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A Matter of Size, Scope, and Significance: Archival Processing and Mass Digitization of the Johnson Publishing Company Archive

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Abstract

Acquired in 2019 by a consortium of philanthropic and cultural heritage organizations, the Johnson Publishing Company (JPC) Archive is co-owned by the Getty Research Institute (GRI) and Smithsonian National Museum of African American History and Culture (NMAAHC). Dating from 1942, when John H. and Eunice W. Johnson founded the company, to the 21st century, the JPC Archive contains over 4 million photographs of published and unpublished works documenting the Black experience, some of which were featured in JPC's 14 magazines, most notably JET and Ebony. In addition to the historically significant events and behind-the-scenes moments depicted, the Archive presents an unmatched and unique record of many facets of the life, work, and contributions of Black individuals, communities, groups, organizations, and businesses. Working collaboratively across the United States (from Los Angeles to Chicago to Washington, DC), these two large cultural heritage institutions currently co-steward this collection, with each focusing on their strengths to bring this remarkable and unique collection to the public.

Motivation

The Johnson Publishing Company Archive (JPCA) represents the Getty Research Institute's (GRI) most significant acquisition to date and a herculean effort of cataloging and digitization. Over 4 million prints, negatives, slides, and transparencies that depict iconic Black actors, musicians, fashion models, writers, leaders, and activists as well as everyday citizens constitute the heart of the JPCA collection. These images highlight the significant roles that African Americans have played in shaping American life and culture, while also providing critical visual documentation of the 20th-century Black experience. Whereas the iconic JPC publications, including titles such as *Ebony* and *JET*, have received both popular and scholarly attention, the image archive constitutes a related yet distinct corpus, only a small fraction of which has ever been published. Beyond the photographs, the collection also documents the activities and publications of the company, including business records, ephemera, and audiovisual and printed materials.

Problem

The greatest challenges for archival processing and mass digitization across institutions on different U.S. coasts for a collection of this size and significance are scale, collaboration, and communication. The JPC Archive is the largest archival collection held by either the GRI or the Smithsonian's National Museum of African American History and Culture (NMAAHC), meaning neither institution had previous experience working on a collection this large, particularly one located offsite in a different state, thousands of miles away. How do we effectively develop workflows that are adaptable but consistent for a collection of this size? How do we meaningfully collaborate across time zones, locations, and institutional cultures? How do we effectively communicate project needs and goals, especially when and if those needs and goals are in flux?

Despite its enormous size, the archive, at its heart, is a photo archive, or "photo morgue" to use the language of publishing. Archival digitization standards and workflows, guided by the Federal Agencies Digitization Guidelines Initiative (FADGI), grounded the digitization workflow and adhered to its principles.

Approach

Focusing on the strengths of each institution, Getty took the lead on physical stewardship and archival processing, while the Smithsonian, with the assistance of the Mass Digitization team in the centrally located Digitization Program Office (DPO), has taken lead on the digitization of the photo archive. Digitization of the published magazines (except *Ebony* and *JET*) is currently in process at Getty, managed and performed in-house with their Imaging Team. Regular site visits, biweekly and monthly meetings, collaborative project management software, and a strong sense of trust between colleagues has proven necessary to launch the initial steps of the project (archival processing and mass digitization). This, coupled with pilot projects for both steps to develop and implement workflow approaches, proved vital.

Archival Processing

Archival processing is crucial to the effective management and use of archival collections. The activities related to archival processing include arranging, describing, stabilizing, and storing materials of enduring and intrinsic value according to professional standards and best practices to facilitate access and long-term preservation. A core tenet of this work is maintaining the original order of the archive. In practice, this requires taking a systematic approach that involves rehousing, cataloging, and digitizing an entire collection or portion from beginning to end rather than selecting folders related to specific individuals or topics. This approach is the most efficient, ensuring the integrity and stability of the materials as well as consistency in maintaining the physical order of folders and boxes.

At both the Getty and the Smithsonian, archival processing is done in advance of digitization to ensure materials are properly organized and identified with sufficient metadata to manage the

resulting digital files. Without this preparation, digitizing unprocessed archives produces disorganized, unidentifiable digital files. For an archive of this size, comprising multiple collections that will produce millions of digital files—thorough arrangement and description are critical to both the digitization process and the long-term usability of the physical and digital archive.

