RACHEL RIVENC*

Getty Conservation Institute Los Angeles, CA, USA rrivenc@getty.edu

EMMA RICHARDSON

Getty Conservation Institute Los Angeles, CA, USA erichardson@getty.edu

TOM LEARNER

Getty Conservation Institute Los Angeles, CA, USA tlearner@getty.edu *Author for correspondence



Keywords: Finish Fetish, Los Angeles, plastics, resins, automotive lacquers

ABSTRACT

In the 1960s, Los Angeles saw the birth and bloom of an art scene specific to Southern California, distinct from art being produced elsewhere in the United States, in particular New York, the main artistic center at the time. Often referred to as the "Finish Fetish" or "LA Look" artists, they produced art inspired by California culture, using a wide range of innovative materials and fabrication processes often borrowed from the industrial world. They created seamless, bright and colorful objects that blurred the boundaries between painting and sculpture, and between handcrafted and industrially produced objects. This paper reports on some of the findings to date from an ongoing study into the materials and techniques of the Finish Fetish group and the conservation challenges that their works may pose.

RÉSUMÉ

Dans les années 1960, Los Angeles a vu naître et fleurir toute une scène artistique spécifique à la Californie du Sud, qui se distinguait de l'art produit partout ailleurs aux États-Unis, et en particulier à New York, qui était alors le principal foyer artistique. Sous l'appellation « Finish Fetish » ou « L.A. Look », ces artistes produisaient un art inspiré de la culture californienne, utilisant un large éventail de matériaux innovants et des processus de fabrication souvent empruntés au monde industriel. Ils créaient des objets colorés et brillants, aux lignes épurées, qui brouillaient les frontières entre peinture et sculpture, et entre objets de production manuelle et industrielle. Cet article présente l'avancée des recherches à ce jour d'une étude en cours portant sur les matériaux et les techniques employés par le groupe Finish Fetish ainsi que les défis que leurs œuvres peuvent représenter sur le plan de la conservation.

INTRODUCTION

While American art in the 1950s was mostly dominated by artists working in New York, the early 1960s saw the birth of a rapidly burgeoning art scene specific to Los Angeles.¹ A group of artists, associated with the Ferus Gallery on La Cienega Boulevard, including Craig Kauffman, Billy Al Bengston, and Larry Bell, was soon to be joined by others like John McCracken, Helen Pashgian and De Wain Valentine, creating a distinctive "LA Look" throughout the decade. The sensuous colors and beautiful, pristine surfaces that were often painstakingly achieved by these artists also earned them the label "Finish Fetish".² They used new resins, paints and plastics, and adopted highly innovative fabrication processes from the industrial world to create seamless, bright, and pristine-looking objects directly inspired by California culture (Figure 1). In doing so, they often blurred the boundaries between painting and sculpture, 2D and 3D, handcrafted and industrially-produced objects.



Figure 1Installation view, *Primary Atmospheres: Works from California 1960–1970*, January 8–February 6 2010, David Zwirner, New York. Photo by Cathy Carver. Courtesy of David Zwirner, New York

As part of its research into the conservation of modern and contemporary art, the Getty Conservation Institute has been undertaking a study into the materials and fabrication processes of the Finish Fetish artists, and implications for the conservation of their work. This paper discusses some of the findings from the initial phase of this project, gathered from

RESUMEN

En los años 1960, Los Angeles asistió al nacimiento y florecimiento de una escena artística específica del sur de California, distinta al arte de cualquier otra parte de Estados Unidos, especialmente de Nueva York, el principal centro artístico de la época. Estos artistas, frecuentemente conocidos como los artistas del "Finish Fetish" o del "LA Look", produjeron arte inspirado en la cultura californiana, empleando una gran gama de materiales innovadores y procesos de fabricación que a menudo tomaban prestados del ámbito industrial. Crearon objetos contínuos, brillantes y coloridos, que borraban las fronteras entre pintura y escultura, así como entre objetos artesanales e industriales. Este artículo aporta información sobre algunos descubrimientos realizados hasta hoy a partir de un estudio en curso sobre los materiales y las técnicas del grupo Finish Fetish y los retos de conservación que sus obras pueden plantear.

interviews with the artists, technical examinations of their work, and scientific analyses to identify and characterize the materials being used.

