Article

Designing for Image Reuse: A Comparative Interface Study of Rights Information and Access Paths on Museum Collection Pages

Yaxin Zhao[1,*]

[1] University of California, Los Angeles, Los Angeles, United States
* Correspondence: Yaxin Zhao, University of California, Los Angeles, Los Angeles, United States

Abstract: Many museums now put public-domain works online under open-access rules, yet the page layout still decides whether teachers and students can check reuse terms, download a file, and copy a full credit. This study looks at eight Japanese woodblock print pages from The Metropolitan Museum of Art (The Met) and the Cleveland Museum of Art (CMA), along with both museums' image policy pages. Half of the prints are open-access works by Katsushika Hokusai and Utagawa Hiroshige, and half are under copyright by Saitō Kiyoshi. Using one classroom slide task on desktop and phone screens, we checked four parts of each page: rights text, file download, credit data, and what happens when a work is under copyright. Both museums use Creative Commons Zero (CC0) for public-domain art, but they lay out the page differently. CMA puts plain reuse wording and a citation box right on the object page, while The Met sends readers to an FAQ page and Art Resource for restricted prints. On CMA's copyrighted pages, a download label still appears even when no image file is available. We sketch a single reuse panel to fix both issues. These findings highlight the critical need for standardized, user-centered interface designs in digital cultural heritage platforms to facilitate seamless educational engagement and ensure clear intellectual property communication.

Keywords: open access; image reuse; rights management; interface design; digital heritage; museum studies

1. Introduction

Over the last ten years, many large museums have dropped copyright claims on digital photos of public-domain art. Programs at The Metropolitan Museum of Art and the Cleveland Museum of Art let teachers and students download high-resolution artwork files for free under Creative Commons Zero terms. On paper, those policies clear away legal hurdles for both classroom and commercial use. In practice, a teacher building a lecture slide does not read a legal memo first [1]. They land on a single collection page. Whether they can tell if an image is safe to reuse, get the right file, write down a full credit, or see what to do when a print is still under copyright depends on how that page lays out its words and buttons.

A common problem on museum sites is that what appears on screen does not always match what is permitted. Earlier work on Open GLAM found that open museum policies do not always lead to easy reuse. People still encounter vague terms, broken links between object pages and policy pages, or missing credit details. When an artwork is under copyright, many pages give little guidance on the next step. A visitor cannot easily tell if a missing file reflects a scan backlog, a third-party copyright restriction, or a licensing rule. Assuming a download button implies free reuse leads to errors, while hiding permission rules inside lengthy FAQ pages wastes time.

To see how collection pages handle this gap, this study compares eight Japanese woodblock print pages at two major U.S. museums: The Metropolitan Museum of Art and the Cleveland Museum of Art [1]. Four prints are open-access—two by Katsushika

Received: 25 September 2026
Revised: 05 November 2026
Accepted: 20 November 2026
Published: 26 November 2026

Copyright: © 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Hokusai and two by Utagawa Hiroshige—and four are copyrighted twentieth-century works by Saitō Kiyoshi. Each page was examined on both desktop and mobile screens. Findings were then cross-checked against each museum's public API data and official policy documentation. No user testing with live participants was conducted, so this paper makes no claims about actual user behavior. Instead, the analysis focuses on page layout, precise wording, and navigational click paths. Three questions guide the inquiry: (1) How do these two institutions present reuse rules and credit information on matched artwork pages? (2) What layout differences emerge between open-access and restricted prints, and between desktop and mobile interfaces? (3) How can a single collection-page panel consolidate rights information and citation requirements into one coherent, accessible location?

2. Literature Review

2.1. Open GLAM Policies and the Digital Surrogate Problem

Scholars have long debated the governance of digital reproductions of historical artworks. It has been shown that many cultural institutions previously asserted copyright claims or imposed contractual restrictions on two-dimensional photographic reproductions of public-domain works—a practice inconsistent with their public education mandates. Advocacy initiatives promoting open access to cultural heritage have responded by releasing such images under unconditional public-domain dedications or applying standardized, unambiguous rights statements [2]. Opening institutional digital collections has also been observed to transform internal workflows and public engagement patterns, shifting the institutional role from that of a restrictive gatekeeper to a provider of shared cultural resources.

Nevertheless, formal policy adoption does not eliminate all practical implementation barriers. Empirical analysis of open-access platforms reveals that even clearly articulated reuse permissions frequently fail to support actual user needs—particularly when high-resolution files are unavailable, licensing terms vary inconsistently across collections, or attribution requirements are poorly integrated into the interface [3]. Legal permissibility constitutes only the initial condition; usability is ultimately determined by interface design, metadata completeness, and navigational coherence.

This implementation gap disproportionately affects classroom educators, who typically lack legal expertise and time to interpret complex institutional policies. When a website advertises 'Open Access' in promotional materials yet displays only low-resolution thumbnails, employs ambiguous labeling, or disperses attribution information across non-intuitive interface elements, educators often abandon the resource due to uncertainty about whether classroom use—such as inclusion in instructional slides—is permissible. Close examination of the precise language, visual hierarchy, and functional layout of individual object pages therefore reveals critical points where open-access commitments diverge from real-world usability [1].

2.2. Rights Communication, Standardized Labels, and Interface Usability

To resolve inconsistencies across museum databases, standardized rights labels were developed to clearly communicate copyright status to both visitors and aggregators. Complementing open licensing frameworks, professional guidelines emphasize converting legal metadata into accessible, plain-language statements rather than technical jargon or unstructured notes [4]. When rights information is spatially separated from download functionality—or buried in auxiliary pages such as FAQs—users must navigate multiple interface layers to infer permissible uses.

