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Time-based Media Art Conservation Education Program at NYU: Concept and Perspectives

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ABSTRACT

In recognition of the ever-changing field of contemporary art conservation, New York University's Institute of Fine Arts Conservation Center expanded its curriculum in the fall of 2018 by establishing a specialization explicitly for the conservation of time-based media art—the first of its kind in the United States. This innovative course of studies will require students to cross the disciplinary boundaries of computer science, material science, media technology, engineering, art history, and conservation. In addition to graduate-level

education, the Conservation Center will offer mid-level training courses to meet the immediate needs of the profession as well as a series of evening lectures intended for broader audiences. Reference is made to the Institute's public outreach program and related events, including the recent symposium, *It's About Time! Building a New Discipline: Time-Based Media Art Conservation*. This article outlines the planning that preceded the Mellon-funded time-based media art conservation initiative and how it will augment the body of knowledge and respond to the needs of a rapidly growing conservation discipline.

THE DEVELOPMENT OF TIME-BASED MEDIA ART CONSERVATION

FOUNDATIONS

The middle to late 1990s marked an important point for the formation of time-based media (TBM) art conservation as a new specialty. Since then, engaged and determined conservators and allied professionals have pioneered the conservation of TBM art and have built up a body of published research, including case studies, the introduction of methodologies, and ethical discourses, for example, on video migration or the conservation of computer-based art. The active exploration of new preservation models has reached a critical point, addressed in numerous international conferences, workshops, research projects, publications, and exhibitions.

In 1996, the Tate appointed Pip Laurenson as the first TBM conservator worldwide (then called Sculpture Conservator for Electronic Media). A year later, in 1997, the interdisciplinary research project and international symposium entitled *Modern Art: Who Cares?* took place in Amsterdam, culminating in a widely disseminated and first-of-its-kind publication on the care and preservation of modern and contemporary art. This was the year when the building blocks and

much of the conceptual framework of modern and contemporary art conservation were laid out. In 1999, the Guggenheim Museum initiated the *Variable Media Initiative*, which raised awareness of the need for a preservation strategy for the intangible and dynamic components of TBM artworks. In 2000, a group of 25 conservators, curators, and artists participated in *TechArcheology: A Symposium on Installation Art Preservation at the San Francisco Museum of Modern Art*. The goal of this gathering was to advance conservation practices for technology-based installation art; the proceedings were published as a theme-based issue of the *Journal of the American Institute for Conservation* (*JAIC*) in 2001 and quickly became a must-read for conservators responsible for media art.

The influence of these projects on the conservation of both time-based media art and the larger context of contemporary art cannot be overstated. These key events catapulted the preservation discussion into uncharted territory and paved the way for the creation of contemporary art conservation resources and projects, including the International Network for the Conservation of Contemporary Art (INCCA), founded in 2002; the Inside Installations: Preservation and Presentation of Installation Art project (2004–2007) and the subsequent publication, *Matters in Media Art* (initiated in 2003); and the Documentation and Conservation of the Media Arts Heritage (DOCAM) project, initiated in 2005.

While each of these examples is a multidisciplinary initiative aimed at developing practical tools and guidelines for the various stakeholders of media art, the latter two focus specifically on the realm of TBM art. Their scope encompasses preservation of the intangible through the exploration and evaluation of documentation protocols with online resources that are considered essential tools by a broad range of caretakers.

Electronic media specialty groups were launched within professional organizations. The German conservator association Verband der Restauratoren (VDR) founded the division Moderne Kunst— Kulturgut der Moderne in 2000 (recently renamed Modern and Contemporary Art) and established the

subdivision EL_media in 2001.

The Electronic Media Group (EMG) of the American Institute for Conservation of Historic and Artistic Works (AIC) was formed as an interest group first and formally launched as a specialty group in 1998. Since its establishment, EMG membership has grown to over 240 members. The first worldwide periodical focusing entirely on TBM art conservation was launched by the EMG in 2012, *The Electronic Media Review*.

RECENT DEVELOPMENTS AND INITIATIVES

Building on the developments from the achievements of the projects outlined earlier, professional organizations, institutions, and individuals have created additional targeted educational opportunities and collaborations, which includes the initiatives listed below (see fig. 1).

Figure 1: Overview of the development of TBM initiatives and organizations over the past 20 years. Graph by Christine Frohnert.

