Building Bridges and Blurring Borders: Collaboration Initiatives in Modern and Contemporary Art Conservation Education
Introduction

The Winterthur/University of Delaware Program in Art Conservation (WUDPAC) became involved in a unique partnership of organizations as part of its effort to enrich their educational imperatives in modern and contemporary art conservation. The two graduate fellows who participated this year: Natalya Swanson, majoring in objects, and Jennifer Myers, in paintings, are both members of WUDPAC Class of 2020. The partnership involves WUDPAC, as well as the Robert Rauschenberg Foundation (RRF) and Voices of Contemporary Art (VoCA). This paper is an updated adaptation of a presentation given at the 2019 meeting of the Association of North American Graduate Programs in Conservation (ANAGPIC) in Los Angeles.

The bound series of fourteen prints (fig. 1) is considered Robert Rauschenberg’s first mature work. He carved a wooden block one cut at a time, printing it in black onto white paper after each cut. The progression then stops halfway through the transition from a black square to the empty white field. The process has been introduced, with the title indicating its partial nature. This leaves the viewer to imagine and determine in their mind how it will finish. The WUDPC/VoCA/RRF partnership is the first half of a project designed to exist in passing time. The groundwork has been laid, and the experience embarked upon by its participants will define the future shape it will become.

Just as a modern artwork may need to be considered beyond its materiality, the depth of this experience is not conveyed through factual details and chronological information alone. The intangible details, such as time the fellows enjoyed engaging with artworks or with new mentors or each other, must be underscored. This story is centered around the visionary efforts of many
passionate and dedicated people and crucial players. The ANAGPIC presentation introduced the collaborative project, encompassing its history, key figures, and important milestones. The development of the general curricula and the specific projects were described, as well as the fellows’ reflections on the experience and the partners’ visions for the future.

**Evolution of the Partnership**

At Winterthur, Bruno Pouliot¹, Dr. Joelle Wickens², and Debbie Hess Norris³ actively discussed how to grow an intensive and holistic approach to the teaching of modern and contemporary art conservation within the program. Collaboration between external conservators and institutions was necessary to build the bridges between materials-based research and preservation concepts and theories associated with intangible aspects of artworks. The San Francisco Museum of Modern Art (SFMOMA) would be an ideal first partner for WUDPAC in this initiative. They were already leading the field since 2001 in contemporary art conservation education with their highly-coveted two-year, advanced post-graduate fellowship. This fellowship requires independent work and unconventional conservation practices not always focused on an object’s materiality. Individuals from the American graduate programs pushed SFMOMA to provide more opportunities like this to meet the growing interest in contemporary art conservation among emerging conservation professionals. In 2015, representatives from SFMOMA, Jill Sterrett⁴ and Emily Hamilton⁵, reached out to the programs, including WUDPAC. Jill traveled to Winterthur to meet with Bruno and Debbie, and collectively, they developed a pilot project geared toward second-year objects fellows. WUDPAC agreed to provide the initial financial support for the fellows, with the goal of transitioning away from SFMOMA at the end of a two-year period.

Coinciding with this pilot launch, upcoming Robert Rauschenberg retrospectives were being planned at the Tate, MoMA, and SFMOMA. During the first two years, SFMOMA’s exhibition schedule directed the subject of study. Because of this, Rauschenberg’s works would be the

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focus of research for the first participating fellow, Claire Taggart (fig. 2). Initial complications arose in aligning a different type of curricula within WUDPAC requirements and navigating the geographic distance between Claire and the artworks. By the second year, many of the initial obstacles were resolved and SFMOMA’s strategic focus moved away from the Rauschenberg Retrospective. This allowed for the second participant, Caitlin Richeson (fig. 3), to focus her research on characterizing polymer-based Rapid Prototype objects used in *Gemini*, a sculpture by Neri Oxman. This led Caitlin to build a relationship with a living artist and become involved with SFMOMA’s Artist Materials Archive.