MATERIALS

The Finish Fetish artists, working in Los Angeles in the 1960s, were clearly influenced by their surroundings. Billy Al Bengston (2010) sees his life-long experience of surfing as the source of his fascination for the ever changing surface of the ocean, something he tried to reproduce in his art. Helen Pashgian (2010) explained how "Light and water, those two things sealed my fate... and you could only experience it in that way in California", and De Wain Valentine describes how "all the work is about the sea and the sky. And I would like to have some way, a magic saw, to cut out large chunks of ocean or sky and say 'here it is" (1984).

Los Angeles was also synonymous with modernity and mass-culture: Bengston and John McCracken both acknowledged the strong influence of LA's ubiquitous car culture on their work, and their choice of materials. McCracken saw cars as "mobile color chips" (Kellein 1995). Bengston said "My earlier work took off from things I saw in the streets: cars, signs etc... and Los Angeles of course, was, and is, a car culture... so I used car- and sign-painting materials and colors the way artists would any other kind of color" (Rubenfien 1978).

Bengston describes himself as "a piston head about materials" (2010). His appetite for experimentation led him to try many different paints, sometimes simultaneously on the same work. He has used oil, different brands of acrylics, household enamels, nitrocellulose-based automotive lacquers and even floor coatings as final varnish, on a range of supports including canvas, Masonite and scraps of aluminum panels made for aircraft. A polyvinyl butyrate based clear coat was also identified on two of his paintings, *Hidden Gold* (1966) and *Tom* (1968). In his earlier works, McCracken also used automotive nitrocellulose lacquers to coat his brightly colored sculptures, on top of plywood covered with fiberglass (Figures 2 and 3). In 1967, however, McCracken switched to using pigmented polyester resin, pouring it straight onto the support and letting it level, which resulted in a much flatter surface and greater degree of perfection (Kellein 1995).

By this time, other artists were also experimenting with polyester resin, especially as a material for casting rather than coating. Valentine was unusual in that he not only adopted materials created for different applications, but was the driving force behind the invention of a new material. As early as 1950, he started casting polyester resin to make jewelry (Bordeaux 1979); he later worked with fiber-glass reinforced plastic in boat shops in Colorado, eventually moving to LA to teach a course in plastics technology at UCLA in 1965 (Newwark 1971, Colpitt 1991). Constantly searching for ways to increase the scale of his sculpture, Valentine worked with a polymer chemist at PPG to modify a polyester resin that could be used in a single-pour casting. This enabled him to create enormous columns, slabs and discs of





Figure 3John McCracken, *Mykonos* (1965). Courtesy of the Orange County Museum of Art

Figure 4De Wain Valentine, *Large Wall* (1968).
Courtesy of the Norton Simon Museum

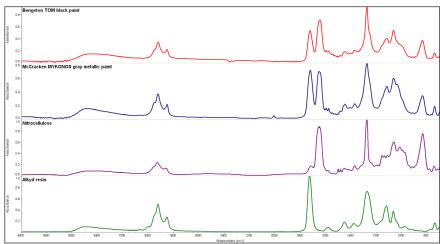


Figure 2FTIR spectra of nitrocellulose lacquers used by Bengston in 1966 for *Tom* and McCracken in 1965 for *Mykonos* with reference spectra used for identification

solid polyester. One of the largest examples is *Large Wall*, made in1968 (Figure 4), which weighs approximately two tons. The resin came on the market in 1966 under the trade name Valentine Maskast Resin, and was manufactured by Hasting Plastics in Santa Monica.

Py-GCMS analysis of a piece of the resin from *Large Wall* identified styrene, 1,2-ethanediol and phthalic acid as the main components (Figure 5), a composition typical of a thermosetting unsaturated polyester resin. The resin used by McCracken has a composition very similar to the resin used by Valentine, but in addition contains the plasticizer dimethyl phthalate. Sampling and py-GCMS analyses of four works from the Orange County Museum of Art spanning over two decades, from 1971 to 1992,³ show that the composition of the resin used by McCracken has remained very constant.

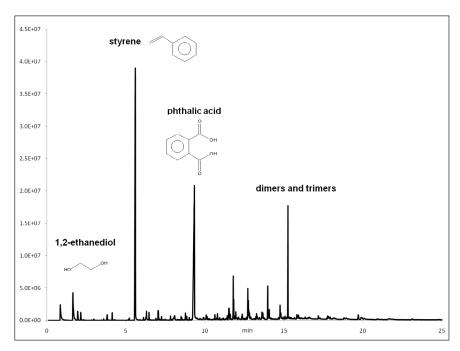


Figure 5
Pyrogram of a sample from *Large Wall* (1968)

