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BRINGING OUT THE "BLING": DECADENCE IN GLASS

L. H. (HUGH) SHOCKEY JR.

ABSTRACT

During the spring and summer of 2007, the Smithsonian American Art Museum's Renwick Gallery presented the work of four craft artists in the exhibition *From the Ground Up: Renwick Craft Invitational 2007*. Preparations for this exhibition led to close collaboration between the artists and the museum's object conservators. This collaboration focused on the installation of *Bancketje*, the massive glass assemblage created by artist Beth Lipman. The work consists of several hundred individual glass components installed on a narrow twenty-foot long table recreating a Dutch Renaissance feast. The collaboration began in the planning stages of the exhibition. The artist expressed reluctance with having conservators clean the glass components prior to her arrival for installation. Following an explanation of logistics and time constraints, she gave the conservators permission to proceed. To allay her most pressing concerns, the artist was assured that her labeling system would be retained for installation.

Before the scheduled installation date of the Renwick Invitational, Conservation Intern Rachel Penniman, Contract Conservator Michelle Savant, and Smithsonian American Art Museum Conservator Hugh Shockey proceeded with the week-long process of cleaning the glass with detergent in water and carbon dioxide snow. Lipman's concerns about conservation cleaning methods evolved into elation when she arrived at the museum. She exclaimed "it's [the glass] never looked better" and explained that our work elucidated her vision of opulence and excess, which she sees as central to the meaning of her work. During the remainder of the installation, Lipman continued to seek out our advice regarding materials.

This successful collaboration had three results: it aided the Renwick's acquisition of the work; it gave the artist and conservators new appreciation and respect for each other's abilities and intent; and it excited our museum colleagues, who in turn generated additional public interest about the work and preservation methods through gallery talks and lectures.

1. INTRODUCTION

The Smithsonian American Art Museum's (SAAM) Renwick Gallery collects and exhibits the works of American craft and decorative artists. The Renwick Gallery's Craft Invitational is a biennial exhibition of the United States' leading craft artists as chosen by a jury of curators from across the nation. The Renwick Invitational of 2007 exhibited the works of four artists: Paula Bartron, Jocelyn Chateauvert, Beth Lipman, and Beth Cavener Stichter. Each of the artists required assistance from the object conservators at SAAM, but none more than Beth Lipman with her sculpture *Bancketje (Banquet)*, 2003 (fig.1).

1.1 BETH LIPMAN

Beth Lipman is an internationally exhibited artist who uses glass as her primary medium. Lipman blows, sculpts, and kiln-forms glass into a wide variety of representative objects that she then assembles into still lifes, often directly referencing art historical masterworks of still life paintings. Using the symbolic language of still life and its compositional elements, she seeks to comment on the opulence and excess of contemporary consumer culture including the waste and decay. Her choice of glass, often clear, as the medium for representing the ephemeral adds a new dimension to the historic still life, limiting the viewer's ability to possess the work visually and denying tactile familiarity with the represented subject matter.

As a glass artist, Lipman's working process is by necessity collaborative (fig. 2). She has taken the idea of collaboration further by actively soliciting other artists to contribute objects made by their hand, not hers, for inclusion in the final assembled work. Additionally, for her larger compositions, Lipman actively seeks the input of volunteers and assistants with the installation and final arrangement of her large works. This collaborative spirit can result in a virtually "new" installation of a sculptural work at each new venue.

Fig. 1. *Bancketje (Banquet)*, 2003. Gallery installation photograph from the Museum of Glass Tacoma, Washington (Courtesy of the Museum of Glass, Tacoma, Washington)

Fig. 2. Beth Lipman (in black with yellow arm guard) working in a glass hot shop studio with assistance (Courtesy of the artist)

1.2 CURATORIAL INTEREST

Prior to the installation of *From the Ground Up*, Renwick Gallery Curator Jane Milosch contacted the conservation department to discuss her desire to acquire Lipman's *Bancketje* for the permanent collection. Milosch presented specific concerns about the work. These included questions about the work's current condition and the museum's ability to maintain the work. The catalyst for her questions had been concerns expressed by the Renwick Gallery's acquisition committee. Members of the committee had expressed serious reservations regarding the work's current exceedingly dirty and hazy condition and the available resources of the museum to provide continuing maintenance of the work.

