THE MUSEUM SCHOLARLY CATALOGUE IN THE INTERNET AGE

ABSTRACT This essay provides an overview of the Online Scholarly Catalogue Initiative, a program launched by the Getty Foundation in 2009 to support the production of digital museum collection catalogues. Launched by the Getty Foundation with help from colleagues at the J. Paul Getty Museum, OSCI supported online scholarly catalogues developed by eight grantees: the Art Institute of Chicago, the Arthur M. Sackler and Freer Gallery of Art, the Los Angeles County Museum of Art, the National Gallery of Art in Washington, D.C., the San Francisco Museum of Modern Art, the Seattle Art Museum, Tate, and the Walker Art Center. The overarching goals of the program, as well as lessons learned along the way and at the conclusion of the initiative, are described here. To close, the essay points to remaining challenges and potential future directions in support of publishing museum collection catalogues online.

KEYWORDS Academic communication, academic publishing, catalogues, databases, differentiation of the publication system, digital art history, digital publishing, digital strategy, e-book, enhanced publication, long-term availability, metadata, museum collections, normative data, open access, publication database, publication formats, research data

ZUSAMMENFASSUNG Dieser Aufsatz bietet einen Überblick über die Online Scholarly Catalogue Initiative, ein Programm, das 2009 von der Getty Foundation gegründet wurde und die Bereitstellung digitaler Sammlungskataloge von Museen fördert. Das von der Getty Foundation mit Hilfe von Kollegen des J. Paul Getty Museums ins Leben gerufene Programm unterstützte Online-Wissenschaftskataloge, die von acht geförderten Institutionen

entwickelt wurden: dem Art Institute of Chicago, der Arthur M. Sackler and Freer Gallery of Art, dem Los Angeles County Museum of Art, der National Gallery of Art in Washington, D.C., dem San Francisco Museum of Modern Art, dem Seattle Art Museum, der Tate und dem Walker Art Center. Die übergreifenden Ziele des Programms, die Lernprozesse sowie das Fazit, das am Ende des Projekts gezogen wurde, werden hier beschrieben. Abschließend weist der Aufsatz auf die verbleibenden Herausforderungen und mögliche zukünftige Handreichungen zur Unterstützung der Online-Veröffentlichung von Sammlungskatalogen von Museen hin.

SCHLAGWORTE Ausdifferenzierung des Publikationswesens, Datenbanken, Digitale Kunstgeschichte, Digitale Strategie, Digitales Publizieren, E-Book, Enhanced Publication, Forschungsdaten, Kataloge, Langzeitverfügbarkeit, Metadaten, Museumssammlungen, Normdaten, Open Access, Publikationsdatenbank, Publikationsformate, Wissenschaftliches Publizieren, Wissenschaftskommunikation

In 2009, the Getty Foundation launched the Online Scholarly Catalogue Initiative (OSCI). The ten-year anniversary of this initiative provides an apt moment for reflection, further underscored by the recent release of Digital Catalogues Study, a cross-institutional user study of online museum collection catalogues. What has been learned, to date, through efforts to publish museum collection catalogues online? What challenges remain? Can we predict future directions? The Getty Foundation, one of four programs of the J. Paul Getty Trust, serves as the philanthropic arm of the Trust with a mission to "support institutions and individuals committed to advancing the greater understanding and preservation of the visual arts in Los Angeles and throughout the world." At the time the Getty Foundation initiated OSCI, it had adopted the methodology of strategic grantmaking. In consultation with experts from around the world and across the fields the Getty serves, the Foundation staff identify critically important problems to solve and then work with partners through grantmaking to solve those problems. Grant recipients are encouraged to share lessons learned and to produce outcomes that can serve as models for the work of others.

The Online Scholarly Catalogue Initiative set out to solve the problem of the future of the museum collection catalogue. The permanent collection catalogue is a well-established genre; such catalogues traditionally include

^{1 &}quot;Our Priorities, The Getty Foundation", under: http://www.getty.edu/foundation/initiatives/ (all websites last accessed 1 July 2020).

core information about the museum's objects as well as scholarly essays. But, in print form, such catalogues are expensive to produce and become quickly out-of-date as soon as the museum acquires a new object or new information or analyses of an object come to light. The internet and new opportunities in digital publishing seemed to offer an answer.

