Owner: Princeton University Art Museum (PUAM)
Accession Number: y1977-2
Artist/Maker: Myron Brody, American, born 1940
Object: *Forma Thirteen*
Date: 1975
Medium: Cast and polished bronze
Dimensions: 18.5 x 24.2 x 20.2 cm (7 5/16 x 9 ½ x 7 15/16 in.)

Provenance: Gift of the artist in 1977 for the William C. Seitz Graduate School Class of 1955 Memorial Collection (Princeton University 1978)

Examiner: Daisy Diamond (Objects Conservation Summer Intern, PUAM; Graduate Fellow, Winterthur/University of Delaware Program in Art Conservation (WUDPAC), Class of 2026)

Consulted: Elena Torok (Associate Objects Conservator, PUAM)
Jeff Evans (Manager of Visual Resources/Photographer, PUAM)
Claire Taggart (Conservator, Nasher Sculpture Center)
Lauren Fair (Conservator and Lab Head for Objects Conservation, Assistant Director of Conservation, Affiliated Associate Professor; WUDPAC)

Proposal Date: July 10th, 2024

Description

This sculpture is a solid bronze form with curved surfaces connected by a continuous undulating linear edge. Three surfaces compose the form: two parallel and slightly concave surfaces are joined by a third surface composed of convex and concave regions that slope into a planar base. The warm-toned metal is highly reflective and mirrors the object's surroundings with distortions. The metal is uncoated and unplated.[1] This sculpture was likely created from a lost-wax casting process and the core contains a void with loose material as a remnant of this technique. A few surface imperfections appear to be artifacts of the production process, including: a patch with a 4 cm micro fissure and moderate surface pitting (fig. 1), 0.4 cm circular regions of varied coloration and texture, small surface pits, and other subtle irregularities. These may be caused by sprues, undesired surface inconsistencies, and other fabrication-related phenomena.

[1] Continuity Tester ET-22 was used to evaluate the presence or absence of a coating: a light on the tester indicated a closed circuit with no resistance to electron flow. The absence of a light would have indicated an open circuit with a resistance to electron flow due to the presence of a coating.

Figure 1. Microfissure and surface pitting.

There is a foundry mark at the base of the larger concave side which reads “1/6 MB 13 Morris Singer © Myron Brody 1975” upside down. The accession number “77-2” is incised into the surface (fig. 2).[2]

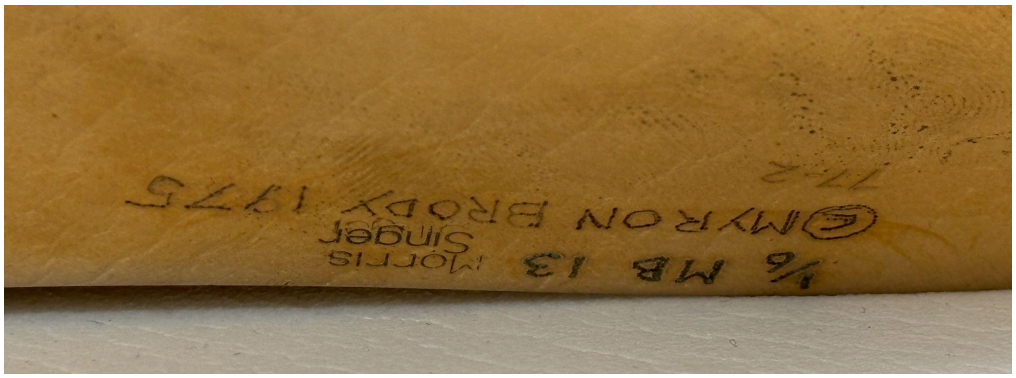


Figure 2. Foundry mark and signature.

A white cloth storage bag accompanies *Forma Thirteen*, but is not used to store the object (fig. 3).[3] One side of the bag is inscribed with “BRODY SAVE THIS BAG” in black handwriting. It is not documented whether the bag came from the artist or PUAM.

[2] Documented with an iPhone 15, ISO 50, f1.6, 1/60s. June 2024.
[3] Documented with an iPhone 15, ISO 50, f1.6, 1/120s. July 2024.

Figure 3. Storage bag front (left) and back (right).