With the committee's apprehension in mind and with the curator's expressed desire to acquire the work, the responsibility fell to the objects conservators to address the concerns and provide the curator with answers for the acquisition committee. The response to Milosch was that the sculpture would first need to be wet-cleaned for it to look its best for the upcoming exhibition and that the work was an excellent candidate for maintenance with carbon dioxide snow cleaning.[1] Her response to the answer was positive and she felt that it would allow her to return to the committee with a solid proposal that addressed their concerns. This in turn raised the stakes for a successful cleaning and installation of *Bancketje* as part of the Renwick Invitational exhibition.

1.3 PREPARING FOR THE STORM

With the exhibition looming, all departments with involvement in executing the show convened a meeting. High on the list for this gathering were questions for Beth Lipman, who attended via telephone. Each department had its own concerns about the installation of Beth Lipman's *Bancketje*. Registration had concerns about the space and personnel time needed to move, unpack, and condition report the sculpture following its arrival, indicating that they only wanted to handle the work once. Exhibit Design and Installation expressed serious concerns about scheduling and logistics, particularly the unpacked work's impact on the installation of sculpture from the other three artists. Conservation had questions about the time and space needed to clean such a large volume of work. Finally, the artist communicated her hesitance to allow the work to be unpacked and cleaned prior to her arrival.

It became apparent during the meeting that waiting for Lipman to arrive would not be a viable option since the installation of the entire show was scheduled for one week. Registration indicated that it would take at least two days to unpack and condition report the work. Conservation estimated approximately five days to wet-clean the surface and remove old silicone adhesive residue. The artist indicated that it would take her between two and four days to install the work not including installation of her other works in the show. With reality plainly visible, the artist finally agreed to allow Registration to unpack the components and Conservation to clean the work prior to her arrival for installation.

Lipman's primary concern regarding the cleaning of the work was the removal of the Sharpie marker numbers placed on the components to indicate their placement on the table. She was also concerned about complete removal of the residual silicone caulk adhesive on the surface, since as she explained it helped her remember the general orientation of the components as they had been installed as part of the finished work. The SAAM conservators indicated that they would gladly reapply the numbers to the surface of the glass using a Sharpie marker after cleaning since it could be easily removed during installation with ethanol and that they would leave small traces of the silicone caulk adhesive for her to use as placement guides. While

remaining slightly hesitant Lipman agreed to allow SAAM's object conservators to move forward with the proposed cleaning.

2. TREATMENT

The treatment of Beth Lipman's *Bancketje* presented itself as a fairly straightforward wet-cleaning of stable contemporary soda-lime glass. The extraordinary aspect of the treatment included both the organization of such a large quantity of individual objects for one work, approximately 450, and the logistics of setting up a temporary treatment area in the Renwick's exhibition space, roughly one mile from the primary objects conservation lab at the Lunder Conservation Center. The organization, setup, and supply acquisition for the project was greatly assisted by the Lunder Center's Technician Susan Edwards. Also required for the project was the help of additional conservators. This help came in the form of then Conservation Graduate Student Rachel Penniman and Contract Conservator Michelle Savant.

Organization of the treatment materials required consideration of all potential needs for the treatment, including cleaning, drying, potential mending, and adhesives for installation. The necessary supplies had to be packed at the primary lab. These materials were then transported on hand dollies to the Renwick since vehicle access to the Renwick is severely limited due to its close proximity to the White House and its strict security procedures. Once onsite, the supplies were unpacked and arranged into a temporary treatment area with workstations for three conservators (fig. 3).

In preparation for treatment, the Registration staff unpacked the glass components onto Tyvek covered moving blankets placed on the floor of the gallery. Placement of the components on the floor was requested by conservators to prevent the possibility of glass components being accidentally knocked off tables onto the floor. This request proved to be wise, since as the artist-packed Sterilite bins were unpacked by registrars, it became apparent that the available table supply would have been inadequate (fig. 4). Following unpacking and condition reporting by the Registration staff, conservators conducted their own assessment of the numerous glass components. Conservators noted potential problems such as; applied gold luster and craft paint, prior artist repairs, awkward centers of gravity, intentionally loose pieces, and preassembled works with difficult or impossible-to-reach interstices (fig. 5). Prior to beginning treatment, additional Tyvek covered blankets were placed in close proximity to the space where the work was to be installed for receiving the cleaned components and reducing the total transport distance for installation.

