Collaborative Cataloging Japan

2016 Collection Survey

Takahiko Iimura Studio

Tokyo -November 23-25, 2016

Section 1: The Collection Survey Overview

Introduction

A collection survey of the work of Takahiko Iimura was conducted November 23–25, 2016, by Ann Adachi, Laurie Duke, and Mona Jimenez, with assistance from the artist and his assistants, Rie Iwashima and Mina Iwashima. The goal of the survey was to locate and assess the highest quality version of the artist's works.

A spreadsheet titled "**CCJ Iimura Collection Survey**" was created ("2016_CCJ_Collection_Survey _Iimura") to collect metadata during the survey. Information from several spreadsheets was compiled into the CCJ Iimura Collection Survey from the following:

- [2016_CCJ_Collection_Survey_Template_Iimura_original]
  This spreadsheet was created on November 23–25 by Ann Adachi-Tasch and Rie Iwashima.
- [2016_CCJ_Collection_Survey_Template_Iimura_MJ]
  This spreadsheet was created on November 23–25 by Mona Jimenez.
- [2016_CCJ_Collection_Survey_Template_Iimura_Jan11_170227_Iwashima]
  This spreadsheet was created on February 19, 2017 by Rie Iwashima.

Particular attention was paid to film materials and obsolete video formats such as U-matic (3/4-inch tape), Hi8, and Betacam. However, a count of all audiovisual items was accomplished, and some changes in arrangement were made to facilitate further work to identify the highest quality versions of Iimura's work. The survey was restricted to video and film; we did not survey any other media (such as optical disks or hard drives).

Methodology

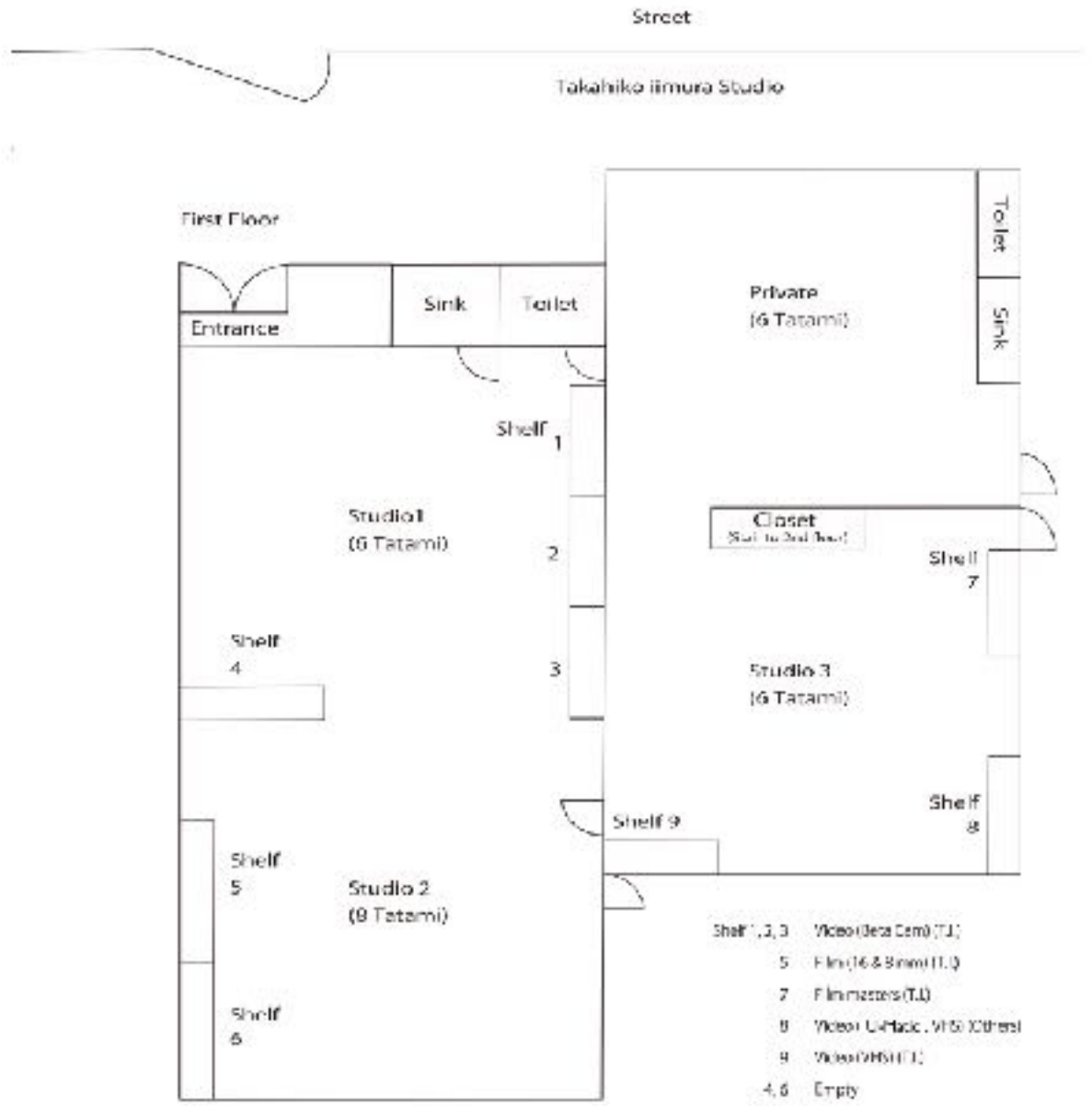
Discussions with the artist revealed his working methods and the organization and arrangement of his collection. Generally speaking, the materials were stored by format. The U-matic tapes were stored roughly chronologically. We respected his arrangement but re-ordered the tapes and in some cases re-shelved them as described below to better understand the collection and to make it easier to locate and compare various versions of artworks and related materials.