TechFocus: EMG launched a conference series entitled *TechFocus* in 2010, which provides hands-on guidance and systematic education on different media categories (*TechFocus I: Caring for Video Art*, Guggenheim Museum, New York, in 2010; *TechFocus II: Caring for Film and Slide Art, Hirshhorn Museum and Sculpture Garden*, Washington, DC, 2012; and *TechFocus III: Caring for Software-based Art*, Guggenheim Museum, New York, in 2015).

Conserving Computer-based Art (CCBA): Since 2014, the Solomon R. Guggenheim Museum Conservation Department has been partnering with the Department of Computer Science at the Courant Institute of Mathematical Sciences of New York University (NYU) to collaboratively analyze, document, and preserve computer-based artworks from the Guggenheim's collection.

The Media Conservation Initiative: This four-year project started in 2016 at the Museum of Modern Art (MoMA) with the intention of advancing and sharing new strategies for the care and conservation of media collections. To this end, MoMA will host several postgraduate fellowships, workshops, and expert discussion meetings devoted to the topic of media art conservation.

CURRENT OPTIONS FOR TBM ART CONSERVATION EDUCATION

While graduate programs in art conservation in the United States are currently covering only the training of basic skills on technology-based art within their established specializations, a few of the European programs have offered this specialty since the middle to late 1990s. The following provides an overview on established TBM conservation programs in Europe and media archive preservation programs in the United States.

ART CONSERVATION PROGRAMS IN EUROPE

Conservation of Modern Materials and Media, Bern University of the Arts, Bern, Switzerland

https://www.hkb.bfh.ch/en/studies/masters-degree-programmes/

This conservation program offers both undergraduate and master's degrees in a variety of specializations, including modern materials and media (MMM). Students who finish the undergraduate program are called Collaborators in Conservation, which is similar to what would be considered a conservation technician in the United States. Graduates of the MA program are conservators and can work in the field as such. Established in 1999, the MMM specialty is the oldest degree-granting program for contemporary art and most comprehensive

for TBM art conservation internationally.

Hochschule für Technik und Wirtschaft (HTW), Berlin, Germany

https://krg.htw-berlin.de/

Two conservation programs established in 1993 in Berlin also offer undergraduate and master's degrees in the conservation of media art: Conservation of Audiovisual and Photographical Heritage, covering film, magnetic audio and video tapes, and photographs; and Conservation of Modern Materials and Industrial Heritage, covering technical objects, kinetic art, and industrial devices.

State Academy of Art and Design, Stuttgart, Germany

http://www.mediaconservation.abk-stuttgart.de/

Founded in 2006, the program Conservation of New Media and Digital Information is embedded within a traditional conservation training program at the State Academy of Art and Design. The two-year MA program—essentially a preservation management degree—is a combination of in-class coursework, laboratory hands-on sessions, and internships. The three main areas of study are photography, audiovisual technologies, and digital information.

New Approaches in the Conservation of Contemporary Art (NACCA)

http://nacca.eu/research-projects/

This research and training program aims to meet the demands of preserving modern and contemporary artworks by educating a new generation of professional curators, conservators, and academic researchers. Fifteen PhD projects are part of the program, each investigating different, as yet underexplored, aspects of contemporary art conservation (three projects are

specifically focusing on TBM conservation), coordinated by the Faculty of Arts and Social Sciences at Maastricht University in Maastricht, Netherlands.

Academy of Fine Arts Vienna, Austria

https://www.akbild.ac.at/Portal/studium/studienrichtungen/konservierung-und-restaurierung/

The program established a specialization for the conservation of contemporary art in 2005. The conservation of TBM is embedded as an integral part of the coursework within the broader scope of its conservation of contemporary art program. The curriculum foresees a minimum of five years of study to be completed with a master's degree. Continued academic training and research is offered within a doctoral program.

ARCHIVE AND PRESERVATION PROGRAMS IN THE UNITED STATES

While a TBM art conservator will need a broader education to include ethics, critical thinking, methodologies, material science, and scientific analytics developed by the conservation profession, collaborations with archiving and moving-image preservation programs have provided important aspects of TBM conservation.

The Moving Image Archiving and Preservation Program (MIAP), Tisch School of the Arts, NYU

http://www.nyu.edu/tisch/preservation/program/curriculum.shtml

This two-year MA program trains future professionals to manage preservation-level collections of film, video, new media, and other types of digital works. The

program provides prospective collection managers and archivists with an education in the theories, methods, and practices of moving-image archiving and preservation. MIAP graduates have gained important positions in museums and as consultants for private collections and contribute significantly to the development of the field.