The unprocessed archive currently occupies 2,700 linear feet of storage space, which is a little over half a mile. Within this, there are 1,833 record storage boxes containing approximately 123,311 folders of photographic material that document the many facets of the life, work, and contributions of Black individuals, communities, groups, organizations, and businesses from the mid-1940s through 2008.

What we now refer to as the archive was originally the Photo Files, which was started by Doris E. Saunders, the first librarian at Johnson Publishing Company. Before joining JPC, Saunders worked for the Chicago Public Library at the George Hall Branch and the Social Science and Business Division. She began her career at JPC in the late 1940s, built a team of librarians and together they established the organization and arrangement of the collection. In the early 1950s, she hired Basil Phillips, who went on to become a photo editor and manager of the Photo Files until his retirement in 2005.

Consistent with the standards of the time, the photographs were organized into groupings based on material type and subject matter. JPC staff navigated the files by browsing subject headings written on standard letter-sized folders, which were stored vertically in five-drawer filing cabinets. Inside each folder, staff would find prints, contact sheets, negatives, and slides stored together, related to that subject heading for use in their work.

We retained the original groupings established by Saunders and Phillips, such as Oversize Photographs of Individuals and Color Photographs of Subjects, while creating additional ones for photographs related to other JPC ventures such as the Ebony Fashion Fair runway show, radio stations WJPC and WLOU, and the television series Ebony/Jet Showcase. We now refer to these material and topical groupings as collections.

Figure 1: The JPC archive during processing, Chicago, March 2023.

Archival Processing Pilot

In 2021, the GRI hired a Chicago-based conservator to conduct a large-scale condition assessment of the archive. The results of the survey revealed that while the materials are in relatively good and stable condition, there are noticeable preservation issues. For example, there are minor signs of creasing and chipping associated with the handling of the prints; improper housing of negatives, slides, and transparencies; overstuffed containers and folders, and the lack of support within containers and folders needed to minimize distortion of the materials. Some photographic prints show signs of physical damage, which have resulted in emulsion flaps and moderate to severe tears. We also learned that the archive represents both a comprehensive photo library and a record of the company's editorial practices.

Although it is not common practice at the GRI, NMAAHC, and most repositories, we decided to conduct an archival processing pilot to establish and test rehousing and cataloging procedures, considering the scope, size, and significance of the JPC Archive. Based on archival and conservation best practices for photographs, we drafted an extensive processing manual that outlines the scope of archival work and includes guidelines for handling and care, preservation techniques and methods, housing and storage, labeling, and metadata creation.

In April and June of 2022, archivists from the GRI in Los Angeles traveled to Chicago to assist the managing archivist with a two-part processing pilot. We aimed to test and evaluate the efficiency of our rehousing and cataloging workflows. Our goal was to process up to 5,000 archival items at the folder level to help our colleagues in the Smithsonian Digitization Program Office conduct an effective digitization pilot. Rather than counting each individual item in the folder, we decided to rehouse and catalog the first three boxes as a sample from three collections: Oversize Photographs of Individuals, Black-and-white Photographs of Individuals, and Color Photographs of Individuals. Each archivist worked on one box from each collection.

During the processing pilot, the conservator trained us to on how to physically handle materials and properly address specific issues related to their condition. As we rehoused the pilot materials, we encountered and handled many of the unique, interesting, and challenging issues that were described in the condition assessment survey. This ranged from removing massive quantities of slides in plastic sleeves to detaching negatives in glassine enclosures on the verso of prints.

Figure 2: Rehousing slides from the Johnson Publishing Company archive. Chicago, August 2023.

The rehousing process seemed simple at first, but each box presented different challenges, making simplicity and ease often nonexistent. Depending on the complexity of the issues found in a box, an archivist could spend up to a few days rehousing and another few days cataloging that same box. While separating materials by format and labeling folders and dividers was time-consuming, we considered it necessary to preserve original order and maintain the intellectual integrity of the collection.