From a design perspective, a collection page must simultaneously support multiple user tasks: viewing artworks, reading curatorial context, copying attribution information, and downloading files [5]. Displaying a download label in the absence of an actual file leads to dead ends and undermines user understanding of system capabilities. Evaluating matched pairs of artworks along a defined task path enables direct identification of such layout inconsistencies without relying on subjective interpretations of user experience.

2.3. Error Prevention and Visibility of System Status in GLAM Interfaces

Two fundamental usability principles explain the effectiveness—or failure—of museum rights panels during image preparation: maintaining clear visibility of the system's current state and proactively preventing user errors. When a publicly accessible, public-domain image is displayed, users require an unambiguous notice adjacent to the image indicating that copying and cropping are permitted without prior permission. Conversely, when copyright restrictions apply, the download functionality should be disabled and replaced with a licensing request option, thereby avoiding user confusion that might arise from an apparently nonfunctional interface element. Earlier investigations into open GLAM platforms have identified that many institutions continue to use legacy catalog templates in which metadata, image controls, and legal information are distributed across disparate page sections. Evaluating the spatial arrangement of these components on both desktop and mobile interfaces reveals opportunities for minor template adjustments that significantly reduce interaction friction for educators and learners [6].

3. Research Design and Methodology

3.1. Sample Selection and Matched-Pair Corpus

This study employs a matched set of eight collection pages, evenly distributed between The Metropolitan Museum of Art and the Cleveland Museum of Art, accessed on November 21, 2026. Japanese woodblock prints were selected due to the substantial holdings at both institutions, encompassing works from the Edo period that are in the public domain as well as twentieth-century prints subject to copyright restrictions. Aligning artists and copyright statuses enables a comparative analysis of how the two institutions present functionally equivalent artworks [7].

Table 1 presents the eight pages, including object identifiers, copyright designations, and associated API metadata. In the public-domain group, each museum provides one impression of Katsushika Hokusai's South Wind, Clear Sky (Gaifū kaisei) and one impression of Utagawa Hiroshige's Sudden Shower over Shin-Ōhashi Bridge and Atake. In the copyright-restricted group, each museum offers two prints by Saitō Kiyoshi (1907–1997). Institutional open-access policies were reviewed through official documentation published by both museums [5].

Table 1. Matched Corpus of Eight Japanese Print Collection Pages Across the Met and CMA

IDMuseum	Status	Artist & Artwork Title	Identifier / Acc. No.	Verified API / Rights Metadata
A1 The Met	Open	Katsushika Hokusai, South Wind, Clear Sky (Gaifū kaisei)	Object 36490 (JP9)	isPublicDomain: true; primaryImage available; CC0
A2 The Met	Open	Utagawa Hiroshige, Sudden Shower over Shin-Ōhashi Bridge and Atake	Object 36461 (JP643)	isPublicDomain: true; primaryImage available; CC0
A3 The Met	Restricted	Saitō Kiyoshi, Gion in Kyoto (H)	Object 55937	isPublicDomain: false; primaryImage absent; empty rights field
A4 The Met	Restricted	Saitō Kiyoshi, Okuno-Hosomichi Io-Ji Izaka	Object 55931	isPublicDomain: false; primaryImage absent; empty rights field
A5 CMA	Open	Katsushika Hokusai, South Wind, Clear Sky	1930.189	share_license_status: CC0; web, print, full images available

A6	CMA	Open	Utagawa Hiroshige, Sudden Shower over Shin-Ōhashi Bridge and Atake	1985.318	share_license_status: CC0; web, print, full images available
A7	CMA	Restricted	Saitō Kiyoshi, Maiko (an apprentice geisha), Kyoto	1985.394	share_license_status: Copyrighted; images array empty
A8	CMA	Restricted	Saitō Kiyoshi, Winter in Jacko-in, Kyoto	1985.392	share_license_status: Copyrighted; images array empty

3.2. Task-Path Protocol and Four-Dimensional Coding Framework

A standardized classroom-selection task was employed: selecting a Japanese print from the museum collection for instructional use, verifying reuse eligibility, downloading a high-quality image file, and recording complete attribution information. Each page was evaluated at both desktop and mobile viewport widths to assess layout behavior—including block stacking, button placement, and vertical scroll depth required to access key functionality [8]. Figure 1 illustrates the alignment between this task protocol and the four-dimensional interface coding framework.

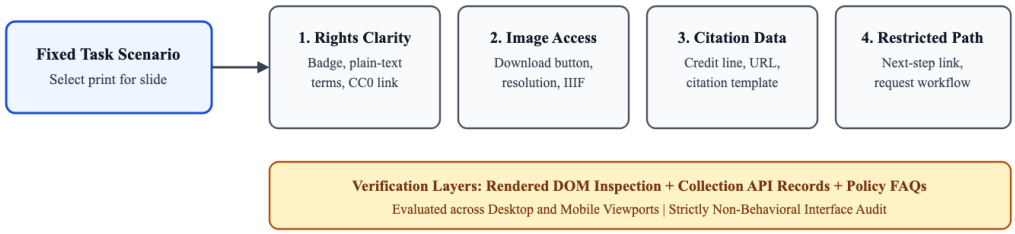

Figure 1. Fixed Classroom-Selection Task Protocol and Four-Dimensional Interface Coding Framework

Four interface dimensions were systematically coded across all pages. First, rights information was assessed for clarity of licensing status labels, plain-language reuse guidance, and accessibility of policy documentation. Second, image access functionality was evaluated—specifically the presence and visibility of download controls, available file resolutions, and consistency with underlying API metadata. Third, credit and citation support was examined, including proximity and usability of attribution lines, object identifiers, and copyable citation templates relative to the artwork display. Fourth, handling of restricted works was documented—namely, user-facing messaging for copyrighted items and navigational pathways for obtaining licensing permissions. As no live-user testing was conducted, all observations pertain exclusively to observable interface structure and content presentation [9].