Helen Pashgian started using cast polyester resin around 1968, but in 1969 also inserted acrylic rods into the center of her polyester spheres, playing with the differences in refractive indexes between the two materials. Craig Kauffman remained faithful to cast acrylic plastic, after briefly experimenting with glass, first as a flat support for his "Hockey Stick" paintings, and later for his vacuum-formed wall-reliefs, bubbles and loops. In *Plain Jane* (1963), as well as *Untitled Wall Relief* (1967), the cast acrylic sheet was confirmed as being polymethylmethacrylate (PMMA). The identification was made with a non-invasive portable FTIR for *Plane Jane* and py-GCMS for *Untitled Wall Relief*. Plexiglas is perhaps the best known commercial brand of PMMA, but according to a written communication with Frank Lloyd, the owner of the gallery representing him, Kauffman has used different brands over the years. The color on his pieces was initially oil and household enamels before he turned to acrylic enamels when they became more widely available.

FABRICATION PROCESSES

Los Angeles artists in the 1960s borrowed not only materials, but also technologies and fabrication processes from a variety of industries, most famously the automobile, aerospace and sign industries. Interestingly, this was the result of individual circumstances rather than a concerted effort, and it is coincidental that many of the Finish Fetish artists were exposed to industrial processes at about the same time. Valentine worked in boat shops, Bengston raced motorcycles, Judy Gerowitz (Chicago) enrolled in an eight week course in auto body school, Fred Eversley trained as an engineer, and Pashgian was artist in residence at CalTech between 1970 and 1972.

Bengston was amongst the first to turn towards non-artistic processes when he started using a spray gun intended for auto body workshops. He quickly became a virtuoso with the technique. He bought his first spray gun setup for \$200, which he claims at that time was the equivalent of two years rent, and still has it. *Buster* (1962), for instance, was made with sprayed nitrocellulose automotive lacquer on Masonite (Figure 6). The automotive primer was a dark gray, with the red area also having a white primer beneath to increase its luminosity. Bengston masked out certain areas on the primer, first the dark blue edge, the powder blue circle and the orange circle in the center. He then slowly built up the colors, for example spraying a gold sub-color under the red, and silver under the blue, both of which create reflective surfaces underneath the final color application. He typically sprayed a minimum of 20 coats of paint, often up to a hundred.

It was indeed Bengston who encouraged Kauffman to use a spray gun to apply paint to the back of his acrylic works (Kauffman 2009). Kauffman had quickly figured out that applying paint from the back was a way to keep his lines clean, but using the spray gun also enabled him to attain much flatter, sheerer paint surfaces. Kauffman was possibly the first LA artist

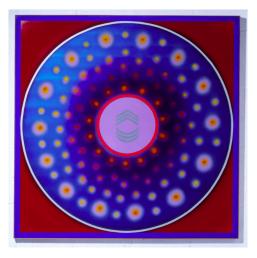


Figure 6
Billy Al Bengston Buster (1962). © Billy Al Bengston, 1962. Collection Museum of Contemporary Art San Diego, Museum purchase, dedicated in 2002 in honor of Thomas S. Tibbs (1917–2002), Director of the La Jolla Museum of Contemporary Art from 1968 to 1972

to work with plastics and also very early on turned to industrial processes when he started looking at ways to transform his paintings into low relief objects. He visited a number of plastic factories, and eventually started working with Planet Plastics, in Paramount, a company that employed a vacuum forming process to make advertisement signs and logos.

In this process, a relatively thin sheet of plastic is heated in an oven until softening temperature and then pulled onto a mold with vacuum. Kauffman prepared the convex molds himself, with formica-coated plywood. He would then use spray mask, a thick rubbery material, to mask out the different colored areas before spraying. The paints themselves were solvent-based acrylic paints designed for commercial signage. The process was quite a delicate one, as the surface of the plastic was susceptible to stress cracking and crazing under the action of the solvent, which would cause Kauffman to discard the entire piece. The technique has different iterations that Kauffman experimented with.

Pashgian's jewel-like, small translucent objects were actually the result of a process more akin to home cooking than dehumanized industrial processes. The sphere shown in Figure 7, *Untitled* (1968–1969), was made in three parts. She first prepared a clear sphere from a polyethylene mold, something like "the little things you spin the salad, the lettuce in to get it dry" (Pashgian 2010), which was then sanded and polished. For the second stage, she used a cylindrical mold, "something like a milk carton", to pour in polyester resin tinted with a few drops of blue dye. She carefully laid the clear sphere in it, pushing the liquid to the sides and over the sphere. Once it was cured, she turned the piece around and poured over polyester resin tinted with a red dye.

