined possibilities. See Louise Amoore, *The Politics of Possibility: Risk and Security beyond Probability* (Durham: Duke University Press, 2013); Paula Jarzabkowski, Rebecca Bednarek, and Paul Spee, *Making a Market for Acts of God: The Practice of Risk Trading in the Global Reinsurance Industry* (Oxford University Press, 2015).

planned retention limits even when they pooled their risks through reinsurance.¹⁵⁸ By the late 1960s, these premiums were prohibitive. In the UNESCO meetings, Pfeffer pointed out that the post-WWII “cultural explosion” had increased museum attendance and correspondingly inflated the value of art cultural artifacts,¹⁵⁹ and Landais lamented that resulting insurance premiums were forcing museums to abandon plans for several exhibitions.¹⁶⁰ In Pfeffer’s estimation, insurance and security measures together accounted for the bulk of special exhibition budgets in large museums.¹⁶¹

Yet the simplest solution of making do with one’s own collections appeared untenable even (or, truth be told, *especially*) for the most encyclopedic museums. In 1974 and 1975, two détente exhibitions—one of Scythian cultural objects from the museums of the Soviet Union,¹⁶² and one of archaeological finds of the People’s Republic of China¹⁶³—went on view in the United States that were unprecedented not only for the objects on display but also for the insurance arrangements that made the exchange possible. The Scythian exhibition was incubated over several years, beginning in 1968 when director of the Metropolitan Museum Thomas Hoving visited the “Gold Room” in the Hermitage Museum in St. Petersburg (then Leningrad) and was stunned by its contents.¹⁶⁴ The two

¹⁵⁸ Pfeffer, “Strategies for insurance cost reduction in museums,” 9.

¹⁵⁹ Pfeffer, 1.

¹⁶⁰ Landais, “Museums and Insurance,” 2.

¹⁶¹ Pfeffer, “Insuring Museum Exhibitions,” 1128; Pfeffer, “The Insurance Experience of Fine Arts Museums,” 1.

¹⁶² It went on view at the Metropolitan Museum of Art (19 April–13 July 1975) and at the Los Angeles County Museum of Art. It also marked the beginning of a longer exchange agreement of five exhibitions between the Metropolitan and Soviet museums in 1975, and a further agreement in 1985. David K. Shipler, “Moscow and Met Museum Agree on 5 Art Exchanges,” *New York Times*, 30 August 1975; Grace Glueck, “Hermitage Treasures Come to Met As U.S.-Soviet Exchange Begins,” *New York Times*, 22 March 1988.

¹⁶³ It went on view at the Petit Palais, Paris (8 May–2 September 1973), Royal Academy of Arts, London (29 September 1973–23 January 1974), Österreichisches Museum für Angewandte Kunst, Vienna (23 February–20 April 1974), Östasiatiska Museet, Stockholm (12 May–6 July 1974), Royal Ontario Museum, Toronto (8 August–16 November 1974), National Gallery in Washington, D.C. (13 December 1974–30 March 1975), Nelson Gallery-Atkins Museum, Kansas City, Missouri (20 April–8 June 1975), Asian Art Museum of San Francisco (28 June–28 August 1975). For contemporaneous commentary on the exhibition as a political strategy by the Chinese, see United States Information Agency Research Service, “The Use of Exhibits by the People’s Republic of China,” 21 July 1975; Robert J. Fornaro, “Ideology and Archaeology in China,” *Economic and Political Weekly*, Vol. 11, no. 20 (15 May 1976), 743-745.

¹⁶⁴ Thomas Hoving, “Director’s Note,” *The Metropolitan Museum of Art Bulletin* New Series, Vol. 32, No. 5, (1973-74), 1-2; Thomas Hoving, *Making the Mummies Dance: Inside the Metropolitan Museum of Art* (New York London: Simon &

institutions began negotiations for an exchange exhibition; in return for the Scythian treasures, the Met promised to send a hundred of its best paintings to the Hermitage. At the joint communique issued at the Moscow Summit of 1974, a meeting between President of the United States Richard Nixon and Secretary General of the Communist Party of the Soviet Union Leonid Brezhnev, the proposed cultural exchange between the Metropolitan Museum and the USSR Ministry of Culture was given special mention,¹⁶⁵ whereupon the Soviet Union agreed to indemnify—or, in other words, underwrite the risk for—the objects sent to the US to facilitate ease of exchange. Reciprocally, Metropolitan leadership worked to secure government backing for the exhibition, which took the form of a piece of Congress-enacted legislation, Public Law 93-476, in October 1974; under it, the works from the Met were to be indemnified for loss or damage (if amounting to more than \$25,000) while on tour in the USSR.¹⁶⁶

Schuster, 1993), 197, 387–89. Hoving’s account of the negotiations is significant for the manner in which ostensible concerns about conservation were brazenly politicized to wrangle desired objects, and how loans denied were politically motivated to present the best picture of the USSR. See also Grace Glueck, “Scythian Gold at Met Brightens Détente,” *New York Times*, 17 April 1975; John Russell, “Met Shows Scythian Art With Skill,” *New York Times*, 18 April 1975. Glueck quotes Hoving as saying that under the indemnity program, “any damage or loss to our own pictures over \$25,000 is paid by the United States Government, and the Russians will look after their own.” It should be noted that this arrangement is in fact the opposite of the British indemnity scheme, which offers to indemnify loans from international lenders while on view in British museums.

¹⁶⁵ “Joint Communique, Moscow, July 3, 1974,” *Washington Post*. <https://www.washingtonpost.com/wp-srv/inatl/longterm/summit/archive/com1974-1.htm>.

¹⁶⁶ *Arts and Artifacts Indemnity Act, 1975: Joint Hearing before the Special Subcommittee on Arts and Humanities of the Committee on Labor and Public Welfare, United States Senate, and the Select Subcommittee on Education of the Committee on Education and Labor, House of Representatives. Ninety-Fourth Congress, First Session on S. 1800: To Amend and Extend the National Foundation on the Arts and Humanities Act of 1965, to Provide for the Improvement of Museum Services, and to Provide Indemnities for Exhibitions of Artistic and Humanistic Endeavors, and for Other Purposes* (Washington, D.C.: United States Government Printing Office, 1975), 36, 38–39. See Public Law 93-476: Joint Resolution to provide for the indemnification of the Metropolitan Museum of New York for loss or damage suffered by objects in exhibition in the Union of Soviet Socialist Republics. Approved 26 October 1974. <https://www.congress.gov/93/statute/STATUTE-88/STATUTE-88-Pg1444.pdf>. Both pieces of legislation were initiated by Congressmen John Brademas (D-IN) and Wayne Hays (D-OH), and Senators Claiborne Pell (D-RI) and Jacob Javits (R-NY). See also James Moske, “Today in Met History: December 20,” 20 December 2010, *Met Museum Blog*, <https://www.metmuseum.org/blogs/now-at-the-met/features/2010/today-in-met-history-december-20>. This essay notes that the Met’s initiative to indemnify a single exhibition was undertaken the year after the draft legislative proposal for a broader indemnity program was submitted. As evidenced in transcriptions of the hearings, the success of the two exhibitions was repeatedly cited to argue for the broader program.