3.3. Institutional Policy Architecture and API-to-interface Mapping

To verify alignment between front-end pages and backend museum data, each web page was systematically compared against its corresponding public JSON record from The Met Collection API and the Cleveland Museum of Art's Open Access API, alongside official policy documentation [4]. In The Met's API, public-domain status (isPublicDomain) is stored independently from image availability (primaryImage) and descriptive rights information (rightsAndReproduction). For openly accessible records, isPublicDomain evaluates to true and primaryImage references a full-resolution image, while rightsAndReproduction remains empty. Consequently, the "OA" designation and supplementary guidance in the Image and Data Resources FAQ serve as the primary sources for interpreting legal permissions. For restricted records, isPublicDomain is false, primaryImage is null, and rightsAndReproduction is also absent.

CMA's API adopts a distinct schema: openly licensed records specify share_license_status as "CC0" and provide four standardized image sizes—annotation, web, print, and full—whereas restricted records assign share_license_status as "Copyrighted" and omit image entries entirely [8]. Cross-referencing these JSON fields with the rendered HTML DOM reveals instances where the web template accurately reflects backend licensing logic and cases where legacy interface elements, such as inactive download buttons, persist despite the absence of associated files.

3.4. Coding Rubric and Analytical Decision Rules

To ensure consistent scoring across all eight pages, each of the four components was evaluated according to the criteria specified in Table 2. An item was classified as Inline or Self-Contained only if a visitor could directly access the reuse scope, activate the primary action, or copy attribution information from the object page itself, without navigating to another document [4]. Items directing users to an FAQ section or an external portal were categorized as Policy-Delegated. Controls rendered in the HTML without corresponding functional backend implementation were designated as Contradictory Affordances.

Table 2. Four-dimensional Coding Rubric for Museum Collection Page Inspection

Dimension	Inline / Self-Contained	Policy-Delegated	Friction / Contradiction Flag
1. Rights Information	Plain-language permission or copyright sentence visible on object page.	Icon or badge only (e.g., OA); scope explained on external FAQ page.	Empty rights field with no inline explanation of restriction.
2. Image Acquisition	Download control matches API asset availability (available on CC0; absent on restricted).	Image acquisition requires navigating to external request form.	Download or Image Controls label rendered when API images array is empty.
3. Citation Support	Dedicated citation widget or copyable credit template on object page.	Citation formula documented only on general Open Access policy page.	Required fields split across distant vertical blocks on mobile.
4. Restricted Path	Explicit inline link to non-open-access rights inquiry or request form.	User must search general FAQ to discover licensing partner (e.g., Art Resource).	No visible distinction between undigitized item and copyrighted item.

4. Comparative Interface Findings

4.1. Cross-Institutional Synthesis Across the Four Dimensions

Table 2 synthesizes interface features across all four dimensions for both museums under open and restricted access conditions. Although both The Met and CMA apply CC0 licensing to public-domain artworks, their object pages differ significantly in the placement and integration of legal information and citation tools [10].

CMA structures each open-access object page as a self-contained workspace for classroom and research reuse, consolidating the permission statement, download options, and citation tools into a single vertical section [1]. In contrast, The Met maintains a leaner object-page layout with minimal legal text, directing users to a centralized FAQ for detailed explanations of CC0 scope and procedures for obtaining Art Resource licenses. Both approaches demonstrate strengths and limitations across distinct user tasks, as revealed through granular analysis of individual navigation paths (As shown in Table 3).

Table 3. Cross-institutional Interface Comparison Across Open and Restricted Collection Pages

Dimension	The Met (Open: A1, A2)	The Met (Restricted: A3, A4)	CMA (Open: A5, A6)	CMA (Restricted: A7, A8)
1. Rights Information	Displays "OA" / Public Domain indicator; detailed CC0 terms reside on policy FAQ page [6].	isPublicDomain: false; rightsAndReproduction field empty in API; limited inline guidance.	Explicit "Public Domain" label + plain sentence: "You can copy, modify, and distribute this work, all without asking permission."	Explicit "Copyright" label + plain sentence: "This artwork is known to be under copyright."
2. Image Acquisition	High-res IIIF main image and direct download accessible on object page.	No public-domain image file exposed (primaryImage: false); no direct download.	Image Controls + Download button backed by web, print, and full-res assets.	Image Controls and Download labels still present in DOM despite empty API images: [] array.
3. Citation & Credit	Standard tombstone metadata and credit line (e.g., Rogers Fund, 1914); no inline citation generator.	Credit line present (Gift of Mr. and Mrs. Martin Lerner, 1985); separate from licensing path.	Dedicated Citations and Credit line sections on page; policy page provides 8-part citation formula [7].	Credit line and tombstone metadata present; non-open-access rights link in footer.
4. Restricted Next Step	Not applicable; open-access FAQ notes third-party rights may still apply [6].	Policy FAQ directs users to Image Request Form via external licensing partner Art Resource [6].	Includes secondary link: "Imagery or Rights for Non-Open-Access Artworks."	Routes users via "Imagery or Rights for Non-Open-Access Artworks" link; no inline Art Resource intermediary.
Mobile Viewport Impact	Controls stack vertically below artwork viewer; policy links require scrolling past curatorial text.	Absence of inline image and licensing CTA increases vertical scanning effort.	Rights sentence remains grouped near image controls, preserving context during vertical scroll.	Persistent Download label near copyright notice risks confusion on narrow screens.

