

CHALLENGING BOUNDARIES: THE HISTORY AND RECEPTION OF AMERICAN STUDIO GLASS 1960 TO 1990

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ABSTRACT

This dissertation addresses the dilemma facing the American studio glass movement after World War II: Can art be fashioned out of glass, or do the utilitarian associations embedded within the medium preclude it from being considered an acceptable art medium? This dissertation is the first to examine this question that reveals both the early history of the movement and the clash of ambitions and power that mark the relationship between the craft and high art worlds.

The Introduction frames the question, defines the terms used, and reviews the sparse literature found in the craft and high art worlds. Part I (three chapters) presents the early history and distinctive characteristics of the movement to 1975. Chapter 1 analyzes the evolving terminology (from art glass to studio glass), the effects of production practice (factory or studio), and the adoption of high art customs. Chapter 2 reviews not only philosophical and circumstantial factors that shaped studio glass, the state of glassmaking practice before the proto-studio glassmakers, the emergence of pioneering practitioners, the importance of the Asilomar conference of 1957, early institutional support, the founding of The Coming Museum

of Glass, the *Glass 1959* exhibition, but how each benefited from the resolution of technical issues, permitting expanded artistic expression. Chapter 3 covers the contested history (1955-62), the influential exhibitions, and pre-1975 marketing and collecting patterns. Also recounted is the movement of glass into university curricula, the impact of the *Object USA* exhibition of 1969 and early collector behavior. The tentative movement of glass into museums and the challenge of creating content-driven art conclude Part 1.

Part II (three chapters) moves to the period 1975 to 1990 period and addresses the increased commodification and expanding patronage for American studio glass. Chapter 1 outlines market development through craft fairs, multimedia craft shops, glass-only galleries, dealers, and the secondary market. Escalating prices attest to the creation of higher perceived value that resulted from increased publications, exhibitions, and critical reviews. Chapter 2 examines private and public (institutional and corporate) collecting. Chapter 3 assesses the degree to which American studio glass has challenged the boundaries between craft and high art.

Introduction:

American Studio Glass Research Sources and Issues

Introduction: American Studio Glass Research Sources and Issues Throughout history, people have suspected that glass is magic. How else can a material be explained that imitates other materials but cannot itself be imitated? That is five times stronger than steel, yet can be broken by the human voice? That is evoked by heating sand and ash and then bewitched into an astonishing array of colors? That is hot liquid and frozen solid, transparent and opaque, common and exalted?

Tina Oldknow

The Problem: Glass as an Art Medium?

In an essay for the *Americans in Glass* exhibition catalogue written in 1984, glass artist David Huchthausen bemoaned the fact that the American studio glass movement was still without critical analysis. Such an absence, he observed, permitted "the success of a piece [to be] reliant on the material alone, [and consequently] it will forever remain suspect on a conceptual level." This lack of a critical perspective continues to haunt glass and perpetuates its exclusion from the realm of fine art media, an exclusion keenly felt by many glass artists. In contrast to Huchthausen's observations, critic Robert Silberman wrote in *Art in America* one year later urging that "studio glass artists not be assimilated into the fine arts world for they would lose their unique traditions." 3 These two observations, one that of a practicing artist and the other an art critic, represent the contradictory forces that have shaped the post-World War II American studio glass movement. These forces emanate from three camps: factory-produced glass, hobbyist production (craft), and the American studio glass movement. The three groups, separated by the means of production and artistic goals, provided the dynamic backdrop for the 1960 to 1975 period under examination. After 1975 the focus shifted as conflicting goals and ideals within the American studio glass community produced both ambitious glass artists (desiring high art status) and conservative ones (preferring a lifestyle rooted in the crafts). Both of these made glass at odds with the high art world. In time, however, a limited number of glass artists (supported by dealers and collectors) gained a measure of acceptance in the vaunted high art community.

Between 1960 and 1990 issues of materiality, the craft roots of the medium, art status ambitions, inclusion or exclusion from public and private collections, methods of marketing, and the creation of the historical record reveal the dramatic journey that American studio glass took as it moved from hobby material to art medium. This move and the importance how studio glass could be viewed is successfully captured a 1996 cartoon that appeared in *Glass* magazine (Fig. 1).

To frame this discussion, a general list of the research sources consulted and the definitions of terminology specific to American studio glass will be presented, as well as a statement of the movement's central and motivating dynamics. This study will also recount and correct the early history of the studio glass movement from its "hobby" beginnings in the 1940s to its full formation by the 1970s; trace the development of the all-important market for this material during the 30 years under discussion; illustrate the level of acceptance of studio glass as a legitimate art form as evidenced by public and private collecting in the post-1970s period. These last two areas involve an examination of contested territory that lies between the high art world and the studio glass community and reveal the patterns of belief and manipulation that rule the continued valuing of one artistic expression (in this case painting and sculpture) over another (studio glass). This discussion will weave together relevant historical strands, an analysis of shifting marketing practices, the appearance of studio glass in both public and private collections, and the phenomenon of crossover artists who move from the glass community to the high art world and those who move from high art to glass. These central issues are understood as containing contradictions, complications, and shifting realities that come together to form the "story" of post-World War II American studio glass.

A central assumption of this discussion is that the high art world adheres to a list of appropriate categories for art-making media that is held up as absolute but is, in fact, constructed. This "construction" has been most fluid during the post-World War II period. Indeed, in the past two decades, the history of fine arts has shown a heartening flexibility in admitting "new media" - when it sees fit. Photography and even craft-based clay have found acceptance, while glass, as will be shown, with its utilitarian associations and hobby antecedents and despite the ambitions of both the practitioners and the supporters (dealers and collectors) still hovers uneasily at the edge. The "fine" or "high art" world resides in our minds as the center of the art universe, the desired Eden. For those who seek status within that world and the higher monetary rewards that accompany admission, it is a paradise. This desire, however, reflects only part of the story as related to glass, for while high-profile members of the glass community (Dale Chihuly, Howard Ben Tre, and others) operate in both the glass community and the high art world, some in the glass community wish to remain separate. Still

others from the high art world dabble in glass, using the medium but pointedly maintaining their status within the high art community.

Three developments within the period to be examined are of particular note. First, the American studio glass reached a critical mass between 1960 and 1990 with minor activity in the pre-1960 period. Second, art ceased to be defined in terms of the material used, thus allowing glass to attempt parity with the long-accepted mediums of paint, canvas, and stone. Third, utilitarian forms were assimilated into the high art world, so that a vessel or chair functioned not always as a container or a seat, assuming at times “content” greater than their formal language implied. These manifest changes in the art world made this period unique; moreover they opened the door for additional media to be considered as appropriate art-making materials.

As a measure of the acceptance awarded to the studio glass, this study will examine its patterns of collecting and the increasing commodification, and its (hoped for) acceptance as indicated by its presence within permanent museum collections. It will include a discussion of the complex relationship of studio glass to the art world it has sought to join. It is not, however, the purpose of this study to “fit” studio glass into high art categories or theories; rather it will center the discussion within the glass world and include the high art world only at those several points of appropriate intersection.

Part 1: The Early History and Characteristics of the American Studio Glass Movement to 1975

Chapter 1: American Studio Glass Terminology From Art Glass to Studio Glass

The terms necessary to discussing history and acceptance of American studio glass need to be defined. As with all terminology specific to a discrete group, each term used here became shaded with implications and judgments that are clearly understood within the glass

community but are obscure to the outsider. Also each successive generation modified the nomenclature to suit its goals. By plotting these changes over time, a fuller understanding of the conflicted (and manipulated) history of studio glass can be seen.

The terms can be separated into three classes: those used to define the object produced, those used to denote or describe the makers, and descriptors of methodology and production locales. Among these run fault lines-caused by definitional shifts and value judgments which occurred as the medium progressed from hobby to art. At the beginning of the period under discussion, the first tensions appear, those between the new of studio glass and previous glass production. To highlight this key dynamic of the movement, examples drawn from the period just prior to the emergence of the American studio glass will be cited. The term for late nineteenth-century glass objets d 'art was "art glass," referring to utility-linked objects made in factories by designers and manufacturers, fashioned in large quantities out of high-quality "art" material for display in middleand upper-class homes. The Illustrated Dictionary of Glass defines "Art glass" as

[a] general term applied to glassware made for ornamental rather than utilitarian purposes, with primary regard to the quality of the metal and the artistic nature of the form and decoration. It was used in connection with modern glassware from c. 1850.

Such art glass, produced for the home with its presumed rarity and its beauty established (and intentionally trumpeted), elevated the status and confirmed the taste of its owners. In the United States, Louis Comfort Tiffany, in his several production entities, manufactured America's most prestigious "art glass" during the last years of the nineteenth century and into the beginning of the twentieth. By consciously pairing the word art to glass, he (and other makers) increased the cachet of their products by implying art-level aesthetics and virtuoso technical achievement. As this period receded into history, the term, through its customary use by scholars, curators and collectors, became firmly attached to this specific type of glass and time.

The work of earlier, however, eras is not always valued by the next generation, and by the mid-twentieth century the studio glassmakers expressed their disdain for this historical material by choosing not to call their work “art glass.” Ironically, the use of this term would seem logical as it did link their ambition (to make “art”) and their chosen medium (glass) in an efficient and vivid phrase. But it would be another 30 years before glass artists returned to a variant, choosing to fashion themselves as makers of “glass art.” This designation, however, shifts the emphasis to art with “glass” as a descriptor, subtly moving the medium into a secondary position relative to the elevated activity of art making. This shift reveals the ambition of the studio glassmakers to distance themselves from the earlier, factory-related works of “art glass,” and to position themselves in proximity to the high arts.

Two other nineteenth-century terms used in conjunction with studio glass are relevant to the discourse today. They are applied art and decorative arts. These terms refer to items made of clay, glass, metal, and wood that have utilitarian forms (or reference utility) with appended decorative passages.² The term applied arts denotes an utilitarian object that has “art” (aesthetic elements) added to the basic functional form as a way of softening or obscuring (crude) functionality. In contemporary usage, the term applied suggests decoration ill-suited to the forms it adorns. By the middle of the nineteenth century, the term applied arts fell into disfavor as the field split into two, with the machine-made items becoming known as “production” (design) and individually crafted works labeled “craft” and later “studio crafts.”

The term decorative arts implies skill in expression and execution, paired with a high level of aesthetic sensitivity, which produces masterpieces. This “masterpiece” sensibility is seen in the Pomegranate Lamp, ca. 1900, by Louis Comfort Tiffany (Fig. 2). Here, the utilitarian lampshade is decorated with a pomegranate motif that dictates the general form and adds visual interest and drama. The object’s utility is not affected by this design, but its decorative power is enhanced, as is its usefulness as a marker of high status. Skilled execution, relative uniqueness, and a named maker move it over into the masterpiece category. A more nuanced meaning of decorative arts, refers to its function as a decoration for a domestic interior and as a status symbol.⁴ Thus, this Tiffany lamp stands for a constellation of meanings. Decorative

arts today continues to carry all the 28 connotations of connoisseurship, rarity, and masterpiece. It is ironic that Western art historical discourse has determined that anything referred to as “decorative” or having intrinsic beauty is of lesser worth and incapable of expressing content — a necessary component of high art. This study challenges that notion, and it will demonstrate how American studio glass sought to refute this assumption.

The original manifestation of craft in the United States is what is now termed traditional craft. It is distinguished from applied arts or decorative arts by its rural associations and the embodiment of an untutored and naive sensibility. Traditional crafts are fabricated by (usually anonymous) master-trained, rural makers who learned their trade through an apprenticeship system that passed empirical knowledge about forming and materials from one craftsman to the next in a generational stream. Producing almost identical objects through repetitious methods of fabrication, these craftsmen neither sought nor prized artistic or technical innovation and often made items that were anachronistic in form and meaning. The Com Dolly, 1980, (Fig. 3) is an example of this type of work. George Kubler noted this distinction when he studied certain classes of indigenous arts in Africa. He sought to capture what separates this from the realm of high art in *The Shape of Time: Remarks on the History of Things* (1962). He states that “a great difference separates traditional craft education from the work of artistic invention. The former requires only repetitious actions, but the latter depends upon departures from all routine.”⁹ This fundamental aspect also distinguishes traditional craft from that made by studio craftsmen who, like fine artists, desire personal expression and communication of content, achieved with the aid of technical innovation and skill. A further distinctive aspect of traditional craft (or “folk art”) is that folk artists market their works to those in close proximity and, as a rule, do not seek recognition end of the craft spectrum with the studio craftsman at the opposite end. As with all classifications, however, there are practitioners who do not conform in all aspects, i.e., traditional craftsmen who are located adjacent to urban centers, but continue to market their works through one-to-one associations. The studio glass community began in this way, but, as will be shown, later consciously adopted the urban high art strategies for marketing their wares.

In the twentieth century, another characteristic that links traditional craft to studio work is that on an economic level, traditional craftsmen make objects not essential to the marketplace or contemporary culture, for these already exist in abundance from commercial sources. Markets exist for both because while a factorymade glass goblet functions adequately, the hand blown one pleases the eye, hand, and soul and provides a culturally meaningful statement. Additionally, owning studio work signifies an appreciation for craft and testifies to a sophisticated aesthetic sensibility. This cultural distinction, initially derived from traditional crafts, remains embedded within the American studio glass sensibility and affects its valuation and place with the art community.

If it's not magic - it's merchandise.

Christopher Wilmarth

The word craft used as both a noun and an adjective, has negatively impacted the studio movement vis-a-vis the high art world since the movement's inception. In the discourse about crafts (whether from within the craft world or from outside), the term refers to handmade, utility-linked objects, made of clay, fiber, glass, metal, or wood, either alone or in any combination. Originally, it denoted the conservative end of the craft movement, but in current usage it implies "contemporary" and as such has supplanted the term decorative arts within the museum world. It has not done so within academe. 14 Craft in the university (specifically in cultural studies and anthropology) means items made by native peoples in rural settings. The implication is that "crafts" are non-art and subject only to the rules that govern material culture.