Through the Met's judicious use of political leverage, the exhibition, which included pieces from the Lavra State Museum in Kiev in addition to those that enthralled Hoving at the Hermitage, was shown at the Los Angeles County Museum of Art after the show closed at the Met; meanwhile, the Met paintings were shown at the Pushkin Museum in Moscow in addition to the Hermitage.¹⁶⁷ President of the Metropolitan Museum's board Douglas Dillon declared that, without PL 93-476, "this exchange between the Metropolitan and the Soviet Ministry of Culture could not have taken place," as the estimated insurance costs for the paintings, of "at least \$400,000," would have been "so prohibitive as to prevent such an historic exchange."¹⁶⁸ The exhibit of Chinese archaeological objects, brokered by the National Gallery, was similarly developed following a 1972 trip that President Nixon took to China.¹⁶⁹ Public Law 93-287, enacted 21 May 1974 in connection with the exhibition, authorized a slightly different form of indemnification: in this case, the US Government agreed to bear the risks of damage to, or loss of, the *loaned* objects while they toured the National Gallery in Washington, D.C., the William Rockhill Nelson Gallery of Art in Kansas City, and the Asian Art Museum in San Francisco.¹⁷⁰

This legislature in the United States was made possible in large part through the work of the ICOM and UNESCO working groups. In 1972, *ICOM News* published an explanatory essay on the British Government's indemnities scheme (extended only to its national museums and galleries and to the British Council¹⁷¹) as a possible model to be followed by other countries, from notes prepared

¹⁶⁷ *Arts and Artifacts Indemnity Act, 1975: Joint Hearing*, 38–39.

"100 Paintings from the Metropolitan Museum" was shown at the Hermitage Museum, 22 May– 27 July 1975, and at the Pushkin Museum 28 August–2 November 1975. See <https://www.metmuseum.org/art/collection/search/436038>.

¹⁶⁸ *Arts and Artifacts Indemnity Act, 1975: Joint Hearing*, 39. Congressman Brademas agreed in his statement.

¹⁶⁹ Judith Weinraub, "Covering the Exhibit," *Washington Post*, 12 November 1995.

¹⁷⁰ See Public Law 93-287. <https://www.congress.gov/93/statute/STATUTE-88/STATUTE-88-Pg143-2.pdf>.

¹⁷¹ At the time of writing, plans were being made to extend the coverage to the Arts Council, and this extension was in place by the time of the UNESCO meetings. See this update in Fox, "The Coverage of Risks of Works of Art," 1.

for ICOM's working party on insurance.¹⁷² As the essay clarified, the scheme "arose naturally out of the long established [sic] rule that, save in exceptional cases, the British Government does not insure. Instead[,] it carries its own risks."¹⁷³ This did not mean it was its own insurance company; if art in a national museum were stolen or destroyed, the Government did not promise to refund the museum or replace works ("even if that were possible"). These national institutions were authorized to offer an assurance of government indemnity in place of commercial insurance *only* when they borrowed works for exhibition—and possibly for study, subject to approval—from international, not local, institutions. Based on this research, the ICOM working party adopted a resolution and the Executive Council recommended in June 1973 that UNESCO urge other governments to offer a similar program of indemnity for international exhibitions in the future.¹⁷⁴ The UNESCO meetings duly followed up on the matter, with George Fox of the National Gallery presenting on the British scheme, and ultimately supported ICOM's recommendation.¹⁷⁵

It is easy to see why this political solution to an economic concern appealed to ICOM and UNESCO. The terms and conditions of indemnification, based on international goodwill, were far simpler than commercial policies and enabled international exhibitions that would otherwise be untenable for reasons of insurance. Lenders could of course choose to reject an offer of indemnity, while cognizant of the implications of this choice for diplomatic relations (the *ICOM News* article cheerfully observed that such refusals were rare).¹⁷⁶ At the time, indemnities were not issued for loans

¹⁷² "The British Government's Indemnities Scheme," *ICOM News*, Vol. 25 no. 2 (1972), 102-103. The text does not list an author, but some similarities between this and the paper presented by George Fox at the UNESCO meetings in 1974 suggest that he originally penned a version of the text for ICOM's working party. See, for comparison, Fox, "The Coverage of Risks of Works of Art."

¹⁷³ "The British Government's Indemnities Scheme," 102.

¹⁷⁴ "Decisions, 32nd Meeting of the Executive Council of the International Council of Museums," 73/EX.14 (July 1973), reproduced in *ICOM News*, vol. 26, no. 2 (1973), 83-84.

¹⁷⁵ See Pfeffer, "Strategies for insurance cost reduction in museums," 18, and "Final Report," 4.

¹⁷⁶ "The British Government's Indemnities Scheme," 103.

between national institutions, as, in the words of Fox, “it is immaterial to the Government whether the object is in one museum, or the other.”¹⁷⁷ The simple contract for an indemnification scheme required that lenders and borrowers agreed on the value of the objects in advance. If lenders agreed to a lower valuation, this was essentially an act of trust in the borrower’s government. Moreover, indemnification required that the risk be borne by taxpayers in the borrowing country.¹⁷⁸ As such, the implications of an indemnity agreement were political as much as they were economic: i.e., that indemnified cultural materials were not only national but also *international* patrimony, entirely in line with the aims of ICOM and UNESCO.¹⁷⁹

Hearings for a much-expanded version of the 1974 pilot indemnity schemes echoed this view that such legislation was vital for international understanding through exhibition exchange. Douglas Dillon, President of the Metropolitan Museum, declared that it would “serve the national interest, not only in providing other people with a better understanding of our American values, but also in the way that they contribute to the American citizens’ understanding and appreciation of the artistic heritage of other countries.”¹⁸⁰ Representative William Lehman (D-FL) pleaded earnestly for “another conduit toward peace in the world” that could act as “a small, but perhaps significant, deterrent against any type of irresponsible hostilities.”¹⁸¹ Brezhnev himself, in a letter circulated for the hearings, declared the exchange between the Metropolitan and Hermitage museums as a crucial first step forward in “strengthen[ing] peace on earth.”¹⁸² Through the efforts of museum leaders working through the AAMD, ICOM, and UNESCO, the Arts and Artifacts Indemnity Act was

¹⁷⁷ Fox, “The Coverage of Risks of Works of Art,” 4.

¹⁷⁸ Fox, 1.

¹⁷⁹ Monreal declared it “a new method of effecting equitable diffusion of such property.” Luis Monreal, “Notes on Insurance,” 77.

¹⁸⁰ *Arts and Artifacts Indemnity Act, 1975: Joint Hearing*, 38.

¹⁸¹ *Arts and Artifacts Indemnity Act, 1975: Joint Hearing*, 101.