4.2. Open-Access Task Paths: Inline Clarity Versus Policy Delegation

On the four open-access pages (A1, A2, A5, A6), both museums allow a teacher to download a high-resolution image of Hokusai's South Wind, Clear Sky or Hiroshige's Sudden Shower without requiring login or prior permission. The effort required to confirm the legitimacy of reuse varies significantly between the two sites. The Cleveland Museum of Art places all essential information directly on the object page: immediately beneath the image controls, it displays a "Public Domain" label alongside a concise statement clarifying permitted uses—"You can copy, modify, and distribute this work, all without asking permission"—and provides a link to its Open Access policy. Additionally,

a dedicated Citations box appears adjacent to the Credit line, supporting the standardized eight-part citation format outlined in its policy documentation [11].

The Metropolitan Museum of Art employs a badge-and-FAQ approach [10]. Its object page features an Open Access ("OA") / Public Domain indicator and exposes direct download and IIIF links, while deferring full terms—including provisions for commercial reuse, non-endorsement clauses, and caveats regarding third-party privacy or trademark rights—to its external Image and Data Resources FAQ. Experienced users familiar with Open GLAM conventions navigate efficiently. However, first-time teachers or students assessing whether they may crop an image for classroom use must leave the object page to consult the FAQ for confirmation. Figure 2 maps both open-access pathways side by side.

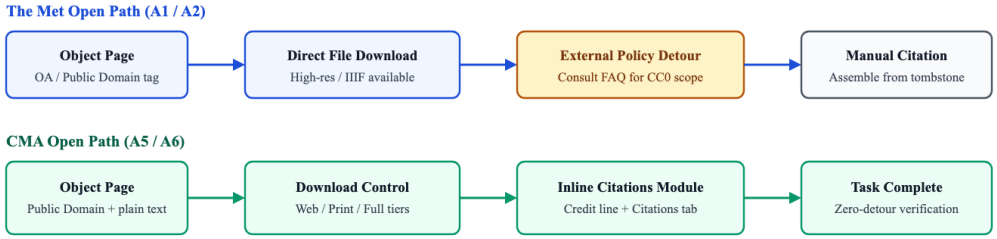

Figure 2. Comparison of Open-Access Image Reuse Task Paths on the Met (a1, a2) and CMA (a5, A6)

That additional navigation step carries greater cognitive weight than it initially appears. Once a visitor departs the object page to access the FAQ, they lose contextual proximity to the artwork image and credit fields. Upon returning, they must reorient themselves to locate the download button and manually construct the credit string from the descriptive metadata rows displayed below the image viewer [7]. In contrast, the Cleveland Museum of Art eliminates this back-and-forth by integrating the reuse permission statement and the citation box within the same vertical zone as the image controls.

4.3. Copyright-Restricted Task Paths: Dead Ends Versus Misleading Affordances

Friction intensifies significantly for the four copyrighted prints by Saitō Kiyoshi (A3, A4, A7, A8). The two museums exhibit contrasting interface shortcomings. On The Met's restricted pages (A3, A4), the open-access image file is concealed—indicated by metadata flags such as primaryImage: false and isPublicDomain: false—preventing accidental download of protected works. However, the rightsAndReproduction field remains empty in the API response, requiring users to consult the museum's general Image and Data Resources FAQ to determine that licensing inquiries and new photography requests must be directed through Art Resource via an Image Request Form [12].

CMA's restricted pages (A7, A8) explicitly state the legal status with a "Copyright" heading, the declaration "This artwork is known to be under copyright," and a footer link titled "Imagery or Rights for Non-Open-Access Artworks." Nevertheless, DOM analysis revealed an inconsistency: the interface still renders Image Controls and a Download label despite the API returning share_license_status: Copyrighted and an empty images array [13]. Presenting a download option where no image file is available creates contradictory signals; on narrow mobile displays, these labels appear adjacent to the copyright notice. Figure 3 maps the breakdown points in both restricted navigation workflows.

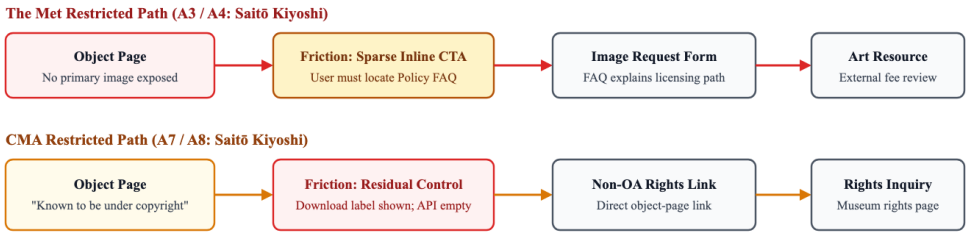

Figure 3. Restricted-work Navigation Paths and Interface Friction Points on the Met (a3, a4) and CMA (a7, A8)

4.4. Responsive Layout Behavior Across Desktop and Mobile Viewports

Teachers and students frequently access museum web pages via tablets or smartphones when preparing educational materials, making responsive layout behavior on narrow viewports critically important [14]. Table 4 compares layout structures across desktop and mobile viewports for all four museum-and-access-status groups. On wide desktop displays, the image, tombstone metadata, and action buttons remain spatially cohesive. In contrast, mobile viewports enforce single-column stacking, which can displace interface elements located below lengthy curatorial notes far down the page.