Iimura's studio is made up of four rooms with the collections stored in three of them. For the purposes of this report we are referring to the room closest to the entryway (on the north side) as the "Studio 1" and the adjoining room on the south side of the building the "Studio 2." A third room that contains a number of old video machines we call the "Studio 3." Shelves containing collections were labeled 1–9. (Additional information on shelving is provided in the paragraphs below, and the map of the studio.)

Section 1: The Collection Survey Overview

Map of Studio and Shelves

Shelf 1–3 (Studio 1): Betacams
Shelf 5 (Studio 2): Films
Shelf 7 (Studio 3): Films (Iimura designated this spot for film masters)
Shelf 8 (Studio 3): U-matics, VHS, and others
Shelf 9 (Studio 3): VHS and others



Many of the tapes we assessed already had various labels affixed. According to Iimura, extant tape labels that have meaning are as follows:

- Red dots indicate “masters.” It appears that “master” could mean an edit master (final version of an edited work), a submaster, or in some cases a camera original.
- P refers to performance
- M refers to music
- F refers to a film transfer

During the survey process, we often referred to [Iimura, Takahiko. *takahiko iimura film et video*. Paris: Galerie national du Jeu de Paume, 1999]—which contains a filmography and videography, as well as a listing of installation and performance works —from 1962 through 1998. We did not have access to a list of titles for 1999 to the present. The most recent title we found (on Betacam) was from 2003. However, Iimura continues to perform to the present date and it is possible he is accumulating files on hard disk or on removable media (i.e., optical disc or flash drive) that document these performances.

Iimura’s oldest works are on film and obsolete video formats: these works were given priority for item-level description. For film, 180 films were examined visually and, with the help of Iimura, details on content and generation were cataloged. Unique identifiers were given to the films, with corresponding labels on the can and film core or reel. Iimura has two main storage areas for film: Shelf 5 in Studio 2, and Shelf 7 in Studio 3. However, there are various cans of film in other areas of the studios. These were determined to be of less importance to Iimura. Due to time restraints it was not possible to find and group all of these films with the others; thus the film count may not be complete. In general, the films on Shelves 5 and 7 are grouped by title, but not in chronological order.