Craft in the art historical discourse still retains the association of kitsch that attached after Clement Greenberg's essay "Avant-Garde and Kitsch (1939)." Finally, at its most rudimentary level, craft means a skill with the connotation of power or strength derived from its Saxon roots. In this context the term translates into a high level of ability in manipulating the chosen art material into a desired form. Today crafts is teamed with contemporary to indicate works that have high skill and artistic intent.

The literature about the nature of crafts and their relationship to the machine is extensive and, while this relationship is not the subject of this study, an understanding of its elements insofar as they continue to affect contemporary crafts (the classification that studio glass most readily falls under) is essential. Kenneth R. Trapp, curator-in-charge at the Renwick Gallery, Smithsonian Institute, Washington, D.C., states that craft (studio glass) is “always concerned with materials, craft always makes reference to traditions, craft involves a constant play with function, [and] craft makes constant reference to the human body [*italics original*].”¹⁸ All of these attributes position craft outside of the realm of high arts and serve as the basis for the tensions between the two worlds. As such, the ramifications of each aspect requires clarification.

The first attribute, materiality, refers to the potential inherent in the medium—a potential that affects the finished product. Materiality is critical to craftbased art, and the selection of one craft material (or, in fact, fine art medium) over another is a primary artistic decision. For example, Dan Dailey (b. 1947) was first a ceramist but shifted to glass because he sought its slick surface. His work, however, still demonstrates an interest in opaque material, a quality not usually associated with glass. This can be seen in his piece *Cafe* where he uses the opaque, glass building material *vitrolite*. Dailey eventually became “hooked on glass; [and there was] no going back” even when it did not prove the most logical choice. The material became fundamental to his artistic expression, while the medium itself proved seductive. Another significant aspect of materiality in glass is its transparent nature. Artist Larry Bell (b. 1939) was drawn to glass in the late 1960s when he sought to explore transparency in his *Terminal Series of Boxes*. Fabricated out of plate glass with the help of glass technicians, and articulated with chrome binding, this work uses the refractive nature of glass to explore transparency and strategies of display. In other words, the materiality is the subject of the work.

Another aspect of materiality is expressed in the passion glassmakers have for the process of making glass art. If glass is a way of knowing (as painting has been so described), then the effect of the making of glass is critical and reveals a way of seeing that is unique to the medium. This interest in the process can be seen in David Huchthausen’s refusal to abandon glass when

painter Richard Dahle urged him to adopt a more “appropriate” artistic medium. Huchthausen continued in glass because its forming (and visual effects) potential intrigued him. The process, the inherent transparency, and the slick surfaces associated with glass became the subject of his work, just as they had for high art world artist Larry Bell.

Materiality, however, has a detrimental effect on the acceptance of glass as an art medium. As David Huchthausen has pointed to the materiality of glass as its essential liability vis-a-vis the high art world, because the advent of conceptual art (and other nonobject-centered art practices) placed the physical reality of the artwork (so important to the craft-based arts) subordinate to concept.

The second inherent characteristic of craft is its reliance on tradition. Tradition here means practices relating to formal vocabulary and forming technologies. Glass objects have existed since the fourteenth century B.C.E. Due in part to the nature of working (forming) glass—from a liquid to a solidified form – a traditional and uniform formal vocabulary developed. For example blowpipe forming, prized by the early American studio glass makers, produced bubbles and blobs that were then readily attenuated to make “vessels” as in the case of Harvey Littleton’s blown and altered *Three Bottles* (Fig. 4). In fact, forming these objects did not require much, for bubbles are the natural outcome of hot air being introduced into a lump of molten glass. Generously termed “art” by their makers, these modest works were really the continuation of the traditional (natural) forms inherent in blown glass and rely on the inherent visual appeal of glass for whatever merit they have.

Many aspects of traditional glass forming methodology have been lost and then rediscovered. Each time a “lost” technology was recovered, it was updated and put to innovative use. For example, Dale Chihuly (b. 1941) “rediscovered” threaded decoration and used it in his *Sea Forms Series* of the 1980s (Fig. 5). This technique had long been known on the island of Murano, one of five islands, located near Venice and renowned for their secret skill for glass making. A form and technique closely related to Chihuly’s can be seen when a the sixteenth-century Venetian *tazza* (Fig. 6) is compared to Figure 5. Chihuly’s two-

part Seaform is directly related to the bowl of the Venetian goblet, but it has been presented in a larger scale and is without a stem. All glassmakers are aware of both the technological and formal history of their medium and use this knowledge as an inspiration and a point of departure. Within the glass community this knowledge confers cultural meaning; within the high art world it is a liability.

Intangible qualities and associations for glass also influence its valuation. Glass could be made to imitate relatively inexpensively the sparkle and shine of precious jewels. As glass is a mediated material (i.e., it needs to pass through a Process in order for it to be completed), it could be manipulated to appear like diamonds, rubies and other precious stones and used to take their place as high status decorative objects. Also, the natural (and only recently understood) refractive and transparent qualities of glass it a metaphor of God's own brilliance. These associations, as will be shown in the following chapters, contribute to the appeal of studio glass to the artists, dealers, and collectors.

The third attribute of craft objects that must be considered is Junction. The function can be overt, as in a vessel for drinking, or it can be symbolic, as when silver is used as a display item, calculated to communicate its owner's wealth. While utility can be seen in the traditional crafts, an attenuated implied functional utility is more usual in contemporary work. Jane Bruce (United Kingdom and United States, b. 1947) makes works that appear utilitarian (Fig. 7) until you realize they are too large or too fragile for actual use. As contemporary craft loosened its ties to traditional craft, it increasingly united two types of function: utility, and status or display. This latter aspect remains a key factor desire to collect studio glass by individuals, and it will address in the context of patronage and commodification in Chapter 5.

The fourth distinctive attribute of crafts is the relationship to the body. Again linked to utility, this aspect has proven a barrier to the acceptance of craft-based into the high art world. The connection to the body reveals itself in scale (with objects usually hand- or table-top size), the selection of textures, and the real or implied functionality (as addressed above). Scale, which in some craft media is dictated by the material, permits the viewer to relate to craft items

without feeling dominated by them. The traditional table-size of most crafts contrasts with the vogue for large scale paintings that marked the second half of the twentieth century. As the idea caught on that larger-scale works were “art,” those studio glass artists with art ambitions increased the scale of their individual works, too. In the 1970s Chihuly, desirous of being considered an “artist,” collaborated with Jamie Carpenter, among others, to make installation works. When it became evident that collectors could not put an installation in their living rooms, Chihuly and Carpenter reincorporated table-sized works to their repertoire.

Another body-related aspect is tactility. First appreciated through the eyes, texture is subsequently registered by the hand, adding a sensuality (beyond the visual) with which to seduce an audience. This hand-to-glass connection, unlike the sensual connection of other craft media, contains an element of danger. Glass breaks easily and broken glass cuts. Glass can also spontaneously shatter (due to errors in metal formulation and annealing processes.) Thus a personal, and at times, intimate and charged relationship is established between a glass object and the viewer.

All of these characteristics combine to create a seemingly insurmountable boundary of associations separating craft from art. The essential tension thus engendered between contemporary craft and the high art world is further deepened as craft (and glass after 1960) sought to challenge these boundaries. Studio glass artists, as will be shown, choose to see the aforementioned qualities not as limitations (as the high art world has positioned them) but as virtues, and from this stance they have developed a dual ambition: to create functionally related objects and to express artistic content. This second goal impelled studio glass to challenge established artistic categories. Joseph Alsop notes “if there really is an unbridgeable gulf between ‘high art’ and ‘mere craftsmanship’ then hand axes are not works of art,” and the notion of an unbridgeable gulf continues to be accepted as reality. With “craft” clearly evoking utility (function), and by implication the hand or body, apotheosis into a higher realm is blocked. Alsop further writes that for “art to be true it must be, and can only be an ‘end in itself produced with no other primarily in mind.” This places utility or reference to utility as an “end” that diverts studio arts from the straight path to high art. But high art has utility, too. Painting

and sculpture have functions as expressions of piety, wealth, or status (to name only a few). When the utility of the high arts is revealed, the distance between craft and art is diminished.

Location of Production: It is a Factory or a Studio?

The word studio when applied to glass is generally understood to be in contrast to factory production. The distinction between studio and its (perceived opposite) factory also marks the point from which studio glass could break from both traditional craft (a home-based activity) and industry (the province of the factory) in order to become art.

The key elements that separate studio and factory relate to how production occurs, who controls it, and how many items are produced. A glass factory produces thousands of glass objects for utilitarian and/or aesthetic reasons by a process of repetitious acts, aided by machines. The impact of the machine can be greater or lesser depending on whether it is guided by a maker's hand or by a technician simply overseeing the machine's routine functioning.

In factories, the method of production is top-down with designers (who may or may not have intimate technical knowledge of glass forming methodologies) directing glassmakers (or gaffers), either by means of drawings or verbal instruction, to execute the designer's concepts. This method separates conception from production, and the creative process from fabrication. The use of machines further distances creativity, causing individual expression to cease. The repetitive nature of the mechanical process, removes spontaneity and the large numbers produced further dilute unique expression. Commercial factory production may produce thousands of identical glass tumblers in a week (Fig. 8), with the glassmaker working merely as a functionary. While a factory can be small (as they are in Europe) or large (as they are in the United States), the governing distinction rests on the number of identical items produced and the method of production, with the key element being the reliance on the machine.

While a factory worker has a repetitive task that is performed thousands of times, the studio artist has a range of activities, repeated only at his discretion. In studio glass fabrication is governed by a single person who is responsible from the initial conception through to production, and often also oversees the marketing of the work. Within this general description there are variations in involvement and intent. Some studio craftsman desire to make competent handmade objects and others to make art. It is the work of those who seek autonomous self-expression that is referred to as studio glass and this group in the focus of this study.

Studio glass practitioners consider themselves artists in the high art world sense by virtue of where they make their art, and their complete control over the creative process. Sociologist Howard Becker posits “a perfect correlation between doing the core activity and being an artist. If you do it, you must be an artist. Conversely, if you are an artist, what you do must be art.” Unfortunately for studio glass, with its craft-tainted roots, this correlation is not universally accepted. The fact that they may work in an “artist-like” setting has not automatically secured their classification as artists. Interestingly, the high art world locates the essential tension of the artistic activity within the product produced, while the studio community positions it within the process. Consequently, much studio craft writing focuses on the conflict with the factory and breaking free from it. Making commercially redundant items the studio maker engages in a “conscious, gratuitous act” which the studio artist claims makes them artists.

The conflicting nature of making the location of production a condition of art making can be seen in the production methods used by glass artist Howard Ben Tre. To produce his works, he rents a commercial glass-casting foundry where he directs the workers (along with his assistants), who are aided by machines, to execute his concepts. This method of creating his large-scale, totemic and anthropomorphic works clearly positions Ben Tre closer to factory production than to single-person, studio fabrication methods. But because his intent is to make unique, art-ambitious works, he operates within the studio definition. Indeed, his sculptures are esteemed by the high art world, and within that context he is referred to an “artist who

works in glass.” Within the glass community he is a fellow studio glassmaker. These contradictions of language and meaning illustrate the tensions surrounding studio glass.

In reviewing the terminology associated with the American studio glass movement, it seems odd that the origin of the phrase “studio glass” is murky. In the immediate post-1962 period studio glass meant only free-blown works. During these early years, “[t]he ethos of the North American Studio Glass movement assumes that one is talking about hot work, specifically freehand, off pipe, in which one works with molten glass oneself, shaping it, forming it or letting gravity do its thing.” After 1962 and until the late 1970s, this remained the case and placed the trailblazing proto-studio artists of the 1930s and 1940s who had used cold or warm glass techniques, effectively outside of the movement. The authors of this exclusion were Toledo Workshop organizer Harvey Littleton and his followers.⁴¹ Littleton was partial to glass blowing and felt that it had the best potential for the creation of art. When Littleton was asked about the origin of the term studio glass, the putative founder of the glass movement said that “studio and glass were used in the earliest proposals as two separate nouns, not as an adjective modifying a noun.” He stated further that he “isn’t sure of the first use of the phrase ‘studio glass.’”⁴² Perhaps the joining of the two words resulted from a shorthand that was quickly adopted without refined conceptualization. The more inclusive definition will be used in this study.

In writing about the history and acceptance of American studio glass, there are other terms that merit discussion because they illustrate aspects of the crafts sensibility that is still inherent in the studio movement and impact its relationship to the high art world. The term “Hand Arts” appeared first in the late 1940s and emphasized the importance makers placed on the direct hand-to-object connection both in the making and in use. The reverence for the hand is one of the hallmarks of the craft movement and persists as a point of vulnerability from the high art world perspective.

In the 1950s and 1960s the hybrid term designer/craftsman also came into use. Favored by the leading craft magazine of the day, *Craft Horizons*, the phrase sought to join the factory

designer to the studio craftsman, thereby resolving the tension between factory and studio. It also assumed the potential for art making within the factory. This notion was derived from increased American awareness during the 1950s of European factory practice, where artists worked in direct association with factory craftsmen. European factories were far smaller than their American counterparts and a closer working relationship between “designer/craftsmen” and gaffers was possible. The last time a similar practice appeared in the United States was when “art glass” was produced during the late nineteenth century and early twentieth century, as discussed above. This small factory model is seen in the Scandinavian countries, in Germany, and Czechoslovakia. Littleton observed this tight-knit relationship in 1957 while visiting Italian glass houses, and it was this experience that determined him to set up a studio at his home designed for the making of glass by a single practitioner.