Creating descriptive metadata at the folder levels in ArchivesSpace, the chosen Collections Information System (CIS) for processing the archive, was straightforward. We captured the subjects of the folder, date range of materials, associated publications, credited photographers, and physical description of items. By the end of the archival processing pilot, we sampled eight original boxes: six record storage boxes and two flat file boxes, all of which were fully rehoused and partially cataloged. The number of rehoused items exceeded our target and included 9,409 archival items rather than the estimated 5,000 items needed for the digitization pilot.

While the digitization pilot was underway, we completed cataloging of the pilot material, refined our rehousing workflows to improve storage of certain formats, standardized metadata creation, and created an AirTable database to track processing assignments, metrics, and quality control. The archival processing manual is over 200 pages long.

Given the size, scale, and detail to which the collection is being stabilized, there was a learning curve—even for an experienced archivist—to understand JPC workflows, processes, and systems. Because of this, the team of six processing archivists underwent a five-week training program with the managing archivist and conservator. The training included an introduction to photographic formats and addressed handling and rehousing of the material and basic preservation tasks necessary to prepare the material for storage and digitization, such as fastener removal and simple flattening, in addition to arrangement and description. Processing archivists also learned to recognize more complex issues requiring the intervention of a conservator.

Based on the materials processed during the archival pilot, we estimate that the collection, once housed in proper archival containers, will expand to exceed a full mile and full-scale archival processing will take approximately four years to complete. While this is less than ideal given the time constraints, public interest, and curatorial needs, it is necessary if the materials are to be properly preserved, digitized, and made accessible.

Mass Digitization Project Management

The Mass Digitization team at the Smithsonian deploys robust project management and a three-pronged workflow approach to successfully manage and execute large-scale mass digitization projects.

We begin mass digitization projects with our **Resource Coalition** process, a series of meetings with senior stakeholders to answer who, what, where, when, and how of a project; and the necessary resources to do so (staff, supplies, equipment, time, money). For this project that means cross-institutional collaboration between the Getty, NMAAHC, and other Smithsonian departments such as DPO and our Digital Platforms team. For an internal Smithsonian project, the Resource Coalition process takes 2-6 weeks; for the JPCA project, the process took two (2) years. A joint Technical Working Group has met regularly since the inception of the project, and many decisions about the digitization workflow were presented to and agreed upon by the Technical Working Group. The Technical Working Group continues to meet and develop the access pipeline for the online presentation of the archive.

Upon determining what resources were needed and who would provide those resources, we began **Long Term Preparation,** which are the necessary steps taken by the Archive staff to prepare collections (both physical items and their digital records) for processing and digitization. This work is performed by the team of archivists under the direction of the Archives Manager in Chicago. Meanwhile, for digitization, we develop and iterate our workflow design and contract with a vendor. This includes image testing in collaboration with DPO's Imaging Services team.

We then begin the **Workflow Design** phase of our mass digitization project planning. DPO has developed, and iterated, over the years, a three-pronged workflow approach that segments that three major workflow needs of a project: the Physical Workflow, the Imaging Workflow, and the Virtual Workflow. This approach is used for every mass digitization project and has proven successful over the ten years we have put it into practice. Therefore, for the JPCA project, we did not need to develop a workflow from scratch, but rather, incorporate the needs of the archive into the established workflow approach. This is best done through a pilot project.

Mass Digitization Pilot

In the summer of 2023, we performed a digitization **Pilot Project**, with the goals of developing an efficient workflow necessary for a larger production project the following year and providing an immersive mass digitization experience in a lower-stress environment. The digitization pilot occurred following the archival processing pilot that took place in the spring of 2023. During that pilot project, archivists selected approximately 9,409 items, spanning the various media types found in the collection, such as prints, paper documents, negatives, slides, and mixed media "collage" items, exceeding our original 5,000 item minimum for the digitization pilot, but gave us more diverse material to digitize.

A site visit to the archive was performed prior to the digitization pilot start. This allowed the project team, including the vendor, to assess the collection in-person, which we found crucial to the success of the project. We discussed some of the physical concerns, such as mixed film formats within a single binder, oversized materials, collaged items and the existence of fasteners such as paper clips and staples. This visual review allowed us to create more accurate workflow design documents, as we were better acquainted with the physical needs and challenges of the archive.