¹⁸² *Arts and Artifacts Indemnity Act, 1975: Joint Hearing*, 40.

passed in 1975. “Treasures of Tutankhamun,” the exhibition which ushered in the age of the so-called blockbuster, was the first exhibition indemnified under the new law. This legislation served as a blueprint for schemes in other countries, too, for although the informal British indemnity scheme was widely cited as a precedent for the US legislation, its *formal* Government Indemnity Scheme (GIS) was initiated under the National Heritage Act only in 1980.¹⁸³

That said, as efforts to formalize indemnity programs were solidified, there were fears that this peacebuilding effort would backfire. ICOM’s Secretary General Luis Monreal voiced concerns that government guarantees were used for exhibitions that were characterized better as political propaganda than as cultural exchange, and that “payment of the indemnity might also be affected by political considerations,”¹⁸⁴ In the UNESCO meetings that same year, Pfeffer shared that “some museum officials are concerned lest government intervention in the financial decisions of the museums will lead to intervention in the artistic decision process as well,”¹⁸⁵ a view shared by R.C.J. Gordon, an underwriter for Lloyd’s who attended the UNESCO meetings.¹⁸⁶ Fox similarly worried that the scheme, encouraging a “proliferation of undesirable loans” made for political reasons, would disregard object conservation.¹⁸⁷ Prefiguring the very similar observations of conservation scientist Garry Thomson, also of the National Gallery, in his 1987 publication *The Museum Environment*, Fox pointed out that

¹⁸³ “The British Government’s Indemnities Scheme,” *ICOM News*, Vol. 25 no. 2 (1972), 102-103. Norman Palmer, “Museums and Cultural Property, in Peter Vergo, ed., *The New Museology* (London: Reaktion Books, 1989), 172–204. Part 7: Insurance and Indemnity, in Anne Fahy, ed., *Collections Management*, Leicester Readers in Museum Studies (London ; New York: Routledge, 1995), 277–96. “41: Indemnity,” in Sixsmith, *Touring Exhibitions*.

¹⁸⁴ Monreal, “Notes on Insurance,” 77..

¹⁸⁵ Pfeffer, “Strategies for insurance cost reduction in museums,” 9.

¹⁸⁶ R.C.J. Gordon, “The Insurance for Works of Art,” UNESCO Committee of Experts on Insurance and Other Forms of Coverage of Risks to Works of Art (8-12 July 1974, Paris). SHC/74/CONF.614/9, Paris, 5 July 1974, 4. Gordon warned that government guarantees did not usually cover, war risks, that some owners might see their settlements as “politically prejudiced,” and that valuations and percentage depreciations might not be easily agreed upon.

¹⁸⁷ Fox, 4.

the optimum environmental conditions for similar museum objects differ in different parts of the world. If an exhibition is assembled from all over the world, there can therefore be no set conditions that will be best for them all. When to this is added the fact that different types of museum objects in any one place may prefer different environments the reasons for compromise are obvious.¹⁸⁸

Procuring government indemnity for an exhibition is by no means an easy undertaking, despite the relative brevity of the 11-page application. Alice Whelihan, indemnity administrator at the National Endowment for the Arts, warns that completing it satisfactorily can turn it into a “1,000-page book.”¹⁸⁹ Not only must applicants demonstrate that a show is culturally significant, they “must also present a detailed list of the works of art, as well as describing their condition, their estimated value and the arrangements for packing, shipping, climate control and security.”¹⁹⁰ While many of the applications, which range between 20 and 30, are accepted during the twice-yearly review (by a panel that includes a museum registrar and conservation specialist in addition to art historians and curators), it can be more costly than commercial insurance to meet NEA indemnity requirements, which encompass the museum security requirements through building management first discussed in the Cooperstown seminar.

It is also a markedly political process. For an exhibition traveling to multiple locations, one institution is expected to apply for all participants,¹⁹¹ so completing a successful application is greatly facilitated by the experienced maneuvering of an institution like the Metropolitan Museum, as with the *Masterpieces of French Tapestry* exhibition in 1947, and *From the Lands of the Scythians* in 1975. International exhibitions travel with greater ease today because of proponents who presented them as

¹⁸⁸ Fox, 9.

¹⁸⁹ Judith Weinraub, “Covering the Exhibit,” *Washington Post*, 12 November 1995.

¹⁹⁰ Judith Weinraub, “Covering the Exhibit.”

¹⁹¹ “Arts and Artifacts Indemnity Program: International Indemnity,” National Endowment for the Arts website: <https://www.arts.gov/impact/arts-and-artifacts-indemnity-program/international-indemnity>.

an urgent, even non-negotiable cultural force to combat the potential catastrophe of total war; under these circumstances, the risk to the wellbeing of art while in transit was a risk worth taking. Today, risk managers must also weigh the threat of catastrophe that is fast turning from risk into certainty: that of environmental disaster. Its effects are felt in the thickening of applications for indemnity and the increasingly inquisitive inquiries of the General Facility Report, and in the retrofitted designs of museums bracing themselves for the inevitable deluge.

EPILOGUE

The Blockbuster and its Networks

“I want to make this note about the business of getting objects ready for lending to other museums and to dealers. In the time since I got back we have put in a considerable portion of our work on this job. A fair share of it is to the good of the collection generally, but some is merely temporary treatment for purposes of shipping or repairs of the results of shipping. In all cases, it interferes with a regular program of maintenance and strikes me as being a pretty big investment in good will when we are sailing so close to the wind.”

— Memorandum from George L. Stout to Arthur Pope, Fogg Art Museum, 13 February 1947.¹

In late 2014, the Solomon R. Guggenheim Foundation announced six finalist concepts for its proposed new “franchisee” on the Helsinki waterfront, a new node in its own global network of museums. The announcement was the culmination of four years of planning for an art and design museum that would “host globally significant traveling exhibitions, generate its own exhibitions, and foreground Nordic heritage, Finnish design, and artistic inquiry.”² The competition was promptly excoriated by the likes of Peggy Deamer and Aaron Betsky, not least for the effort that had gone into the record-breaking 1,715 proposals—worth of voluntary labor.³ Why, critics collectively asked, was the architectural competition still a legitimate means to instigate the building process? The criticism was warranted—while Paris-based firm Moreau Kusunoki Architectes was announced as the overall

¹ Conservation Department History Collection, b. 7, f. Conservation – Correspondence. Harvard Art Museum Archives.

² “Guggenheim Helsinki,” *Guggenheim Museum*, <https://www.guggenheim.org/guggenheim-helsinki>.