At about the same time another term favored for studio glassmakers was artist craftsman and this continues in use today with some modifications. Again, this terminology was first used in *Craft Horizons* magazine, and referred to someone who worked in craft media (clay, glass, fiber, handcrafted metal or wood) but with the intent to create objects with art ambitions. This term - positioned between the “high art” artist and the “craftsman” (read “traditional craftsman”) - signaled the developing ambitions of craftsmen who had begun to see themselves as artists and worthy of appropriate recognition. Two other phrases found favor in the early 1980s: studio glass artists, which was eventually abbreviated to become “glass artist.” Here, the medium adjective modifies the activity (noun), thereby styling those so described as artists who happen to work with glass. Artist Dana Zamecnikova states, “My idea was to use glass simply as one of the many materials available because it offered the best possible way for expressing my ideas - not to use glass because I am a ‘glass artist.’”⁴⁶ By the late 1980s, glass artists dropped both words in favor of calling themselves “sculptors,” thereby attempting to disassociate themselves entirely from the taint of glass. As will be developed in chapter 4, this nomenclature was quickly picked up by enterprising dealers and artists alike. In a further development, Chihuly turned this in yet another direction by using only his name and glass, with perhaps a single modifier, in the titles of his exhibitions: Dale Chihuly: Glass Cylinders (1976), Dale Chihuly Glass (1981-2) and Chihuly: Master Glass (1990).⁴⁷ All of these naming

strategies are clear bids for inclusion in the more lucrative and higher status high art community.

With forming technologies used for classification within the glass world, the craft-based sensibility was reinforced in both the makers and the collecting community and fosters a reliance on skill as the demarcation of success, as opposed to content as in the high art world. Glass forming technologies can be broken into three general types: cold-worked glass, warm glass and hot glass. Cold-worked glass encompasses cutting, polishing, engraving, painting (before firing), fabricating, and assembly.⁴⁸ Warm glass techniques include slumping, fusing, pate de verre, filet de verre, drawing with canes of glass, and flame work. Lampworking was most often seen in the service of paperweight making in factories, and after the studio movement was underway in small studio settings. Hot glass includes mold blowing, free blowing, and casting. Christie's director and studio glass collector Dan Klein noted that hot glass had "enjoyed what seems in retrospect a disproportionate degree of popularity during the 1960s, lost ground to other techniques, until it was felt during the 1980s that it had been almost completely phased out." This shift in forming methodologies reveals significant aspects of the progression of glass towards art status.

The term movement when applied to studio glass is also problematic. As it is understood in a theoretical, art historical sense, the word movement implies a group who share a unified set of goals - sometimes expressed in a written manifesto — that are supported and adhered to by members of that group. But there is no uniformity of vision or theoretical discourse within studio glass as relating to artistic goals, usage of technologies, or even how many craftsmen can work in a studio. The only unifying element is the raw enthusiasm for the material itself. This does not constitute a true movement within art historical discourse, but it does provide the basis for the creation of a community. Nonetheless, studio glass is referred to as a movement by its practitioners and supporters, as well as in craft literature. The fact that it does not conform to a definition established by the high art world is of no concern to those involved with the movement. Indeed, this disdain for high art rules is a source of pride. For the purposes of this study, post-World War II American studio glass will be referred to as a movement.

Part I, Chapter 2: From Factory Glass to Craft Glass

Philosophical and Circumstantial Factors that Shaped the American Studio Glass Movement

The American studio glass movement was shaped by philosophical and circumstantial factors that existed before it emerged. In order to understand what studio glass became, a review of these factors is necessary, for they explain why studio glass emerged when it did and what its essential nature came to be. Many of these philosophical and circumstantial factors affected all of the studio activities (clay, textiles, metals, and wood), but at different rates and times.

While there did exist an initial similarity among the studio crafts, glass branched into a distinct activity with greater ambitions and more ready acceptance than seen in the other studio crafts. An understanding of this differentiation among the crafts is also critical for assessing the development of the American studio glass movement examined here.

The philosophical and circumstantial factors that lead to the emergence of glass in the mid-century period, could logically be addressed chronologically or by topic. Given their varied, nonlinear and sometimes contradictory natures, however, a combined thematic and chronological approach will be applied in this study. These factors include the link between glass and the factory, the survival of craft techniques and mentality, rural (regionalism) versus urban (abstract) concerns, the belief in craft activity as socially good and spiritually rejuvenating, and the practical effects of the Works Projects Administration (1935-39) and the

so-called G.I. Bill (1944). All of these came together to form the studio glass sensibility. While other circumstances were influential (post-war prosperity, population increases, and pent-up demand for household goods) and modified contemporary society, they are not central to studio glass and will be referred to here only when direct impact can be demonstrated.

The most historically and philosophically important reality to inform studio glass sensibility and separate it from the other crafts was its long association with the factory. Ironically, this is a case of craft survival (albeit craft in its simplest sense of facility and knowledge of workmanship), for it was within this commercial setting that knowledge of glass technology endured. While all seventeenth- and eighteenth-century glass had been (of necessity) handmade, glass production flourished only within the factory by the nineteenth century. With the advent of machines, the hand was distanced from production, and craftsmanship, in the sense of original aesthetic expression was devalued and the connotation of handmade shifted from an honorific to the pejorative. Arthur J. Pulos notes that in the United States during the nineteenth century, as the result of advertising by manufacturers, handmade became synonymous with substandard and shoddy, and machines were praised for their uniform production and ability for meeting mass production goals. For both this reason and the cost of running a glasshouse, glass was driven into the factory environment. The connection of glass to the factory was manifest in a tenuous position. Indeed, factory beliefs concerning how (and how not) to form glass and concerns about how many workers were needed for glassmaking retarded the emergence of glass as a craft activity.

Glass yields reluctantly to the “amateur hand.” While clay can be formed (thrown, hand built, coiled, slab-rolled, etc.) in an informal setting (as evidenced by its popularity as a child’s summer camp activity and as an art school practice medium), glass cannot. Reasons for this abound. First, raw glass {cullet} that is free of impurities is difficult to obtain and subject to “secret formulas” that affect its stability and visual properties. Also, the temperatures needed to melt glass into a malleable material are higher than those needed to fire ceramics and prove difficult to achieve on a small scale, outside of a glasshouse. Attempts by early studio glass artists to modify ceramics technology resulted success only with cold or warm working of

glass, as in the ability to slump (partially melt or soften) glass over molds or to fuse it into desired shapes. These techniques offered little formal variety. Additionally, operating a glass furnace (necessary for blowing or casting hot glass) is an expensive activity, due to fuel costs and the requirement for 24 hours a day operation. Only cold working (cutting, painting, gluing, etc.) is readily amenable to small studio applications. One of the contradictions of the studio glass movement is that these more accessible warm- and coldglass techniques would not return to favor with studio glass artists until the technologically challenging (hot-glass) skill of blowing had been conquered.

The importance of craft survival is seen in the philosophical connection of studio glass to American traditional or vernacular crafts. This began with the transplanting of post-1620 artisan-based skills modeled on European practices. As described by Pulos,

[f] or the most part the colonial craftsman did not consider himself to be a designer, but rather the instrument by which the desires of his patrons could be satisfied. To show his familiarity with the most recent styles, he imported examples that could be displayed to attract business and could also be copied. And he sought out and purchased special tools and patterns, or made his own from such samples as he could lay his hands on. That enabled him to work in the latest continental or English styles. However, the artisan often found it necessary to modify a design not only to suit the client's whims, but sometimes because of inadequate tools or limited talents.

This legacy led to an American traditional crafts practice in which innovation for its own sake was not valued (except as dictated by the client or as a production necessity) and where items were fabricated using time honored methods. This approach gave the (still extant) vernacular crafts a conservative ethos (as opposed to an avant-garde one). The early 1950s-1960s proto studio glassmakers also subscribed to that ethos. While inquisitive about "lost" techniques, presenting challenging formal issues (as well as sophisticated content) was outside of their focus. This stance was rejected by the post-1970s glass practitioners, who adopted

avant-garde “art” ambitions imported from the high art world, that hoped to gain acceptance by the urban galleries and collectors.

Another factor contributing to the philosophical underpinnings of studio glass was the reform-based American “arts and crafts” movement of the late nineteenth and early twentieth century. A transplanted phenomenon based on the writings and theories of British art critic John Ruskin (1819-1900) and designer and theorist William Morris (1834-1896), the tenets of British arts and crafts were transformed when they were passed into pragmatic American hands. Although Ruskin wrote at length about his distaste for the machine, the American manifestation chose to follow Morris’s more moderate stand and accepted the machine as a tool of production with the understanding that it should not be used for excessive flights of decorative fancy. American arts and crafts were more commercially based, and their producers did not reject mechanized production. Consequently, most American arts and crafts items were fabricated in what now is, post-the studio movement, seen as factory-like settings. This was especially true for glass.

In the late nineteenth century the work of Louis Comfort Tiffany and the Tiffany Studio epitomized American arts and crafts glass.⁷ Working in a guild-based tradition of team-crafted production, Tiffany thrived because it was a commercial enterprise (later derisively characterized by studio glassmaker Harvey Littleton as managed by “the great merchandising family of New York City”).⁸ However, by the 1920s fashion changed and other manufacturers’ designs found favor with the public. In an effort to remain profitable, Tiffany moved away from producing expensive, “artwork” and increasingly catered to urban, middlebrow tastes with less expensive items. Even with this shift, the firm failed to reach a large enough market and was sold in 1928. Others who relied less on hand-finished works (the bedrock of the arts and crafts ideal), and who successfully marketed mass-produced glass, came to the fore. The most important of these for studio glass was the Steuben Glass Works, a subsidiary of the Coming Glass Works founded by Frederick Carder, which will be discussed below.

Most assume when hearing the term “arts and crafts movement” that it was directly responsible for the subsequent development of the American studio crafts, and by extension studio glass. This, however, was not the case, and the reason lies in the location and social background of American arts and crafts supporters. Although arts and crafts communities were established in both rural and semi-urban areas, the movement and its devotees were informed by an urban sensibility. Reacting to the imposition of the machine between the worker (and consumer) and the product manufactured that separated life and livelihood, the arts and crafts movement sought to rejoin them by a return to hand-based craftsmanship and “truth to materials,” among other things.

It is the focus on the machine that reveals the movement’s urban base, for in the country the hand still prevailed. Indeed, “arts and crafts” and its philosophy seemed a bucolic fantasy to traditional rural makers who had never been separated from hand production and, as a rule, were true to their materials. Consequently, the arts and crafts movement had only an indirect effect on the later studio movement. Indeed, it was only in the 1920s and 1930s (after the wane of arts and crafts enthusiasm) that that crafts, perceived of as a wholesome contrast to big-business manufacturing that were linked to Depression Era failures, became part of the next reform impulse and were freighted with redemptive, social virtue.

There was one way in which, however, later studio glass would be linked to the American arts and crafts movement. Seen in the arts and crafts context as a passion to (re)unite art and life, evidenced in the desire to create an “art that is life,” this was an issue fretted over by urban, middle-class arts and crafts aficionados.¹⁰ But this desire to make a life that was also art and artistic, did inform the lifestyle choices of the later studio glass movement. This manifest in the 1960s and 1970s when American studio glassmakers sought to create handmade glass art, produced within a studio, while they lived a lifestyle that was counter-culture and anti-establishment. How this came about will be dealt with in Chapter 3.

The Post-Depression Era art style changes within the high art world also affected the later philosophical identity of studio glass. During the 1930s regionalism and an interest in

figurative (as opposed to abstract) rendering of form, was the predominant high art style. This figurative impulse worked in tandem with a valuing of rural crafts as expressions of the values of the American heartland. Figurative artists (Thomas Hart Benton, Grant Wood, Paul Cadmus, John Steuart Curry, and Millard Sheets, among others) depicted images of craftsmen at work in order to celebrate the common man and the virtues imputed to their activity. But in the high art world, just as handwork would yield to big manufacturing, the ability to render recognizable forms gave way to abstracted images, and figuration was rendered obsolete. Abstraction, imbued with the presumed virtue of being avant-garde, became the rage in urban centers and figurative artists (and craftsmen) fell from favor. 11 In time crafts were seen as too literal for the avant-garde, abstraction-based, “art for art’s sake” world.

Two more legacies from the Depression clung to crafts. A life in the crafts was believed to express democratic values, which, in turn, could restore the faith in capitalism diminished by the catastrophic business failures of the period. This led to a popularization of craft as a component of national culture, as noted in 1949 by Allen H. Eaton in his *Handicrafts of New England*. Handicrafts could improve social conditions for the rural population where crafts naturally resided, and they were viewed as an untapped source of creative energy. Craft activity was also linked to improving the quality of life of those who were “seeking a creative outlet, convalescents needing occupational therapy, or a retired person seeking an interest in later life.” These associations had an ironic outcome, however, for the connection of craft to the less fortunate and the elderly, attached itself to the later studio crafts (and glass), further ensuring their second-class status vis-a-vis the purportedly intellectually engaging and noble-themed arts of painting and sculpture. “Craft is what other people make - women, people of color, savages, hippies, farmers, crazy people, the poor... ‘normal’ people make art” observed critic, and later director of Urban Glass, Brooklyn, New York, John Perrault. The later ambition to be considered “artists” observable in the glass world after the 1970s was an attempt to remove this taint.

The second Depression legacy related to craft and individualism. Prior to the Depression, the public had placed its faith in government and big business for economic security, only to

find that those entities could not adequately provide when the economy turned down.¹⁵ Self-sufficiency and an honest day's labor seemed the right antidote to the job losses and hardships suffered by the working man. Craft activity, appeared to embody a egalitarian vision of fraternal unity and to stand in marked contrast to callous corporate abandonment. Scholar Eileen Boris notes that concerns about a "professional" class, in which autonomy and creativity are placed second after labor, reflected anxiety over the possible loss of control in an America where people were becoming employees of corporations and witnesses to class conflict. These fears underscored the need to return to core values, and self-reliance became a siren's call. Even the government came to value the virtue of self-sufficiency and expressed this through its New Deal alliances between farmers and craftsmen. This connection helped to solidify the craftsman as a social type imbued with these virtues. In the early years of the studio glass movement, this sense of partaking in a righteous self-sufficiency became a lure for the would-be practitioners.