Table 4. Responsive Viewport Comparison Across Desktop and Mobile Widths

Layout Criterion	The Met Open (A1, A2)	The Met Restricted (A3, A4)	CMA Open (A5, A6)	CMA Restricted (A7, A8)
Above-the-Fold Priority	Artwork image + title; OA icon sits near media controls.	Title + placeholder/absent image; limited rights explanation above fold.	Artwork viewer + Image Controls + Public Domain notice grouped tightly.	Title + Copyright notice; residual Image Controls label visible.
Scroll Distance to Citation	Moderate on desktop; extended on mobile due to stacked overview/tombstone blocks.	Extended on mobile; credit line sits below main object summary.	Short; Citations and Credit line appear immediately adjacent to controls.	Short to moderate; Credit line and non-OA rights link remain accessible.
Policy Verification Cost	Requires leaving object page for external FAQ to confirm CC0 scope.	High; user must locate FAQ and Art Resource request instructions externally.	Low; inline sentence states copy/modify/distribute permissions directly.	Low for status; moderate for next step via footer non-OA rights link.

The mobile scroll sequence reveals practical implications of this layout shift [15]. On the Cleveland Museum of Art's openly accessible pages, a smartphone user first encounters the artwork image, followed immediately by image controls and then the 'Public Domain' heading with its concise reuse statement directly beneath. The Citations link and Credit line appear in close visual proximity, enabling educators to confirm usage permissions, download assets, and copy attribution information within a minimal vertical scroll. At The Metropolitan Museum of Art's openly accessible pages, the artwork image and 'OA' icon appear near the top, but the full curatorial overview and tombstone metadata stack vertically below. To clarify the scope of open access for classroom handouts or cropped details, users must navigate away to supplementary guidance and then return to the object record to retrieve the credit line.

On restricted-access pages, mobile layout constraints become more pronounced. At The Metropolitan Museum of Art, no primary image loads above the initial viewport, and the rightsAndReproduction field remains empty, offering minimal contextual explanation

for the missing image. Smartphone users must scroll through the entire record and consult external guidance to locate the appropriate request pathway for image acquisition. At the Cleveland Museum of Art, a copyright notice appears near the top, yet non-functional Image Controls and Download labels persist adjacent to it on narrow screens [6]. When interactive elements and restrictive notices occupy the same vertical column, users must engage in redundant tapping or reading to distinguish actionable components from informational warnings.

4.5. Metadata Completeness and Citation Readiness Audit

Every classroom slide requires an accurate source line. Although CC0 licensing eliminates the legal requirement to credit the museum, teachers and students still need the artist, title, object number, credit line, and stable URL. Table 5 assesses whether those fields appear on each of the eight pages. Both museums display complete tombstone information for both openly accessible and restricted works. The distinction lies in accessibility: one institution provides a dedicated Citations block directly on the page, supported by a standardized eight-part citation formula, while the other presents tombstone information in separate, fragmented rows requiring manual assembly.

Table 5. Availability of Core Attribution Metadata Across the Eight Inspected Collection Pages

Sample ID	Artist & Title	Credit Line	Persistent URL / ID	Inline Citation Tool
A1 (Met Open)	Present (English + romanized)	Rogers Fund, 1914	Object 36490 (JP9)	Absent (manual assembly)
A2 (Met Open)	Present (English + romanized)	Purchase, Joseph Pulitzer Bequest, 1918	Object 36461 (JP643)	Absent (manual assembly)
A3 (Met Restricted)	Present (Saitō Kiyoshi)	Gift of Mr. and Mrs. Martin Lerner, 1985	Object 55937	Absent (manual assembly)
A4 (Met Restricted)	Present (Saitō Kiyoshi)	Gift of Mr. and Mrs. Martin Lerner, 1985	Object 55931	Absent (manual assembly)
A5 (CMA Open)	Present (with series title)	Bequest of Edward L. Whittemore	1930.189	Present (Citations section)
A6 (CMA Open)	Present (with series title)	The Kelvin Smith Collection, given by Mrs. Kelvin Smith	1985.318	Present (Citations section)
A7 (CMA Restricted)	Present (Saitō Kiyoshi)	The Kelvin Smith Collection, given by Mrs. Kelvin Smith	1985.394	Credit line + policy template
A8 (CMA Restricted)	Present (Saitō Kiyoshi)	The Kelvin Smith Collection, given by Mrs. Kelvin Smith	1985.392	Credit line + policy template

Manually copying and combining tombstone information introduces small but frequent errors in student work—such as omitting Japanese romanization when copying the English title, excluding the bequest credit line, or substituting a search-query link for the stable object URL. Embedding a pre-formatted citation box directly on the object page prevents such inaccuracies and improves efficiency for educators and museum staff alike [5].

4.6. Policy-Level Alignment: Met Image Resources FAQ Versus CMA Open Access

Differences in front-end implementation stem from institutional policy design. Both institutions publish open access guidelines that affirm the use of the CC0 public domain dedication for eligible digital assets. Under CC0, attribution is not legally required but is encouraged; however, the dedication does not override third-party rights related to privacy, publicity, or trademarks. A key distinction lies in how these policies are

operationalized on object-level pages: one institution integrates its policy directly into the on-page citations interface, while the other directs users seeking restricted-use reproductions to an external licensing service. Table 6 presents a comparative summary of these policy implementations.

Table 6. Policy-level Rule Alignment between the Met FAQ and CMA Open Access Documentation

Policy Dimension	The Met Policy Documentation [6]	CMA Open Access Documentation [7]
Open-Access License	CC0 for public-domain artworks and basic collection metadata.	CC0 for open-access images, data, software, and documentation (>50% of collection).
Attribution Requirement	Not legally required; attribution to The Met is appreciated.	Not legally required; provides explicit 8-part recommended citation formula.
Third-Party Caveats	Notes that trademark, privacy, or publicity rights may still apply independently.	Notes that citation does not imply institutional endorsement or trademark permission.
Restricted-Work Channel	Routes licensing and new photography requests to Art Resource via Image Request Form.	Routes inquiries via dedicated non-open-access imagery and rights request page.