³ Peggy Deamer, “The Guggenheim Helsinki Competition: What is the Value Proposition?,” *The Avery Review* 8, May 2015, <https://averyreview.com/issues/8/the-guggenheim-helsinki-competition>; Aaron Betsky, “Guggenheim Finalists: Meh,” *Architect Magazine*, https://www.architectmagazine.com/design/buildings/guggenheim-finalists-meh_o. See also alternative proposals such as *Visions for The Next Helsinki*, <http://www.nexthelsinki.org/>, and a response to Deamer’s article by finalists Cristina Goberna and Urtzi Grau, “Competition Climate,” *The Avery Review* 9, September 2015, <https://averyreview.com/issues/9/competition-climate>.

winner in June 2015, the Helsinki City Council voted to abandon the project in November 2016, perhaps propelled by the force of enduring negative publicity⁴—but it was hardly new.

Of interest for this dissertation is one finalist concept, *47 Rooms*,⁵ or GH5059206475, as it was titled at the time of announcement to preserve anonymity, by Fake Industries Architectural Agonism. Betsky overlooked it entirely in his review, while Deamer singled it out for disparagement as “depressing” to viewers in its emphasis on “the programmatic logic of thirty-one interior rooms without representing the exterior.” Yet this concept is the most thought-provoking of the lot for its deliberate infeasibility. Recognizing that today’s standardized museum interior “burden[s] museums located in cold climates with brutal acclimation costs” through an insistence on adherence to a single climate condition rather than on stabilizing the climate,⁶ the Agonists chose to create conservational chaos. They designed a building they called a “thermal onion,” in which different rooms were—like a Finnish sauna—to be set at different temperatures through the negotiation of its inhabitants.⁷ The official jury statement, following the shortlist selection, claimed that finalists “expand[ed] the idea of what a museum can be,”⁸ and the Agonists certainly went so far as to evacuate the care of art objects entirely from their concept. The design demonstrated in microcosmic form the fact that museum climate standards are political negotiations, not disinterested judgements, that considerably strain

⁴ “Guggenheim Helsinki,” *Guggenheim Museum*, <https://www.guggenheim.org/guggenheim-helsinki>. This decision was likely influenced by the force of its negative publicity. See Merlin Fulcher, “Finnish Architect demands Guggenheim Helsinki rethink,” *Architects’ Journal*, 25 November 2016, <https://www.architectsjournal.co.uk/news/finnish-architect-demands-guggenheim-helsinki-rethink>. See also Tom Ravenscroft, “With Amos Rex, Helsinki shows you don’t need to import a brand to get cultural prestige,” *Dezeen*, 31 August 2018, <https://www.dezeen.com/2018/08/31/museum-helsinki-amos-rex-guggenheim-helsinki-opinion-tom-ravenscroft/>.

⁵ Originally titled *31 Rooms*, it was of course expanded into the more ambitious *47 Rooms* after the announcement.

⁶ Chapter II, “Well-Tempered Identity: Thermal Onion,” *47 Rooms*, 19. Art Institute of Chicago Collections.

⁷ Chapter III, “Politics of the Sauna: Climatic Disagreements,” *47 Rooms*, 33. Art Institute of Chicago Collections.

⁸ Press Release, “Guggenheim Helsinki Design Competition Finalists Unveiled: Six Shortlisted Concept Designs from Both Emerging and Established Practices Offer New Perspectives on Museum Architecture,” *Guggenheim Museum*, 2 December 2014, <https://www.guggenheim.org/press-release/guggenheim-helsinki-design-competition-finalists-unveiled>.

planetary resources in the quest to preserve art. That it was produced for the Guggenheim only accentuates its significance. (Appropriately, the unbuilt design, including the proposal booklet and floorplans, was acquired by the Art Institute of Chicago in 2019 and was on view in its Architecture and Design galleries earlier this year.⁹) (Fig. 5.1)

In this dissertation, I have traced the emergence of an apparatus of object circulation that transformed the business of museums, focusing on the period in the mid-twentieth century in which its induration was most tangible. Elements of this apparatus—particularly the internationalist discourse that propelled it—were undoubtedly incubated in an earlier period, and its details were, equally, further finessed over the decades following the *Treasures of Tutankhamun* exhibition that traveled to museums in Europe, North America and Asia from 1972 to 1981 and is widely agreed to have ushered in the age of the blockbuster show. But as I have argued, it was UNESCO and ICOM, through their dedication to (and interpretation of) cultural peacebuilding, and through their allied regional and professional organizations, who most decisively cemented the circuits of this apparatus.

The irony of what these two entities forged is encapsulated in the word “blockbuster” itself, which originally referred to a bomb used during World War II with enough power to destroy an entire street. The blockbusters that flattened Köln and Dresden gave shape to the concern with monumental conservation for which UNESCO is known.¹⁰ Yet as this dissertation has argued, UNESCO and ICOM turned conservation into a problem of political administration that facilitated travel for certain objects between some institutions and made the hitherto unthinkable blockbuster

⁹ 47 Rooms, Guggenheim Helsinki Finalist Submission (2016), *Art Institute of Chicago*, 2019.832.2, <https://www.artic.edu/artworks/251281/47-rooms-guggenheim-helsinki-finalist-submission>.

¹⁰ See Mark Jarzombek, *Urban Heterology: Dresden and the Dialectics of Post-Traumatic History*, Studies in Theoretical and Applied Aesthetics 1 (Lund: Dep. of Theoretical and Applied Aesthetics, Univ. Lund, 2001). See also Chapter 3, “Unwitting City Planning: Maps of Monuments and the American Bombing of Europe, 1943-1945,” in Allais, *Designs of Destruction*, 71–112.

exhibition a reality. (Moreover, a smaller collection of Tutankhamun artifacts traveled to North America in the early 1960s as publicity for the UNESCO-sponsored program to salvage monuments threatened by the Aswan Dam project, while proceeds from the 1972 showing at the British Museum were used to fund the relocation of the temples of Philae.¹¹) This type of blockbuster was first used to describe the commercial potential of film, conjuring an image of impact measured not in the evisceration of a city block but in crowds of spectators lining up around it, and has come to describe museum exhibitions with the same effect. In 2018, it was estimated that “around 140,000 exhibitions take place per year,” of which “75 per cent...involve hosting content either as a ready-made show or as loans from external institutions.”¹² Yet today, this form of display is acknowledged to be unsustainable, and antithetical to the ethos of planetary conservation.

In February 2020, on the heels of a very successful blockbuster exhibition on Rembrandt (and just as the wave of pandemic-induced museum closures was about to break), director of the mid-sized Museum de Lakenhal in the Netherlands Meta Knol vowed that her museum would never embark on such an undertaking again. “The costs are astronomical,” she expostulated, adding that “we spent about a quarter [of a total budget of 1.2 million euros] on insurance.” After recounting how expenses—from couriers who preferred to fly business class to large media campaigns—drove up the entry ticket price, she bitterly remarked that “it turned out that Rembrandt doesn’t belong to everyone after all, because only those who could afford the extra fee were able to admire his works.” That was why, she said, the Museum de Lakenhal was refusing to participate any longer in the

¹¹ For the exhibition in the UK, see Asaad Ali Zaky, “The Tutankhamun Exhibition at the British Museum in 1972: A Historical Perspective,” *Journal of Tourism Theory and Research* 3, no. 2 (July 1, 2017): 80–88. Although the following does not accurately describe indemnification, see also Juliette Desplat, “A trickle of Pharaonic valuables,” *The National Archives* (UK) blog, 5 February 2016. <https://blog.nationalarchives.gov.uk/trickle-pharaonic-valuables/>.