The digitization pilot took place at the facility of the contracted vendor in New Jersey. Selecting the vendor's location provided additional complications, such as shipping and storage logistics, but offered additional value, such as a full-time, in-house staff (opposed to temporary project staff), and the use of the vendor's full suite of equipment offerings. A site visit was performed to confirm that the vendor's facility provided the necessary security, environmental stability, and logistics capacity for shipping and receiving the collection.

The pilot of the Physical Workflow Design successfully demonstrated that materials from the archive could be successfully and safely shipped from Chicago to New Jersey. Both the archive in Chicago and the vendor in New Jersey occupy facilities that are co-located with fine art shipping and handling companies, which helped efficiently facilitate the shipping and receiving. The detailed processing manual provided useful handling information for the imaging vendor, such as examples of physical concerns found in the archive, such as adhesives, debris, fragile or oversize materials.

The pilot of the Imaging Workflow Design successfully demonstrated the rapid capture of multiple formats simultaneously in the vendor's studio, and helped determine what an expected throughput rate would be for the larger production project.

The pilot of the Virtual Workflow successfully demonstrated that the vendor's privately managed IT infrastructure allowed for rapid upload/download speeds, enhanced cybersecurity, and immediate access to files for remediation or troubleshooting. This, coupled with DPO Informatics' file validation dashboard, allowed us to examine where and when we might expect bottlenecks in the movement and processing of files. One of the major challenges of the pilot was the development of unique identifiers for the archival items. DPO Mass Digitization workflows are predicated on each file have a unique identifier, ideally in the form of a barcode that can be scanned. This use of a barcode was not a part of the regular Getty workflow and required the development of a plug-in to the Getty instance of ArchivesSpace, which is used to manage and catalog the collections data. ArchivesSpace assigns a "refID" to each component or object in the system. Collaboratively, we were able to develop a workflow that would take the assigned refID from ArchivesSpace, print the refID onto a data matrix barcode sticker, and place the sticker on each folder in the archive. The barcode refID would be the base of the file name for each image, with additional suffixes for the number of the item within the folder, and a final suffix for the view of the item (for instance, recto/verso). The persistence of the unique identifier is vital for the various automated processes that are necessary for the images to reach their final destinations, in the Smithsonian Digital Asset Management System (DAMS) and Getty online platforms.

After the completion of our pilot projects, planning and preparation for the full-scale **Production Project** began. Planning is documented and managed through a series of tasks tracked in the project's Gantt chart, as well as in a project-specific instance in a shared project management software, Confluence. Revisions were made to the workflow design, and digitization continued with materials determined "Priority 1," a compilation of high-profile and most requested material from the Archive that will make up the bulk of the content for the public launch. Priority 1 consisted of a larger batch of material than the Pilot material, but smaller than the anticipated Production batches, so it acted like a second pilot, allowing for additional testing and revisions of workflows.

Digitization Workflow Design

Physical Workflow Design

For the JPCA project, the physical workflow design was both more and less complicated than it normally is when we are working onsite in one of the Smithsonian museums, given that we are working across not three but four locations—LA, where the Getty is located, Chicago, where the archives are located, DC where the Smithsonian is located, and New Jersey where our vendor is located. So, the physical workflow design includes details on packing and shipping in addition to the movement and handling of the archival items themselves. Briefly:

- Collection is processed in Chicago.
- Processed collection is packed and shipped.
- Collection digitized offsite at vendor facility in New Jersey.
- After digitization, the collection is sent to NMAAHC storage.

One additional task this project requires, given the multiple locations, is site visits. As we are working in batches on this project, a trip to Chicago a few months prior to the next batch being shipped to the vendor is performed so the collection can be assessed in terms of digitization (estimating the number of items as well as the variation in formats) and draft the contract modification for that batch. We also did a studio survey of the vendor's facility during the pilot, to confirm that the building and studio were properly secured and managed appropriately to house collections. A few additional site visits to the vendor facility for needs like assessing the additional storage space or assisting the archivists in reintegrating materials that had been sent to the Getty for conservation but needed to then be digitized and returned to their original location in the archives' arrangement have been undertaken.