Historical Context

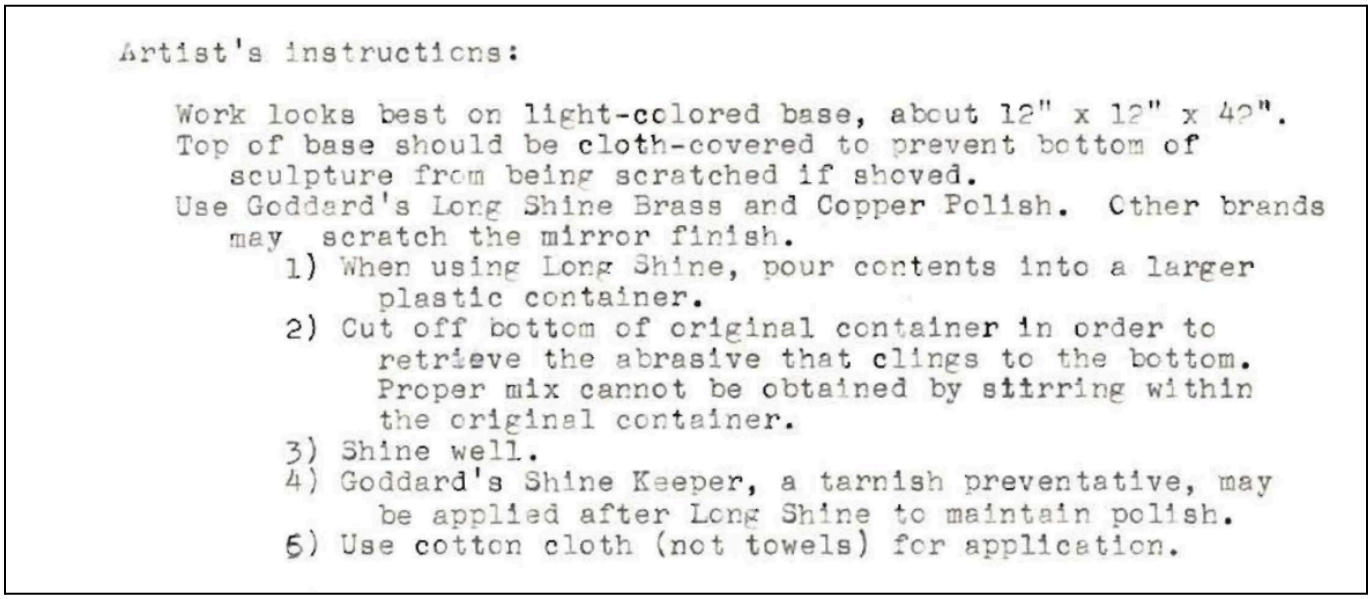
Myron Brody (1940-) is an emeritus professor of art at the University of Arkansas and former president of the Fulbright Alumni Association (1985-1986). He has exhibited photography and sculptures internationally and his work is in the permanent collections of the Museum Nacional de Belas Artes in Rio de Janeiro; the William C. Seitz Memorial Collection at Princeton University; the AVX Corporation at World Headquarters in Great Neck, New York; the Prudential Insurance Company of America in Newark, New Jersey; and Sumitomo Industries Limited in Tokyo, Japan. Two of his sculptures were donated to the University of Arkansas in honor of his wife, Senta Brody, and are on permanent display in Mullins Library (University of Arkansas 2024) (figs. 4-5). Myron Brody also conducted interviews with Joseph Solomon of Knoedler Gallery; Dave Vallance of Morris Singer Foundry; Robert Geddes of Princeton University; Robert Schoelkopf; Tom Wesselman; Anthony Caro; and Henry Moore. These interviews are held in the Special Collections Department Repository of the University of Arkansas Libraries and demonstrate Brody's long-term commitment to art history and material processes (Windon 2022).

Figure 4. *Sentascape #1*, American red granite, 2006. Image Courtesy University of Arkansas Library.

Figure 5. *Sentascape #2*, Arkansas limestone and Brazilian black granite, 2006. Image Courtesy University of Arkansas Library.

Forma Thirteen was cast at Morris Singer foundry, a fine art foundry established in 1848 in Southern England. Although Morris Singer had many changes in ownership, this foundry remained the leading metal casting studio in Great Britain for most of the 20th century (National Portrait Gallery 2024). Artists such as Henry Moore, Elisabeth Frink, and Eduardo Paolozzi used Morris Singer foundry to cast their works (National Portrait Gallery 2024).

On January 23, 1979, Brody expressed through written correspondence that although the inscription suggests this is the first edition of six, the one-of-a-kind mold was destroyed after the first cast (Atrium 2009). Thus, this sculpture is the only version in existence. Brody also provided instructions for polishing during acquisition (fig. 6).