At the end of the WUDPAC-funded second year, the partnership went through its planned re-evaluation and transition of institutional support. This next stage in the evolution was the transition from SFMOMA to VoCA and an artist-endowed foundation. VoCA is a non-profit, mobile organization based in New York. Through three major program streams, it addresses the production, presentation, and preservation of contemporary art. Partnering with VoCA increased the availability of supportive programming, networking, and public engagement opportunities. Additionally, it allowed for the inclusion of affiliated conservators as project supervisors, as many foundations may not have a full-time conservator to fill this role. The second new partner was the RRF, an organization focused on the legacy of Robert Rauschenberg that presented opportunities for cross-disciplinary collaboration in curatorial, collections, and archives research, as well as challenges analogous to other small institutions. The RRF was an ideal organization to join the partnership as they already had a working relationship with SFMOMA, through their
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 scholarly online SFMOMA Rauschenberg Research Project. Additionally, Rauschenberg’s body of work offered an expansive range of categories to fit any student’s interests.

**General Curriculum Development**

At the beginning of the academic year (September 2018), Natalya and Jennifer, along with their WUDPAC project supervisors, Lauren Fair⁶ and Matthew Cushman⁷, made a multi-day visit to New York City to tour the Foundation’s gallery, archives, and storage facility (fig. 4). Goals of this kick-off meeting were to make introductions, view artworks, and begin to develop individual curricula for each fellow.

The following three WUDPAC courses helped to frame the curricula and the summer work projects: a two-semester science course (*ARTC 672-673 - Chemical and Physical Techniques Used in the Examination of Art Materials*) and a one-semester preventive elective course (*ARTC 667 – Preventive Conservation Research and Applications*). The year-long science course introduces students to different methods of analysis, along with their capabilities, applications, and limitations; the ethics of sampling and the importance of meaningful research questions are also emphasized. The focus of the fall science semester is to produce a research proposal and the spring semester is dedicated to carrying out and interpreting results from the proposed analysis. The spring preventive course permitted Natalya and Jennifer to develop in-depth research projects that could be researched and tested in Delaware, with the final results implemented at the partnering institution. The research conducted over this year was framed as preparatory work for the fellows’ nine-week summer work projects at the RRF. With this arrangement, fellows began the summer with a basis of knowledge about the ideas and works of Robert Rauschenberg, which informed individual and collaborative projects (described in the following two sections).

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⁷ Assistant Professor and Paintings Conservator at the Winterthur/University of Delaware Program in Art Conservation

Figure 4 - Gallery tour with senior curator, David White, at RRF with project supervisors in September 2018. Image courtesy Margaret Graham.
**Rauschenberg’s Early Paintings**

Individual projects were selected and developed to address the interests of the fellows, as well as those of the partnering institutions. Jennifer worked on multiple projects, each investigating aspects of Rauschenberg’s works early in his artistic career, aligning with her interest in mid-century American paintings. The subject of her technical investigation was *Untitled (Night Blooming)* (fig. 5), a painting he made during a summer at the experimental Black Mountain College in North Carolina. This was a pivotal time of his intense exploration of unconventional materials, process, and collaboration with friends and other artists that would continue to evolve in his work for the rest of his life.

The collaborative process and materials, such as gravel, oil, and asphaltum, are identified inconsistently and anecdotally in sources from the records and archives. One of Jennifer’s goals for this project was to assist the RRF with the use of terminology when describing this artwork. Another goal was to gain an understanding of the process as it relates to the history of the painting and stories of its creation. Jennifer investigated this through the analytical research courses using an approach combining multiple analysis techniques at Winterthur and extensive investigation and examination of archival materials both at the RRF and at Black Mountain College.