5. Case Deep-Dives

5.1. Case Pair 1: Katsushika Hokusai's South Wind, Clear Sky (a1 Vs. A5)

Comparing two impressions of the same famous print—the Metropolitan Museum of Art's JP9, Object 36490, and the Cleveland Museum of Art's 1930.189—reveals how distinct digital layouts present identical public domain artwork. Both institutions provide free CC0 image files and specify complete credit information: the Rogers Fund, 1914 attribution at The Met; the Bequest of Edward L. Whittemore at CMA. On CMA's page, reuse guidance is consolidated in a single visual stack: a 'Public Domain' tag, a clear statement affirming unrestricted copying and modification, a Download button, and adjacent rows for citations and credit requirements [6]. In contrast, The Met's page places the high-resolution image and IIIF link prominently, while the plain explanation of CC0 licensing resides on a separate FAQ page. For educators needing to crop a detail for classroom use, CMA's inline statement provides immediate clarity.

Preparation of proper attribution highlights a second functional disparity. CMA's policy page specifies an eight-part credit format and positions the Citations link directly beside the image controls. At The Met, users must extract the artist name, English and Japanese titles, date, medium, credit line, and object number from scattered, vertically stacked metadata fields. On mobile devices, where these elements appear far apart in sequence, assembling a complete and accurate credit requires repeated scrolling and navigation.

5.2. Case Pair 2: Saitō Kiyoshi's Restricted Prints (a3 Vs. A7)

Comparing Saitō Kiyoshi's Gion in Kyoto (H) at The Met (A3) with Maiko (an apprentice geisha), Kyoto at CMA (A7) reveals divergent approaches to twentieth-century prints still under copyright. Neither institution can assign a CC0 designation, nor do either provide public-domain downloads via their APIs. However, their presentation strategies differ significantly. At The Met (A3), the absence of a primary image and an empty rightsAndReproduction field in the API creates ambiguity. Without prior knowledge of the Image and Data Resources FAQ or the Art Resource Image Request Form, visitors may interpret the page as incomplete or unscanned—potentially misleading educators into assuming digitization has not yet occurred.

In contrast, CMA (A7) clearly states that the artwork is under copyright and provides a direct footer link titled "Imagery or Rights for Non-Open-Access Artworks" to guide

users on licensing inquiries. Nevertheless, retaining visible Image Controls and Download labels in the HTML when no image data is available generates cognitive dissonance. On mobile interfaces, the proximity of the copyright notice and the download label compels users to reconcile contradictory signals. Replacing the download label with a context-sensitive "Request Licensed Image" button whenever the images field is empty would resolve this inconsistency and improve usability.

5.3. Secondary Pair Verification: Hiroshige's Sudden Shower (a2 Vs. A6) and Saitō's Winter in Jacko-In (a4 Vs. A8)

Analysis of the second matched pair in each group confirms that these patterns arise from shared page templates rather than isolated catalog inconsistencies. For Utagawa Hiroshige's Sudden Shower over Shin-Ōhashi Bridge and Atake, both institutions implement identical open-access configurations: one provides CC0-licensed high-resolution downloads alongside acquisition information citing the Joseph Pulitzer Bequest, while the other associates CC0 licensing and multi-size image files with a named collection and includes inline citation support. In the second restricted pair—Saitō Kiyoshi's Okuno-Hosomichi Io-Ji Izaka and Winter in Jacko-in, Kyoto—the first institution omits primary image data and leaves rights and reproduction fields blank, whereas the second displays copyright notices yet retains visible image controls and download functionality in the page structure.

The recurrence of identical layout behaviors across distinct artists, acquisition histories, and accession numbers eliminates the possibility of isolated data-entry anomalies. Both institutions generate these eight pages from common collection templates governed by a small set of API parameters, indicating that a single template-level correction would propagate consistently across all Japanese woodblock prints and other catalogued objects [7].

5.4. Synthesis Across All Eight Pages: Systemic Template Trade-Offs

Taken together, all four pairs (A1/A5, A2/A6, A3/A7, and A4/A8) show that page friction stems from template design. Every open CMA page places plain reuse wording adjacent to a citation tool, and every restricted CMA page displays a clear copyright notice alongside a residual download label. Every open Met page enables immediate file downloads while directing users to an FAQ for legal terms, and every restricted Met page prevents unauthorized downloads effectively while omitting an inline request option. Because one template governs thousands of collection records, revising these two template patterns would enhance the entire catalog simultaneously [3].

Examining the four pairs side by side also reveals how minor UI elements significantly influence daily teaching practice. When a teacher assembles a lecture presentation under time constraints, they seldom review a museum's full legal policy. Instead, they require an unambiguous yes-or-no indication directly on the page, a ready-to-use image file for open works, a preformatted credit line for immediate inclusion beneath slides, and a visible, accessible request mechanism for copyrighted works. Neither museum currently delivers all four features consistently across both open and restricted prints; however, each institution already implements half of the solution. Integrating CMA's inline reuse statement and citation interface with The Met's streamlined handling of restricted downloads yields a practical, scalable blueprint adaptable by any museum web team [8, 15].

6. Redesign Proposal and Discussion

6.1. Unified Rights-And-Reuse Panel Wireframe

Borrowing the best elements of both sites—the clean download blocking for copyrighted works used by one major museum, and the straightforward rights language with inline citation support used by another—Figure 4 sketches a unified reuse panel. The layout follows three principles: (1) align the primary action button with the actual rights status, displaying a size-tiered Download menu only when the work is in the public

domain or licensed under CC0, and replacing it with a Request Permission option for copyrighted works; (2) place a concise, plain-language reuse summary adjacent to a standardized rights tag, accompanied by a small expandable policy note to ensure users need not navigate away from the page; and (3) provide a one-click citation copy function populated directly from the object's credit metadata [12].