Artist's instructions:

Work looks best on light-colored base, about 12" x 12" x 42".
Top of base should be cloth-covered to prevent bottom of sculpture from being scratched if shoved.
Use Goddard's Long Shine Brass and Copper Polish. Other brands may scratch the mirror finish.
1) When using Long Shine, pour contents into a larger plastic container.
2) Cut off bottom of original container in order to retrieve the abrasive that clings to the bottom. Proper mix cannot be obtained by stirring within the original container.
3) Shine well.
4) Goddard's Shine Keeper, a tarnish preventative, may be applied after Long Shine to maintain polish.
5) Use cotton cloth (not towels) for application.

Figure 6. Myron Brody's preservation instructions. Image courtesy PUAM accession record.

These instructions convey essential information regarding Brody's preservation philosophy for *Forma Thirteen*, indicating the primary significance of a mirror-polished surface. "Goddards Shine Keeper" was a polish containing "tarnish preventive preparations" introduced in 1967 and discontinued in 2009 (Justia 2024). Specific products suggested during the time of acquisition have more suitable contemporary polishing alternatives, but this record decidedly confirms Brody's approval of polishing and tarnish prevention.

Forma Thirteen was last displayed in 1977 in an exhibition that honored the late art historian and artist William ("Bill") C. Seitz (1914-1974). In 1955, Bill Seitz was the first person to receive a PhD in modern art from Princeton University and he wrote an early and influential text on Abstract Expressionism (Harvey 2024).

Condition

This object is structurally stable but in poor aesthetic condition. There are deeply etched fingerprints and smeared marks across nearly the entirety of the surface (figs. 7-10).[4] These marks significantly detract from its intended aesthetic impact: rather than allowing for an experience of a complex three-dimensional form that interacts with the surroundings, a viewer's attention is drawn to the surface irregularities and fingerprints. On the larger concave vertical wall, there is alteration in the surface color due to a thin film tarnish layer (fig. 10). Fine linear incised marks with slight curves are visible from a close viewing distance as evidence of a previous polishing campaign. The overall surface color is yellow and slightly matte due to the copper alloy corrosion products.

[4] Figures 8-10 documented with an iPhone 15, ISO 30-55, f1.6, 1/250-1/440s. June 2024.

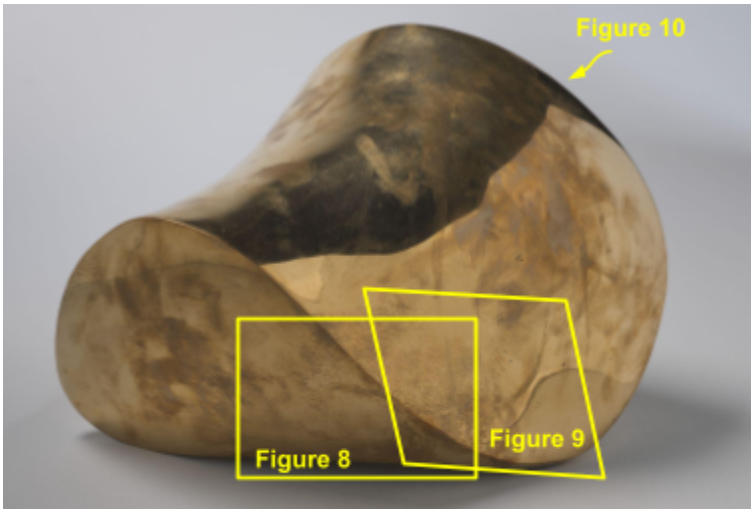


Figure 7. Image locations.

Figure 8. Fingerprints on the smaller perpendicular wall.

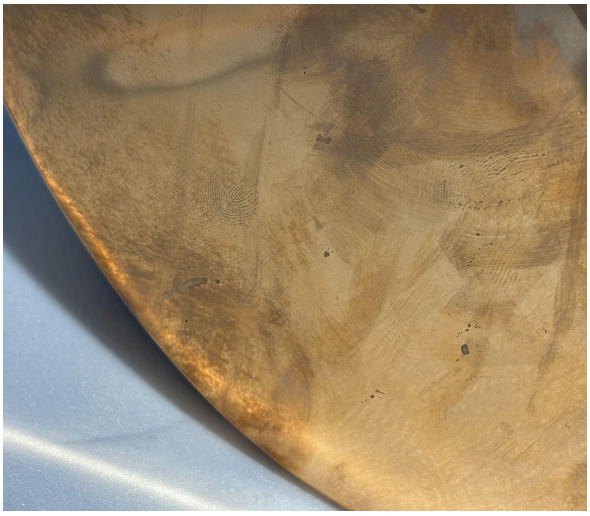


Figure 9. Fingerprints and dark spots.