A less-tangible component of the philosophical architecture of glass lay in its reputed spirituality. By combining democratic and social good, heartland values of self-reliance and righteousness were presumed to suffuse the handmade object. Mary Douglas writes that "[t]hemes of individualism, independence and freedom are connected with those of spirituality and humanism in the life and work of the craftsman." Indeed, this quality was noted by *Craft Horizons* editor Rose Slivka (who carefully replaced the word "craft" with the more elevated term "art,") when she wrote that

In 1945, at the close of World War II, there was only a small group of artists in New York City. We had no idea art would become not only a respectable profession but a crowded one. To us it was not a profession, it was a priesthood — a spiritual calling

While spirituality was attributed to all crafts, it was particularly associated with glass. This, in part, accounts for the devotion to studio glass professed by both its producers and consumers. It can be said, in fact, that it is this quality that assured the success of glass as an art medium. Artists and collectors are often drawn to the medium because of this perceived

spiritual essence, linked in their reminiscences to the magic of glass moving from liquid to solid state and transforming itself from fire red to clear crystal. This and the vaunted transparency and translucency are discussed by artists, dealers and collectors as providing a glimpse of the divine.

In addition to these philosophical roots, concrete realities shaped the development of studio glass. One was the growth in hobby activity that occurred in the second third of the century. The enthusiasm for hobbies (then synonymous with craft) led to the founding of *Craft Horizons* magazine in 1941, the only magazine devoted to reporting on craftsmen and their activities. As leisure time increased, crafts, practiced as a hobby, were seen as a societal good. As noted above, the hobby connection and faith in crafts as useful for solving social issues or providing work relief deepened during the 1930s. Steven M. Gelber writes that hobbies were promoted in the 1930s as therapeutic for both society and the individual for they

taught discipline, instilled focused behavior and redeem[ed] idleness ...[t]he word “hobby” became a strategic term used less to be descriptive than to carry weight of authoritative approval when applied to individual activities. In other words the term “hobby” as used in the Thirties was more an ideological construct crafted to distinguish between “good” and “bad” pastimes, than the natural category of leisure activity.

This quality of good versus bad, the linking of virtue and working with the hands, and the making of items that required seriousness of purpose and consummate skill became a guiding precept of the studio glass movement. Interestingly, at this time the number of those who dabbled in glass as a hobby were few (for reasons that will be explained below), however, they were significant to the movement, for they worked alone, fashioning items out of glass in their spare time, and relied on technical knowledge gleaned either from commercial glass factories or transferred from ceramics.

Two governmental actions propelled crafts to greater acceptance in the 1930s and 1940s. The first was the creation of the Works Projects Administration (WPA) in 1935 and the other

was the passing of Public Law 346 or the Readjustment Act of 1944 (known as the G.I. Bill). In 1935 the Works Progress Administration Federal Arts Project (after 1939, the Works Projects Administration) created up to 3,000 jobs to employ over five thousand artists and craftsmen. By placing craftsmen on a par with painters and sculptors, the WPA implied that being a craftsman was a worthy profession. With craftsmen and artists considered together as a class of worker by the government, the seeds were sown for the G.I. Bill.

The G. I. Bill, signed into law by President Franklin D. Roosevelt on June 22, 1944, was intended to provide productive activity for veterans returning from World War II, but actually was adopted to avoid the unrest and riots that had followed the return of World War I veterans. Among its features, the G.I. Bill offered to pay tuition for college level classes in the arts and sciences.²² No one foresaw the stampede as returning vets flocked into colleges and graduate schools. More surprising was the number of veterans that chose the arts as a viable professional and personal choice. This led to increased demand for art-related courses which, in turn, necessitated the creation of permanent faculty positions to accommodate the influx of new students. As a result, the arts (including crafts, led by clay and glass) became institutionalized, and for the next three decades many craftsmen survived on university salaries that augmented their income from artwork sales. Of equal importance, the G.I. Bill led veterans, interested in craft media (clay, glass, textiles and wood), were educated alongside painters and sculptors. The profound ramifications for the glass movement will be discussed in Chapter 3.

One final post-war circumstance impelled the emergence of studio glass. As returning veterans formed new families, they required housing and furnishings. As a result, household wares were produced in great quantities (after lingering wartime shortages were alleviated) to meet pent-up demand.

This fostered the trend toward mass-produced, anonymous objects, that threatened to make homes all look alike.²³ Handcrafted items, on the other hand, seemed to offer refreshing anomalies and could express individuality. This return to individuality attracted both makers and consumers for as Rose Slivka “[t]he object makers are commenting on their middle-class

culture of mass-produced, standardized good taste as a domesticated, housebroken, sanitized sensibility.”²⁴ In this way crafts were seen as capable of invading suburban Levittown and returning individuality to the American tract house.²⁵ The result of this was an expanded market for studio crafts and moved its center from a rural, often lower-class milieu of (traditional) crafts to the middle-class, suburban high craft community.

Yet another segment of the middle class acquired a taste for handcrafted goods that also expanded its audience. Represented as part of a European avant-garde aesthetic, craft items were touted through the modernist “Good Design” exhibitions held during the 1950s at the trendsetting Museum of Modern Art, New York. Crafts seemed to offer relief from the chilly avant-garde modernity of steel and glass as they harkened back soothingly to time-honored materials. They also offered those with discriminating taste a desired touch of individuality.

The final spur to the increased craft popularity was the fact that handcrafted items, while not inexpensive, seemed to offer value for money, in contrast to the mass-produced modernist designs that advertised as inexpensive, but were not. The interest in “handicrafts” was appealing enough for factories to position their wares as “handcraft” as Blenko Glass Factory Inc. of West Virginia did in its 1944 advertisement in *House and Garden* (Fig. 9).

Glassmaking Before the Proto-Studio Glassmakers

The American studio glass community was the smallest “studio community” to develop after World War II. Clay, textiles, furniture, and even metals (in the form of enamels and decorative wall pieces and room dividers) all boasted more practitioners (artists and teachers) and supporters (dealers, gallery owners, critics, and collectors). The studio glass community is today comprised of no more than a few thousand top-level artists, teachers, students, collectors (representing public and private interests), dealers, and suppliers. The impact of this small size can be seen in a variety of ways. First, among these is relatively low number of studio glass items made. For example, when the American Craftsman’s Educational Council put on their

fourth annual “Young American 1953” exhibition of work by craftsmen under 30 years of age, there were no glass submissions.

The written record lags, too. In the library, books about glass (including the long-esteemed ancient glass) comprise fewer than a third the number of books devoted to clay. All of this has lent a “hothouse” quality to the glass community, resulting in artists, who teach, and their students, competing on a very personal basis with each other. Most importantly, the small numbers led to a canonical history, privileged a few key players and permitted glass blowing to be valued over other forming methodologies. This outcome of this is seen shifting definition of what constitutes “studio glass.” The remainder of this chapter will re-balance these manipulations by placing the emergence of studio glass during the early 1960s, not in the context of a single person’s actions or as an activity limited to hot glass, but as the outgrowth of a handful of independent, proto-studio glassmakers (American and European) who worked from the 1930s on. Indeed, the stratagem of overlooking these early practitioners means that perhaps not all of them are known; however, for the purpose of this study, the proto-studio glass artists to be discussed here are those who have left a lasting record and influenced the later movement.

As noted, by the end of the nineteenth century glassmaking occurred in factories. American factories were larger and less flexible than their older, smaller European counterparts. With glass forming occurring only in this industrial context, meeting industrial needs, these factories focused on the efficient production of utilitarian objects such as beakers, bottles, tubes, etc. Supported by the marketplace, these facilities trained their own workers and built the custom equipment necessary for their work. As a matter of economics, and eventually custom, smaller-scale glass furnaces and annealing ovens needed for the creation of unique glass objects from previous periods (e.g., Tiffany Studios or Handel Glass Co.) were replaced by larger scale glasshouses. By the time Louis Comfort Tiffany and others closed and begun to fade from memory, only commercial production remained.

Determining what is properly called a glass factory is complex. As a general rule, a factory is a facility that brings together a number of workers who repetitively carry out discrete tasks that result in the creation of a predetermined form. Implicit in this is the fact that each factory worker is skilled in a limited number of tasks and that artistic guidance is separate and provided by a designer who oversees the total production, but who may or may not be able to actually work glass. Factories can therefore be seen as “assembly line” activities with little creative risk undertaken by the worker. Consequently, to increase production, supplementary teams of workers are added; and in this way successful glass factories employed hundred of skilled glass workers. The work they produced was primarily formed from hot, blown glass.

The time-honored approach of separating glassmaking into tasks made the existence of teams of six to eight the custom. Glassblowing, the primary method for forming glass used by industry, is a time-critical activity. Therefore, the various tasks relating to forming objects are broken down into activities that are carried out quickly by each specialist. Further, it was considered impossible to melt glass in small batches and even more outlandish for an individual alone to attempt to form objects. Based on the realities of fabrication, the custom of having groups create glass became embedded within the American factory system. This article of faith, with its potential for featherbedding, precluded attempts to establish small glassmaking facilities.

One interesting custom did grow out of the factory setting, and it could be termed an early manifestation of the studio glass impulse. Due to the size of factory enterprises, fuel costs for sustaining the high temperatures needed to melt glass for forming were considerable. It proved most economical to leave the furnaces on at all times. This practice led the glassmakers to create off-hand glass objects called "whimsies" or "triggers," for their own amusement outside of work time. While not conceived as or termed “art” by their makers, these works ranged from impressive displays of technical virtuosity to pieces that captured artistic expression. They also were glass objects formed without concern for utilitarian applications, and in their way they moved glass one step further away from its functional, factory roots and toward a studio sensibility.

In the main, however, factory attitudes fostered contempt for those who tried to be "amateur" glassworkers. Sidney Waugh, a designer for the Steuben Glass Works in Coming, New York, wrote in his book *The Making of Fine Glass*, (1947) that "[i]t must be emphasized that glassblowing, as described on these pages, is not within the scope of the amateur or even the most talented artist or craftsman working alone."³² A similar book by Waugh, *The Art of Glass Making*, written in 1937 contains no such admonition. Perhaps such "company men" as Waugh were already feeling the hot breath of the independent glassmakers to come.

Indeed, this glass factory sensibility contributed to a continuing split in the American glass forming community that haunted it well into the 1970s: the specialized knowledge needed for working glass resided within the industrial community; but the interest in using glass as an expressive art medium lay in the crafts and art communities. Although linked by a passion for the medium, these populations had little or no contact with each other.

Consequently, the first 20 years of studio glass was spent rediscovering, inventing, and transferring glass forming technologies for the service of art. By the 1930s glassmaking began to appear outside the factory. This was aided by Frederick Carder (1863-1963), the founder of Steuben Glass Works, an upscale subsidiary of the Coming Glass Works. Established in 1903, in Coming, New York, Steuben emerged as a dominant force in national and international glass. Carder arrived at Coming from the British glassmaking firm of Stevens and Williams, Brierley Hill, near Stourbridge and brought with him a knowledge and respect for the medium. Carder was a great innovator of colored glass formula and glass compositions, and he was also a sculptor, a skilled form designer, and ultimately responsible for most of the colored Steuben glass manufactured from 1904 until 1933.

But it is Carder's later career that influenced the studio glass movement. In 1932 he was relieved of many of his responsibilities at Steuben, and from the 1930s to the 1950s, he worked at a small kiln in his studio to develop various glass-molding techniques for his original sculptures, rendered in *pate de verre* and *cire perdue* (lost wax) techniques. Most ambitious

were his loose interpretations of ancient Roman carved diatreta vessels, or "cage cups," such as his Diatretum Vase (1953) executed in *cire perdue* (Fig. 10).³⁴ These independent experiments, coupled with his stature within the glass world, made his explorations widely known, and they prefigured a studio glass sensibility.

Meanwhile, European (mostly French) trailblazers also influenced American studio glass. European factories were organized differently from American ones and reflected the historical guild system from which they grew. Positioned between the definition of "factory" in the American sense and the term "studio" in the contemporary sense, European glassmaking did not lose its respect for the traditional, artistic and artisanbased activities of the glassmaker. This extended to all forming and decorative technologies. For example, free blown (or mold blown) hot-glass skill was valued equally with warm-glass slumping, or cold-glass etching or engraving. It would not be until the 1980s, and with an enthusiasm transplanted from Europe that American studio glass, would embrace these techniques. Also in contrast to American factories, European factories, as a matter of course, made both production pieces (i.e., those produced in large quantity) and "art" (limited run) pieces. The prices for these works reflected the amount of individual work provided by the gaffer and the relative closeness of master designer's hand. This "touch of the designer's hand" justified (and still does) the marketing of these works as high-end glass art.

The organization of the French art-glass manufacturers and designers Emile Galle (1846-1904) and Rene Lalique (1860-1945) was typical of European factory organization. Professional designers made sketches for works to be executed by a glass-making team. As the team worked, the designer might come through the work area and alter or augment the gaffer's work, generally in a managerial capacity. The distinction between the artistic aspect and the fabrication of works would be a rejoined and form one of the basic tenets of American the studio glass. Additionally, although French art glass was manufactured in quantity, the plant size and numbers of workers employed were smaller than those seen in America at the same time.

This, too, separated Galle and Lalique from American factory practice and offered an alternative model to early studio glassmakers.

