

Elden Tefft: An Informal Look at a Founding Father of
Twentieth Century Bronze Casting
in the United States



E. TEFFT

Eden's driveway



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To my father who, when we were driving home from the airport once, pointed out the forms of abstract human sculptures along the side of the road and said, "What does *that* mean?" At the time I was unable to find the words to answer him.

Introduction

I first met Elden Tefft in an effort to get a guard and pommel made for the handle of a Chinese sword. I am a Tai Chi teacher and my training partner bought the sword for me as a Christmas present, back in the 1970's when thirty dollars was a lot of money. It had a real steel blade but the guard and pommel on the handle were made out of wood covered with brass coated tin sheet metal. It looked ok, but the balance wasn't right.

I had spent a year in art school, until I ran out of money, and when I met one of my drawing teachers at a save the wetlands meeting, I asked him who might undertake such a thing and he said I should contact Elden.

His number was in the phone book and, when I called him up to see if I could interest him in taking on the project said, "I could do it for you or I could teach you how to do it." I said "yes" right away. Who knew that was all it would take to meet the world famous artist? He took me by the hand and just walked me through every step of the process. In the course of the next few months I started taking him out to lunch and we became friends.

There is a lot of grunt work associated with bronze casting and I like to help with filling up bags of "investment material", mixing it up and pouring the plaster into "flasks" that have to be built, "cups" carved out of the molds and, of course, clean up. I hung around Elden's studio after my sword furniture was finished and another sculptor who works out of the studio, John McCoy, said that Elden had a lot of good stories to tell and that I should write them down. I started traveling around the area to take pictures of his work and checked a book on modern sculpture out of the Art Library on campus. But it wasn't until I drove out to Baker University and looked at his portrait of Bishop Quayle next to another bust by a different artist that my eyes were opened and I realized for the first time how beautiful Elden's portrait is. I have tried to indicate something about what was going on in the back of Elden's mind when he creates his works but without telling you what you're supposed to feel when you look at it.

If anyone wants to actually go see them first hand, I have put the location of Eden's works below the right hand corner of their photos. His studio, Tefftterra, is located at 1333 E. 1600 Rd. Lawrence, Ks. 66046. His residence is 1315 Naismith Dr. 66044. Except for the pictures in the chapter *Elden Tefft: A Kansas Bronze Pioneer*, which were shot by Blake Wilkinson, the photos in this book were taken by me. All photographic images of sculpture remain the intellectual property of the artists and their estates.

Craig Voorhees
Lawrence, Kansas
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The Early Years

At 91 years of age Elden Tefft is still making art. He needs a cane to move around his studio and takes breaks during the afternoons but he has just completed a life size statue of James Naismith, the inventor of basketball, and is now working on a series of “filigree” sculptures. He also oversees the efforts of several local sculptors who come to his shop to work on projects of their own.

Elden was born in 1919 and grew up on a farm near Emporia, Kansas that he refers to as “the ranch”. Elden’s mother taught school and Elden said one of his earliest memories was going to school with his mother when he was very young and staying under her desk while she taught the class. It was a farming community and at recess the children made toy farms with nails for fence posts.

The “Ranch” had several out buildings including a house for the farm hand, a large barn, silos for grain and running water provided by a wind mill. Sometimes his mother would bring some of the school girls to stay over the weekend.

On the farm Elden was encouraged to be independent and self-reliant. He says he remembers riding a half mile over to the silo on a horse but once he got there and got off the horse he found that he was too little to get back up on the horse by himself and he had to walk back to the house leading the horse all the way. Another early memory was that the house, “big for a country house in those days,” was considered haunted. Some one had stolen some horses in the area before he was born and had been hanged from a tree not far down the road. They cut down the “hanging tree” but the memory of the event lingered. There was a large stairway that came down from upstairs into to a parlor adjoining the large dining room and in the winter his mother would put up a curtain between the dining room and the parlor to make the house easier to heat. Sometimes the house would creak in the wind and it seemed from the dining room that he could hear foot steps walking on the staircase. Once when he was still a little boy, Elden came back from school alone and went into the kitchen to put up his books and get a pail for his chores. His overalls caught on a hook in the kitchen and he felt sure that someone he could not see had grabbed him from behind. After that he said he would wait outside on the porch with his dog, “Pooch”, until someone else came home before he would go inside.

Elden started to draw when he was still in grade school and his first drawings were copies of illustrations from a book about Teddy Roosevelt. His classmates noticed him drawing all the time and on Kansas Day they encouraged him to draw a large meadow lark that covered the blackboard in their one room school house. Elden had to stand on a

desk to reach the top of the blackboard and this was probably his first larger than life art project.

When Elden was in the 4th grade, the family moved to Lawrence, Kansas where he benefited from Mrs. Ellsworth's direction of the city Schools Art Program., Ms. Ellsworth was the sister of the director of the K.U. endowment association. Elden made a portrait of one of his class mates that year. When Ms. Ellsworth became Art Education Director at K.U., Eldon took classes from her in the summer. In junior high school he continued to take art classes and, as they lived close to "Woodlawn Lake", located where the City garage now stands in East Lawrence, Elden constructed a wooden row boat that he would take out on the lake. When he was a little older he made a metal canoe out of lard cans that he paddled on the Kansas River with the "sand rats", as kids from North Lawrence were called, and the "blue bellies", the kids from the south side of the river who had denim overalls new enough to leave stains on their stomachs, and who lived over on the bluff side of the river. The "sand rats" are now a community reunion association and Elden is working on a heroic (larger than life size) statue of a sand rat that will go in a little park along the North side of the river.



Sand Rat maquette

Teffterra

As a lad, Elden went to see the local fairs and carnival shows that would set up on the side of Woodlawn lake. They showed Elden wonders. He saw fire eating and acquired an interest in stage magic. He was thrilled to see a man actually swallow a sword. After he got home, he found out everything he could about it and, eventually managed to learn the arcane arts of fire eating and sword swallowing.

By the time he was in Junior High School, Elden had a little shop in the basement of his house and other kids would come over to play with the things he made in the shop. He would set up his own little carnival with small banjos and trinkets he made and put on shows for the other kids. He had a trick die about six inches across covered by a paper shell with a different arrangement of dots that could be surreptitiously removed. He made magic cabinets with secret compartments. One of them was a box in which he was confined and could then escape. He also made a ventriloquist's dummy with articulated hands, made out of wood and operated by strings and rods, that he called "Tom Keen." Elden loves tricks and as an adult likes to insert a pun into the conversation to see if you will catch it.

While he was still in High School, Elden met Bernard Frasier who would become his mentor. Bernard was the first male to graduate from K.U.'s design department and Elden worked assisting Frasier building dioramas in the Natural History Museum on campus. Frasier allowed him to make an Early Man standing in a cave in the back of a cave in the diorama. One day Frasier said something about the proportions of a prehistoric bison. This gave Elden an idea and, years later, he put together a piece based on the skeleton of the bison. Now, at the end of his career, he has got it out and is working on it again. He says it expresses something about the nature of the beast, powerful and dynamic.



Toro Antigua

Teffterra

Professor Frasier taught Elden how to sculpt and, Elden notes in passing, make life masks. Frasier set an example for Elden when he managed to win an international sculpture competition with a ceramic sculpture. This was unusual because, at that time, ceramics were considered a craft more than a fine art and Frasier's award was instrumental in ceramic sculpture attaining fine arts status.

After working with Frasier, Elden decided that sculpture was important to him and decided to enroll in the art school at K.U.. The only problem was that he didn't have the money. But you could fill out the forms to enroll and you didn't have to put the money up on the counter until the very end of the enrollment period. Elden decided he might as well enroll if he could, and while he was standing in line to get the forms, someone recognized him and asked him if he would be interested in painting a mural for the Student Union. Of course he was and that was how he was able to pay for that semester in school.

Elden earned money working at the "Cut Rate" grocery store in downtown Lawrence. He was pretty bored there but he did manage to meet "probably one of the cutest girls in the country." They dated but the war intervened and she married a glass merchant.

Elden was inducted into the Air force and shipped off to California. In his free time he would hitch hike to San Francisco to go to art museums. In his spare time at basic training he made life masks of his buddies in the bathroom which was the only room with a light on at night in the barracks. Elden said one of them later put the life mask on his bed, arraigned his blankets on his bunk and went A.W.O.L.. The commandant found out about the incident but didn't stop Elden from making masks. Instead had him make life masks for his family and sculpt a mural for a movie theater on their new base at Demming, NM. Elden developed a fondness for travel during his time in the service that stayed with him throughout his life.

Elden's commandant was transferred from the base at Stockton, California to Demming, New Mexico and took Elden along with him. Elden got himself invited to give a life mask demonstration at a college in Silver City, New Mexico. Elden didn't like to go places where there were a lot of other G.I.s and while he was at Silver City he heard about a little town down the road named Hot Springs with a saloon called the "Bloody Bucket". All kinds of people would show up from field hands to "the fairer ladies, who held up their skirts a little higher than the other ladies to go through the mud to get in." There weren't many G.I.s there but when he took a buddy with him once, a little girl from a working class family came up to him, threw her arms around him and gave him a warm hug. The other G.I. said, "Now I see why you come here." The officers, on the other hand, spent their leaves at Silver City.