While this may seem quite prescient today, it is worth remembering that in 2009 we were in very early days of digital publishing. A future in which we use our cell phones as a source of reading material had not yet materialized. As Greg Albers, Digital Publications Manager with Getty Publications, recently recalled, the turning point in digital publishing was the release of Amazon's Kindle in 2007, which helped raise awareness of the possibilities of digital publishing beyond the circles of business and technology.² The iPad was released for sale in the United States in 2010, further pushing digital publishing into the mainstream.

Art museums were just beginning to grasp the implications of this new landscape and the rising expectation that content should be easily discoverable online. Not until 2012 did the Rijksmuseum make the unprecedented move of placing 125,000 digital surrogates of Dutch masterpieces online in high resolution. In sum, in 2009, when OSCI began, digital publishing was just coming into its own as publishers began to realize that online content could be much more than a static document and could take advantage of the interactive affordances of the digital environment.

Launched by the Getty Foundation with help from colleagues at the J. Paul Getty Museum, OSCI supported online scholarly catalogues developed by eight grantees: the Art Institute of Chicago, the Arthur M. Sackler and Freer Gallery of Art, the Los Angeles County Museum of Art, the National Gallery of Art in Washington, D.C., the San Francisco Museum of Modern Art, the Seattle Art Museum, Tate, and the Walker Art Center. These were all institutions ready to make an ongoing commitment to digital technology and infrastructure as well as to rethinking workflows and the roles and responsibilities involved in such workflows, including the positions of museum registrars and book editors.³

² Quoted in Shamberg, Caitlin: Reflections on Ten Years in Art, Archives, and Conservation, in: *The Iris, behind the Scenes at the Getty*, 20 December 2019, under: http://blogs. getty.edu/iris/reflections-on-10-years-in-art-archives-and-conservation/.

³ To learn more about the OSCI initiative, see "Museum Catalogues in the Digital Age," the final report that synthesizes the findings of the initiative: https://www.getty.edu/publications/osci-report/. The report was produced using Getty Publications' "middleman book template" (https://github.com/thegetty/osci-report), a prototype for Quire, a multiformat publishing framework that Getty Publications has developed for its digital publishing needs (https://github.com/gettypubs/quire).

Embarking on this endeavor meant facing many challenges unique to publishing collection catalogues in the modern information age. The practice of publishing museum collection catalogues had emerged alongside the formation of museums. In 1836, for example, the National Gallery of Art in London, first established in 1824, issued a two volume illustrated catalogue of their collection that included many of the features we associate with this genre today: each work of art was illustrated and each entry typically included information about the artist as well as a description of the work of art (and in some cases even a critical assessment of the quality of the work), its medium and dimensions, and who had presented it to the gallery. The aim was to provide readers with "an entertaining and instructive *Book* [and] a select Picture Gallery."4 By the dawn of the twenty-first century, most art museums had turned to electronic information management systems to house core information about their objects, such as medium, dimensions, and provenance. This information, what we might also describe as metadata (data about data), is typically well researched and regarded as authoritative. While the production of such metadata is often done incrementally and collaboratively, it is essential that institutions do their best to mitigate against the flourishing of multiple and/or competing versions of metadata.⁵ Having a single database of record and always using this database as a source of information about the collection is a simple solution to this problem.

Therefore, when beginning to conceptualize the workflow for publishing an electronic museum collection catalogue, the museums participating in OSCI recognized that it was desirable to draw on authoritative metadata information already housed in existing museum information systems. These systems, though, were never designed to be publishing platforms. The same was true of digital asset management systems, where the digitized surrogates of the works of art were typically stored. There was also the matter of the scholarly essays, which might be part of a publication ecosystem, but were not often stored long-term in museum information systems. And what of original source materials found in libraries and archives that might be desirable to include? Or technical analyses housed in the labs and information systems of conservation studios? Even before new research could be conducted, the question of how best to harness together information

⁴ The National Gallery of Pictures by Great Masters Presented by Individuals or Purchased by Grant of Parliament, vol. 1, London 1836, p. iii.

⁵ For more on "Practical Principles for Metadata Creation and Maintenance," see Baca, Murtha: Practical Principles for Metadata Creation and Maintenance, in: Baca, Murtha (ed.), *Introduction to Metadata* [1998], 3rd ed, Los Angeles 2016, under: http://www.getty.edu/publications/intrometadata/practical-principles/.

already in electronic form and the infrastructure by which to do so had to be confronted.