The limiting factor for the Physical Workflow Design is maintaining enough storage for the archival materials while they are in New Jersey being digitized. The vendor's studio does not have a large enough footprint to safely store production size batches of material (approximately 10 pallets of material, or 400 boxes), so additional storage space within the vendor's facility was necessary. Fortunately, the vendor's studio is in a mixed-use art building that houses additional art collections and exhibit spaces. The partnership between Getty and Smithsonian was able to secure additional storage space within the same corridor as the vendor's studio, allowing for safe and efficient storage and access during digitization. This need for additional space is ongoing for the project while digitization is in production.

Imaging Workflow Design

The JPC Archive consists exclusively of standard archival material, such as prints, 35 mm slides, 35 mm filmstrips, medium format film, and document ephemera. It was determined at the beginning of the project that we would capture the recto/verso of every reflective item, as well as the 35 mm slides and mounts. Furthermore, it was determined that very minimal post-processing, such as adjusting levels or normalizing film display, would be deployed in the Imaging Workflow, except for the inversion of negatives into positives, and some color reversal film adjustments. The white balance of black and white film, color negative film, and prints would be to render the light source neutral at all values. Color slides would be white balanced on the Dmin step of an ISO 12641-2 transparent positive film target and have a custom color ICC profile generated from ISO 12641-2 compliant IT8 35mm transparency target. The vendor would deliver raw and tiff files, in accordance with all DPO Mass Digitization projects. For the JPC archive collections of transmissive and reflective items, widely

published and accepted research on the resolution needs for capturing the microstructure of film grain is readily available. Accepting the conclusions of this research, we assume that the artifactual information in this material ranges from the following base resolution specifications:

Item Type	Item Properties	Micron measurement	SFR Resolution (PPI)
35mm Color Slide *see fig. 2	Transmissive	5.3 - 10 microns	4,800 ppi - 2,540 ppi
Color Pos/Neg film *see fig. 3	Transmissive	5.3 - 10 microns	4,800 ppi - 2,540 ppi
B&W Neg film *see fig. 4	Transmissive	5.3 - 8 microns	4,800 ppi – 2,540 ppi
Prints, B&W, Color **see fig. 4/5	Reflective	25 – 30 microns	1,280 ppi*

The fundamental image particles in chemical-based images are color dye clouds in color film and silver particles in B&W film.
Color films have dye clouds (5.3-25 microns across) that start from silver particles or clumps. The dye clouds develop around the silver particles. To accommodate for slower and finer grain film, the smallest micron measurements are in the 5.3-10-micron range. Dye clouds are the source of film grain in color films.

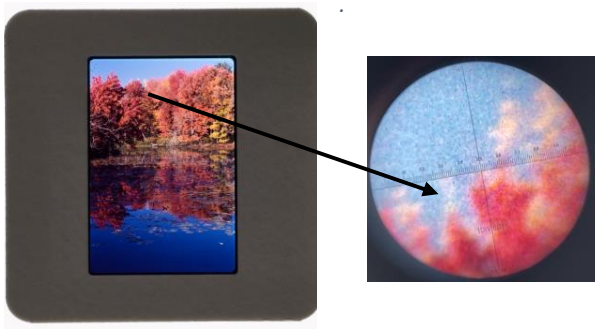


Figure 3a: 35mm Provia 100 slide with 5.3-micron measurements of dye clouds; imaged at 4500 ppi.

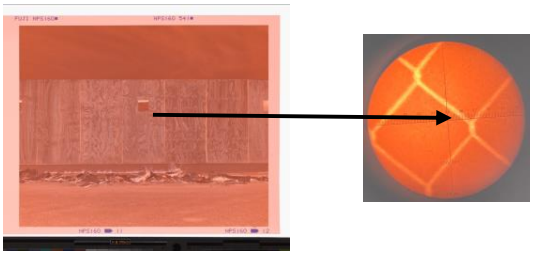


Figure 3b. Medium format color negative film Provia 100f with 8.5-micron measurement of dye clouds; imaged at 3000 ppi.