TBM Art Conservation Education—A New Specialty at the Conservation Center, Institute of Fine Arts, New York University (CC/IFA/NYU)

https://www.nyu.edu/gsas/dept/fineart/conservation/

As the oldest degree-granting program for graduate-level conservation training in the United States, the Conservation Center prepares students for careers in technical study and conservation through a four-year graduate program that combines practical training in conservation with art historical, archaeological, curatorial, and scientific studies. The program is embedded in the Institute of Fine Arts at New York University, which is a graduate school dedicated to instruction and advanced research in the history of art, archaeology, and the conservation and technology of works of art. Students in the conservation program graduate with a dual degree, earning both an MS in the Conservation of Historic and Artistic Works and an MA in the History of Art and Archaeology. The Institute prepares students to enter careers in university teaching, museum work, independent research and writing, art criticism, and art conservation. Whatever their professional goals, all students gain a sound knowledge in the history of art and a foundation in scholarship and connoisseurship as a basis for critical judgment and research.

Since the Conservation Center's founding in 1960, the program has produced 283 conservation professionals employed across the United States and internationally. As such, Conservation Center alumni occupy important positions in major museums, libraries, archives, and historical societies, and are proprietors of successful private practices. The program maintains its traditional strengths in

educating future conservators focusing on paintings, paper, library and archive materials, decorative objects, ethnographic, archaeological, sculpture, photographs, and modern and contemporary materials. TBM art conservation fits seamlessly into NYU's portfolio of specialized education and training. Several previous and current students have declared an interest in TBM (see fig. 2).

Figure 2: Taylor Healy and Lia Kramer (students) discussing with Christine Frohnert (TBM Program Coordinator) in the library. (Courtesy of Bryan Whitney)

CURRICULUM DEVELOPMENT

Establishing a TBM art conservation specialty requires creativity and ingenuity as well as close consultation and collaboration with existing programs worldwide. During the curriculum-planning phase from 2016 to 2017, the core competencies and skill sets for future TBM conservators were identified based on meetings with experts from European programs and potential employers and practitioners in the United States. The TBM Project Team was supported by an advisory board and

working group consisting of 11 members (see Acknowledgments section). Based on discussions and advice, the learning objectives were organized to fit into the most suitable teaching formats (e.g., lecture course, treatment class, workshop, summer internship, fourth-year internship) and built around the most efficient timeline for acquiring specific skills.

Identifying Core Competencies and Skills for Future TBM Conservators

As with other specialties within conservation, core competencies of future TBM conservators are grounded in conservation ethics, conservation methodologies, and conservation science. The conceptual framework of modern and contemporary art conservation alongside modern and contemporary art history and media theory will provide a foundation early in the student's education. Building on this, specifically designed courses will cover topics such as electrics/electronics, computer science, programming, TBM art acquisition and documentation, TBM art installation and exhibition, audio, video technology and preservation, digital preservation, and photochemical processes to develop a solid knowledge of each TBM media category, such as film, slide, video, audio, software, performance, light, kinetic, or Internet art. Furthermore, the equipment associated with each medium—the signal processing and characteristics of different display and playback devices—needs to be understood in context in order to assess the visual and aural integrity of a TBM artwork.

In addition to technical competencies, communication skills and the ability to create a network of experts are critical. Future TBM conservators will learn and practice how to identify the work-defining properties of an artwork and to understand and document all components in context, which requires close communication with all stakeholders involved. Students will learn how to design a preservation plan for a TBM collection, which will translate into the general skills needed to promote advocacy for TBM works in an institution, to build and grow a lab, and to establish workflows.

Degree Requirements and General Curriculum Overview

https://www.nyu.edu/gsas/dept/fineart/conservation/program.htm

The basic requirement for the dual degree in art history and conservation is the completion of 73 points over four years. This includes 15 conservation courses (for 45 points) for the MS in the Conservation of Historic and Artistic Works, and seven art history courses (for 28 points) for the MA in the History of Art and Archaeology. The MS degree also requires noncredit courses in photographic documentation of artifacts and microscopy, and a nine-month internship completed in the fourth year. Additional MA requirements include language examinations in French, German, or Italian, and a master's thesis on a topic of art history or technical art history to be supervised by a member of the Institute faculty. Students specializing in the conservation of paintings, objects, photographs, or paper follow the general program outline, whereas a modified course of studies has been customized for students in the Mellon-funded Library and Archive Conservation Education (LACE) track. The general Conservation Center program outline is depicted in figure 3. The curriculum as outlined here was implemented in the 2004/2005 academic year.