A count was done for each videotape format (see below). 59 U-matic tapes were cataloged. U-matic tapes are stored on Shelf 8 in Studio 3. Generally speaking, masters and submasters on U-matic are stored on the two top shelves. The majority of the tapes containing a single work (determined by inspection of existing item notations) were given unique identifiers and entered into the CCJ Iimura Collection Survey spreadsheet, and corresponding labels were put on both the tape cases and the tapes. U-matic tapes marked “F” were arranged together. There are also 2 Betamax tapes; see below for exact location.

Betacam tapes that were stored in boxes in an outdoor storage room were brought into the front studio room and arranged on Shelves 1–3. Masters and submasters were arranged together by title of artwork, left to right chronologically, from the earliest to the latest works (according to dates in the *taka iimura film et video* catalog). Betacam film transfers were also arranged in this manner. Compilations, some

performance works, and works by others were also categorized and are stored on A shelves. It should be noted that some titles—with apparent multiple versions/copies—are arranged in double rows in order to save space.

VHS/S-VHS tapes are stored in various locations. (Note that some VHS are stored on Shelf 9, to the right as you enter the equipment room from the back studio room. VHS/S-VHS are also stored on Shelf 8 with the U-matics. Those labeled “P” and “M” have been grouped together, and single programs and compilations have been roughly divided into separate areas on Shelf 9. Otherwise, the VHS/S-VHS tapes were not re-ordered. Some VHS/S-VHS were found in boxes with the Betacam and moved to Shelf 8 or 9. Tapes with a red dot and a few marked “master” were moved to Shelf 1.

Also, there were eight boxes found in a storage room containing VHS/S-VHS and a few other formats. All tapes that were not VHS/S-VHS format were removed from these boxes and are represented in the counts below (primarily Betacams), and these boxes have been re-labeled Box 03–Box 10. These boxes had been previously labeled on the top with list of their contents: the existing notations may roughly correspond to a portion of the contents. However, it was not possible to note which tapes were removed. Thus, if a particular item on the box’s handwritten list can’t be found, it is likely on Shelves 1–3.

Video8 and Hi8 tapes were removed from shelves and arranged in Box 01 and Box 02 (see details below). Mini-DV and DVCAM tapes were also moved to these boxes, and a small number thought to be masters were moved to Shelf 1. Audiocassettes, DAT tapes, and VHS-C were placed in boxes. One D1 and one HDCAM that were found in the collection were placed on Shelf 1.

Light dusting was done wherever possible as tapes were arranged. Empty cans/cases and new tapes were separated and not counted. Boxes 01–10 were placed in the storage area under the stairs on the north wall of the equipment room.

Section 2: Collection Analysis

Overall Condition

Films were inspected for noticeable damages including mold and vinegar smell by visual examination. These conditions were noted in the CCJ Iimura Collection Survey spreadsheet. No playback was done. In some cases, the films were previously wrapped with plastic and masking tape, which were taken off to let air in. For a number of films, Iimura unwound the film himself to inspect them. The films that were inventoried seemed to generally be in good condition with a few in very poor shape.

Tapes that were entered into the Iimura CCJ Iimura Collection Survey spreadsheet were checked for contamination, and others were randomly examined. Only one was found to have mold. However, no other inspection was undertaken and thus other problems may be found as the collection is inventoried. Also, the tapes were not write-protected. The tapes seem to be in overall good condition, but the tapes cases are extremely dusty. Some tape labels on the older tapes are in danger of being detached or have separated altogether. Playback was not possible so neither the ability of the ›tape to transport reliably nor the signal integrity are currently known.

Formats

There are 1,368 items in the collection. 172 are film, 1,182 are video, and 14 are audio.