Silver particles in B&W film
Film grain in B&W film is composed of numerous silver particles, an order of magnitude smaller than the average film grain size; 5.3 to 8 microns for film grain resolution.

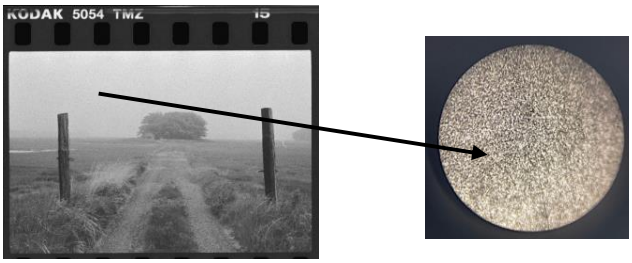


Figure 4a: 35mm black and white film grain measurement (TMAX) 5.3 microns; imaged at 4800 ppi.

Figure 4b: 4x5 B&W Film Grain measurement 10 microns; imaged at 2540 ppi.

Prints (B&W, Color)

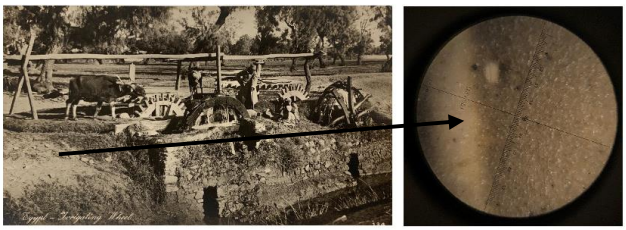


Figure 5: Silver gelatin B&W photographic print; measurement of printed grain 25-30 microns.

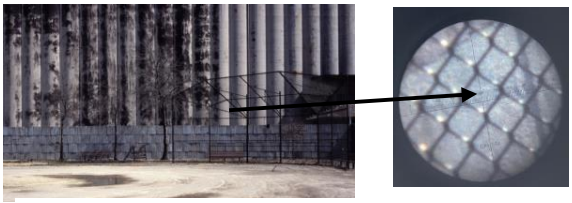


Figure 6: Color print; measurement of printed grain, 30 microns.

Virtual Workflow Design

The last workflow in a DPO mass digitization project is the Virtual Workflow, which documents the movement of data from capture to online presentation. The Johnson Publishing Company archive project is complex and still in progress. Data moves across vendor, Smithsonian, and Getty systems.

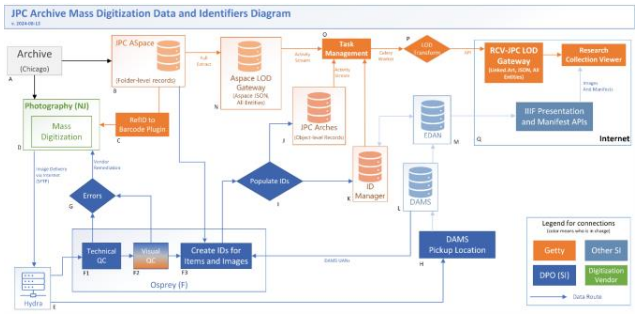


Figure 7: JPC Archive Mass Digitization Data and Identification Diagram, August 2024.

The JPCA project is only the second offsite mass digitization project the DPO has managed, and thus, delivery workflows from the vendor were not yet well established. However, the vendor regularly performs digitization projects with other collections and has a well-established delivery workflow. The vendor provided storage via a read-only SFTP server that DPO Informatics would transfer files to an SI storage location via the Internet, scanning the storage location for any updates. The storage location required enough space for four (4) weeks of production, to allow time for remediation when necessary. The vendor would deliver weekly, on Fridays, so the archivists could perform QC the following week. We aim to perform quality control as quickly as possible after delivery, to help facilitate rapid and efficient remediation when needed.

DPO Informatics has built a file validation dashboard, affectionately known as Osprey, which allows stakeholders to view and track the files after they are delivered from the vendor, but prior to ingest into Smithsonian DAMS. Osprey performs a series of technical checks including validity (through JHOVE and ImageMagick), matching MD5 hashes, correct sequencing, required metadata, and more.