YEAR	FALL SEMESTER	SPRING SEMESTER
1	• Technology & Structure of Works of Art I: Organic Materials • Material Science of Art & Archeology I • Foundations I in Art History • Art History Elective	• Technology & Structure of Works of Art II: Inorganic Materials • Material Science of Art & Archeology II • Principles in Conservation • Art History Elective
	Summer 1: internship(s); participation at an IFA-sponsored archaeological dig; Villa La Pietra projects	
2	• Instrumental Analysis I • Preventive Conservation • Conservation or Art History Elective • Conservation or Art History Elective	• Instrumental Analysis II • Conservation or Art History Elective • Conservation or Art History Elective • Conservation or Art History Elective
	Summer 2: internship(s); participation at an IFA-sponsored archaeological dig; Villa La Pietra projects	
3	• Conservation or Art History Elective • Conservation or Art History Elective • Conservation or Art History Elective	• Directed Research Towards M.A. Thesis • Conservation or Art History Elective • Conservation or Art History Elective
	Summer 3: internship(s); participation at an IFA-sponsored archaeological dig; Villa La Pietra projects	
4	• Nine-month Internship	

Figure 3: General art conservation curriculum at CC/IFA/NYU. The basic requirement for the dual degree is the completion of 15 conservation courses and 7 art history courses. Core courses required for students of all specialties are marked in orange.

During the first and second years, students complete the core curriculum in conservation. Electives in the second and third years can be chosen based on the needs of the student and local logistics. Some courses are offered only in alternating years to combine students with the same interest and to optimize resources. Some courses are team taught to ensure that sufficient depth of expertise is available for the range of material covered, while others are offered by a single instructor. Advanced courses are held at the Conservation Center or rely on special projects in conservation facilities in the New York City area carried out under the supervision of the faculty and outside consultants.

During the third year, students continue to take advanced courses in specialized areas of conservation and complete any remaining requirements for the MA degree. Simultaneously, students work with the Center's Chair to make arrangements for a nine-month internship in their chosen discipline, a capstone of the MS degree, scheduled for the fourth year of study. The final internship takes place in a conservation establishment in the United States or abroad

selected to provide the optimal experience in the student's area of concentration.

TBM ART CONSERVATION PROGRAM AT CC/IFA/NYU

The CC/IFA/NYU dual MA/MS degree inherently allows for curricular flexibility and adaptation, a necessity for a successful specialization in TBM (https://www.nyu.edu/gsas/dept/fineart/conservation/time-based-media.htm). New course offerings will provide options for practical and technological training in media art conservation, employing a coalition of experts and specialists in computer science, engineering, and film and video preservation. The TBM art conservation program outline is shown in figure 4.

YEAR	FALL SEMESTER	SPRING SEMESTER
1	• Technology & Structure of Works of Art I: Organic Materials • Material Science of Art & Archeology I • Technology & Structure of Works of Art III: Time-based Media • Foundations I in Art History	• Technology & Structure of Works of Art II: Inorganic Materials • Material Science of Art & Archeology II • Principles in Conservation • Topics in Museums Studies: The Museum Life of Contemporary Art (Museum Studies)
	Winter Intersession: Electrics, Electronics and Control Engineering **Summer 1: Alternating non-credit workshop, directed work placement**	
2	• Instrumental Analysis I • Preventive Conservation • Introduction to Programming (Courant) • Acquisition & Documentation	• Conservation of Digital Art Objects • Conservation Elective • Art History Elective • Art History Elective
	Summer 2: Alternating non-credit workshop, Directed-Work Placement	
3	• Exhibition & Installation • Conservation Elective • Art History Elective	• Video Preservation • Art History Elective • Directed Research Towards M.A. Thesis
	Summer 3: Directed-Work Placement	
4	• **Nine-month Internship**	

Figure 4: TBM art conservation curriculum at CC/IFA/NYU. TBM-specific courses, workshops, and nondegree-required activities are marked in purple.