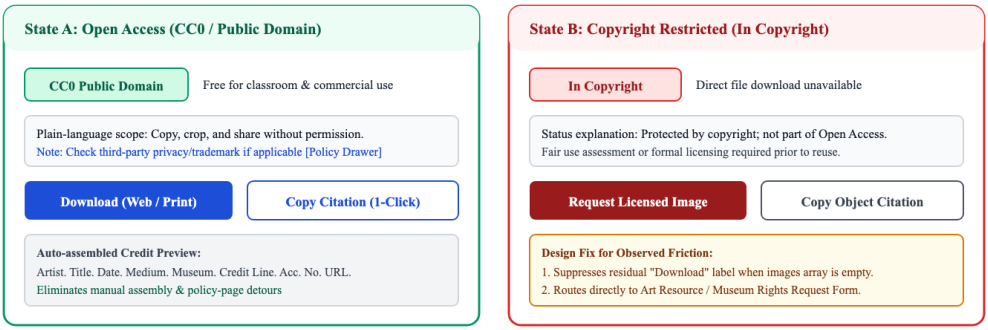

Figure 4. Proposed Unified Collection-Page Reuse Module Addressing Open-Access Citation and Restricted-Work State Clarity

In the open-access state, a teacher preparing instructional materials sees a green CC0 tag, a clear plain-English permission statement, the Download menu, and the Copy Citation button arranged cleanly before any curatorial text begins [5]. In the copyrighted state, a red In Copyright tag appears alongside an unambiguous explanation and a Request Licensed Image button that directs users to the appropriate licensing service or institutional rights office, while still enabling scholars to copy the object's citation for bibliographic purposes (As shown in Table 7).

Table 7. Component-level Interface Specification for the Proposed Unified Reuse Module

UI Component	API / Metadata Trigger	Open-Access Behavior (CC0)	Restricted Behavior (In Copyright)
Rights Status Badge	isPublicDomain or share_license_status	Displays "CC0 Public Domain" with plain-language classroom/commercial scope.	Displays "In Copyright" with explicit note that open download is disabled.
Primary Action Button	primaryImage or non-empty images	Active "Download" menu offering Web, Print, and Full-resolution tiers.	Download label removed; replaced by "Request Licensed Image" CTA.
Citation Module	Artist, Title, Date, Credit Line, Acc. No., URL	1-click copy formatted per institutional citation template [7].	1-click copy for scholarly reference even when image file is restricted.
Policy / Next-Step Drawer	Rights exception or licensing partner flag	Inline expandable note on third-party privacy/trademark caveats [6].	Direct link to Art Resource / Museum Rights Request Form [6, 7].

6.2. Design Trade-Offs, Implications, and Scope Boundaries

Positioning a reuse summary and citation box near the top of the page involves clear design trade-offs. On small mobile screens, additional interface elements compete for limited space with curatorial essays and related-artwork grids. Consolidating reuse controls into a single compact card placed directly beneath the image viewer preserves reading continuity while addressing primary reuse queries at the user's initial point of visual attention. Replacing generic "Download" labels with "Request Licensed Image" on

copyrighted pages reduces unintended interactions without obscuring the institution's formal licensing pathway.

From a web engineering perspective, this solution does not require modifications to the underlying museum catalog database. Both institutions already expose the necessary rights-related metadata in their public JSON APIs: for example, flags indicating public domain status and primary image availability. A front-end template implementation requires only two straightforward conditional checks. First, the download interface element is suppressed when the API returns an empty image list. Second, a concise rights statement and a pre-populated citation string are generated dynamically from existing object-level fields—such as artist, title, date, credit line, and persistent URL. Implementing these rules at the template level resolves inconsistencies across thousands of collection pages without requiring manual curation updates. Even small technical teams maintaining legacy museum websites can deploy both rules within a single development sprint, effectively eliminating the most prevalent usability barriers identified in this analysis.

6.3. Implications for GLAM Information Architecture and Classroom Reuse

These findings are relevant to museum web teams and educators. Teachers typically lack time to review legal guidance from multiple institutions while preparing classroom materials. Integrating a clear rights indicator with a concise plain-language summary and a one-click citation tool helps prevent copyright infringement and avoids unnecessary avoidance of openly licensed or public-domain resources—such as skipping a high-quality public-domain print solely because the interface fails to confirm its reuse eligibility. Linking front-end button visibility directly to backend API status (e.g., suppressing download labels when image data is unavailable) is a low-effort engineering solution compatible with both desktop and mobile interfaces. Table 8 summarizes the four observed interface challenges and their corresponding template-level design solutions.

Table 8. Summary of Observed Interface Friction and Template-Level Design Remedies

Observed Friction	Affected Samples	Root Template Cause	Proposed Template Remedy
Legal scope delegated to external FAQ	The Met Open (A1, A2)	Object page relies on OA badge without inline scope sentence.	Add one-line plain-language CC0 summary + expandable policy drawer.
Manual citation assembly required	The Met Open & Restricted (A1-A4)	Metadata split across tombstone rows without copy widget.	Provide 1-click citation copy assembled from artist, credit, ID, URL.
Sparse inline licensing path on restricted works	The Met Restricted (A3, A4)	Empty rightsAndReproduction field and no inline request CTA.	Render explicit "In Copyright" notice + Art Resource Request CTA.
Residual download label on copyrighted works	CMA Restricted (A7, A8)	Image Controls / Download rendered despite empty images array.	Suppress download affordance whenever images is empty; swap to Request CTA.