Of even more direct influence on the American studio glass movement were the pioneer French glassmakers who carried out explorations on their own, using either factory facilities in off hours or creating their own studios. Three such pioneers, who worked in the rediscovered, warm-glass technique of *pate de verre* were Henry Cros (1840-1907), Gabriel Argy-Rousseau (1885-1953), and Franiose Emile Decorchemont (1880-1971). This ancient Egyptian technique had been lost and then rediscovered in the nineteenth century by this small group of Europeans and would eventually appeal to independent American glassmakers. Suitable for fashioning small pictorial or sculptural objects, the technique involved placing crushed glass, colored with oxides, in a mold and applying heat to fuse the mixture into a solid form. Experimentation resulted in formulating a new mold-release technology which returned *pate de verre* to the glass makers palette. American protostudio makers also worked in *pate de verre*, which is a warm-glass technique that required only an annealing oven (often modified from a clay kiln), not the large glassblowing furnaces needed for hot work. As such it offered the easiest technology for proto-studio artists to execute by themselves, in small non-factory settings.

Hot blown glass, so important to the studio glass movement in the 1960s, intrigued the pioneer early twentieth-century French glassmakers, and their experience directly affected the American movement. Maurice Marinot (1882-1960), trained as a painter and affiliated with the Fauves, participated in the Salon d'Automne in 1905. In 1911, however, he transferred his interest to making vessels from molten glass. Previously Mari not had commissioned functional table wares blown in the factories to his specifications, which he then decorated with enamel paints. In 1912, Marinot apprenticed himself to the M.M. Viard factory in Barsur-Seine (owned by friends) where he worked after hours to form small vessels with stoppers and veiling (air bubbles trapped between layers of molten glass) similar to his Vessel (ca. 1934) (Fig. 11). Describing his works as sculptures, not vessels, Marinot labored alone or sometimes in concert with a single assistant to create his acid-etched, “modeme” patterns in the exterior

of his thick-walled forms. In 1937 the Viard factory closed, and Mari not discontinued his work in glass.

Marmot influenced American studio glass in four ways: first, he bridged the artistic versus technological divide that existed between artistic vision and the ability to execute it. In fact, he worked as an independent artist in a factory. Secondly, he was an established artist who chose glass as his art medium. This path would be followed by several glass artists in the 1980s who would usher in the “crossover” phenomenon that developed between high art and studio glass in the 1980s that will be discussed in Chapter 4. Thirdly, he imputed a spiritual character to the activity of forming glass. Finally, for Marinot, art made of glass had to be produced by the hands of the artist. This belief, shared by later American studio glassmakers, would form one of the core beliefs of the American studio glass movement and inspire them to call themselves “glass artists.”

Another important intersection between European glass and the emerging American studio glass movement occurred when Spaniard Jean Sala (1895-1976) and American Harvey Littleton crossed paths in 1958. From the 1920s through the early 1950s, Sala pioneered glassblowing in a studio setting. The son of Catalonian gaffer, Bienvenido Sala, Jean and his brother, Joachim, learned their father's craft in Spain. The family then moved near Paris, where Jean maintained a private hot-glass facility in Montparnasse and worked in the family antique shop on the rue Bonaparte. In his small, self-made furnace, which he fanned with a hand bellows, Sala made *pate de verre*, melted glass batch and *cidlet*, blew glass, and produced small vessels and glass animals in a bubbly, porous metal called *malfin* (Fig. 12). Adulterated with impurities, this glass in time took on the appearance of devitrified glass (a condition associated with ancient glass). Sala's studio, probably the first designed and built for glassblowing by an individual, remained in operation until his failing eyesight forced him to close it about 1952. Fortunately for the American studio glass movement, a transfer of Sala's technical knowledge and the conceptual approach occurred when Littleton visited him in 1958. Sala had photographed his studio before dismantling it and was able to show Littleton his small furnace, built with an annealing oven on top. This validated Littleton's belief that small-scale

glassblowing could occur outside of a factory setting and would eventually lead to the Toledo Workshops of 1962.

American Proto-Studio Glass Pioneers

One of the commonplaces of the studio movement is that it began in Toledo, Ohio, on March 23, 1962, when Harvey Littleton held a glass workshop on the grounds of the Toledo Museum of Art. While this event was important (as will be shown in the next chapter), this belief in a single progenitor is too simple and privileges both one moment and one man over a field of others. As Susanne K. Frantz writes:

What is often forgotten is the fact that there were plenty of other artists working with glass in various states long before Harvey. Sometimes overlooked, too, is the fact that most of these precursors were not American, and for them, the idea of an artist working with glass was not the revelation it had been in the United States.

This point of history pits the followers of Littleton against those who believe that there were others working with glass in a studio manner at least two decades before and that they were instrumental in the founding of the American studio glass movement.

The passion of the former group had a deep impact on the future of glass and the intensity of their belief can be glimpsed in the title of an article by Dr. Paul Hollister entitled “And on the Sixth Day He Rested...” Published in *Neues Glass* in 1989, this essay (and many other writings) dramatically casts Littleton as the father of the (studio glass) world. Similarly, in a publication of 1999 by Karen S. Chambers, a New York writer for *American Craft and Art in America*, stated categorically that “the Studio Glass Movement can be said to have a definite birthdate: 23 March 1962, the beginning of a 10-day workshop organized by Littleton at the Toledo Museum of Art.” However, both her assertion and the capitalization of “studio” and

“glass” do not square with the facts. As shown in the first part of this chapter, there are multiple reasons for the emergence of studio glass in the post-World War II period, and as will be shown below, there were other Americans working in an independent, studio manner. Further, as already seen, Marinot and Sala working in Europe had made artistic glass in a studio setting long before the 1960s Toledo workshops.

In the United States the handful of independent glassmakers worked in varying degrees of isolation — both from each other and (importantly for the movement) from the factory. Their education, their attitude toward glass as a potential art medium, and their forming methodologies manifest sensibilities seen in the later movement. They also earned their livelihood from glass and hence were not simply hobbyists. Producing in the period between the decline of the glass objet d’art by Tiffany or Handel, etc., and the rise of a formalized studio glass movement in the early 1960s, these artist-craftsmen worked in warm- and hot-glass techniques at a time when little was known about how to fabricate glass in a small studio.

While the precise number of these independent glassmakers is difficult to determine, the four noteworthy pioneers to be discussed here, deserve attention because of their influence on the development of the subsequent studio glass movement.³⁹ Independently (and only later with shared information) these pioneers were impelled by their commitment to glass to set up studios in order to experiment with the warm-glass technique of fusing, slumping and enameling of small functional glass items. Three of them owed their studio success to European training (Maurice Heaton and Michael and Frances Higgins) and one (Edris Eckhardt) to the transfer of technology from studio ceramics (ahead of glass in its development as a studio activity) to glass.

Maurice Heaton exemplifies the European multi-generational and artisan-based tradition. The son of an arts and crafts cloisonne enameler and the grandson of a London stained-glass maker who specialized in Gothic Revival style windows, Heaton moved to New York in 1914, where he attended the progressive Ethnic Culture School, followed by a year at Stevens Institute of Technology. Armed with a cultural and technical education, Heaton decided by 1923 that

his future lay in glass, and he worked with his father on large, stained-glass commissions. In 1928 textile designer Ruth Reeves asked Heaton to create glass shades for polished steel floor lamps, thus leading to similar work throughout his career. Executed in an “art deco” style, these and the lighting scones and ceiling fixtures that were to follow featured his knowledge of enameling. Soon, he was designing for the manufacturer Lightolier, and his work appeared in industrial design shows at the Metropolitan Museum of Art, New York. Conversant with the formal language of “art moderne” and Cubist art, Heaton’s work invoked the traditional verre églomisé technique used in ancient times.

As an on-going part of his production, Heaton made plates decorated with brightly colored enamels. Typical of these are three works at The Coming Museum of Glass : Africa (1948) (Fig. 13), Free (1951), and Fish Bowl (1955). Each uses the warm-glass techniques of kiln forming (slumping) and the application of powdered glass, enameled decoration. As described at the time, Heaton

Cuts and grinds the glass to shape and then attaches the glass to a plate glass turntable. He makes his design directly on the shaped glass by tapping powdered enamels through graded sieves and over curved and angled templates to create overlapping shadows. The completed design is fixed with an adhesive spray, placed in a sheet iron mold into which it is slumped in the kiln while the enameled design is fired on. Heaton himself makes the molds and all his tools.

In May 1932 Heaton created The Flight of Amelia Earhart Across the Atlantic, a large window for Radio City Music Hall in New York. Using a combination of techniques in an individual manner, Heaton applied vitreous glazes to glass with an airbrush, and then kiln fired them. An article in *Architecture* (1931) illustrates several of Heaton's commissions including large, paneled windows for Stem Brother’s and L.P. Hollander & Company in their New York City stores, glazed elevator doors for Park Avenue apartments, and several salesroom windows. These records are the only images that survive, for in 1974 Heaton’s studio burned to the ground, and many of the installations had been dismantled by that time. Heaton also fabricated objects in his studio during the 1940s and 1950s using the warm-glass techniques

of fusing and slumping. For his equipment, he scavenged and modified items associated with ceramic production. Both the means and the location of his production, place his activity within the definition of studio glassmaker.

Two other trailblazers were the husband-and-wife team Michael (1908-1999) and Frances (b. 1912) Higgins. Their work featured warm-glass technology in their brightly colored, geometric patterned, glass enamel tablewares. Michael, trained as a graphic designer and painter, attended the Visual Design Department in the Chicago Institute of Design in 1948. Frances served as an assistant professor at the University of Georgia and received her M. F. A. from the Chicago Institute. Attracted to working in all scales, from jewelry to church windows, in 1962 the Higginses were fusing glass into large sheets to make screens, panels, and sculptures.

Aside from their numerous commercial tableware lines made for Dearborn Glass from 1959 to 1965, both Higginses produced a range of unique objects in their studio. Michael constructed ingeniously hinged boxes with connecting joints of copper wire screen and folded metal bands fused into glass (Fig. 14). Equally sensitive and innovative were the vessels made by Frances during the late 1950s, with granules of fused colorless glass, that mimicked fractured ice (Fig. 15). By leaving the top edge of the simple, tapered vessel irregular and the upper half of the vase intermittently punctured, she heightened the visual effect of ice melting. Interested in creating an optical dialogue between the surface and the three-dimensional ground, Frances also added gold enamel to this series of forms. While the work looks dated now, over-decorated and too clearly utilitarian in comparison to current studio glass, the artists strove to return an individual aesthetic touch to glass wares (Fig. 16).

The Higginses also adapted a silk-screen technique resulting in designs that required as many as twelve laminations to create the rich colors they desired. One of their trademark styles involved “mother-of-pearl” lustered glass. To achieve the effect, chips of glass were dipped into water, then sprinkled with colorant for the design and lustered on top. Their largest commission was the 28 feet high by 80 feet wide window for the front of the First National

Bank of Appleton, Wisconsin. In the early 1980s the bank was remodeled and the window was lost.

During the 1950s the Higginses made a line of utilitarian wares for Marshall Field, Bloomingdales, and Georg Jensen. Many of the pieces retailed for only five dollars per item. Highlighting the differences between the factory and the studio, Michael Higgins remarked in 1985 “[I]f we had had the money that Tiffany had, what we could have accomplished! But of course Tiffany didn’t blow glass: he was a designer and designer is a very different act.”⁴¹ The Higginses exemplify the designer-craftsman designation that was the hallmark of the proto-studio glassmaker and linked production to unique expression.

The fourth trailblazer was Edris Eckhardt (1905-1998). Trained as a sculptor at the Cleveland School of Art in the late 1920s, she worked as a Works Projects Administration (WPA) supervisor in the ceramics arts program until 1941. As with many of the later studio glassmakers, Eckhardt, chose to work in the craft-based medium of clay and then transferred the related technologies to forming glass. During the 1950s she experimented with making her own glass from batch in her basement studio and for her innovative work she received one Tiffany and two Guggenheim fellowships. Among her innovations were a tool for drawing with hot glass and her sculptures combining glass with other materials, notably bronze. By 1953 Eckhardt had rediscovered the technique of laminating gold (or silver) between two or more layers of glass. The sheets of the metal were engraved with a stylus, then slumped between two sheets of glass and rolled on a rolling pin on a marble marver. She, too, went on to rediscover the verre eglomise technique and the casting of glass in lost-wax molds. She used this technique to form plaques and free-standing, figurative, sculptures, such as Archangel, (1965) (Fig. 17). This work was featured in the important survey exhibition Glass 1959, mounted by The Coming Museum of Glass, Coming, New York, and is now in their permanent collection.

Eckhardt stated in 1985 that “I’m only happy when I am working with three dimensional forms. I work in glass from an artist’s viewpoint, not a craftsman — as I am a sculptor.”⁴³

This statement in which she separates herself from craft and aligns her work with art first, and glass not at all, places her within the studio camp ahead of her time. This focus on “art” prefigured the attitude of late 1970s studio glass artists.

Early Institutional Support: The Founding of The Corning Museum of Glass and the Glass 1959 Exhibition

In May 19, 1951, The Coming Museum of Glass was established as a nonprofit, tax-exempt, educational institution dedicated to the art, history, research, and exhibition of glass, supported by the patronage of the industrial glassmaker Coming Glass Works. In its first few years, the museum organized several exhibitions devoted to historical glass, but by far the most significant in terms of the studio glass movement was the international survey "Glass 1959: A Special Exhibition of International Contemporary Glass."