In their first term, students will enroll in a course called *Technology and Structure of Works of Art III: Time-based Media*. This course will introduce various categories of time-based media art in both theory and practice. Issues related to the

acquisition, examination, documentation, installation, exhibition, and conservation of TBM will be discussed through case studies. This is an overview course on an introductory level. The course is required for TBM students and is open to other students at NYU who are majoring in art history, computer science, engineering, library science, museum studies, or general art conservation.

Students at the Conservation Center will also be learning from experts within our NYU network, including the Interactive Telecommunications Program and the Integrated Digital Media Program. This collaboration will provide valuable input from colleagues educating the next generation of technologists, engineers, designers, and artists uniquely dedicated to pushing the boundaries of interactivity in the real and digital world. TBM students can enroll in classes offered through several NYU graduate departments, such as the Moving Image Archiving and Preservation Program, described earlier, and vice versa. One example of a course available to the TBM student is *The Museum Life of Contemporary Art* with Glenn Wharton, Clinical Associate Professor of Museum Studies. This serves as an ideal introduction to the challenges of media art on display. Other courses of interest are offered by the Courant Institute of Computer Science. Deena Engel, Director of the program Digital Humanities and Social Sciences (DHSS) and Clinical Professor of Computer Science, will advise TBM students in their selection of appropriate courses depending on their previous experience in the subject. Her course, *Introduction to Programming*, is a prime example of one such elective since it has no prerequisites.

Core competencies in TBM art conservation will be covered in courses created specifically for TBM students. Instructors will be recruited from institutions in the New York area and beyond, offering leading experts in the field an opportunity to teach the next generation of TBM art conservators. Figure 4 shows the timing of those four courses within the program outline, delineated here.

Acquisition and Documentation

Students will learn how to gain intellectual and physical ownership of complex artworks in order to manage technological changes and obsolescence over time while respecting the artist's intent. The course consists of four sections: (1) general introduction to the approaches and workflows of acquisition, followed by a series of in depth practical seminars, each dedicated to a specific medium and related exhibition technology commonly found in collections; (2) preacquisition assessment in the context of a fine art collection; (3) acquisition actions, including identity report, dialogue with artist (and representatives), condition checking, collaboration with external vendors, planning for exhibition in the medium term, and storage; and (4) exercises on how to look broadly at all aspects pertaining to the documentation of TBM works.

Exhibition and Installation

TBM works are best understood as functional systems that must be installed to be experienced in context. The choice of components and their constellation is often loosely defined by the artist; for a majority of TBM works, variability and change are inherent, and artworks are frequently reconfigured in response to given exhibition spaces, curatorial concepts, or changing technological landscapes. This lack of fixity and the resulting necessity to interpret the artwork's "score" for every iteration make TBM works highly vulnerable to misinterpretation and poor display that compromises the artwork's integrity. This course consists of three sections: (1) the introduction and comparison of a variety of contemporary and legacy display devices and technologies and their impact on artworks; (2) the discussion of display scenarios that can be considered harmful to an artwork's integrity; and (3) the documentation of iterations and the decision-making process determining them. *Conservation of Digital Art Objects*

The digital assets of institutions collecting TBM are rapidly growing, as most TBM artworks either consist of born-digital or digitized media content. In response, museums have to establish protocols for all stakeholders involved to manage, preserve, and store their digital collections. Digital preservation protocols have

been developed by the library and archive community but need to be understood and reviewed for the application to artworks. This course will introduce TBM conservation students to digital preservation standards in an art conservation context. The course will consist of three sections: (1) digital and information technology literacy; (2) digital tools for conservation practice; and (3) preservation-compliant repositories.

Video Preservation

In the late 1960s, artists began using video as a creative medium, which is now becoming ubiquitous in exhibitions and gallery installations and represents the most popular TBM art medium in collecting. Future TBM conservators will be tasked with caring for and treating video, both in its analog and digital form; proper training in all aspects of the medium is critical to the field. This course will build on the content of *Technology and Structure of Works of Art III* to educate TBM conservation students in the history, theory, and practice of video preservation and conservation. With a firm grounding in the historical evolution of the medium, students will spend the majority of the course learning the full technical characteristics of analog and digital video. This will involve working intimately with video tape recorders (VTRs), various analog and digital monitors, oscilloscopes, and related video hardware to understand and practice analog video playback and migration to digital file formats. In the digital realm, students will work with software tools to expose and document technical metadata, learn how to properly analyze digital video playback and perform treatments using a host of different software and commands.