This study has several limitations. First, the analysis focused on eight Japanese woodblock print pages hosted by two large, well-resourced U.S. museums; smaller or regionally based institutions using legacy systems may encounter distinct technical considerations [4, 12]. Second, the audit reflects the live state of those pages as of November 21, 2026, and museum interface templates evolve over time. Third, in the absence of human usability testing, the proposed redesign constitutes an analytical recommendation derived from systematic page inspection and established Open GLAM principles, rather than empirically measured user performance.

6.4. Future Empirical Validation Agenda

While this study keeps its claims strictly to visible page layout, the friction points identified suggest clear tests for future user research. First, think-aloud sessions with high-school teachers and college instructors could measure how quickly and accurately they determine whether a copyrighted print can be included in a closed lecture slide versus an open course site. Observing where participants pause, navigate away to consult guidance resources, or hesitate over residual download labels would convert these layout observations into quantifiable task times and error rates [15].

Second, A/B prototype tests comparing the policy-delegated page against the unified reuse panel (Figure 4, Table 7) could assess whether inline summaries and one-click citation buttons reduce detours to guidance resources and mitigate omissions of attribution. Third, evaluating smaller regional museums and non-Western collections would indicate the robustness of these template improvements beyond major flagship sites, particularly under constraints of limited staff capacity and engineering resources [12].

7. Conclusion

Applying a CC0 designation to public-domain art constitutes only part of the effort required to make museum collections practically reusable; the remaining challenge lies in the design and functionality of the web interface. Across eight matched pages featuring Japanese prints at The Metropolitan Museum of Art and the Cleveland Museum of Art—both institutions with strong open-access commitments—observable trade-offs emerge in how rights information is displayed, download actions are surfaced, attribution support is provided, and copyrighted works are handled. The Cleveland Museum of Art uses straightforward reuse statements and inline citation tools, reducing verification effort for public-domain prints; however, on pages containing copyrighted works, download labels remain visible despite the absence of downloadable image files. The Metropolitan Museum of Art prevents restricted downloads cleanly but directs users to an external FAQ for fundamental CC0 explanations and Art Resource request forms.

Resolving these interface-related friction points does not necessitate new legal frameworks or large-scale catalog overhauls. Both institutions already expose underlying rights metadata and image availability status through their public JSON APIs. Directly linking button states to those API signals, presenting reuse guidance directly on the object page, and enabling one-click citation generation transforms open-access policy into tangible usability for educators and learners. Regardless of whether a museum's collection includes Edo-period woodblock prints or contemporary copyrighted works, unambiguous, object-level interface cues help ensure appropriate use while minimizing unwarranted hesitation toward openly licensed materials.

References

1. F. Valeonti, M. Terras, and A. Hudson-Smith, "How open is OpenGLAM? Identifying barriers to commercial and non-commercial reuse of digitised art images," *Journal of Documentation*, vol. 76, no. 1, pp. 1–26, 2020.
2. K. D. Crews, "Museum policies and art images: Conflicting objectives and copyright overreaching," *Fordham Intellectual Property, Media & Entertainment Law Journal*, vol. 22, p. 795, 2011.
3. M. Terras, "Opening access to collections: the making and using of open digitised cultural content," *Online Information Review*, vol. 39, no. 5, pp. 733–752, 2015.
4. International Rights Statements Working Group, *Recommendations for standardized international rights statements*, 2016.
5. R. T. F. This, *Creative Commons CC0 License*, 2008.
6. P. Suber, *Open Access*. Cambridge, MA: The MIT Press, 2012, p. 256.
7. L. Ballinger, B. Karl, and A. Chiu, "Providing quality rights metadata for digital collections through rightsstatements.org," *Pennsylvania Libraries: Research & Practice*, vol. 5, no. 2, pp. 144–158, 2017.
8. Y. Choi and E. M. Rasmussen, "Searching for images: The analysis of users' queries for image retrieval in American history," *Journal of the American Society for Information Science and Technology*, vol. 54, no. 6, pp. 498–511, 2003.
9. D. E. Acuna, P. S. Brookes, and K. P. Kording, "Bioscience-scale automated detection of figure element reuse," *bioRxiv*, p. 269415, 2018.
10. M. Sanderhoff, "Open Images," *Nordic Museology/Nordisk Museologi*, no. 2, p. 131, 2013.

11. F. Prior, J. Almeida, P. Kathiravelu, T. Kurc, K. Smith, T. J. Fitzgerald, and J. Saltz, "Open access image repositories: high-quality data to enable machine learning research," *Clinical Radiology*, vol. 75, no. 1, pp. 7–12, 2020.
12. T. Zulueta-Coarasa et al., "MIFA: Metadata, Incentives, Formats and Accessibility guidelines to improve the reuse of AI datasets for bioimage analysis," *Nature Methods*, vol. 22, no. 11, pp. 2245–2252, 2025.
13. C. C. Marshall and F. M. Shipman, "The ownership and reuse of visual media," in *Proc. 11th Annu. Int. ACM/IEEE Joint Conf. Digital Libraries*, Jun. 2011, pp. 157–166.
14. G. Candela, M. D. Sáez, M. Escobar Esteban, and M. Marco-Such, "Reusing digital collections from GLAM institutions," *Journal of Information Science*, vol. 48, no. 2, pp. 251–267, 2022.
15. P. J. Heald, M. Sahli, and A. Cuntz, "Digital Reuse and Online Availability of Visual Artworks," 2026.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Publisher and/or the editor(s). Publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.