Much painstaking sanding was involved, from the rough sanding with electric tools to impart the initial shape, to hand polishing with extremely fine sandpaper to give the final, seemingly immaculate surface polish. The whole process was very much the result of trial and error, especially the amount of catalyst, which, if incorrect, could cause the piece to break, or never properly cure. Valentine went through similar experimentation, although on a much larger scale: for some of his works, it required four men to put a single mold together, and the amount of stress and heat developed upon curing could result in dangerous incidents if anything went wrong. As a result, his molds had to be made of much tougher materials, either a quarter-inch steel plate or fiberglass reinforced plastic (Newwark 1971), or particulate boards (Valentine 2011).

One of the most innovative fabrication process was Larry Bell's use of vacuum-coating technology. Early in his career, Bell turned towards a complex industrial process to coat the glass panels of his cubes. He was looking for a way of getting a reflective surface on both sides of a glass panel and came across a process called "front surface" used in the film industry. In this process, the reflective coating is applied to the surface of a piece of glass, as opposed to its rear, as in a household mirror. He first contracted a company to do the job for him, but soon bought his own piece of used



Figure 7
Helen Pashgian *Untitled* (1968–1969).
Photography by Brian Forrest. Courtesy of Brian Forest and Helen Pashgian

equipment and learned to use it with a book entitled *Vacuum Deposition of Thin Films* (Holland 1956). When he became more familiar with the process (Figure 8), he had a larger machine built and installed in his studio in Taos, New Mexico. He still uses the same process and machine today.

The machine deposits a micron thin metallic film on the surface of the glass, modifying the way the light is absorbed, reflected and transmitted by the glass panel. Bell elegantly declared "My media isn't glass, it's the light that hits that glass" (2006). His glass panels are held within the vacuum chamber at a slight angle; the metal evaporates from metal filaments, and deposits onto the glass. The different variables that the artist can play with are the type of metal, angle of the glass panel, length of exposure (which determines the thickness), stencils to control where the metal deposits, and multi-layering. The three main metals Bell has worked with over the years included aluminum, for its brightness and rapid evaporation, inconel, a nickel-chrome alloy, and silicon monoxide. Once the panel is coated, about 36 hours are needed for the film to oxidize before the panels can be handled, inspected, selected and assembled (Bell 2006, 2010).



Figure 8
Larry Bell in his studio, Venice Beach,
California, 1969. © Photo by Malcolm
Lubliner. Courtesy Malcolm Lubliner and
Craig Krull Gallery, Santa Monica

SURFACE PROPERTIES AND CONSERVATION

The term Finish Fetish has not rallied around the artists it is supposed to describe. The reason for this is that the finish is only the means to an end, the interacting with, and experience of, the work of art. But the term alludes efficiently to the importance of surface properties.

For some of these artists, it is not about obtaining a perfect surface, but the right one. Billy Al Bengston sprayed surfaces should not look like a gas tank, even though they draw from techniques used to paint them: "I don't want it to look like you can ride it home" (Bengston 2010). The delicate surface of his paintings should look like skin, with small goosebumps. "If I had a Finish Fetish it would be to make it look like chicks" (Bengston 2010).

For others, perhaps especially those artists who worked with light and transparency and were involved in the birth of the Light and Space Movement, an immaculate surface is a prerequisite. Helen Pashgian explained this very clearly: "On any of these works, if there is a scratch... that's all you see. The point of it is not the finish at all – the point is being able to interact with the piece, whether it is inside or outside, to see into it, to see through it, to relate to it in those ways. But that's why we need to deal with the finish, so we can deal with the piece on a much deeper level" (2010). The importance of a pristine surface calls for a very low tolerance to damage by the artists. The feeling is shared by Larry Bell: "I don't want you to see stains on the glass... I don't want you to see fingerprints on the glass... I don't want you to see anything except the light that's reflected, absorbed, or transmitted" (2006).

A certain acceptance, however, of ageing as a part a natural process, is not excluded. Bell, almost in contradiction with himself, accepts that his works

have a life, and that small chips or minor damages may be tolerated as long as they don't "take away the presence of the piece" (2006). Bengston is equally ready to tolerate little knocks and scratches, but also sets the limit: "If something becomes so big that's all you see, then to me that is cause for fixing" (2010).

McCracken has explicitly accepted imperfections linked to the making of his piece, for example the white small craters on *Black Resin Painting I* (1974), that result from the drying of the resin and the use of a white polishing material (1995). He advises however to fix small damages such as scratches by polishing the surface, locally or on the whole piece if needed, to preserve the original look (1998).