In short, to publish a museum collection online meant connecting systems that were not originally conceived to be interoperable nor designed to support publishing collection catalogues digitally. Being able to pull authoritative and accurate information from these systems - that is, solving the problem of integration – emerged as a leading requirement for the endeavor.⁶ Audience research helped to identify another important stipulation: persistence. Readers needed to know that these catalogues were just as permanent as print catalogues and, moreover, that they could be appropriately cited and referenced. While the latter requirement might have been satisfied by the portable document format (PDF), the participating teams ambitiously wanted to take advantage of new technologies made feasible in the digital environment in order to create an enhanced experience for their readers. These included the ability to deliver zoomable high-resolution images, to compare images, and to include multi-media content as well as superior search functions. But remember, in 2009 none of this had been done before by these institutions.

To proceed, the projects were divided between a research and development phase and an implementation phase, which encouraged addressing technical issues immediately rather than at the end of the project. In other words, the grant initiative was designed to push against or disrupt the traditional linear workflow of publishing that focuses first on the production of content and then delivery of that content to the publishing platform. Instead, the teams were encouraged to work iteratively so that content development went hand-in-hand with identifying and then solving technical requirements. This new way of working was supported by periodic convenings, organized by the Foundation, which brought key team members together for collaborative sessions that allowed the grantees to learn from one and other as well as experts in the field.

An interim report, published by the Foundation in 2012, surfaced both exciting opportunities and challenges facing the projects at this halfway point in their genesis. A key benefit of publishing museum collection catalogues digitally, the participants quickly discovered, was the broad range of visual and textual materials that could be included as well as the variety of means by which readers could engage with the catalogue, for example, by creating their own study collections. In imagining potential readers,

For further perspective on integrating systems, see Honeysett, Nik: The future of museum scholarly catalogues, in: *Bulletin of the American Society for Information Science and Technology* 2012, 38, pp. 49–53, under: https://doi.org/10.1002/bult.2012.1720380312.

in part through rigorous user research, museum staff began to realize that digital publishing allowed them to expand their outreach greatly since these catalogues, all freely available, could reach anyone with a computer and an internet connection. But, of course, a collection catalogue cannot contain everything and readers do not want to face a deluge of information, so the participating teams also recognized that they needed to make judicious choices. Institutions also had to grapple with copyright issues well before the open access movement had gained strength. As already suggested, the technical infrastructure required to support digital publishing did not yet exist. Creating this infrastructure entailed new staff positions as well as modifying and adapting workflows in response to the shift from linear to iterative project management.

The final report on the initiative, issued by the Getty Foundation in 2017, consolidated the lessons learned over the course of the planning and implementation phases, including choosing technology wisely, effective design with particular attention to navigation, finding ways to serve multiple audiences, and having the right people and structures in place. One of the most critical findings was "Make Sure your Content is Ready", which translates to starting with clean data and using consistent metadata standards and controlled vocabularies shared across the institution, from the curatorial and scientific to the digital media department. This is a significant endeavor if these subdivisions of the museums customarily had autonomy regarding metadata. But the investment in clean and reconciled data is both necessary and essential in order to move it through the tripartite process required of publishing catalogues online, beginning with the museum collection databases, then moving to a content management system that could unite that data with the scholarly essays, digital surrogates, multimedia files and other materials referred to in the catalogue, and then finally publishing the content on the web.

This final report also surfaced one of the most persistent issues regarding digital publishing – sustainability. Once a museum finishes a print catalogue, its long-term care is the principal concern of its owner, whether it be an individual or a library. But once a museum finishes a digital catalogue, it remains the principal concern of the museum, particularly if there are expectations that the catalogue will be updated over time. Museum publishers, the final report cautions, must "be deliberate about version control" in light of potential updates. They must also address access and long-term preservation, and, most of all, leverage the investment made in producing a single volume so that systems and tools are re-usable for the production of subsequent volumes, and content is stored in such a way that it can be

re-purposed for such enterprises as in-gallery interpretations. The ultimate goal was for each institution to develop a pipeline for continuing to publish online, rather than producing one-off experiments. To date, for example, the Art Institute of Chicago has published fourteen online scholarly catalogues, the National Gallery of Art six catalogues, and the Walker Art Center produced three volumes of their *Living Collections Catalogue*.