The Air Force base at Demming was close to the border and Elden would also hitch hike down into Mexico looking for art and artists. He met Ascunsulo, the premier sculptor of Mexico, in Mexico City. He also made a life mask for the governor of the State of Chihuahua. He said he met the governor in his "glass hall" accompanied by two armed guards. The governor had breathing problems and became agitated when Eldon was working the sticky mask close around his nostrils. He said he was a little worried what the armed guards might do to him, but the Governor's lovely daughter calmed him down and talked the governor into going through with it.

Elden made several trips hitchhiking to Mexico looking for art and artists. Once, a lady going to an art resort gave him a ride in her car. Another time a travel guide on his way to pick up a lady in a resort gave him a ride along with an Army officer whose motorcycle had broken down. They went down past the end of the Pan American highway in Mexico, the Army officer giving him Spanish lessons in the hours they spent driving to Oaxaca. He said when word got out that there were a couple of new people in their town, the Oaxacans were very friendly and invited them in for drinks under "florid

bougainvilleas.” At a Museum in Mexico City he struck up a conversation with a lady who looked like she could speak English and was tired of talking to her aunt. It turned out she was a writer, along with her husband and brother, and they were going to visit the art center at Taxco and then on to see the *ruinas* of the Mayan Indian cities. After the war Eldon went back to Oaxaca to see how they did gold casting which the Mexican Indians have been doing since Pre-Columbian times.

The surface tension on molten metal will keep it from going into any very small openings on jewelry sized pieces. Modern jewelers use a vacuum pump to force the liquid gold into their molds, but Eldon said the Mexicans melted the gold and put it in a bucket and swung it around their heads on a chain to force the liquid metal into the mold.

After the war, when he was discharged from the Air Force, Eldon went to New York to see the writers he had traveled around with in Mexico and one of them turned out to be an art critic for the New York Times. They showed Eldon around New York and took him out to dinner with the famous designer, Russell Wright and the head of the Museum of Modern Art.

Eldon's last staging area before he shipped out to the South Pacific was in Salt Lake City, where the Mormons don't drink coffee, and they thought Eldon was a Mormon, too, because he didn't drink coffee, either.

Finally they were sent to the South Pacific on a transport ship but, in route, their ship collided with another ship (in the middle of the vast ocean!). Eldon was down in the hold of the ship when the alarm went off and he and his fellow airmen were very nonchalant about getting up on deck, “After you.” He says when they got up on deck, they found out that the ship was in serious trouble and it became, “Me first!”

They put in at New Hebrides for repairs and Eldon worked for the special services department designing and painting backdrops for theatrical productions. He also designed the emblem for the “Black Rams” of 460 flight group, when he joined them later on in New Guinea. They went on to a small island in the South Pacific and half the group was sent on ahead to open an air field. Eldon had to dig foxholes in the coral and the men complained how hard it was to dig in the coral. Soon, however, they were fired on by enemy Zeros. Eldon said that then, “Even the officers found out how soft the coral got”. Eldon carried a chisel with him and spent the long hours in his fox hole carving wood with a chisel he kept with in his haversack. He still has the piece and we will look at it later on.

As the war progressed he was sent to the Philippine Islands. The Japanese were on the island first, and at one time Eldon and his comrades were cut off from the rest of their troops. He took a shot at a Japanese soldier but says he didn't think he hit him. Along with the strafing on the little island that was all of the combat that Eldon saw in the war.

While he was in the Philippines, he tried to find another piece of tropical hardwood that was large enough for him to carve the size of sculpture he wanted but he found out that all the tropical hardwood had already been cut up for lumber. The other thing he did in the Philippines was contract schistosomiasis, a tropical parasitic disease. He was sent to a field hospital to recuperate and when the surgeon general found out he was an artist, he put Eldon in an art therapy program for shell shocked soldiers. He says he remembers a man who looked forward to his hands growing back, after they had been badly mangled, so that he could do the crafts and another man who tried to get out of the military by

slashing his wrists. Elden was still sick himself when he was sent to Swananoa General Hospital in North Carolina.

Sick or not he managed to walk from the hospital over to Black Mountain College. The area is famous for its black cherry hardwood and he tried to find a piece big enough for him there but was unable to find wood in the size he needed. It was becoming clear to him that he was not going to be able to find hard wood in the size he needed and this was instrumental in his decision to switch from wood carving to ceramic sculpture.

On campus at Black Mountain College, Elden said they believed in the students working and some of the students, who loaded coal supplies into the buildings on campus sometimes came to class covered in coal dust. While he was at Black Mountain College, he sought out Joseph Albers, at the time a leading artist in Germany who was then teaching at Black Mountain. Years later, when Elden was teaching at K.U., Albers came to visit and Elden was able to show him around the art department here, which Elden found very gratifying.

After he got home, Elden looked up his old teacher, Bernard Frazier, at Tulsa Oklahoma, where Frazier was directing the Phillbrook Art Center. While Elden was there, he passed by a woman at a bus stop and thought to himself, "I have seen cuter women," but after walking a little farther, "but I really can't remember where." It turned out that she worked at the Center and played the violin. When Elden told Bernard about her, Bernard said that he had already seen them together and then kidded Elden that he really must have been sick, if he didn't remember his first meeting with the most beautiful woman he had ever seen.

Her name was Mary and Elden started courting her. He ordered a dozen roses to be delivered one at a time but, after the first few the deliveries, driver asked if he could just deliver the rest all at once and Mary said, "ok."

After finishing the semester at Tulsa, he and Mary moved back to K. U. where Elden took classes in design and drawing and painting and earned a degree in Art Education. Two years later he finished his master's degree in sculpture at K.U. in 1950. During the summers he took courses at the Cranbrook academy of Art in Michigan with a view towards enrolling in a PhD. program in sculpture offered by Ohio State University. But Ohio State discontinued its PhD sculpture program and so did the few other State Universities that had offered a PhD sculpture program. He now has an honorary PhD from Baker University but he never refers to himself as, "Doctor Tefft."

PhD degrees in sculpture or no, the quality of state universities in this country is quite high. K.U., a university in an agricultural state with a modest population and few special features, has consistently been first in the nation in several areas. Not so many people know it but, as we shall see, Elden Tefft built the first "lost wax" sculpture foundry in the country at a university for teaching casting art bronzes right here at K.U. in 1953.

Elden Tefft: A Kansas Bronze Pioneer

In the decades after World War Two, Elden Tefft single handedly introduced “lost wax” bronze casting into the art departments of American Universities. The lost wax process has since become the standard technique for casting art bronzes in this country.

The only other way to cast bronze is called “sand casting” and this involves simply pressing a wax model down into a wet bed of sand. This leaves an impression in the sand into which molten bronze can be poured and, as the bronze cools down, it solidifies into exactly the same shape as the depression in the sand. Sand casting works well enough for simple, flat objects but three dimensional objects, like statues, require a complicated ventilation system to let trapped air out of domes and curves in the sculpture where air pockets will form if some way is not provided for the air to escape.

In “lost wax” casting, a wax model and its ventilation system are immersed in a container of thermal plaster. After the plaster hardens, the mold is heated until the wax melts and runs out down a hole left in the bottom of the mold. This leaves a hollow in the dried plaster in exactly the same shape left by the wax model. The hole in the bottom of the mold is then plugged up and melted bronze is poured into the mold and the bronze solidifies in the hollow left behind in the plaster when the wax melted and ran out. The lost wax process gets its name because the wax disappears when the mold is heated. Using the lost wax casting technique, large and complex sculptures can be cast in the round in a way that isn’t possible with sand casting.

With the exception of a couple of foundries in New York, who weren't interested in taking on a lot of individual art projects, and dentists, who didn't know how to make large castings, no one in the United States knew how to do lost wax casting until Elden started his professional career. It is through his efforts that we have the lost wax method at Universities today. When my photographer and I were going around K. U.'s campus taking pictures of Elden’s work, I paused in front of a plaque in Strong Hall honoring James Canfield. My photographer asked me, “What’s the date on that plaque?” I replied, “1908.” He said, “That was sand cast.” I asked him, “How do you know?” He said, “Because it was before Elden.”