Project-based training plays an essential role in the development of a well-rounded conservator, as it allows students to develop technical abilities and collaborative skills in real work situations. The Conservation Center works actively to create and arrange practical training opportunities for students during semester intersessions as well as during the summer. Summer Directed Work Placements (DWP) for TBM students will be carefully planned with their academic

advisor to improve their practical skills and to cover topics that could not be included in their regular coursework. These work placements, generously funded by the Mellon Foundation, are considered nondegree requirements and will cover six to eight weeks in the summer after Years 1, 2, and 3 (see fig. 4).

During the winter intersession and spring break, students will also have the opportunity to participate in some of the workshops designed for broader audiences (see later discussion).

Students will need access to dedicated lab equipment and related resources. With support from the Mellon Foundation, the Conservation Center will update its facility by purchasing a custom-designed TBM workstation and include the first cohort of students in an important exercise: how to build up a lab. While basic equipment for frequent use will be available in-house, the CC/IFA/NYU has established collaborations with leading museums, as well as collaborations with NYU partner programs, to ensure access to highly specialized equipment.

APPLICATION AND SELECTION PROCESS

The CC/IFA/NYU's recruitment strategy has focused on candidates from art history, studio arts, pre-med, and the sciences. With the new TBM specialization, we have broadened our strategy to include engineering, both computer and mechanical; computer science; game design; video editing; and studio art programs with an emphasis on new and developing media technologies (https://www.nyu.edu/gsas/dept/fineart/prospective/conservation.htm).

Candidates for the conservation dual degree program complete an online application in December via the Graduate School of Arts and Science Office of Admission's website. The application consists of a personal statement and curriculum vitae; an art history writing sample; transcripts providing evidence of the program's prerequisites in art history and laboratory science; and, at

minimum, three letters of recommendation from art history professors and conservation professionals. Qualified applicants are then interviewed at the Conservation Center in March, where a candidate's knowledge of studio art materials and techniques is presented through a personal portfolio. Offers of admission are then made in April. Typically, the top 21 applicants are interviewed. Candidates for the TBM track will follow the same admission process as other students. Two fully funded TBM students will be accepted each year. The Conservation Center encourages applicants from culturally diverse backgrounds.

PUBLIC OUTREACH AND PROFESSIONAL DEVELOPMENT AT CC/IFA/NYU

Due to our mission as an educational institution and our location in New York City, the CC/IFA/NYU regularly serves as a resource center for the community at large. During the next four years we plan to offer lectures, courses, and workshops to students from other programs and disciplines, and to professional and public audiences to share our achievements and to promote TBM art conservation as an emerging field.

Public Lectures

The inaugural CC/IFA/NYU's public lecture series *Topics in Time-based Media Art Conservation* took place over the course of the fall 2016 semester. Ten distinguished scholars and peers in the TBM field from the United States and abroad were invited to present their research. Topics covered the conservation challenges associated with different media categories, such as kinetic art, software-based art, interactive art, light-based art, and video art. TBM conservation was highlighted from different perspectives, ranging from artists to conservators, computer scientists, and art historians. The public lecture series created the opportunity to promote the field, to foster the dialogue between TBM professionals, and to build a community. Many professionals consider the

recordings of the lectures available in the Institute's video archive as a valuable resource (https://www.nyu.edu/gsas/dept/fineart/events/time-based-media.htm).

Building on the success of this lecture series, and responding to the many requests received from members of our community, we will continue to provide public lectures and make them available to the public from our events website. We are planning to organize four lectures per year and will continue to engage practitioners and collectors, specialists, and newcomers to the field.

It's About Time! Building a New Discipline: Time-Based Media Art Conservation

The 2018 TBM symposium was hosted by The Institute of Fine Arts and the Courant Institute of Mathematical Sciences, New York University, on May 20-22, 2018, organized by Hannelore Roemich, Christine Frohnert, Deena Engel, Nora Kennedy, Kate Lewis, and Joanna Phillips (https://www.tbmsymposium2018.com/). The event promoted education and training opportunities for TBM as a new specialization at the CC/IFA/NYU and provided a forum for educators, artists, art historians, museum curators and directors, collectors, gallerists, engineers, computer scientists, and conservators to foster TBM art conservation as a discipline on an international level. The symposium attracted more than 150 participants from the United States, Canada, Switzerland, Austria, Germany, Mexico, Brazil, Italy, Portugal, the Netherlands, the United Kingdom, Australia, and China. The program included 30 presentations and 5 roundtable discussions grouped in five sessions: (1) TBM Art Conservation Education—Current Offerings and Future Opportunities; (2) Practical Training, Professional Development, and Team Building; (3) Challenges and Needs; (4) TBM Art Conservation and the Archives; and (5) Advocacy, Implementation, and Collaboration.