The treatment method was as follows:

1. Reduced silicone caulk residue from the surface with single edge razor blades and scalpels.
2. Washed with a 1.5% (v/v) mixture of Triton XL-80N in water applied by soft absorbent cotton cloth or Kimwipes EX-L.
3. Rinsed with deionized water using soft absorbent cotton cloths, Kimwipes EX-L, or flowing water.
4. Dried with Kimwipes EX-L and warm air as necessary.
5. Removed lint with carbon dioxide (CO_2) snow.
6. Relabeled according to artist's numerical system using Sharpie marker.

Fig. 3. Temporary treatment workstation in the Renwick gallery. Conservators from right, Michelle Savant and Rachel Penniman. (Photograph by Hugh Shockey)

Fig. 4. Conservator Rachel Penniman reviewing a small portion of the components during unpacking by the Registration staff (Photograph by Hugh Shockey)

Fig. 5. Component from *Bancketje* showing applied gold craft paint, artist's repair to bowl, and individual glass fruit epoxied into the bowl requiringcleaning as an individual unit (Photograph by Rachel Penniman)

Fig. 6. *Bancketje* elements before and after cleaning. Left image: Before treatment condition at previous venue showing cloudiness of the glass (Courtesy of the Museum of Glass, Tacoma, Washington). Right image: After treatment on exhibit at the Renwick Gallery with no visible cloudiness of glass (Photograph by Hugh Shockey)

2.1 VISIBLE RESULTS

The visual change after cleaning was characterized by an increase in clarity and an enhancement of the glass' reflectivity resulting in a more active and vibrant surface quality overall. Although difficult to reproduce in photographs the difference was readily apparent to the artist when she arrived (fig. 6). Her approval of the treatment results was evident in her outwardly displayed excitement (hugs and accolades for the conservation team). With additional components remaining to be cleaned following her arrival, conservators met with the artist to discuss and prioritize the remaining pieces to establish a hierarchical treatment list. This allowed conservators to continue cleaning the remaining elements while allowing the artist to begin installing the work in a fluid workflow without adding delays to the process. The total timeline for treatment from first to last component was five full working days.

3. INSTALLATION

Installation of *Bancketje* required collaboration between three to five people at any given time, including the artist. The people assisting the artist were professional art handlers, conservators, and a graduate student intern of craft and decorative arts. The process of installation began by placing the artist's full-scale template along the side of the table in the proper orientation as determined by the artist (fig. 7). The artist, with assistance, began the process of placing components on the table. This process can be characterized into the following steps:

1. Location of large anchor pieces that do not have variable locations.
2. Addition of the first layer of components onto the table surface.
3. Addition of the second layer of elements onto the existing glass components and table surface.
4. Addition of the final components at various locations around the table and composition.
5. Refinement of the final arrangement as necessary.

3.1 PUTTING IT ALL IN PLACE

Throughout the installation process, the artist used a variety of cues to determine approximate component placement. While the template served as a two-dimensional guide to the table surface, Lipman used the residual silicone caulk as a three-dimensional guide. Between memory and referencing the adhesive residue, she was able to recreate the location of elements stacked on top of one another. Once she had determined the location she wanted, she would then apply silicone caulk as an adhesive, and tape, weight, or prop the component into place. During the process of building the assemblage, the artist actively solicited the opinions of not only the people assisting her, but also of staff working in varying capacities during the exhibition installation. To varying degrees Lipman would incorporate the suggestions of others into the final composition of the work.