When Elden came back to the United States right after the war, he said that he returned to a country in which, “Bronze casting was practically outlawed because of the influence of the “carve direct” school. The carve direct school was influential in the decades after the First World War. Museum curators and gallery owners were not interested in sculpture unless the artist personally handled every stage of the process,

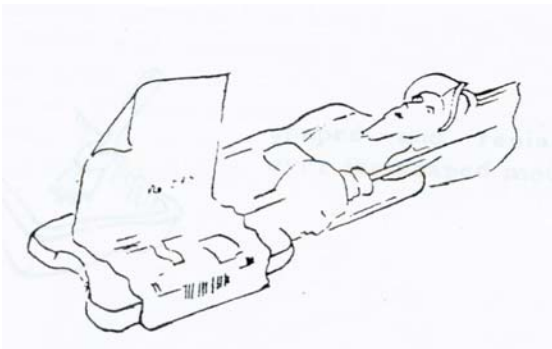
including casting. At the turn of the century there was a lost wax foundry in St. Louis and one in Chicago but they went out of business because the carve direct school killed off demand for art bronzes. Sculptors in this country did not know how to cast bronze on their own. There was no place to buy bronze casting equipment in the United States or even any systematic terminology to talk about the procedures used in bronze casting. Artists wanting their work cast in bronze would have to send a plaster model off to foundries in Europe where the actual casting would take place. In stone sculpture as well, American artists would make a plaster model and send it overseas where European craftsmen did the actual carving in marble. With this system in place, sculptors relinquished control over the final stages of the process. There were plenty of opportunities for third parties to change things. Sometimes the contractors got it wrong, in one notorious case putting an arm on backwards.

But south of the U. S. border the Indians in Mexico had been casting gold with the lost wax process since pre- Columbian times. And, as a Spanish colony, Mexico had been in contact with European methods of bronze casting and they knew how to do lost wax casting. But in the years before the war, bronzes in Mexico were mainly statues in cemeteries and their artistic quality was not high.

Back in Lawrence, Elden's mentor, Bernard "Poco" ("Shorty" in Spanish) Frasier had accepted a commission to make a set of bronze panels to set in the doors of the Memorial Campanile, honoring K.U.'s war dead, and it is through these doors that graduating K.U. students walk to receive their diplomas on their last day as a student. Rather than having them cast in Europe, Bernard decided to have the panels cast in a Mexican foundry and set up a meeting between Elden and a Mexican government official. Together they found a place in Mexico City to do the work.

Elden had managed to find two European books on bronze casting and had succeeded in making a couple of small pieces in his garage. Since he had a rudimentary grasp of the steps involved, and had been to Mexico several times during the war and was comfortable traveling down there, Elden was happy to go. He said that, "My aim was to turn to the primary source, where know-how rather than equipment produces fine castings."

And that's the way it turned out at Estatuaria de Mexico in Mexico City. A rusty gate allowed entrance through a crumbling adobe outer wall. In one place the wall had completely disintegrated and had been rebuilt with the plaster models of various pieces of sculpture that had been discarded after firing and casting. Inside the main building a layer of black volcanic cinders covered a dirt floor. Heat for the furnace was provided by a slow drip from a raised barrel of kerosene and ignited with a match to burn on the volcanic cinder. A small fan blew the heat from the flame into the furnace. It was all home made but they knew what they were doing and were willing to share their knowledge. Elden drew up an illustrated guide to the steps in the process. He said that years later, when he went down to help with a foundry in Guatemala, he was pleased to find that his little booklet had preceded him and that they were using it when he got there.

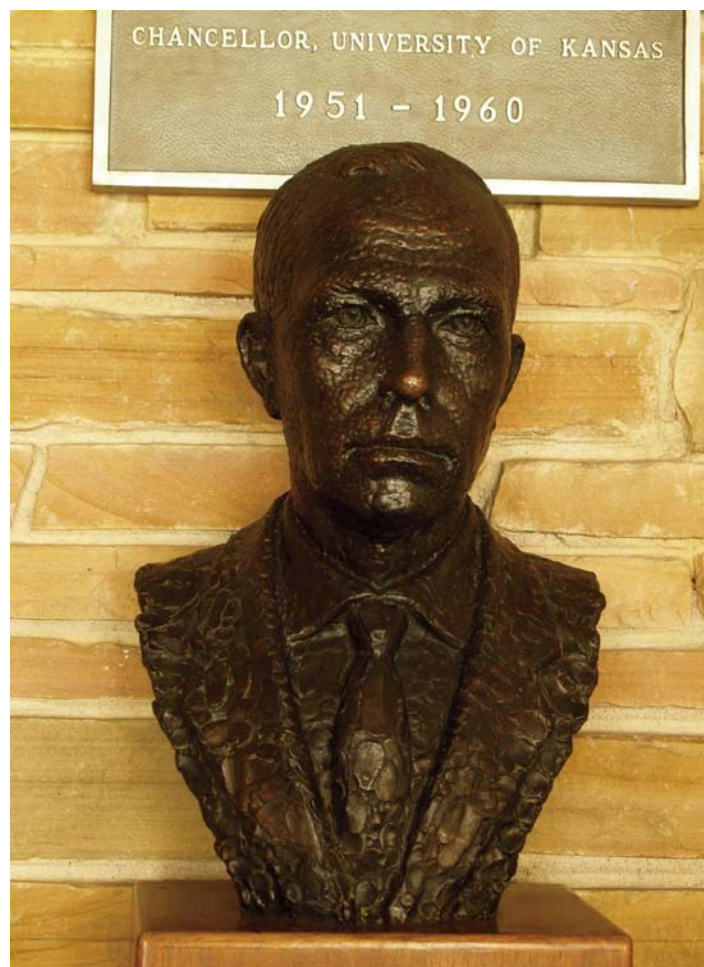


Elden recorded the first step in casting the doors of the Memorial Campanile with this drawing. A plaster model is soaked in water and covered with newspaper.



Bernard Frasier Kansas University
The panel in the Campanile door inscribed Native/Explorer

In 1951, one of Elden's students told Chancellor Murphy that Elden knew how to cast bronze but didn't have a foundry. Elden said Chancellor Murphy called him up and asked, "What do you need?"



Elden's portrait bust of Chancellor Murphy. 1960
Murphy Hall University of Kansas

With the funding he needed, Elden built the first lost wax teaching foundry in the United States since the 1920's in Baily Annex at K.U.. It was here that the Jayhawk in front of Strong Hall was cast.



Elden's "Academic Jayhawk" in front of Strong Hall.



Elden's inscription on the base of the Jayhawk. The Kansas University Sculpture Foundry was the first one in the nation. 1958

Elden sent letters off to art departments at universities around the country telling people, "We can cast bronze" and that he was having a workshop. He expected 35 or 40 people to come but 100 people showed up for the workshop. They have one every two years, and attendance has doubled at each succeeding conference and the organization he started is now the world's largest association of art sculptors.

Even though he wasn't an expert yet, Elden went to Europe in 1961 to study bronze casting techniques. He said he could just get off the plane and ask around in the city, "Where is the foundry?" He found two in Paris.

People in the United States at this time were still sending their work off to Europe to have it cast. On his way back from Europe he stopped in New York City where he said he met an artist who had just come back from having a piece cast in Italy and returned with his sculpture and a Fiat.

Two years later his sabbatical came due. By this time Elden and Mary had a son, Kim, who was seven years old and Elden drove them to Mexico and they flew on down through Central America visiting Guatemala, El Salvador, Panama, Colombia and Costa Rica. K.U. maintains a relationship with the University of Costa Rica and they help faculty and their families to acclimate to Latin American culture. Elden said while he was staying there with his young family, he received notice of his tenure back home and that this was a very happy time in his life.

Elden returned to his rounds of teaching at K.U. and taking trips in the summer. Each time he got back from one of his trips, Elden would share his findings at his biannual sculptors' conference. After the third conference Elden arranged a trip to Japan. Someone suggested a hostel in Tokyo for him to stay, and Elden went down the road to

Kamakura to look at their gigantic bronze Buddahs. They are hollow and you can go inside them. Elden said it was like walking into a hollow bronze space the size of a two-story house.

In 1967 he started workshops at Crested Butte, Colorado. His son, Kim, “A sculptor by birth and a gold smith by profession”, went along and years later told me what the workshops were like. Crested Butte is a deserted mining town and Elden tasked his students with going out and scrounging up all the materials they would need to cast bronze. They used whatever they could find. They cannibalized parts from an old tippie, used a metal sluice they discovered at one of the mines and some coal the miners had left behind and even cow dung to fire their furnace. After they had a handle on building a foundry under primitive conditions and with any materials at hand, Elden took them to Costa Rica where they helped build a foundry at the University.

When Elden came back to teaching his art classes at K.U. he began work on his master piece, a ten foot statue of Moses that kneels before the stained glass picture of the burning bush from the bible in front of the School of Religion, a work that took him and his students fifteen years to complete.

In 1986 Elden received an invitation from the Central Institute of fine Arts in Beijing to come to China and teach a workshop on lost wax bronze foundry procedures at the located in JiaoJong University at Shang Hai.

The Chinese had been using lost wax casting since about 400 A. D. and have produced exquisite bronzes with it over the millennia. Elden believes lost wax casting was introduced into China from Europe via the silk road because the early centers of lost wax casting in China are in towns leading down from the silk road into China. But the communist revolution changed all that.

As Chairman Mao aged during the 1970’s, he grew worried that China was becoming complacent about the Communist Revolution and he launched what he called a “cultural revolution” to root out anti-revolutionary elements from the time when China still had an Emperor, only sixty years before.