Scholarly reviews of these catalogues have recognized not only the value of the rigorous research they contain, but also the affordances of the digital environment. In the case of the Seattle Museum of Art (SAM), for example, their catalogue of *Chinese Painting & Calligraphy* included a class of objects for which the museum had not yet secured attribution or were generally considered of lesser significance – works that might have been omitted from a print catalogue. As curator Kevin McLoughlin notes, this "represents an innovative choice by SAM- one that is counter to conventional museum practice [... and] is a bold and welcome decision, clearly made possible by the online nature of the catalogue, and in line with SAM's intention to use the site as an open-ended portal to the collection."8 With respect to the Art Institute of Chicago's catalogues dedicated to Claude Monet and Auguste Renoir, librarian Kimberley Henze applauds how the catalogue gives readers immediate access to scholarly research "through the shared experience of the raw archival and conservation materials" as well as the "interactivity and high-resolution quality of the images."9 The online environment can be conducive to helping to reconstruct the former contexts of works of art,

Museum Catalogues in the Digital Age, A Final Report on the Getty Foundation's Online Scholarly Catalogue Initiative, Los Angeles 2017. The report is licensed under a Creative Commons Attribution 4.0 International License (CC-BY), https://www.getty.edu/publications/osci-report/lessons-learned/#lesson-9. For further reflections on the OSCI initiative, including lessons learned by participating partners, see Henel, Jennifer E.: New Approaches to Old Art: The Launch of NGA Online Editions "Dutch Paintings of the Seventeenth Century", in: Visual Arts Research, vol. 43, no. 1, Summer 2017, pp. 8–16. – Henel, Jennifer E.: Dutch Paintings of the Seventeenth Century: The National Gallery of Art's First Online Scholarly Catalogue, in: Decker, Juilee (ed.), Technology and Digital Initiatives: Innovative Approaches for Museums, Lanham, MD 2015, pp. 25–33. – Westerby, Genevieve and Keegan, Kelly: Digital Art History and the Museum: the Online Scholarly Catalogues at the Art Institute of Chicago, in: Visual Resources, An International Journal on Images and their Uses, vol. 35, nos. 1–2, 2019, pp. 141–154.

⁸ McLouglin, Kevin: The Getty Foundation's Online Scholarly Catalogue Initiative (OSCI) of *Chinese Painting & Calligraphy* at the Seattle Art Museum, in: *Ars Orientalis*, 45, 2015, http://dx.doi.org/10.3998/ars.13441566.0045.013.

⁹ Henze, Kimberley: Online Scholarly Catalogue Initiative at the Art Institute of Chicago: Monet and Renoir in: ARLIS/NA, December 2014, under: https://www.arlisna.org/publications/multimedia-technology-reviews/481-online-scholarly-catalogue-initiative-at-the-art-institute-of-chicago-monet-and-renoir.

as Brinda Kumar observes with respect to the Los Angeles County Museum of Art's online catalogue of Southeast Asian art.¹⁰ A particular challenge in publishing online museum catalogues, as art historian Pamela Fletcher astutely discerns, "is harnessing the power of the digital format to facilitate connections and allow for user-directed investigation, while also providing the clear coherent sense of the whole—and the relation of the parts to the whole—conveyed by traditional print formats," a challenge effectively met by the Tate's research publication *The Camden Town in Context.*¹¹ Scholar Anne Higonnet, reviewing the Art Institute of Chicago's online catalogue of Gustave Caillebotte's paintings and drawings, persuasively argues that such online catalogues "change how we interpret the form of art."¹²

Yet, while the overall goals of the initiative were met, there were some surprises along the way. To address the technological challenges, many participants initially expressed a desire for a single, shared software solution. But, over time, it became apparent that technological solutions need to work within the specific and frequently unique ecosystems of each institution, so that it was not possible to produce a specific software solution or a single model for the field. Another surprise concerned user behavior. When the San Francisco Museum of Modern Art and the Walker Art Center undertook user studies, they learned that seventy-five percent of their catalogue readers did not enter the catalogue through its home page. Museum director Anne Goodyear, in her overview of the initiative, noted the tendency of users to migrate from online catalogues to other sections of the website, making it difficult to articulate the boundaries of the catalogue and also dismantling expectations of a single, unified whole that readers may bring from their experience of printed catalogues. 14

Looking ahead, many art museums are now moving towards breadth rather than depth in the online presence of their collections, or, perhaps more accurately, moving towards making collections equally accessible rather

¹⁰ Kumar, Brinda: Southeast Asian Art at LACMA: An Online Scholarly Catalogue, in: *Ars Orientalis*, 45, 2015, under: http://dx.doi.org/10.3998/ars.13441566.0045.012.