¹² Vastari, *Exhibition Finance Report Supplement*, December 2018.

“museum circus,” choosing instead to tell “local stories with a universal appeal[,] not as an expression of provincialism, but explicitly because we need to find new ways to understand the world.”¹³ Knol’s stand was, at the time, an unusual one; barely a month before *MuseumNext* published her disheartened manifesto, it ran a piece on how blockbusters were “saving” museums in the age of the attention economy.¹⁴

The pandemic reconfigured the calculus of exhibition risk, as travel restrictions and shipping delays, not to mention plummeting attendance numbers—that prime metric of exhibition success—placed blockbusters in jeopardy. The pain of these disruptions was felt immediately. While this dissertation has not examined the problem of transportation at length, it constitutes a vital factor in the apparatus of circulation and registered many changes in the mid-twentieth century. One of these is the role of the courier, a museum staff member who travels with the art in the capacity of a guard and registrar, and who, with the advent of air travel, is increasingly flown in style. Fritz Dietl, founder of an international art logistics company bearing his name, observed that “Museum couriers were always a big part of the budget—we’re talking 10 to 20 business-class tickets for a large show.”¹⁵ While he notes that the absence of a courier makes lenders “uncomfortable,” the pandemic made it impossible for the company to provide their “usual standard of service,” compelling Dietl to turn to virtual couriers in the form of a live camera feed going forward. Yet the length of time in

¹³ Meta Knol (translated by Boet de Willigen and Angel Perazzetta), “Blockbuster Addiction,” *MuseumNext*, 22 February 2020, <https://www.museumnext.com/article/blockbuster-addiction/>.

¹⁴ Rebecca Carlsson, “Go big or go home: how blockbuster exhibitions are saving museums,” *MuseumNext*, 26 January 2020, <https://www.museumnext.com/article/go-big-or-go-home-how-blockbuster-exhibitions-are-saving-museums/>.

¹⁵ Kate Brown, “Is the Age of the Blockbuster Exhibition Over? A Perfect Storm of Challenges Suggests It May Be a Thing of the Past,” *Artnet News*, 30 June 2020, <https://news.artnet.com/art-world/the-end-of-blockbusters-1890212>.

which museums were forced to remain closed has spelled the death of many smaller museums and forced larger institutions to reevaluate their priorities.¹⁶

This dissertation has also not discussed the privatization of the museal circulatory apparatus from the 1970s, in part because this development merits its own dedicated study and because the path from there to our present moment is much clearer. Suffice it to say that while major museums today have robust departments dedicated to producing exhibitions, the business of producing a blockbuster is so involved that museums can (or least could until quite recently) outsource the administrative work of coordinating object movement to a plethora of private contractors who undertake exhibition design, logistics, sponsorship, and marketing for smaller institutions. These were extremely lucrative prior to the pandemic. One of these is the aforementioned logistics company, Dietl. Another more contemporary service was Vastari, a private museum exhibition service provider launched in 2013, headquartered in the UK and with regional representatives based in many parts of the world.¹⁷ The company connected private collectors to museums to facilitate exhibition or long-term loans to raise the profile of the works, provided publicity and consultancy for exhibitions, and conducted research on industry trends.¹⁸ (It even launched a secure database of private works for museums to browse for objects for future exhibitions, fulfilling UNESCO's own ambitions to that end.) Its founder, Bernadine Bröcker Wieder, regularly wrote thought leadership pieces in various outlets (including one on the benefits of digital facility reports on the American

¹⁶ Some, however, are taking the opportunity to turn this too into a form of “last-chance tourism.” See Greg Richards, “Blockbuster art exhibitions: From ‘first time ever’ to ‘last of its kind’ in a few short years,” *Tourism Research and Marketing*, <https://www.richardstourism.com/post/blockbuster-art-exhibitions-from-first-time-ever-to-last-of-its-kind-in-a-few-short-years>.

¹⁷ The firm, in all earnestness, is named “in recognition of the democratising force that was Giorgio Vasari (1511-1574), but with an added T for technology.” See <https://www.vastari.com/about/>.

¹⁸ See “Solutions, *Vastari*, <https://www.vastari.com/solutions/>.

Alliance of Museums website soon after the most recent version of the report was launched).¹⁹

During the pandemic, it launched an NFT consultancy arm called Vastari Labs to stay afloat, but filed for insolvency in April 2022 and was placed under the administration of an external company, ReSolve.²⁰

The problem of conservation in a time of ecological crisis (and in a time of renewed warfare with far-reaching consequences) is not the only major concern to consider. As this dissertation has shown, UNESCO and ICOM channeled the logic of globalization to make possible a form of exchange between museums that correspondingly embodies its weaknesses. Global, these exhibitions are; equitable, they are not. The events of 2020 have brought us to an inflection point wherein deeply entrenched canons of “universal” culture across the humanities are seemingly being unsettled. The dissertation’s uncovering of the infrastructural networks of international governance is consequential because unlike calls for diversity and equity that prompt the hiring of individual curatorial staff, institutional critiques are often obstructed by a narrative that major museums adhere to rigorous standards of object care that are unmet by those in states demanding object repatriation or requesting object loans. I hope that this history of how rules of so-called care were instated by political means might offer the beginnings of a useful tool with which to engage in this institutional critique, and to approach both object care and public education in ways that better foreground equitable representation, interpretation, and access.

¹⁹ Bernadine Bröcker Wieder, “The Case for Digital Facility Reports,” *Alliance Blog*, <https://www.aam-us.org/2020/02/10/the-case-for-digital-facility-reports/>.

²⁰ “Re/solve appointed to Vastari Group,” 3 May 2022, *Re|Solve*, <https://www.resolvegroupuk.com/news/resolve-appointed-to-vastari-group/>.

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FIGURES

As many images in this dissertation contain third party copyrights, they have been redacted for this final version.

Fig. 0.1: Sketch of exhibition layout, likely by Pierre Verlet.

Dossier: La tapisserie française, du Moyen Âge à nos jours, 1946-1948.
Documentation du département des Objets d'art, Musée du Louvre.

Fig. 0.2: The dedicated folder for the *French Tapestries* disembarkation ceremony.

Loan Exhibitions-Held-1947-1948; French Tapestries; Disembarkation Ceremonies; L 7806.
Metropolitan Museum of Art Archives.

Fig. 0.3 a, b, c: Each version of the exhibition agreement has a dedicated folder.