Bronze casting had been associated with the Emperor in China for centuries. In order to eliminate “reactionary influences” in a society that was still in the process of defining itself in the decades after World War II, people teaching bronze casting were sometimes killed outright or, more often, sent to work on farming communes out in the country. There was no demand for bronze casting and Chinese bronze foundries fell into ruin. Thirty years after the cultural revolution destroyed lost wax bronze casting in China, Elden constructed a working lost wax bronze foundry for the art department of JiaoJong University in Shang Hai, and shared his knowledge of how to use it with artists and craftsmen from all over China.

Throughout his career, Elden kept a busy schedule and, when he retired after forty years of teaching classes, he had written ten books and constructed fourteen architectural sculptures. He completed seven free standing sculptures, ten portrait busts, and thirteen plaques. He gave forty exhibitions at art galleries around the country and, on top of all this, made more trips to Paraguay, Thailand, Taiwan, and the Philippines, teaching artists how to cast their work in bronze. When he retired in 1990, the hard working Professor Tefft received the State of Kansas Governor’s Award for Lifetime Achievement, the first time the award was ever given in the field of Art Education. Elden loves to teach and, with all his kudos, remains an unassuming, generous, and very approachable person.

The Carve Direct School

By the middle of the 1800's, the triumph of capitalism and liberal democracy in Europe had changed the face of life in France beyond anything Louie the 14th would have recognized. The church and the aristocracy no longer commissioned pictures of saints and royal families. Toulouse Lautrec made posters for cabarets like the Moulin Rouge and famously complained that he was the first painter in history who had to work for a living.

The rapid pace of change in French society after 1850 produced a crisis in the art world that went beyond just a shift in subject material. Artists went back to square one and began rethinking, not just the purpose of art, but the very nature of art itself. They realized that art took many forms and that each art form had its own unique set of raw materials with which to work. This simple fact is fundamental to the nature of artistic expression. The first modern artists didn't know where modern art was going to go after them, but they decided that, wherever it went, some signs of the raw material in its original state must be carried over into the completed work. Elden calls leaving something of the nature of the original material showing in the finished piece, "truth to materials."

To look at one example in France, painters understood that their canvases were flat. Manet painted a fifer boy in a soldier's uniform with trousers that were a flat black, without the lighter and darker shades that communicate three dimensional depth in the wrinkles of clothing, something difficult to master and of which Manet's teachers at the Royal Academy were justifiably proud. Manet broke with this long tradition because he wanted to show something about the nature of the raw materials he used in making his painting, namely that the canvas is flat, and that this fact shouldn't be entirely obscured by the illusion of depth on the surface of the painting, an assumption here-to-fore taken for granted in painting since the time of Greece and Rome.

Since differences in media were fundamental to the nature of art, particular tools used in working particular media also became important. Because different tools are used to work different media, early modern French artists felt that an indication of how they used those tools should also remain evident in the finished piece. Elden calls this "honesty to process."

Another example. By the time of the impressionists, the industrial revolution in France had created metal ferules for the brushes painters used. This made the brush able to hold stiffer bristles in place than the older style of brushes. Van Gogh began applying thick layers of paint in bold strokes that left enough paint laid up on the canvas to cast little shadows of its own. He did this not only because he wanted to explore the possibilities of the new technology, but also because he wanted to leave something in the piece itself about the nature of the tools he used to make it: an industrial strength brush able to support a thick gob of paint.

This really was quite a departure from the way raw materials and the tools used to work them had been handled in antiquity. Greek statues had been carefully rubbed and polished smooth to remove any sign of a chisel being used in their construction. Usually Greek statues were also then painted in bright colors. The first modern artists didn't

know what sculpture in the future would look like, but they wanted to see what it was made out of, and they wanted to see some tool marks left on the surface because this is something they understood art fundamentally to be: a particular material worked with a particular tool suited to it.

These sensibilities were developed in painting but they were transferred to sculpture in the carve direct school, also called the "the direct cutting technique, by which the master, hammer and chisel in his own hands, carves his figure, removing layer by layer from the block of stone but leaving both the original block and the marks of his chisel still visible."¹ Elden has been deeply influenced by the carve direct school and, when I read this sentence to him responded, "That's exactly right."

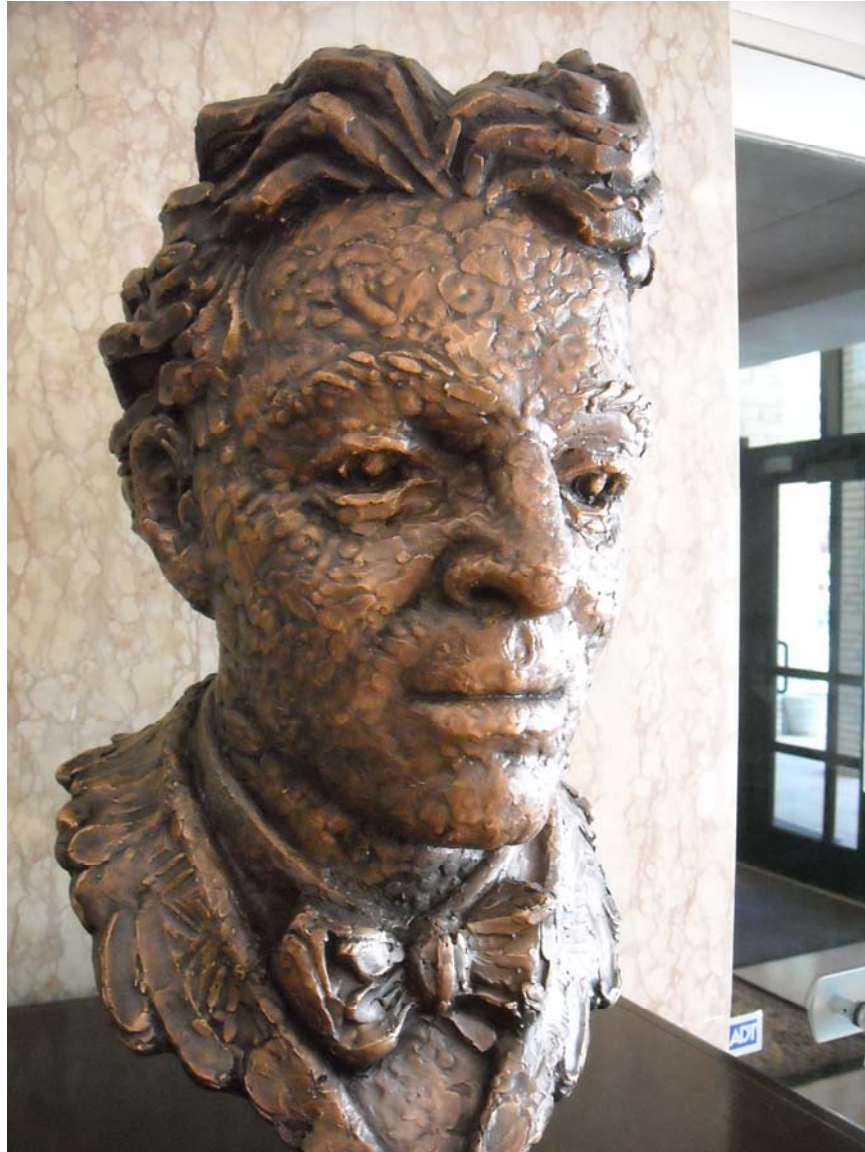
Since the shape of the tool exists independently from any particular work of art, the introduction of tool marks necessarily introduces an element of abstraction into the design of the piece. Leaving some tool marks from the process in the finished piece itself is something Elden readily exploits to introduce abstract elements into his work.

He says there are two ways to sculpt, either by removing material, or by adding on material and Elden uses both methods. As we shall see, he finishes his portrait busts by pinching off a little piece of clay, rolling it between his fingers, and then pressing it onto the face. We can see the impressions his fingers made in these little pinches of clay still showing on the surface of his faces. The fingers are not, strictly speaking, tools but it takes a hand to use a tool and leaving hand marks on the completed piece is very much related to the carve direct approach to sculpture.

But, as we saw earlier, until Elden spread the techniques of bronze casting into artist's studios in the years following the Second World War, museum curators and gallery owners would not accept cast bronze pieces because the sculptor himself didn't actually complete the transfer of his hand marks into the sculpture's final form. This set up a kind of love/hate relationship between Elden and the carve direct school. Their rough and not too finished approach to art suited Elden's straight forward Midwestern approach to life. He has left marks from his own hands in place all over his magnificent portrait busts and his debt to the aesthetic sensibilities of the carve direct school is obviously profound. On the other hand, they told Elden that bronze casting didn't count as fine art and Elden is not the kind of guy you want to tell that he can't do something he wants to do, if he can't see any good reason not to. As we have seen, it's a battle that Elden won but, I think, it left some hard feelings in him towards the carve direct school. If pressed, he will admit that, yes, he does owe something of his personal style to their influence. But I remember seeing a new sales rep, a young man from one of Elden's suppliers, drop by the studio to meet Elden and find out what kind of operation he had. Elden had his arm around him and was leading him over to look at his film of casting Moses and saying, "When I got out of school, bronze casting was practically outlawed because of the influence of the carve direct school...."