3.2 FINAL TOUCHES

With the final adjustments in place, Lipman spoke with SAAM's lighting designer Scott Rosenfeld. He recounted her instructions to put as much light as possible on the work, "think glass porn" she said to him. Rosenfeld approached the conservation staff for direction on preservation lighting requirements while informing them of the artist's request. This immediately prompted a discussion between the conservator and artist regarding the stability of the paint on the surface of the table. Her response was simple, the table was far less important visually than

the glass and the high lighting levels helped her emphasize the visual excess of the work. She indicated that as far as she was concerned the table could be repainted glossy black if it faded without impacting her artistic intent.[2] Rosenfeld then proceeded to light the work intensely using a creative mixture of standard incandescent and halogen sources, exploiting the warm transparency of the standard lamp with the white glittery sparkle of the halogen (fig. 8). The assemblage was then checked for the appearance of streaks, fingerprints, lint, and Sharpie marker residue on the glass surfaces. These were treated locally with ethanol, detergent in water, or CO_2 snow.

Fig. 7. The process of installation, from top left to bottom right: full scale template and components laid out along the length of the table; Lipman setting primary elements onto the table top; Lipman asking for input on positioning and composition from helpers; and setting final placement with silicone caulk and masking tape (Photographs by Susan Edwards)

Fig. 8. Final installation of *Bancketje* for the Renwick Gallery's exhibition of *From the Ground Up: Renwick Craft Invitational 2007* (Photograph by Mildred Baldwin)

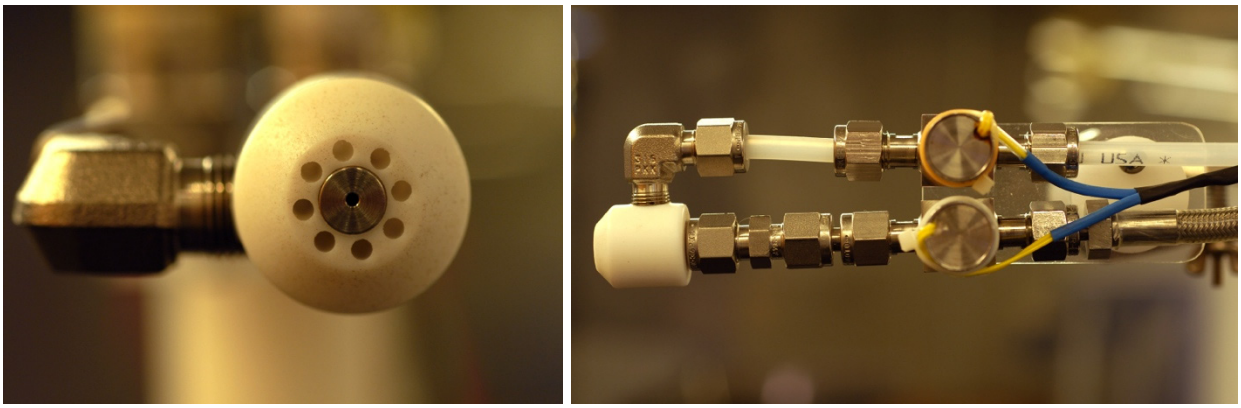

Fig. 9. The CO_2 snow apparatus. Left: Detail of the nozzle tip, single hole in center of stainless steel is the CO_2 snow exit, multiple holes in white polymer head are nitrogen (N_2) blanket gas exit. Right: View of the unit from above, CO_2 is lower braided line, N_2 is upper polymer line (Photograph by Hugh Shockey)

4. ONGOING MAINTENANCE

Ongoing maintenance, particularly dusting, of *Bancketje* requires consideration of many of the factors encountered with preparing the work for exhibition. These include: the total volume of individual items, the complex arrangement of components, the wide variety of surface textures, and the time required to achieve satisfactory removal of surface dirt and grime from a work on open display. The maintenance of the sculpture has largely been made possible with the use of the SAAM conservation lab's CO_2 snow generation equipment .[3] The equipment allows for an individual conservator to remove accumulated dust from the entire surface of the work in a period of forty-five minutes to one hour. A brief overview of CO_2 snow cleaning technology was

presented by the author as an unscheduled presentation during the morning break of the AIC Objects Specialty Group Session in Denver. The following section provides a condensed summary of the topic.