Figure 10. Variation in surface discoloration.

Treatment Purpose

This treatment will reduce etched fingerprints and surface grime from *Forma Thirteen* to re-emphasize its highly reflective and spatial qualities. *Forma Thirteen* will be included in an upcoming exhibition about artistic materials in the East-West ArtWalk of the new PUAM building.

Treatment Proposal

1. Complete before treatment photo documentation (est. 2 hours).
2. Dry surface clean to reduce loose surface dust and soiling (0.25 hours).
3. Solvent clean to reduce handling oils and residue (est. 0.5 hours).
4. Reduce fingerprints and smears on the surface of the object by polishing with appropriate abrasive techniques, following testing and consultation. Evaluate and repeat as necessary (est. 6 hours).
5. Apply a reversible coating to protect the surface from improper handling and tarnish (est. 1 hour).
6. Complete after treatment photo documentation (est. 2 hours).

Estimated treatment time: 11.75 hours

Treatment Procedure

1. Completed before treatment photo documentation (3 hours).
2. Overall dry surface cleaned with cosmetic sponges (0.25 hours).
3. Overall solvent cleaned with ethanol applied on scientific VWR Cotton Pads (0.25 hours).
4. Polished with 0.3 µm alumina slurry with no additives or silicates from Electron Microscopy Sciences (Cat# 50368-20) applied on scientific VWR Cotton Pads. The overall surface was polished three times and significantly etched areas were polished six times total (6 hours).
5. Applied and buffed two layers of Renaissance micro-crystalline wax on the entire surface with a microfiber cloth (2 hours).
6. Completed after treatment photo documentation (1 hour).

Total treatment time: 12.5 hours
Report Date: July 28th, 2024

Handling and Storage Considerations

Handle with contaminant-free gloves to reduce the likelihood of etched fingerprints and other surface alterations. Gently reduce dust with a microfiber cloth, as needed.

Treatment Justification

This treatment was successful and followed the proposed procedure. The polishing solution was established in consultation with Claire Taggert, Conservator at the Nasher Sculpture Center, who used a 0.3 µm alumina suspension MicroPolish supplied by Buehler to clean high-polish copper alloy artworks by Donald Judd (email correspondence, June 2024). Lauren Fair was also consulted (Conservator and Lab Head for Objects Conservation, Assistant Director of Conservation, Affiliated Associate Professor; WUDPAC). She shared that Winterthur has a supply of alumina slurries, also from Buehler, made specifically for polishing metallographic cross sections with 1.0, 0.3 (most commonly used), and 0.05 µm alumina particle sizes (email correspondence, June 2024). The Buehler products were unavailable at this time, so a comparable product from Electron Microscopy Services with a 0.3 µm particle size was used to maintain an effective and efficient polishing material without excessively abrasive components. Some areas of more deeply etched corrosion required more polishing to re-establish a uniform and highly reflective surface. Elena Torok, Associate Objects Conservator at PUAM, was consulted to confirm that the extent of polishing was aligned with the treatment goals. The bronze color shifted toward a more uniform color as the yellowed corrosion layer was polished.

A coating was determined to be beneficial to protect the surface and decrease the frequency of future polishing campaigns. However, some artists who work with mirror-finished bronzes are strongly opposed to coatings, indicating the risk of disrupting mirror surfaces (Claire Taggert, email correspondence, June 2024). Claire Taggert shared that silicone-containing coatings cause issues with bronzes and hot waxes risk discoloration of high polish bronzes and should be avoided. She indicated that cold microcrystalline waxes or spray-applied B72/B48N would be more suitable. In consultation with Elena Torok, a micro-crystalline wax was selected for reversibility and its minimally altering effect on surface texture. Overall, the dramatic transformation from an irregularly etched surface to the highly reflective uniform surface honored Myron Brody's original artistic intent.

Before Treatment Photo Documentation

Images captured with a Phase One IQ4 150MP by Jeff Evans on June 21st, 2024 (figs. 11-18). All metadata is included in TIFF files in PUAM image records.

Figure 11. Before treatment, ½ overall.

Figure 12. Before treatment, ½ overall with color checker passport (removed in fig. 11 due to reflectivity at this angle).

Figure 13. Before treatment, ½ overall.

Figure 14. Before treatment, ½ overall with color checker passport (removed due to reflectivity at this angle).

Figure 15. Before treatment, larger convex side.

Figure 16. Before treatment, larger convex side with color checker passport (removed due to reflectivity at this angle).

Figure 17. Before treatment, frontal view of side visible in Figure X.