¹ Reihold, Hohl translated from the German by Andre Marling and Michael Heron in *Sculpture: the Adventure of Modern Sculpture in the Nineteenth and Twentieth Centuries* p.113

Eden's Art



This energetic portrait of Bishop William Quayle is a lovely balance of representational and abstract elements. 1959
Quayle Library Baker University Baldwin, Kansas

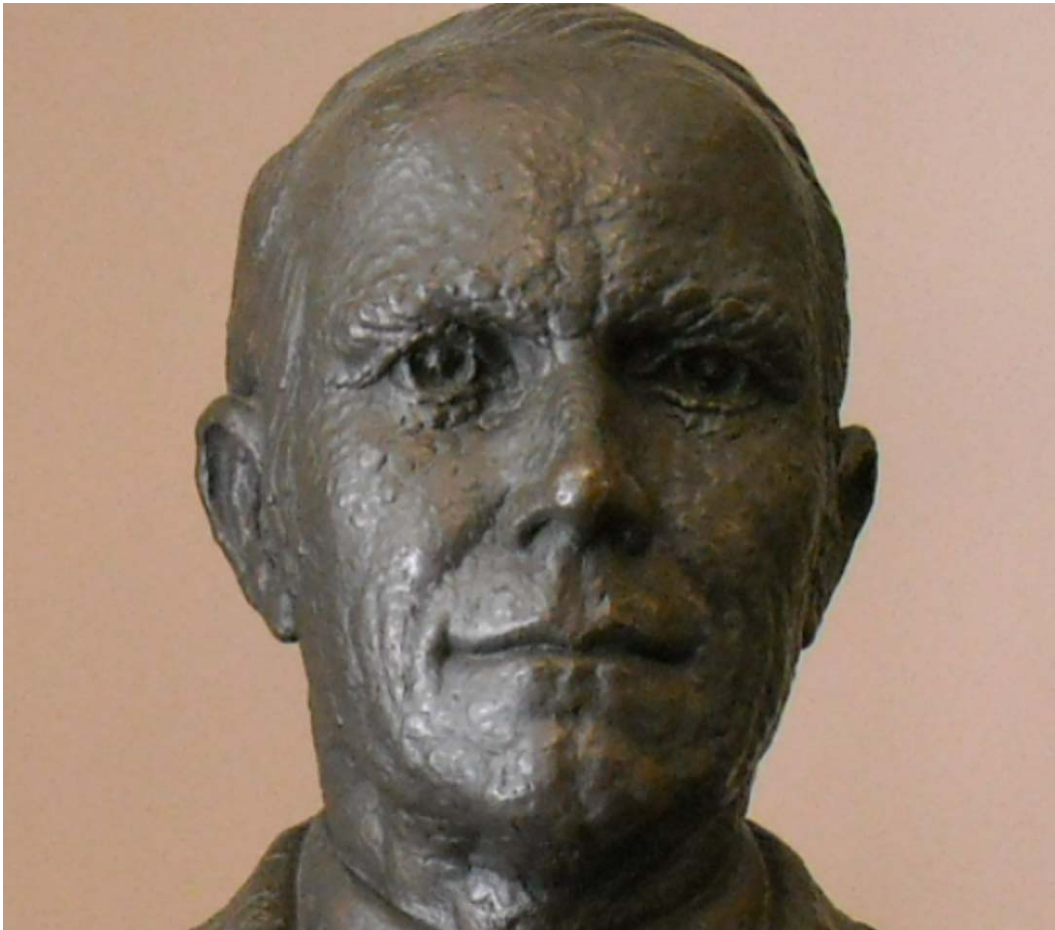


Frank Strong 1962

Strong Hall University of Kansas



Thomas Gorton 1975 Thomas Gorton Music and Dance Library
Murphy Hall University of Kansas