Film Formats

Format	Count	Shelf Location	Notes
16mm	156	Shelves 5 & 7	Masters and duplicates
Super8	5 + 1x Single8	Shelf 5	Duplicate prints
8mm	19	Shelf 5	Many are camera originals
Total Films	172		

Section 4: Risks

Obsolescence, Deterioration, and Other Issues

Obsolescence in terms of moving image media means that it becomes more difficult and expensive to find working playback machines for the various formats that must be digitized. Tools and supplies needed to sustain playback machines are becoming scarce, limiting the window of time to transfer obsolete media currently to 15–20 years. Magnetic tapes can face many preservation issues over time including sticky-shed syndrome commonly seen on U-matic tapes, is the deterioration of the binders that results in its inability to playback. Other problems can include mold and other biological problems, stretching, breaking, drop-outs, and warping sometimes caused by piling the tapes horizontally or storing unevenly. Small and thin formats such as MiniDV are not durable.

Information on the Generation: Which One is the Superior Master?

With many generations of the same work existing in Iimura's collection, it is necessary to document the timeline of the transfers and gather information on the hierarchy of the various versions. Especially in risk are identifying the camera originals for performance works and locating the masters for the installation works.

See below for further details of the risks according by format, which are assessed to contain masters and submasters in the collection.

U-matic: Introduced by Sony in 1971, the 3/4-inch U-matic video tape format was widely adopted by industrial, professional, and educational users. Its use in portable recording systems made video tape a relatively easy means of taping for broadcast television, creating industrial trade video materials, and documenting and creating art. Due to media and hardware obsolescence, this format should be considered at high preservation risk. U-matic tape SP's picture quality is superior to the standard U-matic; the improvement in picture quality is lost if the SP tapes are played back in a standard deck. Standard U-matic tapes cannot be played back on an SP deck at all.

VHS/S-VHS: VHS is a magnetic tape-based analog video cassette format. Older VHS tapes are susceptible to signal loss due to age. Tapes are also susceptible to damage from mold, binder deterioration, and other physical and biological issues. This format is considered at low preservation risk as the media and equipment are still currently available.

Betacam: Introduced by Sony in 1982, Betacam format supplanted the U-Matic format. Older Betacam tapes are susceptible to signal loss due to age. Tapes are also susceptible to damage from mold, binder deterioration, and other issues. Equipment obsolescence is not yet a concern and Betacam cassettes tend to be durable, so most

of the format's risk is determined by its age. This format would currently be considered low risk.

MiniDV: MiniDV is a magnetic tape-based digital video (DV) cassette format. It was used chiefly for consumer home video in the late 1990s and early 2000s. MiniDV is subject to the same physical issues as analog tapes—stretching, breaking, drop-outs, mold, binder deterioration, and unintended recording. The tapes are relatively fragile and are not considered to be an archival format. Presently, market share seems to suggest a lessened threat of obsolescence. However, as with any newer video format, it is difficult to predict how long it will be supported. These cassettes should be given reformatting priority based on their content value.

DVCAM: DVCam is a magnetic tape-based digital video cassette format. As with most magnetic media, DVCam is subject to the threat of obsolescence; its present market share, however, suggests that this threat is relatively low. Although DVCam is not an archival format, reformatting is not an immediate preservation priority unless there are obvious signs of tape failure.

(Reference: https://psap.library.illinois.edu/collection-id-guide/videotape#umatic)

Section 5: Recommendations

Environment, Care & Handling, File Storage

Tapes should be stored in an area with consistent temperature and relative humidity values. The tapes should be shelved upright, with the spines facing outward, like books on a shelf. If the tapes cannot be stored on metal shelves, they should be kept in lidded boxes that hold the tapes securely in place, standing vertically. They should be transferred to acid-free, archival boxes that will not degrade or outgas. Tapes should be stored in a fully rewound state in order to minimize exposure to dust and other contaminants, and to prevent damage to areas of the tape that contain information during playback (since the beginning of the tape is usually blank).

Checking Against Currently Available Digital Files

Since Iimura has done extensive digitization of his works to create distribution, access, and online streaming copies, there must be a repository of digitized material. It is highly possible that this process was done to create DVD copies, which digital files have been used in recent years as digital exhibition copies. The quality of such digital files does not often reflect the quality of original or master film or video, and files should be checked to assess their resolutions.