*Figure 5 - Untitled (Night Blooming), ca. 1951 (Oil, asphaltum, and gravel on canvas (est.)) 82 1/2 x 38 3/8 inches. Robert Rauschenberg Foundation Collection. Image courtesy Robert Rauschenberg Foundation.*
Jennifer evaluated materials used in long-term storage at the Foundation in her preventive elective research project. Artworks of various composition in the storage facility are covered in plastic sheeting and secured with tape, at times with other materials enclosed, such as glassine (fig. 6). Many of these materials, particularly Dartek®, a cast nylon film, have not been tested for use in the storage of artworks. Established in-house protocols for Oddy testing, and their subsequent results, comprised one method used to initially evaluate these materials (fig. 7). This information will be supplemented with data obtained from continuing analysis (Fall 2019) identifying potential volatile organic compounds emitted from these materials utilizing headspace solid-phase microextraction gas chromatography mass spectrometry (HS-SPME-GCMS). This information will aid in evaluation of the suitability of these materials in long-term storage.

Jennifer’s summer projects included a collection and condition survey of seven of Rauschenberg’s early paintings in the RRF’s collection (*Black Paintings*, *White Paintings*, and one in the *Night Blooming* painting series), with recommendations for their storage, display, and handling. These paintings were created following a time when Rauschenberg claimed to develop a reverence for the use of color, following his study with Josef Albers at Black Mountain College. Many of these artworks, particularly the *Black Paintings*, have more complex surface variation and depth than they may appear in photographs and would benefit from a systematic approach to their condition assessment. Particular attention was given to the biography and treatment of the *White Paintings* over time by the artist, his assistants, and conservators.
Additionally, further research and examination was planned for a specific *Black Painting, Untitled [matte black painting]* (fig. 8) to add to the body of knowledge about this period. Jennifer’s summer of early paintings research primarily took the form of intensive observation and photography of these paintings, supplemented by interviews with conservators and curators familiar with Rauschenberg, visits to view works in other collections, and additional archival and object record investigation.

Jennifer will present her findings from summer research and the fall/spring technical analysis at a scholarly *Black Paintings* Study Day planned for Winter 2020. Jennifer will plan and execute this event as part of a collaborative effort over the fall between her VoCA-affiliated supervisor Jennifer Hickey⁸ and the RRF staff. This two-day event will bring scholars and conservators from across the country to New York City to share their research about the *Black Paintings* and *Night Blooming* series in other collections, with the intention of rejuvenating interest and research about these influential early artworks.

*Rauschenberg’s Metal Paintings*

Natalya undertook a three-part curriculum focused on Rauschenberg's metal paintings, which he made in series from 1985-1996. The particular series Natalya studied for this project were made by reacting copper alloy or aluminum panels with chemical solutions to produce what Rauschenberg called “tarnishes” or “corrosives.” Often, Rauschenberg layered acrylic paint, polyurethane varnish, and other clear coatings to create complex picture surfaces on top of the patinated metal substrates.

For the analytical research course, Natalya’s research focused on characterizing the materials Rauschenberg used to create the *Borealis* metal paintings series (1988-91). This research was motivated by two factors: to determine the accuracy of the archival records and legacy

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⁸ Paintings Conservator at the Hirshhorn Museum and Sculpture Garden and VoCA-affiliated supervisor
Natalya’s preventive elective research project focused on efforts to establish baseline documentation for Rauschenberg’s metal paintings with highly reflective or mirror-like surfaces. Depending on the photography set-up (e.g. position of camera and lights), the images captured can vary widely (fig. 10) and often require significant post-capture processing, which makes evaluating change difficult, if not impossible. To better understand which practices most accurately document surface phenomena that cannot be textually described or noted in condition diagrams, Natalya made mock-ups that model the tarnishing and coatings on some of the metal paintings; she documented the surfaces of the mock-ups with digital photography,

Figure 9 - Street Song (Borealis), 1990 (Tarnish and silkscreen ink on brass) 72 3/4 x 96 3/4 inches. Robert Rauschenberg Foundation Collection. Image courtesy Robert Rauschenberg Foundation.

Figure 10 – Images captured with differing set-ups of the same artwork: Copperhead-Bite VI / ROCI CHILE, 1985 (Acrylic and tarnish on copper) 96 7/8 x 51 1/4 inches. Robert Rauschenberg Foundation Collection. Images courtesy Robert Rauschenberg Foundation.
colorimetry, and glossimetry (fig. 11). The goal of this project was to determine if change to the metal substrate, tarnish layers, and/or glossy varnish coatings could be quantified.