The impetus for the exhibition of 1959 came from the impressive architectural glass displayed in the Czechoslovakian pavilion at the Brussels exposition of 1958. It awakened the determinations of The Coming Museum of Glass to assess developments in contemporary glass worldwide. This international survey exhibition was a collaboration with Coming and four participating institutions: The Art Institute of Chicago, the Metropolitan Museum of Art, the Toledo Museum of Art and the Virginia Museum of Fine Arts, Richmond. Writing in the preface of the accompanying catalogue, Thomas S. Buechner, director of the Coming Museum of Glass, cozily positioned the need for this exhibition within a Cold War and manufacturing sensibility, stating that “[g]lass capacitors and resistors [that] contribute to miniaturization in electronics and glass dosimeters [that] record radiation,” coupled with the “sixty car loads of table glass” recently ordered by the Strategic Air Command, place glass as a primary material of the future. He further ambitiously links his exhibition to the Triennale in Milan and the Brussels World’s Fair.

Choosing a unique approach toward curating the exhibition, the museum, guided by Buechner, did not seek a panel of jurors who were experts in glass technology or history. Instead, they selected recognized authorities on design and connoisseurship. Leslie Cheek,

director of the Virginia Museum of Fine Arts in Richmond, Edgar Kaufmann Jr., architectural historian and critic, Russell Lynes, an editor at Harper's Magazine, studio furniture maker George Nakashima, and Gio Ponti, editor of the Italian design publication *Domus*, selected objects from 1,814 submissions from 173 manufacturers in 23 countries. In the works shown by European manufacturers, fewer than fifty were designed and crafted by individual artists, and most of these were executed in cold-decorating techniques, by kiln-forming, or by flameworking. The most expressive work came from Czechoslovakia and Italy, confirming their seminal position and their long history of glassmaking. These pieces were notable for their use of brilliant color and their fresh approach to the traditional skills of enameling, engraving, blowing, and casting, and they stood in contrast to the spare, modern aesthetic of Northern Europe and Scandinavia.

The juror statements, accompanied by photographs of each juror's three favorite pieces, focused on issues of functionality and formal beauty. The natural seduction of the material was evident in their choice of descriptive words: "elegant," "glistening highlights," and "delicacy of the components." 53 The American proto-studio glassmakers were again represented by Heaton, the Higginses (for Dearborn Glass Company, Dearborn, Michigan), and Eckhardt, who were joined by Priscilla Manning Porter, Earl McCutchen and paperweight maker John Burton.

Glass historian Frantz notes that among the non-American factory works were a few intriguing examples of free-blown glass and one figural vase whose expressiveness recalled Marinot's work and reflected a sensitivity to its contemporaries in painting and sculpture. It was submitted by Lucrecia Moyano de Muniz of Buenos Aires, artistic director of *Cristaleries Rigolleau, S.A.*, and was identified as designed and "fashioned" by Mrs. Muniz (Fig. 19). Although this piece represented something very different from the other works, and prefigured the studio glass to come, it aroused little interest at the time. Only juror Gio Ponti expressed the wish to "steal the barbaric vase by Mrs. Muniz!" 54 All of these underscored the potential of glass.

As a result of Glass 1959, Paul Perrot, then director of The Coming Museum of Glass, assessed the state of contemporary glass by observing that in 1960 there was a rising number of artist-craftsmen making kiln-formed glass in the United States, while in Europe, apart from cutters, engravers, and enamellers, there were few independent artists using the material. In his article "New Directions in Glassmaking" for a special issue of *Craft Horizons* magazine, Perrot asked to hear from craftsmen working in the medium in an attempt to unearth previously unknown experiments. Ironically, at this time neither Perrot nor anyone in the United States was aware of the work of Erwin Eisch, from Frauenau, Germany (who became a seminal link between America and Europe as a result of his friendship with Littleton), or the work of Mrs. Muniz, who seemed just an eccentric offshoot.

Technical Issues and Expanding Formal Vocabulary

A common thread that linked all of the proto-studio glass artisans was the need to learn their techniques either from industry sources or from ceramics, or by trial and error. While some information was available from trade schools (and even at the university level from Alfred University, Alfred, New York), these skills were considered technical and not applicable to artistic endeavors. This division was underscored in the article for *Craft Horizons* written in 1955 by the University of Georgia instructor Earl McCutchen, who noted (rightly) the limited number of sources relating to glass and the primitive state of prevailing technique. He then (naively) suggested that glass be obtained from the junkyard or salvaged from mirror shops, and remelted. Had readers followed his recommendations, they would have been working with a type of malfin, that did not produce stable glass due to the high level of particulate impurities. This type of technical problem highlighted two other technically-linked issues for the movement.

First, few technical choices resulted proto-studio glassmakers creating works that were vessel-related predominately. Second, technique became the means of determining who the true studio glass artists were. The reality of the first problem led ceramist and sculptor Robert Ameson to declare in 1967 that "If I see another drippy glass bubble, I'm going to blow my

mind." Only after technical limitations ceased to restrict the forms produced, could glass move ahead and address issues of content. Indeed, it was by rejecting utility and utility references implied within the vessel form, that the glassmakers who followed sought to become artists.

The second problem concerned the definition of studio glass. As will be explored in the next chapter, melting and then blowing molten glass became the focus of two workshops held at The Toledo Museum of Art in 1962. And this led to defining the term studio glass to mean that which is formed from hot glass (blown or cast). This privileging of hot glass (over warm or cold technique employed by the proto-studio glass artists) by those linked to the Toledo Workshop and effectively dismissed the pioneering efforts of the earlier fusers and slumpers, and removed them from inclusion as genuine studio-glass artists. The history and effect of both issues will be explored in the next chapter.

Part 1, Chapter 3: Studio Glass Achieves Critical Mass: History, Exhibitions, Marketing, and Collecting Patterns, 1962 to 1975

Glass art since 1962 has added a whole new dimension to American culture. Before this, most Americans working in glass were either designers for industry or industrial technicians. They had few artistic pretensions and their main aim was to make good consumer products. But whereas the industrial designer has a customer and his needs to consider when working on a product, the artist needs to impose no such restraints on himself.

Ambition and Technique Coalesce

The accomplishments of the proto-studio glass artists of the 1950s and early 1960s prepared glass to shed its factory and hobbyist roots and to adopt high art ambitions. Three conditions were necessary for this to occur: a focused artistic ambition; access to adequate technical knowledge; and appropriate validation from cultural institutions. All were present and poised to coalesce in 1962 and needed only to have Harvey Littleton, Dominick Labino, and Dr. Otto

Wittmann of the Toledo Museum of Art fuse them together. These men came to stand for the central components of the glass movement and their contributions are deserving of serious analysis, for each one contributed to the early characteristics of the American studio glass movement. The years 1962 to 1975 were marked by energy, knowledge, and good timing, which permitted a small band of craftsmen to achieve critical mass. From this would flow enthusiasm for glass as an art medium, a reconnection to factory-based skills (relocated to individual studios), and the development of glass centered university curricula, which in turn, would attract practitioners (artists and teachers) and supporters (dealers, collectors), who would insure the success of glass as an art medium.

The usual recounting of the beginning of the American studio glass movement casts Harvey Littleton as the sole progenitor of the movement. As noted in the previous chapter, he was in fact one of several individuals who sought to use glass for art making, and as will be shown here, he was also heir to the educational and technological successes of his predecessors. Littleton's timing was fortunate. As noted in Chapter 1, the post-war period saw shifts in art practice that opened the way for materials not previously considered appropriate for art making. Evolving societal concerns also coincided neatly with Littleton's vision and art ambitions. While he had a significant effect on the evolution of studio glass during its first decades, Littleton was not the only the "big man of glass." The persistence of the belief that he was, however, is worth noting, because his mythology, its origin and the its impact, shaped the studio glass movement in three key ways.

First, Littleton's passion for hot glass led him to restrict the definition of studio glass to glass blown in a studio. This excluded those who worked in other technologies, such as warm or cold glass and created a tension between these practitioners. It would not be until the late 1970s, after others rediscovered the potential of other techniques, and after Littleton had moved on to making intaglio prints with glass sheets, that this issue lost its divisiveness. Second, Littleton provided the impetus for the founding of art-based, glassblowing classes in university art departments. These eventually led to university-level training in all glass forming methodologies. Third, he pushed for studio glassmakers to move beyond conquering technique

and toward presenting content through their work. Through these three steps glass was positioned to attain the high art world recognition that occurred in the post-1975 period. In order to understand this set of accomplishments, a review of Littleton's development, his philosophy of craft, and his art ambitions is necessary.

Littleton was born into glass. His father Jesse Littleton, a physicist, was hired by Dr. E. C. Sullivan at Coming Glass Works, Coming, New York, to develop new consumer products for the growing middle-class, domestic market. Dr. Littleton was particularly interested in the nature of glass insulation and its application to glass cooking devices. ⁴ While being the son of a physicist and inventor gave Harvey status within the glass community at Coming, it was the visits to the plant on Saturdays when his "father would give [him] to some stockman to take around the factory, or sit in front of a Bunsen burner to melt some tubing, or otherwise keep [him] entertained" that made glass integral to his life.

Despite his father's influence, from an early age Littleton had been attracted to the artistic as opposed to the scientific, as his father had been. To pursue his interests he attended an extension class at nearby Elmira College, where he learned the rudiments of figure drawing and modeling under Enfred Anderson.⁶ In 1939, however, he bowed to family expectations and enrolled at the University of Michigan, Ann Arbor, to study physics. But after a two-year stint there, he transferred to Cranbrook Academy of Art in Bloomfield Hills, Michigan, where he served as an assistant to sculptor Carl Milles. Milles, however, did not encourage his artistic ambitions, and Littleton returned to the University of Michigan to study the half-scientific and half-artistic topic of industrial design in the fall of 1941.

After the outbreak of World War II, Littleton spent three years in the Army 849th Signal Intelligence Corps working on codes and ciphers for the British and traveling through Italy and France as a teletype maintenance man. Again a passion for art surfaced, and he concluded his tour with a few months at the Brighton School of Art in England. This exposure to European culture and the combination of scientific and artistic experiences served Littleton later when technical and artistic issues arose in relationship to studio glass.

Returning from Europe, Littleton took advantage of the G.I. Bill to complete his degree in industrial design at the University of Michigan. Littleton's memory of the general post-war situation is revealing. He noted that "there were ten million of us who came back, and suddenly free of our parents and we could go to the university and we didn't have to compromise with [our] parents." 7 For Littleton this meant taking a number of jobs relating to industrial glassmaking, including working at Coming as an inspector of blown-glass cookware and as a moldmaker for their fused-glass product, Vycor Multiform. While at Coming he made his first clay-to-glass sculpture, a female torso, which he then copied at Coming in Vycor Multiform glass (Fig. 20). In 1946 he displayed this piece at the Michigan Artists Exhibition in Detroit. He did not show glass again until 1962.

In 1947 Littleton married and moved to Ann Arbor. A casual request to build several potter's wheels steered him toward the business of ceramics supply, and he took over the private Goat's Nest Ceramic Studio, renaming it the Potter's Guild of Ann Arbor. This small clay studio grounded him in practicalities, requiring him to sell pots, teach technique, and build wheels for throwing. It also focused his interest on starting "what was called a studio group, or a group of potters who had been there long enough so they didn't need to take a class, but they wanted a place to work." This made him a professional, focused on producing work instead of studying, and provided him with a paradigm for future independent glass studios.

The years 1949 to 1951 were devoted to working with clay, which eventually returned him to glass. In 1949 Littleton again attended Cranbrook Academy of Art to complete his M.F.A. in ceramics with Bauhaus-educated, Finnish ceramist Majlis (Maija) Grotell (1899 - 1973).⁹ Under her guidance Littleton formulated a central tenet of his artistic philosophy that he would soon apply to studio glass: that neither the type of material used nor the implied or referenced utility of it, circumscribed art potential. This meant that even functionally referent forms made of "craft" media could aspire to being art. This would form the basis of Littleton's belief that studiomade glass could be an art medium.

Searching for recognition for his ceramic work, Littleton entered the Syracuse National in 1950, which featured utilitarian ceramics, and then he won a prize at the Michigan Designer Craftsman exhibition the next year. This piece was acquired by the Detroit Art Institute (Fig. 21) and provided a tantalizing taste of museum validation.

As serendipity would have it, an acquaintance of Littleton's (whose father was a judge in Toledo) helped him reconnect to glass by facilitating his securing a position teaching ceramics at the Toledo Museum of Art School of Design from 1949 to 1951. In addition to exposure to the fine ancient and nineteenth-century glass in the museum's collection, Littleton met a second key figure in the studio glass movement, Dominick Labino (1910 - 1987). Labino, then vice-president and director of research at Johns-Manville Fiber Glass Corporation, was taking evening "hobby craft" classes at the museum. The meeting was fortunate as Labino would provide the second critical component for the success of studio glass: an understanding of glass chemistry and forming technology.

Also at this time, Littleton met the Toledo Museum of Art director Dr. Otto Wittmann. Wittmann struck Littleton as concerned with increasing attendance at his museum. This led Littleton to surmise that Wittmann might even "divert the sidewalk to put more people through the front door, because that was his stock in trade." 11 This desire to expand the museum's audience may ultimately have made Wittmann particularly receptive to Littleton's notion of holding a glassblowing workshop at the museum; but that was a decade away.

For the next few years Littleton continued to focus his interest on clay, while still wanting to move into glass. After attending the First Annual Conference of the American Craftsmen Council at Asilomar in 1957, Littleton decided to do extended research on glassmaking in Europe, where he knew that the tradition of small factories could perhaps inform his own studio ambitions. He planned to visit factories and technical schools to see firsthand how the historically based apprenticeship training functioned in the European factories.

Before leaving for Europe, Littleton met with The Coming Museum of Glass director Paul Perrot, who shared his concern about the increasing mechanization of glass factories and the potential loss of the craft of glassblowing. At that time, Perrot utilized engineering resources at the Coming Glass Works to formalize plans for a small melting furnace that could potentially work for studio applications. Recognizing that they had similar concerns, Perrot asked Littleton to prepare a report on the Italian glass factories of Murano for inclusion in the upcoming Glass 1959 exhibition. Again, Littleton's passion and belief in glass as a potential art-form had found important institutional encouragement.