L7806 Loan Exhibition-Held-1950. Vienna, Treasures from Imperial Coll. Original & Copies of Agreement 6 Oct. 1949; L7806 Loan Exhibition-Held-1950. Vienna, Treasures from Imperial Coll. Original & Copies of Supplemental Vienna Agreement, December 1950; L7806 Loan Exhibition-Held-1950. Vienna, Treasures from Imperial Coll. Original & Copies of Second Supplemental Agreement Oct 1951.
Metropolitan Museum of Art Archives.

Fig 0.4: *French Tapestries* Exhibition, Victoria and Albert Museum, March-May 1947.

Victoria and Albert Museum Archives.

Fig 0.5: *French Tapestries* Exhibition, Metropolitan Museum of Art, November 1947-February 1948.

Metropolitan Museum Archives.

Fig 0.6: *French Tapestries* Exhibition Disembarkation Ceremony, Metropolitan Museum of Art, November 1947-February 1948.

Metropolitan Museum Archives.

Fig. 0.7: Carrying a rolled tapestry up the main staircase in the Metropolitan Museum.

Sarah Mallory, "Behind the Scenes: Hanging the Tapestries in *Grand Design*," *Metropolitan Museum* blog 14 October 2014. <https://www.metmuseum.org/exhibitions/listings/2014/grand-design/blog/posts/hanging-the-tapestries>.

Fig. 1.1: Convention for Promoting Universally Reproductions of Works of Art for the Benefit of Museums of All Countries.

Mari Lending, *Plaster Monuments: Architecture and the Power of Reproduction* (Princeton: Princeton University Press, 2017), 22-23.

Fig. 1.2: Bayer's Field of Vision diagram (original in P.M. Magazine, 1939).

George Nelson, *Display* (New York: Whitney Publications, 1953), 110.

Fig. 1.3: Number of Exhibitions and Showings, by year, 1931-1954.

“Circulating Exhibitions 1931-1954,” *Bulletin of the Museum of Modern Art*, Vol. 21, No. 3/4 (Summer 1954), 29.

Fig. 1.4 a, b, c: Packing solutions.

Grace McCann Morley, “Introduction,” *Museum*, vol. III, no. 4, 1950 (Museums and Circulating Exhibitions), 267-69.

Fig. 1.5 (reference for Fig.4c): Packing solutions.

The caption reads, “Framed oils are packed back to back in boxes with guard racks to hold them in place. Boxes of different types must be built for glazed pictures, for mounted materials and for models. Every case is carefully marked which end to open, which screws to remove; the box list and unpacking instructions are tacked on top. To cut down on the possibility of damage, nails and hammering have been eliminated in unpacking. The boards, screwed to metal plates on the backs of the picture frames, slide into rubber lined grooves. “Keys” marked A and B in the photographs hold the boards in place in the grooves. In every instance there must be compiled a system of numbering the objects not only for identification with the descriptive literature and installation instructions but for repacking them exactly as they came.”

“Circulating Exhibitions,” *Bulletin of the Museum of Modern Art*, Vol. 7, No. 5 (September 1940), 8.

Fig. 1.6a: ALC.62660, Jaime Torres-Bodet to Minister for Foreign Affairs, Iraq. 10 June 1949.

First Traveling Exhibition: Paintings 1860 – today: Iraq.

Fig. 1.6b: ALC.62660, Jaime Torres Bodet to Minister of Education and Industries, Government of Pakistan, 13 October 1948.

7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

Fig. 7 a, b, c: ALC.264195, Copy of condition report drawn up by Curator of the Central Museum at Lahore, attached as Annex A to letter from Jean Thomas to Deputy Secretary to the Government of India, 20 November 1951.

7 A 145.01 (54/56) First Traveling Exhibition: Paintings 1860 – today: Country Numbers 54/56. UNESCO Archives.

Fig. 1.8: Circulating Exhibition at San Francisco Museum of Art.

The caption reads, “Cubism and Abstract Art, an early landmark among traveling exhibitions, at the San Francisco Museum of Art, July-August 1936.”

“Circulating Exhibitions 1931-1954,” *Bulletin of the Museum of Modern Art*, Vol. 21, No. 3/4 (Summer 1954), 4.

Fig. 1.9: Small objects and sculpture wrapped individually and packed in cases with built-in compartments to fit.

“Circulating Exhibitions,” *Bulletin of the Museum of Modern Art*, Vol. 7, No. 5 (September 1940), 7.

Fig. 1.10: MoMA packing facilities.

The caption reads, “After its year’s tour abroad, 12 Modern American Painters and Sculptors is unpacked at the warehouse for careful checking.”

“Circulating Exhibitions 1931-1954,” *Bulletin of the Museum of Modern Art*, Vol. 21, No. 3/4 (Summer 1954), 19.

Fig. 1.11a: Compression cornerwise test.

The caption reads, “Method of performing the compression cornerwise test. Any two corners as desired on a diagonal passing through the center of the box may be used.”

Fig. 1.11b: Compression-on-an-edge test.

The caption reads, “Method of conducting the compression-on-an-edge test. Any two diagonally opposite edges may be used as seems desirable.”

Fig. 1.11c: Compression endwise test.

The caption reads, “Method of making the compression endwise test. The compressive force may also be applied sidewise or to the top and bottom in a similar manner.”

John F. Keeley, *Packing for Foreign Markets* (Washington, D.C.: United States Government Printing Office, 1924), 5-7.

Fig. 1.12: Inside of large test drum.

These machines contain “a series of hazards which cause the box to fall...in such ways that the stresses, shocks, and rough handling of actual transportation conditions are simulated.”

John F. Keeley, *Packing for Foreign Markets* (Washington, D.C.: United States Government Printing Office, 1924), 9.

Fig. 1.13a: Wrapped paintings in containers with loose wood wool.

Fig. 1.13b: Padding for paintings.

Robert G. Rosegrant, “Packing Problems and Procedures,” *Technical Studies in the Field of the Fine Arts* X, no. 3 (January 1942), 149-50.

Fig. 1.14 a, b: Diagrams from *Procedure for Handling, Packing, and Removal of Art Objects in Emergency* (Museum Press, The Metropolitan Museum of Art, New York), December 1941.

Conservation Department History, b. 10, f. Pamphlets, 1939-1946.

Harvard Art Museums Archives.

Fig. 1.15 a, b, c, d, e, f. Images of packing cases.

Elodie Courter Osborn, *Manual of Travelling Exhibitions*, Museums and Monuments 5 (Paris: UNESCO, 1953), 33-36, 39-40.

Fig. 1.16: Circulating joints.

Fig. 1.16a: John F. Keeley, *Packing for Foreign Markets* (Washington, D.C.: United States Government Printing Office, 1924), 23.

Fig. 1.16b: Joseph Leeming, *Modern Export Packing* (Washington, D.C.: United States Government Printing Office, 1940), 15.

Fig. 1.16c: Elodie Courter Osborn, *Manual of Travelling Exhibitions*, Museums and Monuments 5 (Paris: UNESCO, 1953), 32.