While there are varying opinions regarding the acceptability of tape playback for either the creation of immediate access files or to determine content, there is a risk that the initial playback of an older tape may be its last. Also, if the equipment used for playback has not been cleaned and serviced on a regular basis, there is the chance that new damage to the tape may be sustained. Jointly commissioned by The Andrew W. Mellon Foundation and the National Endowment for
the Arts, the Dance Heritage Coalition report observed:

Preservation Master—Method A. While there are varying recommendations as to the best format for digital moving image preservation, major cultural repositories in the United States currently espouse the JPEG 2000 format:

> Library of Congress has done the most digital video reformatting while the National Archives and Records Administration and the Smithsonian Institution are starting to carry out projects of their own. All three agencies have purchased SAMMA devices, a product of the Front Porch Digital company. The Library is using SAMMA's best-known implementation in a workflow that produces a stream of video-frame images, each encoded in lossless JPEG 2000. This picture data, together with soundtrack, timecode, closed captioning, and so on, is wrapped in the Material eXchange Format (MXF) file format.[1]

The Barbara Goldsmith Preservation and Conservation Department at NYU's Bobst Library also has a SAMMA machine which is used to create JPEG 2000 preservation

[1]Carl Fleischhauer, "Format Considerations in Audio-Visual Preservation Reformatting: Snapshots from the Federal Agencies Digitization Guidelines Initiative," Information Standards Quarterly 22, no. 2 (Spring 2010): 39.

masters. However, JPEG 2000 can be a problematic preservation format in that it requires expensive, specialized equipment and techniques for creation and file manipulation (files must be transcoded before they can be used), and increased storage needs.

Preservation Master—Method B. Another recommended format option for preservation masters is 8-bit or 10-bit uncompressed. Both Preservation Master methods A and B strive to preserve as much information as possible during the transfer to digital files. In a recent compression study by the Dance Heritage Coalition and the Bay Area Video Coalition, participants did not see differences between 8-bit and 10-bit uncompressed files. JPEG 2000 was not included in the study because "there is a lack of standardization among software and hardware implementations. Some of the hardware encoded files may not be readable without the appropriate hardware installed." Typically, these uncompressed formats would use an .mov file wrapper, which means they can be opened by video editing software.

For access purposes, the H.264 codec is appropriate.

File Storage

Estimates for digital file storage space requirements are as follows: [2]

File Type	Gigabytes (GBY) Per Hour
JPEG2000	30
10-Bit Uncompressed	95
8-Bit Uncompressed	85
DV50	25
DV	13

*Maintaining digital files requires time (for file migration) and data storage space commitments. It is best to develop a preservation plan for long-term file storage, considering options such as RAID systems and digital linear tapes (LTO), before undertaking preservation-quality digitization of the video tapes.

Intellectual Control & Metadata

Intellectual control and metadata are what enable an archive to manage materials over time; in the absence of adequate and reliable intellectual control systems, users lack critical information and collection managers are neither able to keep track of original materials nor to maintain the connection between source materials and subsequent

[2]Sacerdote and Sorensen, "Codec Comparison," The Electronic Media Review vol. 1 (2012): 66.

versions. Intellectual control is a necessary step in maintaining authenticity and guaranteeing the integrity of the materials in the archive.

Records metadata should be transferred to a more flexible and robust system. The use of a relational database would accommodate multiple variations of names, titles, and dates. Given both the existence of multiple elements pertaining to a single work and the multiple video file instantiations that will result from the creation of both digital preservation and access copies, an audiovisual media-specific database template is recommended. The IMAP template is a good starting point. PBCore would also be useful for tracking works that will be divided into pieces for the purpose of quick online access (such as has been done by the team for YouTube). An open-source tool that incorporates content—video clips—into the database itself is Open Video Digital Library Toolkit. Another open-source software, Collective Access, provides an asset management solution that is very flexible.