Further support was forthcoming when Littleton consulted with Steuben Glass president Arthur A. Houghton, Jr, to ask if he knew of any individuals working with molten glass in Europe. Houghton mentioned Jean Sala, whom The Coming Museum of Glass's founding director, Thomas S. Buechner, had seen blowing glass in his Parisian studio in 1951. This led Littleton to the historic meeting with Sala in Paris. On leaving Paris, Littleton visited small glass factories in Naples and on the island of Murano, where he spent two and one-half months observing factory organization and glassblowing techniques. These experiences convinced Littleton that it was possible to set up a one-person studio. He remembered that "[i]t was the impact of again watching the fascinating technology of the small glass shops in Murano that made me resolve to discover for myself if glassblowing was within the scope of the artists." Observing successful, small-scale glassmaking made duplicating it in the United States seem feasible.

When he returned in the summer of 1958 to Wisconsin, Littleton drew on his knowledge of ceramic technology and attempted to melt glass in a ceramic kiln. Using his modified clay-forming equipment, he improvised a small furnace and a petite 13 by 15 inch firebrick kiln, heated with a propane blowtorch to melt glass. Littleton placed one of his thick, wheel-thrown stoneware bowls inside, creating a crucible in which to melt his glass batch. Confined by the limited literature available about glass technology, Littleton remembers that he "looked at Scholes' Handbook of the Glass Industry and picked the simplest formulas for lead glass. Using my own clay pots, I couldn't expect the perfection of Steuben, but results were

satisfying.”¹⁴ To economize on fuel, he built a small annealing oven on top of the furnace, which was patterned after Jean Sala’s design, and carried out primitive blowing experiments. A year later he wrote to Michael Higgins that his

Purpose in these experiments had been to show that the individual craftsman working alone could melt decent glass and handle the technical aspects of blowing and annealing it without being born in the industry and without going through an arduous apprenticeship. On the basis of the five melts (two soda-limes and three lead compositions) and of course, the “bubbles” that I was able to blow, I believed that is possible.

Eager to share the news of his progress, Littleton presented his experiments to the third Annual Conference of American Craftsmen Council at Lake George, New York, in 1959 and exhibited glass he had formed hot and altered in a cold state. A panel moderated by Littleton discussed 11 methods of glassworking, and again fellow panelist Paul Perrot seconded Littleton’s belief that glass offered endless potential for creativity. The panel concluded that there were currently no more than half a dozen American artists working with glass outside of the factory. By 1960, buoyed by collegial enthusiasm and clear in his goals, Littleton asked be relieved of his teaching duties for two months in order to study all stages of the glass- melting process.

To further proselytize for studio glass, Littleton participated in a panel chaired by Kenneth Wilson, then curator at The Coming Museum of Glass at the 1961 Fourth National Conference of the American Craftsmen's Council held at the University of Washington, Seattle.¹⁶ He discussed the future of glass as an art medium, and Perrot, who also attended, again reinforced his position him by stating in his opening remarks to the panel that

[f]or years we have been hearing that glass would become one of the basic materials available to contemporary craftsmen. Indications can now be seen on many sides that this prediction has come true. That such a development has occurred is due to the

tireless efforts of a few craftsmen who, not to be discouraged by the prediction of specialists: have boldly explored and experimented with the material and its properties. Obviously, the surface has only been dented and the true potential of this fascinating material will only burst forth with the entry of many more craftsmen into the field.

Stirring language and mutual encouragement seemed to assure that what was now characterized as Littleton's "dream" could be realized. Once again reviewing his latest experiments, Littleton explained that his initial tests convinced him that it was possible for the craftsman to undertake glassblowing entirely alone. He displayed pieces that he had melted, ground, and polished while working alone in his studio. Fellow panelists, glimpsing the potential, encouraged Littleton to pursue glassblowing as a viable medium. Even the factory community revised its position, and Dr. Frederic Schuler, a scientist for Coming Glass Works, spoke on the properties of glass and its suitability for use by craftsmen.

In what would become a typical pattern, Littleton neatly positioned himself as an artist standing up against the conformity of industrial manufacturing and as disinterested in technical issues. Declaring glass technique as "no more difficult than pottery," he wrote in 1964 that

An aura of impossibility has prevented artists from realizing [glass's] expressive potential, particularly in the field of offhand glassblowing. This technique most needs the artist's uninhibited approach to counter the uniformity of almost all industrial production.

The "technique" that Littleton acknowledged, however, was, at this time, only resident in the factory. It would be Dominick Labino who would introduce it to the studio glass movement.

Labino was well known to Littleton, for they frequently played poker when Littleton stayed over night in Toledo on Wednesdays after teaching. Labino embodied the movement as it sprang from both the factory and the hobbyist's passion. Trained as an electrical engineer at

the Allegheny Vocational High School, Pittsburgh (1928), and then at the Carnegie Institute, Pittsburgh, Labino had a lifelong love of tools, inventing and problem-solving, which he coupled with a passion for artistic endeavors: as a child he had carved wood and later designed jewelry and painted. A true inventor, Labino felt that “machines were more beautiful than art because they are doing something, and they are doing it for a purpose.” At this juncture in the development of American studio glass, it was Labino’s tools and inventions that the studio movement needed.

Just as Steuben’s Frederick Carder had done before him, Labino carried out glass blowing experiments while working at an industrial glassmaking firm. During the 1930s Labino ran the Owens-Illinois Glass Co. milk bottle plant, where he had a small laboratory in which to concoct new glass formulas. In 1940 Ben Alderson, Labino’s predecessor at the plant, showed him how to blow glass. Although Labino enjoyed the experience, he did not pursue it as an art but rather as an occasional hobby. He noted later that while he was working with Johns-Manville, he had a home furnace where at night he would blow glass as more or less a hobby. But the hobby had noteworthy successes: in 1958 Labino fabricated a paperweight as a retirement gift for a friend, and by 1960 he had melted a batch of glass and fashioned a primitive blowpipe on which to blow bottles in his studio.

Labino’s interest in studio glass was the result of his frustration with industry. As he recalled, “I had just had it in industry. I would say to myself, ‘How many years will I have to stay here until I can decide to do something that I don’t have to get approved by fourteen to twenty people?’”²² His home studio offered independent activity that fused Labino’s interest in the potential of glass for art and his understanding of glass chemistry, both of which were necessary to the success of the 1962 Toledo Workshops.

The final element that coalesced in 1962 was the attracting of institutional interest. This occurred when Otto Wittmann, perhaps sensing the appeal of glass to the general public, took an interest in the notion of studio glass and encouraged the holding of a workshop on the grounds of the museum. This led to the galvanizing 1962 Toledo Workshops.

Institutionalization: Glassmaking Moves to the Universities

The period from 1962 to about 1975 was a time of new energy and high excitement. In those days I went to Toledo a lot thanks to [szc] Dominick Labino's support. Around the country people were doing lots of workshops, blowing glass, doing big things...there were few glass exhibitions, few collectors of glass - not very much to glass then as I look back and remember.

Fritz Dreisbach, Artist

Before the Toledo workshops, glassmaking - then termed "glass technology" - if it was included at all in academic settings was part of "manual arts" curriculum or taught as a hobby activity. Now it moved into university and college programs and, most significantly, into fine arts departments. This development was critical for glass; it meant that after 1964 glass artists were increasingly college-educated with a master's of fine arts program that required the same coursework demanded of painting or sculpture majors. How this institutionalization occurred, its profound effects on the field, and the ways in which it set the stage for glass to join the high art world in the post-1975 period need explication.

Glass education developed along three tracks. The first of these being found in art departments of universities and colleges. The second involved enhancement of the already-established seasonal and regional craft centers to include studio glass courses. The third track was the expansion of the network of traveling workshops led by established glassmakers. The establishment of glass as part of higher education; the locating of glass within craft centers; and an expanded network of traveling glass ombudsmen created an infrastructure of artists, teachers, and eventually collectors that defined the interconnected glass community. The establishment of these tracks was initially spurred by the achievements of Littleton and his early group of hot glass aficionados and was the crowning achievement of this period.

While the post-1962 period saw dramatic growth in educational opportunities for would-be studio glass artists, the interest in having glass included in the art-based curricula pre-dates 1962. In 1956 glass artist Robert Willson received a national study grant to undertake research at The Coming Museum of Glass on the historical and technical background of glass used in art, architecture, and crafts worldwide. In order to understand the European approach to glass education and its long history, Willson visited and collaborated with Alfredo Barbini and other craftsmen in Murano, Italy, to fabricate glass sculpture. As a result of his experience, Willson urged support for the training of artists in the use of glass as an art medium.

Willson's work helped establish a climate for considering the inclusion of glass in college curricula.

Another program began in the 1950s at New York State University, at Alfred. Known for its technological expertise and long association with industry, the Alfred campus offered a laboratory course in glass technology that included an opportunity to blow glass. Each St. Patrick's Day, a small outdoor furnace was lit and blowers from the nearby Steuben factory in Coming would demonstrate their craft. Alfred ceramist and drawing instructor Andre Billeci (b. 1933) requested and was granted the right to keep the furnace going throughout the summer of 1962, and with assistance from two retired Coming Glass Works gaffers, he started blowing glass. As noted, in the early 1960s there were no hot glass training courses available in the United States, except those that taught the related activity of scientific lampworking. By the fall of 1963 Billeci established an independent study course in glassblowing, and by 1966 it had become institutionalized as an undergraduate course in the Alfred art department. As it would turn out, this coincided with Littleton's activities at the University of Wisconsin. Perhaps because of Alfred's long affiliation with clay over glass or because of its connections with industry, these accomplishments did not receive as much attention as Littleton's did. Or perhaps this is attributable to the persistence and durability of the Littleton myth.

Following on the successes of the Toledo workshops, Littleton instituted an independent study course in glassblowing through the ceramics department at the University of Wisconsin

in the fall of 1962. It was a groundbreaking course, offered in the informal setting of Littleton's pottery studio on his farm outside of Madison. In the spring of 1963 Littleton tried to secure funding from Coming Glass Works to establish an independent art glass working center and to continue the Madison-based pilot glass working program, but he was turned down. In the fall of 1963, however, the Department of Art and Art Education at the university accepted Littleton's proposal to inaugurate "Art 176 Glass working" as a graduate art class to begin that September. The university accepted the plan with the proviso that funds from outside of the university be found to purchase the equipment needed for the studio. Once again Labino came to Littleton's aid and arranged for Johns-Mansville Fiber Glass to donate a thousand dollars and 2,400 pounds of #475 marbles to the nascent program. Consistent in his preferences, Littleton designed the curriculum around glassblowing, excluding other forming methodologies.

Soon other glassmaking opportunities developed. In 1966 and 1967 Labino presented three workshops at his studio under the auspices of the Toledo Museum of Art, School of Design. The museum also sponsored classes and built a studio specifically designed for glassblowing. To further respond to the increased interest in glass, the museum opened a new gallery in 1969 to house its collection of ancient glass and nineteenth-century factory-made glass. A joint art program was established between the University of Toledo and the museum's School of Design with Fritz Dreisbach (b. 1941) as the glass instructor. Dreisbach remembers that there were many workshops, a lot of glassblowing, and few exhibitions or collectors. One year later Philadelphia College of Art inserted glass into the ceramics department, and future glass artists William Bernstein, Dan Dailey, and Wayne Filan built the first glass furnace.

All of these programs required teachers, and the newly minted glass artists gladly took the jobs for three reasons. First, ever sensitive to the vulnerability of object-based art to caprices of art fashion, they wanted glass to achieve a permanent place within the university hierarchy. Second, teaching offered access to bigger and more sophisticated kilns and other technical equipment than they could not afford in their own studios. And third, teaching provided the financial security of a regular paycheck to balance the less-reliable income from the sale of

their work. These were some of the reasons that even those who had slender credentials and minimal training were tempted to accept the newly established posts.

As Littleton had taught most of the studio glassblowers during the first few years following the Toledo Workshops, it was Littleton's students who became the permanent faculty members. While they do not represent all of those who founded or took over glass programs, their large numbers served to perpetuate a mythology that stresses the singularity of Littleton's contribution and the privileges glassblowing. A typical example would be Toledo attendee Tom McGlauchlin (b.1934), who settled at the University of Iowa, Iowa City. He remembers that he "came away bursting with enthusiasm for this new material—couldn't wait to get started on my own. I remember that when I got a job teaching glass in Iowa in 1964, I had about six hours of glassblowing experience."

Further, generational linkages between teachers and students were established as other Toledo Workshop attendees and those who had studied with Littleton settled into university positions. These direct linkages among the studio glass artists can be easily traced: Marvin Lipofsky, while working at University of California, Berkeley, taught Dick Marquis (b. 1945), who eventually settled at University of California, Los Angeles; Norman Schulman (b. 1935) founded the program at the Rhode Island School of Design (RISD) in the fall of 1965 and was soon assisted there by then Littleton's graduate student Dale Chihuly (b. 1941); Dan Dailey (b. 1947) also studied with Chihuly and went on to found the glass program at Massachusetts College of Art in Boston; Thermon Statom (b. 1953) also attended Pilchuck Glass Center and RISD with Chihuly and headed the glass program at the University of California, Los Angeles for two years until its closure in 1985.

This close - knit studio glass community perpetuated the attitude belief that if your glass education could not be traced back to study with Littleton or one of his students, you were an "outsider." Glass artist Richard Posner refers to this as "the 'LDS' syndrome," defined as the Littleton-Lipofsky disease where sufferers express a wrong-headedness, leading to a cult-like selection of artists (glassblowers) as genuine."³⁹ As glassmakers and teachers working in other

methodologies and not trained by the first generation of Littleton followers have emerged, this hegemony has receded.