Fig. 1.16d: Walter Stern, *The Package Engineering Handbook* (1st ed., 1949, reprinted 1954), 210.

Fig. 1.16e: Louis C. Barail, *Packaging Engineering* (1954), 100.

Fig. 1.17: Forms as image and as text.

Fig. 1.17a: Sample forms shown as images rather than as reproducible text.

Fig. 1.17b: The condition report on the upper right-hand side of the page is reproduced as an image, and is difficult to read. It seems intended to show the materiality of documents that accompany objects rather than relay that information for replication by staff in other museums.

Elodie Courter Osborn, *Manual of Travelling Exhibitions*, Museums and Monuments 5 (Paris: UNESCO, 1953), 57, 61.

Fig. 1.17c: The condition report is reproduced here as text whose language is clear to read and therefore to assiduously replicate.

Grace McCann Morley et al., *Temporary and Travelling Exhibitions*, Museums and Monuments, X (Paris: UNESCO, 1963), 116.

Fig. 1.18: Illustration block, 1953 vs. 1963 manuals.

Fig. 1.18a: The first image in the illustration block at the end of the 1953 manual of *Chinese Shadow Puppets*, a temporary exhibition at the Detroit Institute of Arts.

Elodie Courter Osborn, *Manual of Travelling Exhibitions*, Museums and Monuments 5 (Paris: UNESCO, 1953), 73.

Fig. 1.18b: Compare this with the first image in the illustration block at the end of the 1963 manual: scale models in the Hall of Oil Geology in the American Museum of Natural History.

Grace McCann Morley et al., *Temporary and Travelling Exhibitions*, Museums and Monuments, X (Paris: UNESCO, 1963), 124.

Fig. 2.1: Summary of Flow and Space Diagrams.

Clarence S. Stein, "Planning for Art Museum Services (Paper Read at the Annual Meeting of the American Association of Museums, Philadelphia, 19-21 May 1938)," *Museum News* 16, no. 13 (January 1, 1939), 12.

Fig. 2.2 a, b, c, d,e,f: Museum Services Flow Diagrams.

Clarence S. Stein, "Planning for Art Museum Services (Paper Read at the Annual Meeting of the American Association of Museums, Philadelphia, 19-21 May 1938)," *Museum News* 16, no. 13 (January 1, 1939), 5-7.

Fig. 2.3: Sculptures borrowed for the Cubism and Abstract Art show denied entry at Customs.

Russell Lynes, *Good Old Modern: An Intimate Portrait of the Museum of Modern Art*, 1st ed. (New York: Atheneum, 1973), image insert.

Fig. 2.4: Mobile vans.

Fig. 2.4a: Daylight mobile cinema van with shaded screen, in Turkey.

Fig. 2.4b: Amphibious cinema developed for tropical use by Thomas de la Rue Company.

The Use of Mobile Cinema and Radio Vans in Fundamental Education (Paris: UNESCO, 1949).

Fig. 2.5: Mobile museums.

Fig. 2.5 a, b, c, d: French architect-planner Abraham Beer's Mobile Educational Unit of the French Ministry of Education.

"Recent Developments in Mobile Units," *Museum*, vol. 5, no. 3 (1952), 186-95.

Fig. 2.5 e, f: French architect-planner Abraham Beer's mobile unit designed for use in arid zones.

"Expandable Mobile Museum for Arid Zones," *Museum*, vol. 7, no. 2 (1954), 127-40

Fig. 2.6 a, b, c, d: Various mobile exhibition vehicles.

James H. Carmel, *Exhibition Techniques, Traveling and Temporary*. (New York: Reinhold Pub. Corp., 1962), 154-157

Fig. 2.7: UNESCO label, Agreement on the Importation of Educational, Scientific, and Cultural Materials.

A guide to the operation of the Agreement on the importation of educational, scientific and cultural material, 'Florence Agreement,' adopted by the General Conference of Unesco at Florence in 1950, 4th ed. (Paris: UNESCO, 1969), 13.

Fig. 2.8: ICOM label, Agreement on the Importation of Educational, Scientific, and Cultural Materials.

A guide to the operation of the Agreement on the importation of educational, scientific and cultural material, 'Florence Agreement,' adopted by the General Conference of Unesco at Florence in 1950, 4th ed. (Paris: UNESCO, 1969), 17.

Fig. 2.9: First list of sponsored exhibitions.

ICOM News, vol. 10, no. 5 (1957), 14.

Fig. 3.1: Portion of a condition report (1939) filled by George L. Stout at Fogg Art Museum.

Francesca G. Bewer, *A Laboratory for Art: Harvard's Fogg Museum and the Emergence of Conservation in America, 1900-1950* (Cambridge, MA; New Haven, CT: Harvard Art Museum; Yale University Press, 2010), 159.

Fig. 3.2 a, b, c, d: Reproducible Condition Report

George L. Stout, "A Museum Record of the Condition of Paintings," *Technical Studies in the field of the fine arts*, 1935, 213-16.

Fig. 3.3: Sample Condition Report, completed by David Rosen at Fogg Art Museum.

George L. Stout, "A Museum Record of the Condition of Paintings," *Technical Studies in the field of the fine arts*, 1935, 206-07.

Fig. 3.4: Condition Reports.

Fig. 3.4 a, b: Condition report (1938) filled by George L. Stout at Fogg Art Museum.

Fig. 3.4c: Condition report (1938) filled by Murray Pease at Fogg Art Museum.

George L. Stout, "General notes about the condition of paintings," *Technical Studies in the field of the fine arts*, Vol. 7, 1939, 162-163.

Fig. 3.5 a, b: The Freer Gallery laboratory.

Gettens, Rutherford J. "Conservation Studios and Laboratories 2: The Freer Gallery Laboratory for Technical Studies in Oriental Art and Archaeology." *Studies in Conservation* 4, no. 4 (1959): 141, 143.

Fig. 3.6: Examining tables.

Fig. 3.6a: Examining table in the research laboratory, Freer Gallery.

Fig. 3.6b: Examining table in the storage room, Freer Gallery.

Rutherford J. Gettens, "Examining Tables in Use at the Freer Gallery of Art". *Studies in Conservation* 4, no. 1 (1959), 23.

Fig. 3.7: Main floor, Museum of Tomorrow.

Clarence S. Stein, "The Museum of Tomorrow," *Architectural Record*, v. 67, February 1930, 8.

Fig. 3.8: Engineer J.R. Jones takes a reading of the humidity in a subterranean chamber at Manod Quarry.

Neil Prior, "How National Gallery's art was hidden from Hitler in WW2," *BBC News*, 19 May 2019, <https://www.bbc.com/news/uk-wales-48308512>.

Fig. 3.9: Test air-conditioned room at National Gallery, London.

T.R. Keeley and F. Ian G. Rawlins. 1951. "Air Conditioning at the National Gallery, London: Its Influence Upon the Preservation and Presentation of Pictures," *Museum International*, 4, no. 3: 194.