Francis Snow 1962

Snow Hall University of Kansas



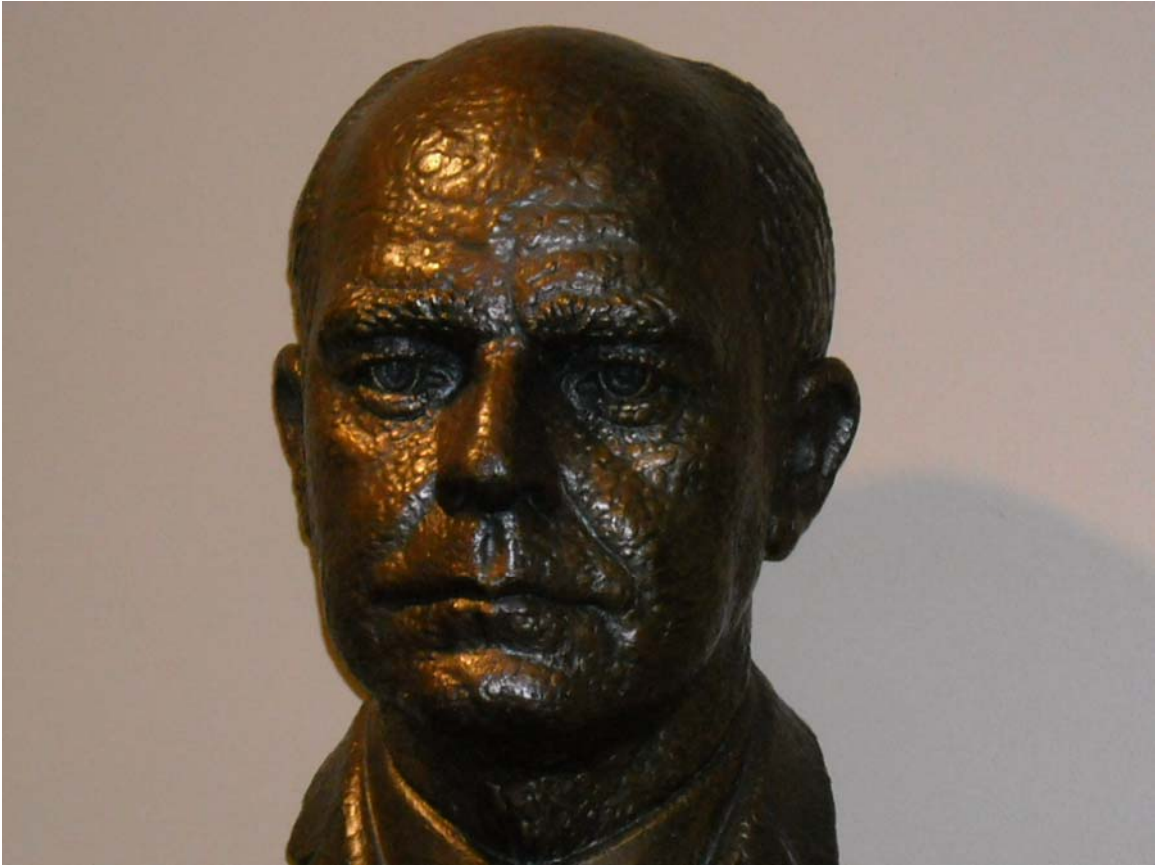
Raymond Nichols

Nichols Hall University of Kansas



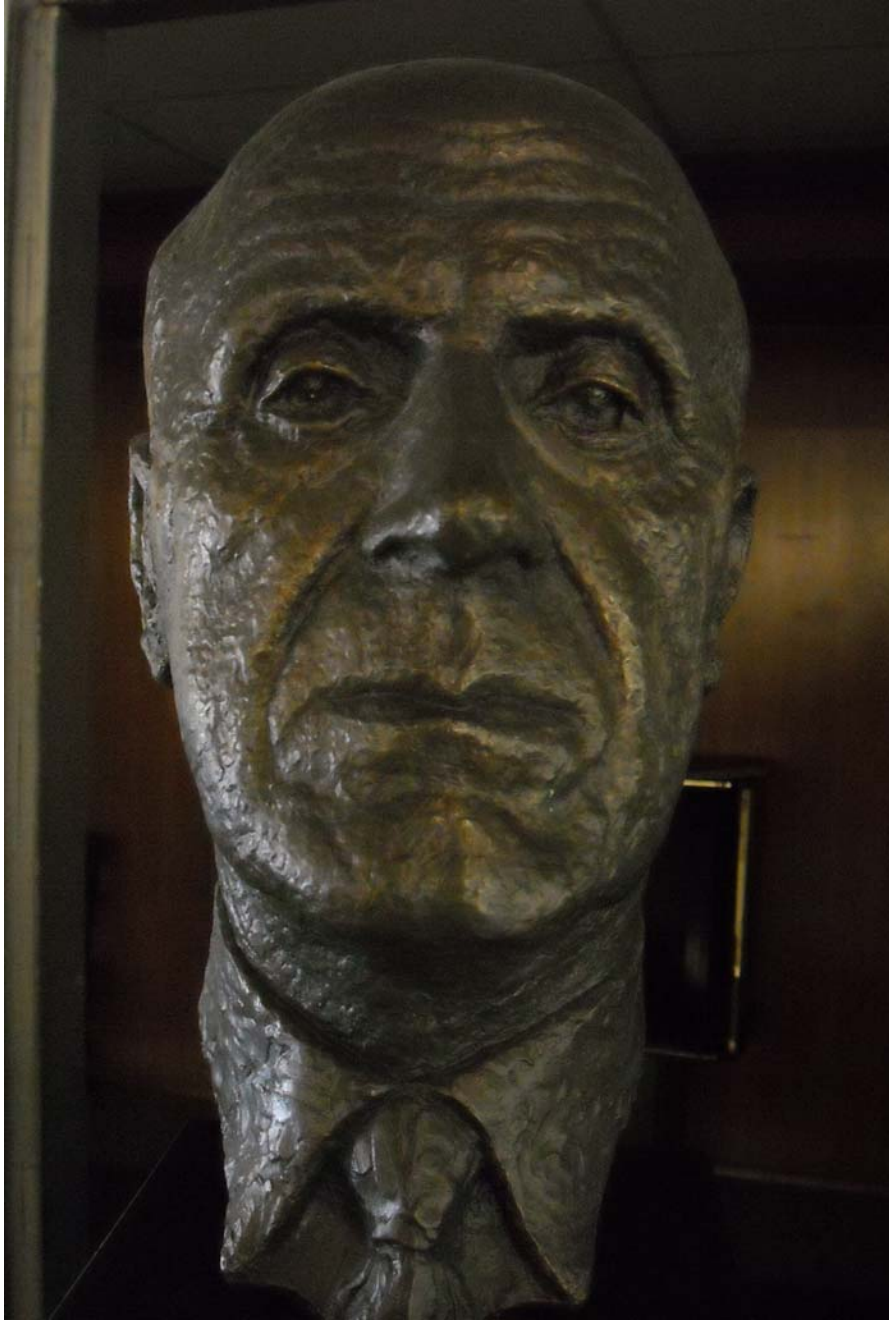
William Allen White 1959

Stouffer-Flint Hall University of Kansas



Clark Wescoe 1969

Wescoe Hall University of Kansas



Donald Swarthout 1954

Swarthout Auditorium Murphy Hall
University of Kansas



Ida B. Wells 1983

Teffterra



"Skipper" Williams 1976

Allan Field House University of Kansas



James Naismith 2009

Teffterra



The Face of Moses 1982

Smith Hall University of Kansas

Medallions and Grave Marker



The Seal of the Regent's of the State of Kansas 1956 Strong Hall University Kansas



close up of the Regent's seal



The Seal of the University of Kansas 1954

Teffterra



Close up of the University Seal

Kansas Memorial Union University of Kansas



Centennial Medallion 1966

Kansas Memorial Union University of Kansas



Jung Hong Lee's Grave Marker 1990 Pioneer Cemetery West Campus University of Kansas

Elden spent the first eight years of his life on a farm and, when his family moved to Lawrence when Elden was in the fourth grade, continued to spend time outside around Woodlawn Lake and down on the sandbars along the Kansas River. He grew up in Lawrence, went to art school there, and started teaching at the Lawrence campus of the State University system. While he was there, he undertook work on commissioned projects from the State of Kansas, the University of Kansas, and others. And for all those commitments, he was still able to find time to experiment with sculpture that *he* wanted to work on.

Elden earned his B.A in art education in 1949, and an M.A. in sculpture the following year. In the process, he received an exposure to modern art, and Elden is a modern artist. He absorbed the tenants of the carve direct school and developed an appreciation for European sculptors who used uncluttered lines and also sculpture constructed with interior spaces.

But, he says, he really wasn't very interested in European art. Maybe it's because Elden was a country boy, and the modern art scene was a product of the urban life in the big cities. He says he was initially more interested in contemporary sculpture in Mexico, but, after going down there and looking at it, found that it didn't really appeal to him that much either, and that the most exciting things in Mexican art at that time were happening in painting.

Growing up in a farming family, with its easy openness and direct approach to life, helped Elden feel comfortable walking up to strangers and starting a conversation, even with people in the third world. He knows they're just folks, too. With his Midwest sensibilities, I would like to call him a regionalist, except for one thing: this hay seed has studied abstract art. Elden has a logical mind and, starting with his master's thesis, has a very systematic approach to investigating the fundamentals of his calling.

His teacher, Bernard Frasier, used to say, "Most people don't have but one or two really good ideas their whole life." An example would be Einstein, who came up with his theory of special relativity in his early twenties and spent the rest of his life trying to explain it to other people. After Elden set forth his master's thesis, he says "I didn't go very far." Maybe so, but his thesis does elucidate "basic principles of all sculpture of all times - representational and non-representational, abstract and non-objective." His master's project allows a way to classify all sculpture on the basis of the relative weight of internal to external spaces in the piece. In his book on modern art, Rihhold Hohl calls the relationship of inner to outer spaces, "...the base problem in sculpture." p.145.

In his Master's thesis, Elden tells us something about the nature of art when he says that "there is something which can best be said through each art". Elden wants to say something to us that he feels sculpture can say better than any other art form, and that something is the way form and space define each other.

Elden was entirely sympathetic with the truth to materials and honesty of process approach of the carve direct school, but chaffed under their main objection to admitting bronze casting into the family of the fine arts, namely that the artist did not himself control each and every step in creating a bronze sculpture. He learned how to satisfy these technical requirements and spent a good deal of his life teaching other sculptors how to do it themselves. Since the ends and outs of actually casting bronze is his speciality, it is not surprising that when he makes sculpture without any prior constraints

on its subject matter, he exploits the technical aspects of bronze casting to say something about representing form and space with sculpture.

He has pursued what it means to create space at various levels of abstraction, but he started with the human form back with his puppet, Tom Keen, and seldom strays so far from that it is not immediately recognizable. As we will see in just a few minutes when we look at them, the ways that he abstracts the human frame give it an ethereal quality and some of his subjects are along lines I am tempted to call "nature spirits". Others of his figures are more ambiguous, devoted to contrasting internal and exterior spaces as they relate to the human frame. In any case, Elden says that when he starts a sculpture, he conceives an abstract form first and then moves on to give it naturalistic features.

Bronze is a heavy material that is worked at very high temperatures. This means that when the liquid bronze cools down, it cools from the outside in and the surface of the bronze is cooler than its hot core. This causes the bronze to shrink unevenly as it cools down and distorts the original shape given to it by the mold. Even something as small as the brick sized ingots that bronze sculptors get from their suppliers show signs of distortion from cooling when they were manufactured. The only way to minimize this is to make the bronze as thin as possible by constructing an internal wall inside the mold that makes the core of the finished piece hollow.

Constructing the inner wall of the sculpture's mold is an area of specialized expertise all its own. The shape of the hollow cavity inside the sculpture is different than the outside shape of the piece. The inner wall of the mold for the piece must be built first and it is not always possible to see the inner wall when the wall for the outside of the piece is being constructed. The thickness of the bronze must not be too thin in some places, or it will not support its own weight, or so thick in other places that it will distort too much from the outside cooling faster than the inside. The artist must visualize all this in head as he works shaping a mold around the outside of where the finished piece is going to be.

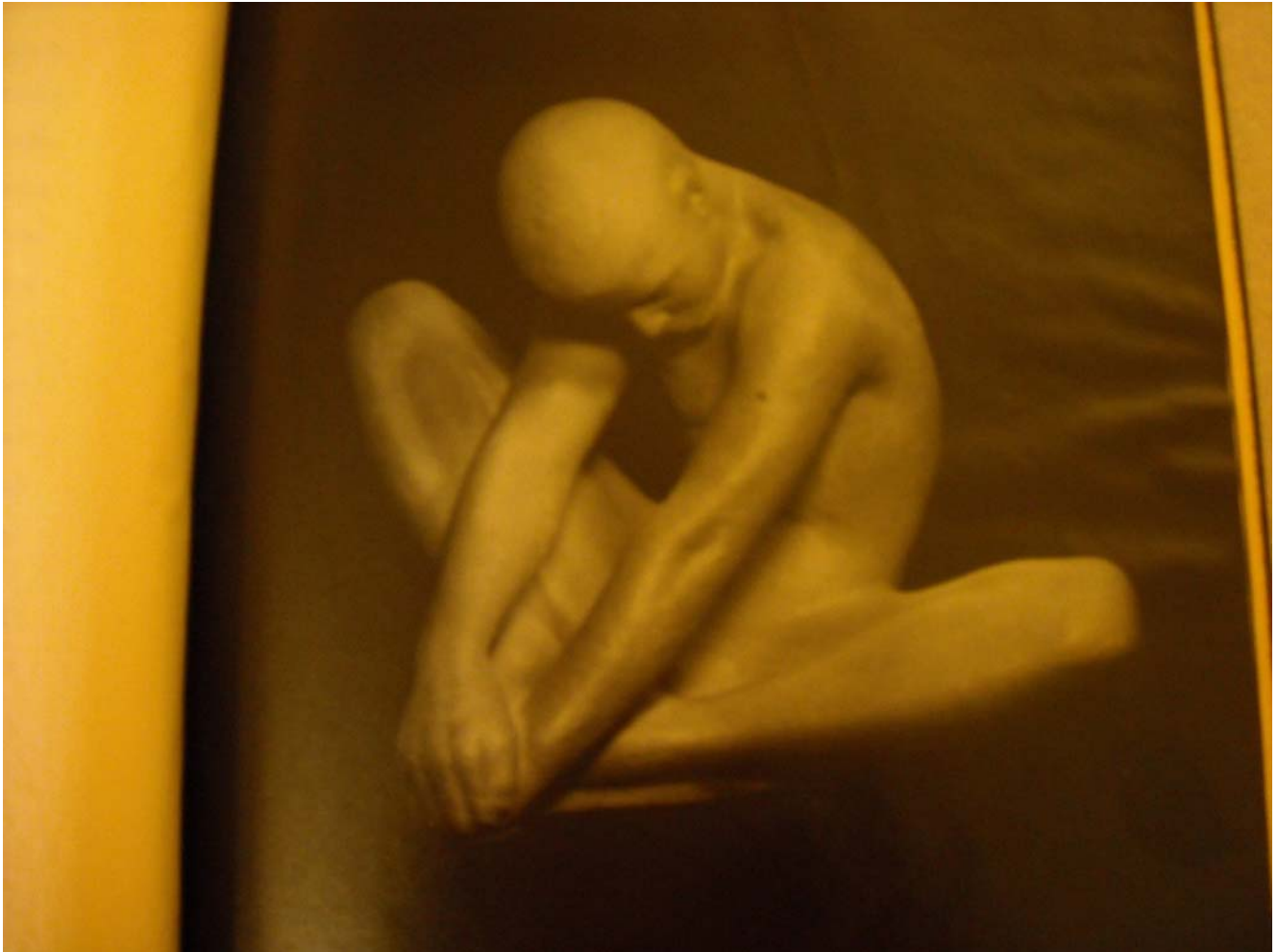
The abstract painters in Europe found out that form and color evoke emotional responses in people even when they are divorced from a representational context like, say, the face of Mary as she holds the dead body of Jesus. Abstract painters are attuned to the way different forms and colors make them feel as they work on a piece, and abstract form and color are words they use to communicate those feelings to us.