As these teachers fanned out in to universities and colleges, issues concerning glass curriculum and how to teach it came to the fore. With Littleton's personal teaching style and his preference for blowing setting the standard, the early glass teachers took what they had learned under their brief tutelage with Littleton and shared it with their new students.⁴⁰ The result was uneven and in the early years often did not include philosophical inquiry. Henry Halem, later professor of art at Kent State and founder of its glass program, remembers that his year long study consisted only of demonstrations by Littleton, followed by individual students struggling on their own to use blowpipes to achieve similar results. Due to this trial and error method much of "[w] hat we did at first was the result of ineptitude, misinformation, and all."⁴¹ But the "works [produced] had a vitality and an enthusiasm" remembers artist and teacher Mark Peiser.⁴² For all of these programs, the need for new equipment also shaped the course work, so that the invention of basic hardware became an integral part of the glass experience.

During the first decade, this lack of sophisticated art education, coupled with the realities of hot glass forming, resulted in formally naive work. Based on the "bubbles" that naturally form when glass is blown on a blowpipe, the works produced displayed a lack of formal complexity that permitted enthusiasm to lead the way. Although the desire to make art was the professed goal, the end product was far from it. This persisted because techniques for glassmaking were complex and (at the time) required rediscovery. Also, the teachers did not have a grounding in the long history of theoretical issues relating to artmaking, and consequently, little attention was given to theoretical or content issues. That would have to wait until the next decade.

The second avenue for a glassmaking education was provided by the seasonal glass workshops and courses offered in established craft school settings across the country. These workshops, often held for a few weeks in the summer, were casual and informal and provided

intensive learning opportunities. Most attendees were students who were beyond or not yet connected to university degree programs. Access was easy. Peiser remembers the casual screening he received in 1967 when he applied for the first hot glass artist residency at Penland. When Peiser asked if he could become a resident, although he had little training in glass, director Bill Brown “nonchalantly said ‘sure,’” and Peiser joined the team.⁴³ Typical of these programs were (and are) the Haystack Mountain School of Crafts, Deer Isle, Maine; The Penland School of Handicrafts, North Carolina; and Southern Illinois University at Carbondale. With few requirements and with personal compatibility of primary importance, a tightly woven glass community developed.

The third major means of disseminating glassmaking knowledge was through the workshops held by artist-teachers who traveled both nationally and internationally. Haystack and Penland became regular stops on the workshop circuit. Another pattern, inspired by Willson’s and Littleton’s European experiences, developed when visits to Italian and German glasshouses became part of glass culture. Dick Marquis (b. 1945) received a Fulbright-Hay Fellowship to study traditional techniques at Salviati & Compagnia and later worked at Veninie C. Marvin Lipofsky became a “glass ombudsmen” to Europe for his work at small factories in Holland and Italy.⁴⁴ These international contacts facilitated crosspollination of the exuberant and casual American style and the highly skilled but more staid European glass practice.

Part of what made these glassmaking opportunities so appealing was the impromptu and collaborative spirit engendered by the actual process of blowing glass. Glassblowing is a time-critical activity. Therefore, the various tasks relating to forming objects are broken down into discrete acts that are then carried out quickly by each specialist. This meant that each participant had a teamwork relationship with all of the others, that was integral and subservient to the process. Evident at the Toledo workshops, this quality established the tone in the early days of glass and became part of the “glass lifestyle.” With the furnaces running twenty-four hours a day, experimentation, teamwork, and close quarters fostered abiding collegial and interpersonal connections.

Contemporaneous societal realities also influenced the development of this lifestyle. The popular quest for alternative lifestyles, a particular fascination of middle-class teenagers of the 1960s, made the twenty-four-hour-a-day aspect of glassmaking seem beguiling. This, attached to an interest in communal living, rejection of parental authority, and the breaking of the perceived restrictions of middle-class life, made glassmaking the perfect platform from which to explore all notions of counter-culture. The formation of this distinctive lifestyle led to the founding of the seasonal glass center at Pilchuck in 1971.

The Pilchuck Glass Center (later renamed the Pilchuck Glass School) became the premier place for artists to meet, work, and explore technique and content. And soon it developed into a place for collectors to meet artists and watch work being made. Pilchuck resulted from a collaboration between glass artists Dale Chihuly and Ruth Tamara and collectors John H. and Anne Gould Hauberg. The Haubergs wanted to start a craft school associated with the Pacific Northwest Arts Center. Chihuly persuaded them to provide him with land on a tree farm north of Seattle where he could explore his innovative educational plans for creating a school that bridged the worlds of craft and art. Established as a residential summer school for glassmakers, it appealed to the desire for an alternative lifestyle, free of the establishment values of the older generation. "We were hippies, Okay? People have to understand that. No watches, no underwear, no nothing." remembers glass artist Toots Zynsky (b. 1951) of the early days work at the Pilchuck. Learning to make art with glass, rejecting bourgeois rules, and living an anti-establishment lifestyle were irresistible and became part of the lore both of Pilchuck and the glass movement in general.

Glass programs had penetrated the university and craft world sufficiently that in 1973 Glass Art Magazine listed seventy educational programs in its "Guide to Glass Instruction," most of them resident within arts departments. This expansion had a profound effect on the establishment of a critical mass of artists devoted to learning about, producing and promoting studio glass. Most importantly, study side-by-side with other art majors within universities developed art ambitions in studio glass artists. Subjected to the same intellectual demands

made on painting or sculpture majors, this new generation, although working in a traditionally crafts-oriented medium, came to expect high-art-world rewards. This ambition led in the 1980s to their looking to the high art world for marketing practice, collecting strategies, and museum interaction. But in order to appreciate fully this transformation, a look at the preceding developments is necessary.

1963: Studio Glass Enters The Museum of Modern Art, New York

Even though the forms produced by the early glass artists were not sophisticated in content or execution, some significant high art museums were eager to display the new medium and even to add it to their permanent collections. Again, this occurred with amazing rapidity that built on the groundbreaking work toward acceptance already accomplished by clay and textiles.

In 1963, one year after the Toledo Workshops, the Art Institute of Chicago displayed studio glass by Harvey Littleton. The next year he had a one-person exhibition at the Museum of Contemporary Crafts in New York, and that, in turn, led to his work entering the permanent collection of the prestigious Museum of Modern Art. These events had profound implications for the movement, and the story surrounding the MOMA acquisition, particularly, highlights the ongoing effort to place studio glass in a museum context.

In preparation for inclusion in an exhibition at the Museum of Contemporary Craft, scheduled to open in 1964, Littleton submitted a work for consideration. Littleton recounts that the events started with his

Irrational act of fusing and finishing a form that [he] smashed in an act of displeasure..
. . . the piece lay in the studio for some weeks before [he] ground the bottom and brought it in the house. It aroused such immediate antipathy in [his] wife that [he] looked at it much more closely, finally deciding to send it to an exhibition. Its refusal there made

[him] even more obstinate, and [he] took it to New York to show with other more established forms included in [his] exhibition at the Museum of Contemporary Crafts in January 1964.

Unsuccessful in having it included with his other work, he “stepped across the street” and showed it to the Design Department at MOMA. Littleton continues “[although it was not displayed then [at the ACC], I later showed it to the curators of design at the Museum of Modern Art. They, perhaps relating it to some other neo-Dada work in the museum, purchased it for the Design Collection.”⁸⁵ He credits the addition of the piece to the collection to the fact that the Design Department was “desperately running around trying to buy things.” So, although having already been rejected by the Museum of Contemporary Crafts, Littleton’s nonfunctional vase was purchased, not donated, by the Design Department for the Museum of Modern Art’s permanent collection. Most interestingly, Littleton remembers that the museum acquisition committee initially told the Design Department that they could not buy it because it was glass but didn’t have a hole in it. This removed it from a utilitarian classification and hence placed it technically outside of the Design Department’s purview and within that of the art department as a piece of sculpture. This somewhat fuzzy logic reflected the museum’s guidelines, which privileged painting and sculpture but permitted the acquisition of works from the “allied arts of architecture, film, photography, industrial design, manual industry, dance and so theaters design.” Craft-based works were only to be considered when related to industry or technology, not as artworks. As curator Craig Miller notes

[d]uring this time, MOMA evolved a distinct policy in that they were only interested in craft when it showed a new development in technology or material which could perhaps be applied to industrial design. Craft was not excluded per se from the museum, but its status was very much that of a ‘second cousin.

This, of course reflected the general high art view of craft-based work. The fact that Littleton’s piece was acquisitioned after first being rejected by the artist (and his wife), as causing “displeasure,” and then being rejected by those who were familiar with crafts (the

ACC) seems to hint at curatorial naivete on the part of MOMA staff and to exemplify the dangers of limited expertise.

Part II, Chapter 6: Boundaries Challenged: Glass Art

It would be wrong to think of the past 50 years of American studio glass as anything more than a small event when set against the previous five thousand years of glass history. Placed alongside of the glass output of the Roman period, for example, the corpus of American studio glass is insignificant. During its brief span, however, it has made remarkable strides for itself and by extension the other craft based media, for it has successfully challenged what is accepted as art and what is relegated to the category of craft. This accomplishment is manifested in the flourishing marketplace and collecting communities.

The restraints were many with the first being the materiality of glass. Art critic and glassmaker John Perreault writes that glass is “the most purely visual of all the art media, even more visual than painting, because in it light, color and material are one,” glass is “primarily visual because it is not very complex to the touch. Glass is cool, smooth and unusually slippery.”* This visual appeal, while good for attracting collectors, made the medium suspect to the realm of high art that it sought to enter.

The second boundary that needed to be challenged related to the location where glass items were produced. To be considered high art, glass had to leave the factory and locate its production in a setting that paralleled that adopted by painters and sculptors. When glass successfully moved from the factory to the studio — a move accomplished by means of rediscovered technology and the invention of clever new technology by such leaders as Dominick Labino— this telling distinction was erased. Artists working in glass eventually adopted high art practices of production.

The third boundary involved breaking into the educational system of the high art world. After a brief period of identifying itself as a discrete field, studio glass had attracted enough practitioners to position itself within universities as a credible art medium, one worthy of focused study. This was accomplished through the activities of the proto-studio glassmakers in the 1950s and 1960s and later by Harvey Littleton and his followers, who helped to move potters from clay to glass and glass from vessel-oriented forms to sculptural one. The final and decisive step was to place glass in the university art curriculum.

These accomplishments by the American studio glass community did not occur in a vacuum. There were societal developments that drove the field. Antiestablishment sensibilities, the increased acceptance of art made in nontraditional mediums, the lure of a life outside of the mainstream and group camaraderie all contributed to the formation of a community that was devoted to the making of art in glass. Soon collectors appeared, and a limited literature relating to the field also emerged. Next museums added their clout, mounting exhibitions that included glass artworks. Some museums even began to collect glass: The Metropolitan Museum of Art, The Los Angeles County Museum of Art, in addition to regional or medium specific institutions such as the Indianapolis Museum of Art, the Toledo Museum of Art, and The Corning Museum of Glass. With high art institutions joining their second tier confreres, glass was able to successfully challenge established institutional boundaries. Also contributing to this overall growth was the development of a private collecting community and the market apparatus to supply it. This occurred in the straight-line trajectory seen in other craft-based media with the distinction that in glass it occurred more rapidly. Only when the development of a secondary market was the next logical step in this process did the growth momentum fail. This most public aspect of the art market was not inclined to confer value on contemporary works made in a craft-linked medium. This aspect of acceptance and commodification of American studio glass has yet to solidify.

Issues of content also played a role in the history and expansion of studio glass. Artist Michael Taylor defined two types of studio glass artists: those who work within the “modernist concepts of sculptural form as personal statement” and those “who love the material because

of its raw beauty and enjoy making things with hot glass because it is challenging.” Thus, there exist parallel universes: one inhabited by content-driven makers, and the one by those who are solely engaged by the materiality of glass. The tension between those who make content-driven glass and those who reify the beauty of the material remains a central concern. On the one hand artists declare “technique is cheap,” on the other they need craft for successful art creation; this issue continues to be replayed as each artist works to gain technical proficiency in order to express content more effectively. Works that do not strive for content hinder the acceptance of glass as an appropriate medium for art making.

This aspect is further complicated by the imposition of high-art-world standards by the high art world for glass that require it to conform to the norms of painting and sculpture. The issue of whether glass can be good sculpture - similar to works made by those working in wood, metal stone, or assembled materials — is incorrectly framed; the real issue should be can glass function as an expressive art medium. As shown, the answer is “yes,” with varying levels of success, as would be true for any art media.

The final challenge that still troubles studio glass, is its place relative to the high art firmament. Art historian Thomas Crow has noted that in Europe prior to the mid-seventeenth century, “art” was defined differently the way we characterize it now. Painting, sculpture, furniture, glass, etc., were made by artisans who belonged to guilds. In 1648 a dramatic transition began with the establishment of the Royal Academy of Painting and Sculpture by French painter Charles Le Brun. This created a new category for the fine arts. These new “fine artists” no longer wished to be part of the guilds. Separate exhibitions were established, lectures about theory proliferated, classes featured live models, and periodic salons for the general public appeared. These conscious steps were taken to remove the stigma of being considered “artisans who worked with their hands” instead of artists who dealt in concepts. Instead the new “fine artists” sought to become part of literary and philosophical circles and to remove themselves from the artisanal world by formulating an intellectual basis for their work. As shown similar activities were attempted by the American studio glassmakers with the notable exception of formulating an intellectual basis for their work.⁴ It is in this respect

that studio glass has yet to achieve its vaunted goal of being high art. This lack will continue to haunt its success and acceptance. Without an appropriate set of critical tools for assessing the validity of art made out of glass, American studio glass will be unable to cross the boundary into the world of high art.

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