Figure 18. Before treatment, underside.

After Treatment Photo Documentation

Images captured with a Phase One IQ4 150MP by Jeff Evans on July 15th, 2024 (figs. 19-27). All metadata is included in TIFF files in PUAM image records.

Figure 19. After treatment, ½ overall.

Figure 20. After treatment, ½ overall with color checker passport (removed due to reflectivity at this angle).

Figure 21. After treatment, ½ overall.

Figure 22. After treatment, ½ overall with color checker passport (removed in due to reflectivity at this angle).

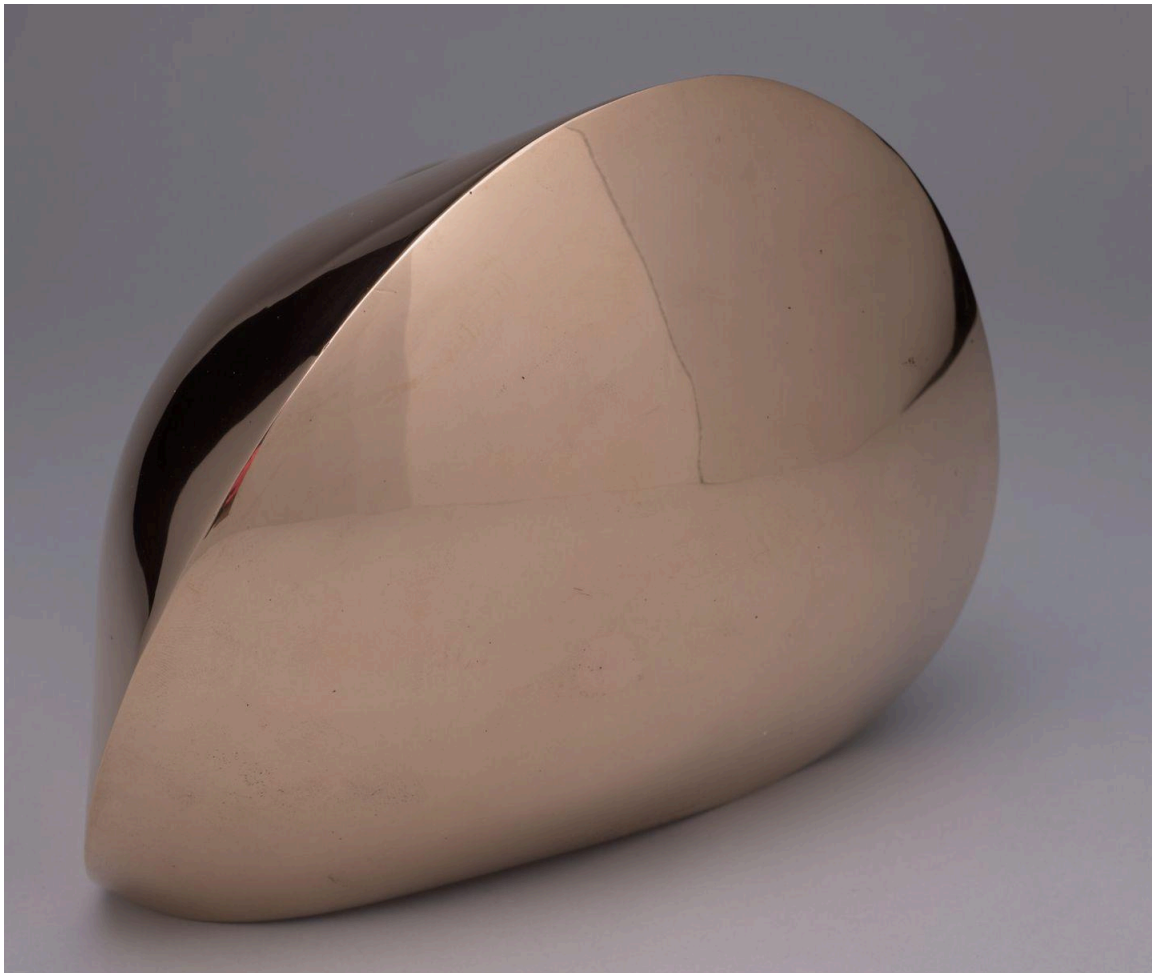


Figure 23. After treatment, larger convex side.

Figure 24. After treatment, larger convex side with color checker passport (removed in due to reflectivity at this angle).

Figure 25. After treatment, frontal view of the side visible in Figure 21.

Figure 26. After treatment, underside.

Figure 27. After treatment, underside with color checker passport (removed in due to reflectivity at this angle).

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