Once files have successfully been loaded and verified in Osprey, the archivists in Chicago perform a visual quality control, which we call Image Quality Inspection (IQI) through the Osprey platform. IQI is based on ISO 2859-1, "Sampling procedures for inspection by attributes," the international standard applied when working with a continuing series of lots (large volumes of items over prolonged periods of time), whereby parameters are established and observed. During IQI, the archivists review the following criteria:

- Image orientation
- Sequence
- Physical flaws in photo capture, such as smudges or debris in Mylar
- Lighting flaws in photo capture, such as moiré

Lot and sample sizes were originally determined by ISO 2859-1, using Table 2-A within the standard, but we found the Osprey tool did not perform sustainably doing so, therefore we changed the threshold to a simple percentage—starting with a higher percentage at the beginning (40%), then reducing that threshold as more files were successfully delivered—down to 10% for inspection.

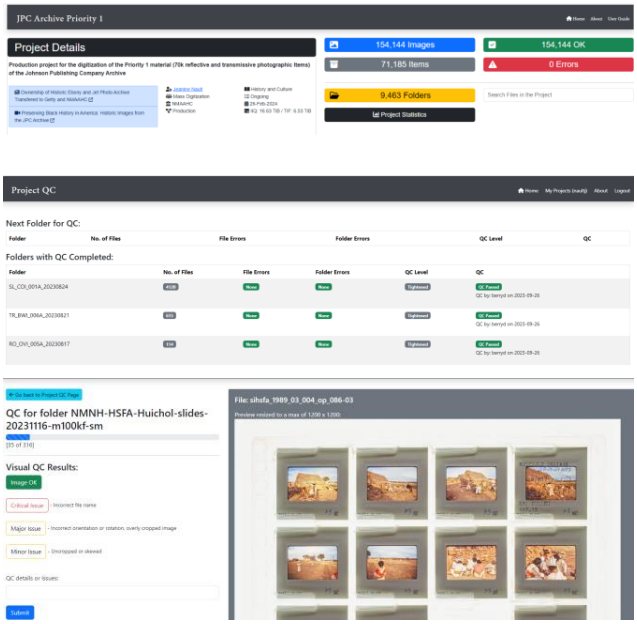


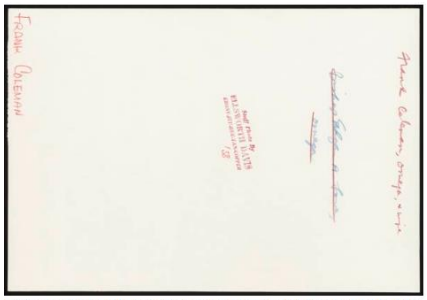
Figure 8: Screenshots from the Osprey dashboard (top), as well as the Osprey Image Quality Inspection tool.

During the IQI process, some special concerns were identified issues that appear to be errors or nonconformities, but were found to be intentional and should not be marked as errors, such as:

- Irregular cropping around Mylar: the vendor's automatic cropping software would crop around the Mylar of an item if present, not the actual item, so in the event of a mismatch in size between the Mylar and the item, the archivists would initially fail these items; however, after more review, it was determined that the capture was not incorrect, just visually inconsistent.
- Rotation of text on verso: the recto of an item is always captured in its correct orientation; however, any annotations on the verso of the item that are written "upside down" (opposite to the orientation of the recto), the item would not be rotated during digitization to capture it reversed, and therefore legible. The reason for this is twofold: one, to maintain efficiencies during the mass digitization

process; and two, so that the digital surrogate of the original item is as true to the original as possible.

Filename: bbe8146fd9ff81571fb7f50c58b98088_0001_001



Filename: bbe8146fd9ff81571fb7f50c58b98088_0001_002

Figure 9: Example of Image Quality Inspection concern, in which the text on the verso is in a different orientation than the image on the recto. Both images are correct. Johnson Publishing Company Archive.