Fig. 3.10: Brussels Preparatory Meeting, September 1948.

Back row: Helmut Ruhemann, John Gettens, Stephen Rees Jones, Arthur van Schendel;

Middle: Ian Rawlins, Harold Plenderleith, René Sneyers;

Front: Madeleine Hours, Paul Coremans, C. Anglade

KIK-IRPA, Brussels: www.kikirpa.be.

Fig. 3.11: Proposed Laboratory for Research, Examination of Pictures, and Office, 4th Floor, Victoria Memorial Building.

Nathan Stolow, "Memorandum to the Director: Report and Estimates for Department of Conservation and Scientific Research" (June 4, 1957), 6.

National Gallery of Canada Library and Archives, Ottawa.

Fig. 3.12: Department of Conservation and Technical Research, 5th Floor, Elgin Building.
Nathan Stolow, “Conservation and scientific research at the National Gallery of Canada,”
Professional Public Service, Vol. 42, No. 2, Feb 1963, 5.
National Gallery of Canada Library and Archives, Ottawa.

Fig. 3.13: Stolow engages in public education.
Caption reads, “Six-year-old Diana Thistle has a scientist’s-eye view of the differences in paint pigments as Dr. Nathan Stolow explains to her what she is seeing through the microscope.” (Photo by Dominion Wide)
“Scientist’s-Eye View,” *Ottawa Journal*, 2 January 1965.
National Gallery of Canada Library and Archives, Ottawa.

Fig. 3.14 a, b: Plan of Echo Drive Storage Building.
Memo from Stolow to Buchanan (copies to Jarvis, Hubbard, Veit, Wardlaw), “Storage and Related Problems in the National Gallery of Canada,” 15 August 1957, 2, 5.

Fig. 3.15: Diagram of silica gel panels.
Nathan Stolow, *Conservation Standards for Works of Art in Transit and on Exhibition*, Museums and Monuments 17 (Paris: Unesco, 1979), 86-87.

Fig. 3.16: Walls within walls.
Fig. 3.16a: The truck as a secondary container.
Nathan Stolow, *Conservation and Exhibitions: Packing, Transport, Storage, and Environmental Consideration* (London; Boston: Butterworths, 1987), 124.
Fig. 3.16b: Nested layers around the collections.
Patrick Boylan (ed.), *Running a Museum: A Practical Handbook* (Paris: ICOM, 2004), 62.

Fig. 3.17: Layout of Fine Arts Gallery, Expo ’67.
Fig. 3.17a: Floor plan: air-conditioning.
Fig. 3.17b: Floor plan, Service areas.
Fig. 3.17c: Floor plan: Exhibition galleries.
Nathan Stolow, “The Technical Organization of an International Art Exhibition,” *Museum XXI*, no. 3 (1968), 200-202.

Fig. 3.18: Exhibition forms.
Fig. 3.18a: Loan Agreement.
Fig. 3.18b: Condition Report.
Nathan Stolow, “The Technical Organization of an International Art Exhibition,” *Museum XXI*, no. 3 (1968), 210.

Fig. 3.19: Regulating objects and climate.
Fig. 3.19a: Check-in dossier.
Fig. 3.19b: Figures of daily records.
Nathan Stolow, “The Technical Organization of an International Art Exhibition,” 201, 204.

Fig. 20a: Image of relationships between museum personnel.

Nathan Stolow, "Recent Developments in Exhibition Conservation: Policies and Directions," *Museum International* 29, no. 4 (December 1977): 192.

Fig. 20b: An earlier version of the relationship diagram.

Nathan Stolow, "Conservation Policy and the Exhibition of Museum Collections." *Journal of the American Institute for Conservation* 16, no. 2 (1977): 14.

Fig. 21a: Model floorplan of registrar's office.

Fig. 21b: Model floorplan of storage vault.

Nathan Stolow, *Conservation Standards for Works of Art in Transit and on Exhibition*, Museums and Monuments 17 (Paris: UNESCO, 1979), 35, 39.

Fig. 22: Area relationships for collection storage facilities.

E. Verner Johnson and Joanne C. Horgan, *Museum Collection Storage*, Technical Handbooks for Museums and Monuments (Paris: Unesco, 1979), 13.

Fig. 4.1: General Facility Report (American Alliance of Museums, 2019), contents page.

Fig. 4.2: General Facility Report (American Alliance of Museums, 2019), checklist of attachments.

Fig. 4.3: *Take Care* exhibition.

Fig. 4.3a: Brooklyn Museum photograph, PHO_E1954i010, 1954.

Fig. 4.3b: Brooklyn Museum photograph, PHO_E1954i002, 1954.

Take Care exhibition, January 18, 1954 through February 28, 1954, Brooklyn Museum.

<https://www.brooklynmuseum.org/opencollection/exhibitions/872>

Fig. 4.4: Still from "A Future for the Past."

Caroline K. Keck and Sheldon Keck, *A Future for the Past* (Brooklyn Museum, 1954),

<https://www.youtube.com/watch?v=6gfQPy-ndp4>.

Fig. 4.5a: *Study of Dancer* before and after Pomerantz's treatment, removing chalked reworking by another hand, shown on exhibition.

Fig. 4.5b: *Neptune and Amphitrite*, normal and infrared photographs before treatment, shown on exhibition.

Know What You See: The Examination of Paintings by Photo-Optical Methods, exhibition, 6 October to 7 November, The Renaissance Society at the University of Chicago, 1970.

<https://renaissancesociety.org/exhibitions/266/know-what-you-see/>.

Fig. 4.6a: Examination of *Virgin and Child* by energy-dispersive X-ray fluorescence.

Fig. 4.6b: Experiment demonstrating the rapid response of canvas paintings to RH variations.

Progress in Conservation, 1439, 14 January-13 February 1972, DOC/NG EX, National Gallery of Canada Archives and Library.

Fig. 4.7a: Still from film (fire extinguishers).

Fig. 4.7b: Still from film (Louis Pomerantz).

Caroline K. Keck and Sheldon Keck, *The Hidden Life of a Painting* (Brooklyn Museum, 1962), https://www.youtube.com/watch?v=twMPXpWC_-4.

Fig. 4.8a: Storage racks at Hartwick College, Oneonta, New York.

Fig. 4.8b: Storage racks, attic of Fenimore House, New York State Historical Association (now Fenimore Art Museum), Cooperstown, New York.

Caroline K. Keck, *A Primer on Museum Security* (Cooperstown, NY: New York State Historical Association, 1966), 75-76.

Fig. 4.9 a, b: Fine Arts Insurance Museum Form, and Application for Fine Arts Insurance.

Caroline K. Keck, *A Primer on Museum Security* (Cooperstown, NY: New York State Historical Association, 1966), 26-29.

Fig. 4.10: Flooded Corning area.

John H. Martin, *The Corning Flood: Museum Under Water* (Corning, NY: The Corning Museum of Glass, 1976).

Fig 5.1: “Thermal Onion” climate layout.