4.1 CARBON DIOXIDE SNOW BASICS

Carbon dioxide (CO_2) snow is made up of solid crystals of CO_2 that are generated by a nozzle apparatus fed from pressurized carbon dioxide liquid or gas (fig. 9). The particle size varies from micron to sub-micron depending on source and nozzle geometry. The solid snow crystals have the ability to penetrate the thin turbulent air boundary surrounding all surfaces in the atmosphere. After penetrating this layer, the snow particle impacts the soiling material and displaces it largely by momentum transfer. The CO_2 crystal then sublimates to a gas at room temperature. CO_2 snow has been used in industry for critical cleaning applications including the removal of contamination from silicon wafers and coated optical surfaces. It is most effective at removing particulate soiling matter from hard surfaces. It is not effective on bound particulates or heavy grease type accretions and soiling, nor is it effective on "soft" energy absorptive substrates.

5. CONCLUSION

The final result of the installation of *Bancketje* was a work that mesmerized the audience. The experience of the conservators and the artist working together gave each a new and different appreciation of the other's skill sets. The uniqueness of the sculpture and the experience of its installation provided excellent opportunities for the public to learn about the process of exhibitions and the extent of dialogue between artist, curator, and conservator. Beth Lipman has continued a dialogue with the SAAM object conservation staff, actively seeking to learn more about materials and their stability over time. It is a fine but rewarding line for a conservator to walk by providing information about materials and methods to an artist while not impacting their creativity or expression. When successful, the artist can leave the experience with a larger toolbox and may be better equipped to execute their creative vision.

5.1 FROM THE ARTIST

The following is the response from Beth Lipman regarding her experience working with conservators during this project:

> "Working with Hugh Shockey and his team at SAAM's Renwick Gallery was a turning point for me in many ways. I don't consider myself savvy to structural concerns, and usually build risk into my creative process. 'Will this piece of glass support its own weight or not?' is a question I ask over and again. In the end, I am still responsible for my work's immediate and long-term stability. My meeting and working with Hugh enabled me to understand the possibilities of what realistically can be accomplished. Now I have an ally. I strongly encourage artists that I know in the field to contact a conservator and have a good long discussion if they have reached an impasse with their work technically. It can change their life."

ACKNOWLEDGEMENTS

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NOTES

1. Carbon Dioxide Snow (SCO_2, CO_2 Snow) is a cleaning technique that is typically used in critical cleaning applications (i.e. decontamination of silicon microchip wafers and high performance optical lenses). CO_2 Snow should not be confused with liquid CO_2, supercritical CO_2, or pelletized dry ice. CO_2 Snow is the generation of micron to sub-micron crystals of CO_2 formed as a result of CO_2's enthalpy properties as modified by venturi or adiabatic nozzle geometries supplied by a pressurized gas or liquid CO_2 source. The cleaning mechanisms can be characterized as momentum transfer displacement and mild organic solvation.

2. Via personal communication. Beth Lipman's desire to illuminate the work preferentially was followed after she was consulted by a conservator regarding the long-term preservation risks of the request. Following acquisition of *Bancketje* the artist's response was recorded in the curatorial files, conservation files, and SAAM's collection database.

3. The CO_2 snow unit at the SAAM Conservation Lab is a dual gas unit by Applied Surface Technologies of New Providence, New Jersey. The unit has gas-fed CO_2 snow generation with simultaneous dry nitrogen (N_2) blanket gas capabilities. The nitrogen gas acts to displace water in the ambient atmosphere allowing more efficient CO_2 crystal formation.

REFERENCES

Hill, E. A. 1994. Carbon dioxide snow examination and experimentation. *Precision Cleaning – The Magazine of Critical Cleaning Technology* 2(2): 36–39.

Sherman, R. 1999. Carbon dioxide cleaning: Going through phases a panel discussion of CO_2 cleaning technology. *Precision Cleaning – For Advanced Technologies* 7(7): 27–34.

SOURCES OF MATERIALS

Dual Gas Carbon Dioxide Snow Gun
Applied Surface Technologies
15 Hawthorne Drive
New Providence, NJ 07974
(908) 464-6675

Kimwipes EX-L, Small and Large
Erie Cotton
1112 Bacon Street
Erie PA, 16511
(814) 459-6644

Triton XL-80N
From Lunder Conservation Center Lab supply stock
This product no longer commercially available

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