To venture into the brave new world of abstract art, the first modern artists had to make a break with the past and this process is ongoing today. Elden started out in ceramics as his first form of plastic sculpture and says in his Master's thesis that "Clay is part of the earth; therefore it has been a common concept that designs rendered in clay should look as if they were and would remain part of the earth. No doubt this was part of the truth to materials movement and is a valid view of clay; however it is a small view. Considering clay from the larger point of view one needs no longer remain earth bound, an insignificant man viewing clay as a smaller portion of a larger whole. One may view clay as though he were away from the earth (as God might be) viewing the earth itself as a free clay or earthen body, with no base.... Clay conceived as such becomes a valid medium for expressing the universal entities of the cosmos...and even the universe as a whole."

Breaking away from a limiting, earth bound view into a free universe, valid on its own terms, is Elden's way of describing breaking free from preconceptions about the old way of thinking about sculpture. But when Elden talks about "designs" he has specific

statues in mind and he has given his "no longer earth bound" concept a concrete meaning in form and space by abstracting the human frame into a self-contained sphere, like the shape of the planets in space, which is what he says he means by "universal entities". As he does this study, in addition to rounding the designs of his pieces, he takes them through increasing degrees of abstraction. As the figures become more abstracted, they open up and this generates interior spaces in between the limbs of the figures and the torso. What he wants to get out of this process of rounding and abstracting, is some insight into how the human frame creates interior spaces when left to its own devices.

For his master's thesis, Elden took a human figure through five stages of abstraction. He started with a naturalistic figure in a position of "interest to me because of its form in space qualities" which is to say the way this posture defines both internal and external spaces.



Anonym "The squatting position with the back and head bending in a gentle curve emphasized by the straightness of the arms and angular extension of the knees presented a design of special interest." And this is because the limbs of the figure define a number of enclosed spaces to look at.

Elden then starts a process of abstracting this human form which moves "towards the spherical shape of free earthen bodies", by which he means a planet.



Spheroid

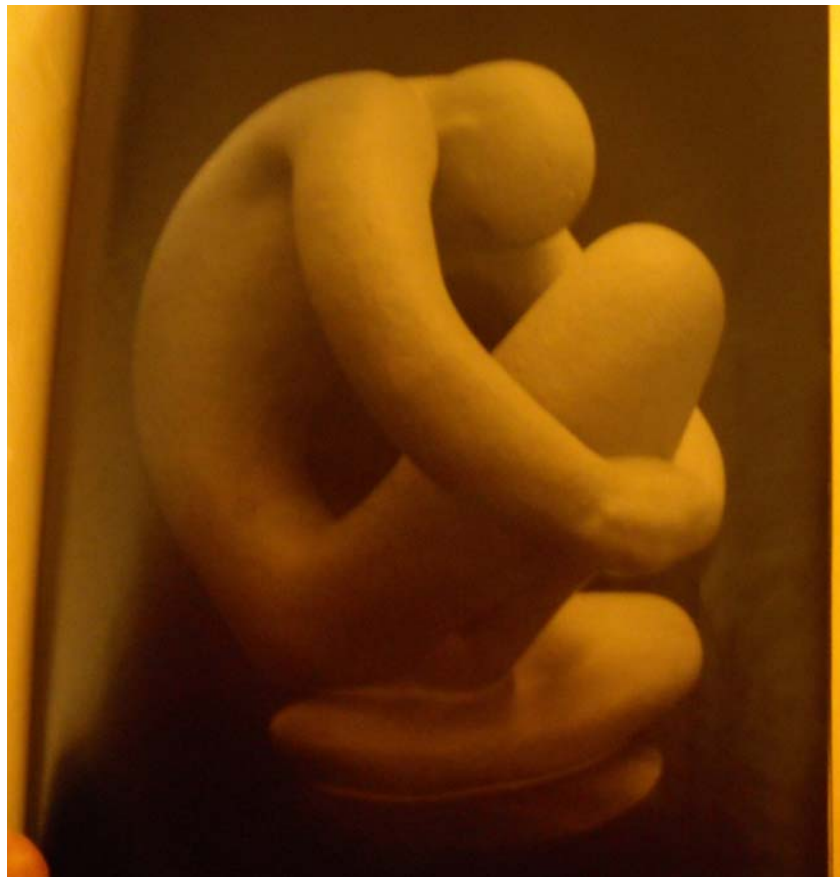
Spheroid preserves its interior spaces even as the outside of the figure becomes more round.



Spherevoid

Spherevoid "reaches farther toward... the spherical shape of free clay bodies", yet "retaining in that shape hollow volume", ever Elden's subject of interest.

Having defined a rounded space surrounding a curled figure in *Spherevoid*, *The Fourth*, his next stage of abstraction, starts to change the shape of the interior spaces of the figure, "activating space" as he puts it.



The Fourth (ceramic)

Having taken his initial form through four stages of increasing abstraction, Ettore Sottsass completes his study of abstraction of the human frame with *Is*.



Is

Is is a completely abstract form but still closer to the human form than, say, a rock or a tree. This figure defines both interior and exterior space with equal emphasis. And our knowledge of these shapes grows as we view the piece from different angles. The surface pattern draws our eye around back to the other side of the sculpture.

Three dimensionality is the sine qua non of sculpture. "When one looks at a form, one must see more than that which is visible from a particular point of vision. One must see with the mind's eye what is on the other side. One must complete the form in one's mind if one is really to experience form." The shape of the other side of the object calls to us, even though we cannot see it yet. To relate to the object emotionally, we must feel in our imagination, a "volume's center, or core, and its direction" and mentally posit the other side of the object. Our brains do this automatically, of course. When Elden's son, Kim,

and I were taking pictures of one of Elden's pieces called *wings*, that we will look at very shortly, I commented that the object was not symmetrical and that I was having trouble deciding which side of it to photograph. Kim replied, "It's a mark of good sculpture that it makes you want to look at the other side of it."

Elden's portrait busts are, of course, hollow on the inside and, during the time he was crafting them, he was constructing hollow cores for all of his pieces. He knows that that space is in there but we don't. But he *feels* it and it calls to him. At some point five years down the road from his master's thesis, Elden decided to tell us that he feels something about this space by showing it to us. The result was a fenestrated (*fenestra* Latin: window) sculpture with an opening in its surface. We will look at this piece in just a second, but before we do that, let's start by first looking at some of his sculpture that explores what he considers the fundamental consideration of any composition: the relationship of interior and exterior space.



Muser 1 1953 The heavy feeling we get from the weight of the bronze figure is contrasted and offset by the central space between arms and legs and an ethereal quality lent to it by the ambiguity of its form, especially its face.



Muser 2 fused steel 1954

Teffterra

Note the hollow space in the figure's torso and the way it is accented by the elongation of the waist. A ... "universal entity of the cosmos" ... regards us from the depths of its universe. Because it is ... "free from compressive contact with the earth" ... it occupies another order of being amidst the clutter of the studio. The surface texture gives us a hint as to what the back of the piece looks like and helps us imagine what it looks like.



The Fourth (bronze) 1952

Teffterra

The Elongated lines of the arms of this... "no longer earth bound"... figure draw our eye up and away from the almost invisible center of the piece which the face seems to look at, as if he can see something that we can't.