Blogs written by students and recent graduates of NYU programs for VoCA (Voices of Contemporary Art) promote the video recordings, which are available online

and mark a milestone in the development of TBM education (https://www.nyu.edu/gsas/dept/fineart/events/tbmsymposium2018.htm).

Professional Development Courses and Workshops

Conservators and practitioners entering TBM conservator positions from different educational backgrounds have acquired their knowledge through workshops, such as *TechFocus*, or from presentations during the EMG sessions at the annual AIC meetings and other media conferences, or through archiving and preservation programs. All of these professionals will need further training on existing and emerging technologies to advance their careers and to keep up with new developments.

Responding to the need for training in TBM art conservation, the Conservation Center will provide time-limited, nondegree professional development opportunities to students and mid-career conservators and to those entering the field of TBM or in need of enhancing specific skills. This will complement other offerings for professional development currently available, such as workshops at MoMA or *TechFocus*. Offerings include: *Art With A Plug—Electrics, Electronics, and Control Engineering* (four days, first iteration in January 2019); *Artist Interviews—TBM-Specifics* (in collaboration with VoCA, two days, in March 2019); *Digital Preservation* (three days, first iteration in 2019); *Maintenance and Care of CRTs* (two days, forecast for 2020); and *Film and Slide Preservation* (two days, forecast for 2021).

Topics that can be presented in lecture format will be open to 25 participants, while topics for which lab space and access to equipment are necessary will be limited to smaller groups. With a total offer of four courses (four days each) and eight two-day workshops over four years, we will be able to offer 32 days of training and 153 spots for mid-level professionals plus 30 spots for our students, for a total of 183 possible participants.

For the Conservation Center's students, the added bonus is that they will join selected workshops and courses as participants learning alongside practitioners already working in the field. Students together with workshop participants will create a strong TBM art conservation community, fostering a professional network that will enhance their careers. Upon graduation, they will have met, learned from, and studied with experts in the field who will become important allies as they contribute to TBM art conservation research and scholarship. External participants will benefit from learning in an academic environment within a limited time frame, allowing them to continue working in their home institutions.

Applications will be processed through a portal broadly advertised in fall 2018. The Program Committee—consisting of the Department Chair, Program Director, Program Coordinator, and two members of the Advisory Board—will select participants. Applicants will be asked to submit a cover letter expressing the need for training and the benefits for their career development. Costs for organizing these workshops are provided by the Mellon Foundation. Participants will need to cover costs for travel and accommodation.

PERSPECTIVES ON AN EMERGING DISCIPLINE

The Conservation Center, with its program grounded in art history, MA/MS dual degree, specialized faculty and adjuncts, close relationships with area museums and collections, and its network within NYU, is ideal for the implementation of a program in TBM art conservation education. The inherent flexibility of the program will also help to build coursework based on student needs and interests, for example, in kinetic art, light-based works, or any emerging technology, such as virtual reality. Since applicants from various backgrounds—including artists, computer programmers, or engineers—are encouraged to apply, the program can ensure that students receive the individualized instruction that complements their pre-program experience or knowledge base. The TBM course outline can be

adjusted and modified as necessary for each student and can easily respond to changes in the discipline.

Starting in fall 2018, the program accepted two students who received funding to cover tuition and living expenses. Each cohort of students will benefit from a highly specialized education in TBM art conservation and will graduate with an MA/MS dual degree from the Institute of Fine Arts.

During the next four years and thanks to funding by the Andrew W. Mellon Foundation, the Conservation Center will offer workshops and evening lectures that provide an unprecedented opportunity not only for the dissemination of best practices and current research but also for networking and connecting professionals, who are already working in the field, facing daily challenges with TBM art or complex installations.

TBM art conservation is in a time of rapid transition. Articulating and advocating the need to preserve contemporary art, educating and mentoring emerging conservators, incorporating the expertise of allied professionals and scholars, and sustaining a program of continual learning present challenges that NYU is ready and eager to confront.

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