¹¹ Fletcher, Pamela: *The Camden Town Group in Context*, edited by Helena Bonett, Ysanne Holt, and Jennifer Mundy, in: *The Art Bulletin*, 99, 2017, pp. 198–201.

¹² Higonnet, Anne: Caillebotte Paintings and Drawings at the Art Institute of Chicago, edited by Gloria Groom and Genevieve Westerby, in: The Art Bulletin, 99, 2017, pp. 196–198.

^{13 &}quot;Evaluation", in: *Museum Catalogues in the Digital Age*, under: https://www.getty.edu/publications/osci-report/evaluation/.

¹⁴ Goodyear, Anne: The Getty Foundation, *The Getty Online Scholarly Catalogue Initiative (OSCI)*, in: *CAA.Reviews*, 6 October 2016, under: http://dx.doi.org/10.3202/caa.reviews.2016.133.

than bundling content into discrete units. This trend raises the question, once the catalogue is unbound from the constraints of the printed page and moved to the web, what does it refer to? Is there an essential difference between an "online catalogue" and "collections online"? The OSCI enterprise, for Anne Goodyear, "raises the very question of what a catalogue can represent."¹⁵

In assessing the field, the recently commissioned report *Digital Catalogues Study* chose to focus only on those catalogues that were integrated with museums' online collection pages, suggesting that this is the most likely avenue forward. ¹⁶ One of the key findings of this report is that forty percent of users came to the respective online catalogues to research a particular object, a result that may further encourage museums to shift away from conceiving the online catalogue as a discrete entity.

Yet, such a shift will render even more complex the issue of discoverability. Both the OSCI final report and the *Digital Catalogues Study* point to the challenges website users faced in finding the catalogues, whether through search engines or commonly used academic databases. 17 Furthermore, users still express a desire "that digital catalogues exhibit cohesion in their style of writing" and "value [...] having an interpretative narrative to tie the catalogue together, rather than the entries being presented merely as a list of items" as well as analyses, authored by respected experts, for each artwork entry. 18 To address such needs, clearly marked pathways must be established between digital catalogues and their "parent museums' websites." 19 The pressure for effectively signposted navigation and thoughtful articulation of the integrity of the catalogue will only become more intense if museum publishers chose to pursue linking online catalogues to "content anywhere else on the web" and allowing users to "add their information," suggestions of future possibilities offered up by focus group participants in the Digital Catalogues Study.²⁰

¹⁵ Goodyear.

¹⁶ Quimby, Claire: Digital Catalogues Study: A Cross-Institutional User Study of Online Museum Collection Catalogues, Chicago, November 2019, p. 3, under: https://digpublishing.github.io/catalogues-study/.

^{17 &}quot;Evaluation", *Museum Catalogues in the Digital Age.* – Quimby 2019 (see fn. 16), pp. 4, 10. See also the section "How can the catalogues be marketed more effectively" in Quimby 2019 (see fn. 16), pp. 25–27.

¹⁸ Quimby 2019 (see fn. 16), pp. 51, 50.

¹⁹ Quimby 2019 (see fn. 16), p. 37.

²⁰ Quimby 2019 (see fn. 16), p. 60.

While the future look and feel of online scholarly collection catalogues is still in flux, and concrete problems remain to be solved in publishing museum catalogues online, it is clear that this mode of disseminating scholarship has become accepted by the field and judged successful, as registered by both user statistics and peer reviews. The *Digital Catalogues Study* succinctly summarizes the current state of the field: online catalogues "are attracting a large and diverse user base" and "previous concerns about the value or permanence of online resources are fading." In the ten years that have elapsed since the launch of OSCI, digital publishing has become increasingly accepted and expected.

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²¹ Quimby 2019 (see fn. 16), p. 3.