Natalya’s primary summer project was a multi-faceted condition and collection survey of eleven monumental *Copperhead* metal paintings. At the beginning of the summer, Natalya tested the documentation protocol she developed in the preventive research course and evaluated its repeatability. This information helped her determine how best to include colorimetry and glossimetry in the survey, and how her protocol could be adjusted and applied to other series in the Foundation’s collection.

Natalya’s study of the *Copperhead* metal paintings overlapped with other scholars and students researching Rauschenberg’s international humanitarian venture, Rauschenberg Overseas Culture Interchange (ROCI). ROCI permitted Rauschenberg to travel and explore local materials and art-making practices from different countries. He made the *Copperhead* series during his exploration in Chile as part of the ROCI project. One of these ROCI scholars is Vitoria Hadba, a graduate art history student who published an article contextualizing Rauschenberg’s ROCI Chile project within Chile’s socio-political climate under the Pinochet regime. Through communication and collaboration with an art history student, Natalya gained a more holistic perspective of Rauschenberg’s intention when making the *Copperheads*.

During the summer, Natalya undertook two related projects: examination of Rauschenberg’s silkscreens and an analytical investigation of four *Copperhead* metal paintings. She examined some of the metal paintings alongside the original photographs and silkscreens used to create the artworks, to better understand Rauschenberg’s working process. In addition to being an incredible educational opportunity, this study allowed Natalya to assist the staff at the Foundation who had questions about the value and preservation of these source materials. Her analytical investigation of the *Copperheads* is ongoing and focuses on determining the impact of environmental exposure on the rate of deterioration of the varnish coating.
**Additional Summer Work**

In addition to completing and presenting individual major research projects and results to RRF staff, there were three other components within the nine-week summer placement. The fellows designed and/or participated in two Study Day events, visited conservation studios and collections with holdings of Rauschenberg’s artworks, and began to write their peer-reviewed articles for the VoCA Journal.

Natalya, Joelle, and Michelle Barger, worked with the Foundation’s Head of Art Services, to organize a storage and rehousing study day focused on Rauschenberg’s popular, found- and assembled-metal sculptures, the *Gluts*. *Gluts* sculptures are difficult to store as many have kinetic or flexible components, are large and unconventionally shaped, and because they are mostly assembled from discarded scrap metal (fig. 12). At the successful and idea-rich Study Day, art packing and shipping experts joined Foundation staff and the fellows to brainstorm approaches to safely handle, store, and ship these unruly artworks.

Throughout the summer, Natalya and Jennifer visited conservators at six institutions and five private conservation studios in New York and Washington, D.C., in addition to viewing holdings of Rauschenberg’s artworks in museums and private collections. These site visits helped to contextualize the artworks studied within their larger series. They also gave the fellows an opportunity to speak with others about what solutions they have found to be most effective for storing and exhibiting their Rauschenberg collection items.

The perspectives gained from these conversations aided the fellows in drafting their articles for the VoCA Journal. Jill supervised this aspect of the fellows’ summer and provided mentorship to Jennifer and Natalya, particularly in the initial focusing and articulation of ideas. She also guided and advised on techniques to communicate the philosophies and concepts underpinning their

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9 Objects Conservator at SFMOMA and VoCA-affiliated supervisor
research projects to a diverse and general audience. These articles will continue to be developed and written over the course of the fellows’ third year, with a likely publication date in 2020.

**Benefits and Challenges**

There were many benefits of being involved in this partnership. Of course, these benefits came with a set of challenges. Both are seen as opportunities for educational or personal growth.