The subjectivity and nuances of artists' positions on tolerance to damage, and the need for a pristine surface, may leave conservators faced with difficult questions when it comes to deciding if an intervention is required, and what should be the extent of this intervention. Indeed, the Finish Fetish works appear to be excellent examples of the constant dilemmas with which conservators of modern and contemporary art are faced, of balancing the needs of preserving the original materials against the artist's intent.

CONCLUSION

Interviews with the Finish Fetish artists have given invaluable technical information on the wide range of materials and fabrication processes that they used, as well as a fascinating insight into their creative processes and intent. Through these descriptions, emerges a sense that there is an incredible amount of craftsmanship, time-consuming labor and manual dexterity behind the making of these works, even though their impeccable finish may evoke mass-produced objects. Each of these objects bears in a unique way the mark of their makers, yet if the process is successful none of their efforts should be visible and the surface should be pristine. Scientific analysis has complemented this information with details on the chemical composition of the materials used, which will help in understanding their ageing processes. As the project continues and more pieces are studied and analyzed, a more thorough picture of the materials and techniques of this group of artists will emerge.

NOTES

- In 2011, a major initiative across Southern California will celebrate the birth of the LA art scene: Pacific Standard Time, Art in LA 1945–1980, http://www.pacificstandardtime.org/.
- ² Peter Plagens first came up with the idea of "LA Look" while John Coplans invented the term "Finish Fetish" (Allan et al., forthcoming).
- ³ Red Cube (1971), Red Pyramid (1974), Nine Planks I (1974), Dream (1988–92).

REFERENCES

ALLAN, K., L. BRADNOCK, and L. TURVEY. Forthcoming 2011. For people who know the difference: defining the Pop Art Sixties. In *Pacific Standard Time: Los Angeles*

Art, 1945–1980, eds. R. Peabody, A. Perchuk, G. Phillips, and R. Singh. Los Angeles: Getty Research Institute.

BELL, L., interview by L. Hickey-Friedman, Artists Documentation Program Archive, the Menil Collection, 18 April 2006.

BELL, L., 2010, personal communication, 26 January 2010.

BENGSTON, B.A., interview with Tom Learner and Rachel Rivenc, 27 September 2010.

BORDEAUX, J.-L. 1979. Art in America December: 103–106.

COLPITT, F., exhibition curator. 1991. *Finish Fetish: LA's cool school*. Los Angeles, California: Fisher Gallery, University of Southern California.

HOLLAND, R. 1956. Vacuum deposition of thin films. London: Chapman & Hall.

KAUFFMAN, C., interview with Tom Learner, Andrew Perchuk, Rani Singh and Rachel Rivenc, 8 April 2009.

KELLEIN, T., interview with John McCracken, August 1995, in *McCracken*, Kunsthalle Basel, 1995.

LOUGH, R., director. 1984. A Good Time to be West, film, 1984.

MCCRACKEN, J. 1995. Verbal communication with Bruce Guenther, Orange County Museum of Art.

MCCRACKEN, J. 1998. Unpublished written communication with the Orange County Museum of Art.

PASHGIAN, H., interview with Emma Richardson, Rani Singh and Catherine Taft, 8 April 2010.

PASHGIAN, H. Modern Art in Los Angeles: The Industrialized Gesture, a Conversation with Peter Alexander, Helen Pashgian, and DeWain Valentine. The Getty Center, 19 May 2010.

RUBINFIEN, L. 1978. Through Western eyes. Art in America September–October: 78.

VALENTINE, D. 1971. An interview with DeWain Valentine, sculptor of plastic. *Leonardo* 4(4): 377–380.

VALENTINE, D., interview with Tom Learner, Rachel Rivenc and Emma Richardson, 2nd of February 2001.

Appendix I - Experimental

FTIR analysis was carried out using a Hyperion 3000 (Bruker) FT-IR microscope with 15X Cassegrain objective, and MCT detector, or in situ with a FlexScan (A2) portable FTIR with ATR objective. For both instruments, 64 scans were collected at 4 cm⁻¹ resolution.

Py-GCMS analysis was carried out on a Frontier Lab PY-2020D double-shot pyrolyzer system (550°C, 6 secs) attached to an Agilent Technologies 5975C inert MSD/7890A GCMS. Column: Frontier Ultra ALLOY-5 30m (0.25 mm \times 0.25 μ m); helium carrier gas: 1 ml/min flow; GC oven: 40°C for 2 mins, ramped 20°C/min to 320°C, then held at 320°C for 9 mins; MS ionization: 70eV.