Results

At the end of 2024, after 18 months of active archival processing and digitization, the Archive team in Chicago has processed twelve magazine titles (not including *Ebony* or *JET*), and seven collections of photographs, including Legacy images, oversize photographs of individuals, oversize photographs of subjects, photographs of Mr. and Mrs. Johnson, Ebony Fashion Fair, Fashion Fair Cosmetics, and Moneta Sleet Jr. slides, as well as inventoried eleven pallets of business records. The mass digitization team, utilizing vendor services, digitized 80,594 archival items, resulting in 179,194 images. The processing and digitization workflows developed during the pilot, coupled with archival and imaging standards, proved successful enough that we could continue processing and digitization without needing to stop operations to make workflow adjustments.

Conclusions

Working across time zones, managing and collaborating with distributed teams requires additional layers of communication and trust. Focusing on each institution's strengths during the workflow development, through Getty's archival processing pilot, and the Smithsonian DPO's established three-prong workflow approach put into practice in both pilot and production settings, created a stable foundation from which we continue to build and iterate.

While we have established steady workflows for both archival processing and mass digitization, access and presentation workflows, AV and magazine digitization, as well as outreach are all ongoing as well, with different stakeholders and participants. Though arguably the bulk of the work to preserve and make accessible this collection, the archival processing and digitization are only two cogs in a much bigger wheel. A continuing partnership between the Getty and the Smithsonian aims to complete the archival processing and digitization of the collection by 2029. The continued success of this project relies on the upkeep of scalable workflows, open communication about milestones and approaches, and a collaborative understanding of the scale, scope, and significance of the archive.

References

[1] Film Grain, Resolution, and Fundamental Film Particles. Tim Vitale, Paper, Photographs & Electronic Media Conservator, Emeryville, CA USA

[2] Conservation in support of access: The Johnson Publishing Company photo archive. In Working Towards a Sustainable Past. Lough, K., S. Booth, S. Brogdon-Grantham, M. Gates Moresi, and R. Rivenc. 2023. ICOM-CC 20th Triennial Conference Preprints, Valencia, 18–22 September 2023, ed. J. Bridgland. Paris: International Council of Museums.

[3] Sampling Procedures for Inspection by Attributes—Part 1: Sampling Schemes Indexed by Acceptance Quality Limit (AQL) for Lot-by-Lot Inspection. International Organization for Standardization. (2014). ISO Standard No. 2859-1:1999. https://www.iso.org/standard/1141.html

Author Biography

Steven D. Booth (he/him) is an archivist and independent researcher. Throughout his career, he has worked to preserve and make accessible notable collections related to the Black experience such as the papers of Dr. Martin Luther King, Jr., the presidential records of Barack Obama, and Johnson Publishing Company Archive. Steven is an alumnus of Morehouse College, Simmons College, and the Archives Leadership Institute. He is a Fellow of the Society of American Archivists.

Nathan Ian Anderson holds a B.F.A. in Photography from the Parsons School of Design in New York City and brings over twenty-five years of experience as a cultural heritage professional. As a photographer and program officer at the Smithsonian Institution, Anderson has overseen the digitization of more than a million objects, ranging from delicate Tiffany glassware to 30-million-year-old fossils. Beyond his work in cultural preservation, he is an accomplished large format fine art photographer.

Jeanine Nault (she/her) serves as the Mass Digitization Team Lead in the Smithsonian Institution Digitization Program Office. She previously managed the digitization program at the National Anthropological Archives (National Museum of Natural History) and served as the digital asset manager for the Veterans History Project (Library of Congress, US). Ms. Nault holds undergraduate degrees in English Literature and Anthropology from the University of Michigan and a graduate degree in Museum Studies from the George Washington University.

Luis J. Villanueva joined the DPO in April 2018 to help enrich item-level records across all units of the Smithsonian. During his academic career, which went from searching for tropical frogs in Puerto Rico to listening to temperate and tropical soundscapes, he

studied the way data and databases are used to analyze biological systems. Luis developed software packages to allow other researchers to analyze audio files as part of his PhD work at Purdue. From there, he managed and expanded a large spatial database of biodiversity information at Yale that was built from a variety of sources. Luis is now seeking to expand the tools and resources available for the collections to improve the data available on a massive scale.