An overarching benefit of this project was its length. The year-long collaboration allowed time for critical thinking and exploration of ideas without the pressure for immediate action. It also gave the fellows time to gain a broad understanding of contemporary conservation theory, both within the context of modern artwork, but also in its relation to a more traditional conservation practice; a benefit that resulted from the partnership taking place during the fellows’ second year in the WUDPAC program, instead of during their third-year placements. The long-range planning also allowed for time to adjust and be flexible with both institutional and individual needs.

Collaborative curricula writing and development pushed the Jennifer and Natalya to identify their personal and educational goals. Clear communication concerning expectations and achievable projects within the scope of coursework was necessary. These invaluable conversations became opportunities for learning when to be flexible and when to speak up. They helped the fellows to hone their “intrapersonal skills” which are critically important for successful collaboration across any discipline. Bruno wisely noted this in 2016, when he wrote an email at the beginning of the project emphasizing the importance of effectively communicating with different audiences:

“*This might turn into a good educational opportunity in the future, so that students understand the value of this type of collaboration and its critical importance when dealing with contemporary artists such as Rauschenberg…It is particularly strong not only to increase [Claire’s] exposure to the conservation of modern and contemporary art through involvement in very interesting projects at the museum, but also in how it*
emphasizes the importance of the critical dialogue that must be an essential part of the process.”

Engaging in open dialogue with curators, artists, and the public is fundamental in contemporary art conservation, which means it was central to this partnership. Clear communication has been critically important since the first meeting, when the staff and board at the Foundation were made aware of the value of taking samples for analysis. In addition to discussing possibilities for potential outcomes, the fellows had to set expectations about the limitations of analysis. These conversations have taught them to be conscious of the connotations associated with specialized conservation terminology, especially when speaking with colleagues who may derive different meanings from terms like patina, tarnish, and corrosion.

Rauschenberg’s non-traditional approach to artmaking added a layer of complication to the fellows’ research. Rauschenberg often used proprietary, industrial materials in novel ways; while this is not uncommon for modern or contemporary artists, Rauschenberg’s commitment to chance and unconventionality makes it difficult to extrapolate information from one case study to the larger series. Rauschenberg’s practice also means that his artworks regularly fall somewhere between traditional conservation specializations. These blurred boundaries require collaboration across disciplines to ensure an artwork’s tangible and intangible qualities are respected and preserved.

The projects and curricula were designed to encourage understanding of these differences between conventional conservation and contemporary art conservation practice. This is one reason why all of the fellows’ projects were research-focused. One of the primary goals when designing the curricula was to bridge the materiality of Rauschenberg’s art to the conceptual considerations of contemporary conservation theory. Having research-heavy projects also permitted independent work, which was crucial, particularly since in-person supervision would only be available for three of the nine weeks of the summer work project. Adaptation to the reality of working in a small institution that does not have a conservation lab was another challenge. The fellows did not carry out any interventive treatments this summer, but lack of onsite equipment could complicate this for future students.
Next Steps – The Future
Debbie, Jill, and Bruno’s initial goals have finally come to fruition: the partnership will be funded exclusively by the Foundation for the next two fellows. Maddie Cooper, WUDPAC Class of 2021, has enthusiastically volunteered to be a one of the participants in the next chapter of this venture and the program is excited about the possibility of the partnership growing to include another conservation graduate training program.

This project presents different opportunities for each participant. Maddie enjoys modern and contemporary art, but her true passion is disaster preparedness and response; she is most interested in learning how she, an emerging preventive conservator, can serve this type of small institution. For Jennifer, whose love of modern paintings often feels inexhaustible, this project permitted study one of the most influential and innovative artists of the second half of the 20th century. For Natalya, this project allowed time to dedicate exclusively to exploring conservation philosophy and ethics under the guidance of some of the greatest minds in the field.

The opportunities provided by this partnership are extensive and significant. The professional connections made by Natalya and Jennifer will continue to be invaluable resources and encourage future collaborative efforts as they emerge into the field. Thanks to the inspirational efforts of the founders of this partnership, challenging and unique experiences will be provided for upcoming graduate fellows willing to dig deep into the nuanced and layered complexities of modern and contemporary art conservation theory and practice.

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