The Fourth (bronze) No.2 1986

Eden's residence

The hollow spaces inside this sculpture tell us something about the nature of the heavy material of bronze: It must be worked at high temperature and therefore necessarily has hollow spaces inside it. Because it exploits the specialty of sculpture, that it exists in three dimensions and we can see new views of it each time move around looking at it, this sculpture says something about the way that form and emptiness create each other that another form of artistic expression, writing for example, cannot. The Heart Sutra, from India, tells us that, "Form is emptiness. Emptiness is form. Form is nothing other than emptiness. Emptiness nothing other than form." This is because each necessarily presupposes the other, and they are the same in that they both form integral parts of the same system.

The Chinese have long understood the creation of negative space as an important element in painting. In the arrangement of the bamboo leaves, the patterns found in the spaces in between the leaves is just as important as the patterns of the leaves themselves. The great debate about breaking with the past that took place in the European art world in the 1850s was over whether or not art could dispense with picture plane construction. In the Chinese world, the debate between the modernists and the traditionalists was about whether it was possible to dispense with negative space in a painting. Chinese painters in the twentieth century found out that it was possible to entirely cover the surface area of the painting with pigment. The traditionalists put up a tough battle because they saw emptiness as a necessary part of the way the world worked. The Tao Te Ching talked about the function of emptiness in any working system. "Existence and non existence give birth the one to the other. Long and short contrast each other. High and low rest upon each other. Front and back follow each other." Words have their own power, and painting can create imaginary spaces, but because *The Fourth (bronze) No. 2* exists in real space and we can walk around it, this sculpture gives us more viewpoints in a single example of form and space creating each other than a picture or a poem can provide.



The Trio 1955

Tefferra

This is the first of Elden's fenestrated sculptures. From this angle you can just see the opening at the top of the piece.

Gossamer Series - Filigree Technique

In Elden's work, the final expression of the idea of seeing enclosed space is realized in what Elden calls "filigree technique", which he invented, and filigree technique is his contribution to the development of modern art. In his filigree art, bands of bronze separated by empty spaces define the planes that form the volume of the sculptures.



Ghost Dancer 1976

Teffterra



Mariposa 1986

Teffterra



Maria 2009 (bronze core exploration)

Teffterra



Moses 1982

Smith Hall University of Kansas

In Elden's masterpiece, his vision of sculpture existing free in its own space and his studies of the interior shapes in abstract human figures come together to produce a massive bronze figure of incomparable lightness



Prairie Spirit A nature spirit.

Teffterra



Hole'y Hawk 2003 The piercing in this sculpture gives it a feeling of lightness for all of its massive size and weight. Teffterra

Wings



Saint Francis 1959

Augustine Hall Saint Benedict's College Atchison, Kansas



Wings 1982 (Buddy Rogers Award)

Teffterra

Although it seems so at first glance, this piece is not symmetrical and you cannot accurately picture the other sides of it without walking around it.



Science Fiction Award

Tefferra



The Fountain

Eden's residence



Elden's Yard

Eden's residence

Animals



Haremo 1944

Tefftera

Elden carved this piece from tropical hardwood while on guard duty in a foxhole in the South Pacific with a chisel he always kept with him. He showed it to a native islander who pronounced it "Haremo".



Faun 1940

Teffterra



Baker University Wildcat 2000 Baker University Baldwin, Kansas



The Guardian

Eden's residence



Owl outside the foundry. 1952 An early work, originally a ceramic. Teffterra



Hawk Mascot of Olathe East High School 1996

Olathe, Kansas



The Chesty Lion 1956
Mascot of Lawrence High School. One graduate said that she used to like to hold her hand inside the lion's mouth.

Lawrence, Kansas



Olathe, Kansas 2010



Trails West 1995 Lone Elm Park

Olathe, Kansas



Close up of Trails West.

Jayhawks



Saramanawk 1965

Kansas Memorial Union University of Kansas

A mythological Pilipino bird originally cast for the University of the Philippines where one of Elden's students was a professor. The original was destroyed in a fire.



Kansas Saramanawk 1983 Bronze

Teffterra

Monumental Stone Sculpture



Keepers of Our Universe (male side) 1988

Burcham Park Lawrence, Kansas



Keepers of Our Universe (female side) 1988
Nature spirits from a man who swam in the river as a boy.

Around the Studio



Elden at work 2009

Teffterra



James Naismith maquette

Tefferra



Teffterra

Keepers of Our Universe (male) maquette



Teffterra

Keepers of Our Universe (female) maquette

1988



Players maquette 1988

Teffterra



Ichabod Washburn maquette

Teffterra



Prairie Markers.

Teffterra

Elden said the Indians used to leave mounds of rocks on the prairie to mark trails, as did white people heading west. Early farmers in Kansas set up limestone fence posts to mark their fields, and these are the inspiration for Elden's pieces. The sides of these limestone slabs were cut by hand with chisels. Note Elden's impressionistic treatment of chisel marks on the sides of the markers.



The Guardian maquette

Teffterra



The Chesty Lion maquette

Teffterra



Compact Hawk

Teffterra



Pterodactyl Hawk (evolution of a concept)

Teffterra



Taco Joe, Jayhawk maquettes and medallions

Teffterra



Sand Rat maquette sketch

Teffterra



Sand cast teaching projects for students.

Teffterra



Jayhawk Medallion for the Athletic Department.

Teffterra



Wax model for the goddess, Star Spirit.

Teffterra



Chinese copy of Star Spirit celebrating the 30 year anniversary of the thawing of relations between the United States and the Peoples Republic of China, to be sited in China in 2010.



Medalion University Centennial (obverse)



University Seal (reverse)

Teffterra



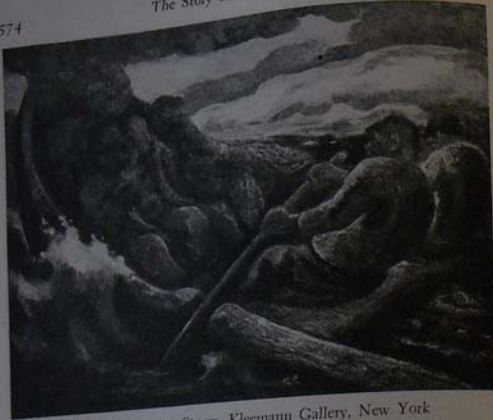
Tefferra

Taco Joe Elden made Taco Joe for a Taco John's restaurant that was out on the edge of town a short drive to the studio where they would go for lunch.



Ceramic horse's head in for repairs.

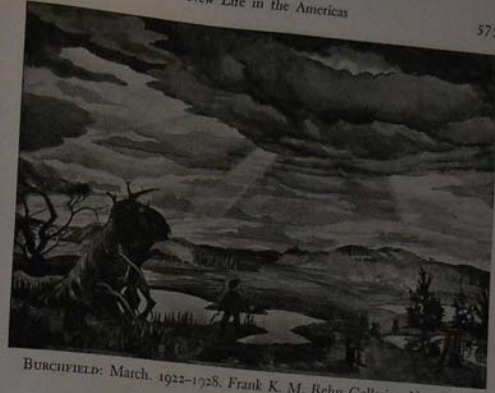
Teffterra



HIGGINS: Coming Storm. Kleemann Gallery, New York

achieved. Hartley throughout his career has held to a simplification and a directness of statement placing him squarely within the primitive-modern development. Coming from territory more to the right, Eugene Higgins has moved toward a Ryder-like, moody expressiveness, especially in his studies of life by the sea.

It was the touch of a beyond-nature reality that first lifted the paintings of Charles Burchfield above "mere realism." Choosing the homeliest of scenes as motifs, painting what appear at first glance to be illustrational records of suburban and industrial America, Burchfield has added a haunting atmospheric truth while painting with a twentieth-century feeling for structural organization. Never approaching abstraction, he yet absorbed in his art training something of form-consciousness. He was one of the first of the great American moderns to have his entire schooling in this country—at Cleveland. His professional experience was all too typical, as lack of appreciation of his work prevented him from giving more than spare time



BURCHFIELD: March, 1922-1928. Frank K. M. Rehn Galleries, New York

to painting until 1930. His particular sort of picturing, drawing on Main Street for subjects, but free from the malice or hint of superiority that implants in most Main Street literature and painting an ultimately unpleasant taste, procured for him finally a place among the most popular of the independent moderns.

Both Hopper and Burchfield showed in their interpretations of American life something like the intensified reality achieved by the German verists. It was not camera truth that they were after, but a concise pictorial record of aspect and spirit. In both cases it is the *feeling* of the subject that comes over to the beholder. Neither man distorts so freely as did Grosz and Dix in their verist days, but the evocation of a mood and an essence is as sharp and true. Coming before the more widely exploited American Scene group of the mid-twenties, Hopper and Burchfield had reason to claim priority as discoverers of the effectiveness of the native scene as thematic material; just as in the thirties those critics who kept their heads were able to see the two as rightly at the top of the roster of American Scene interpreters.

Elden's reading material he has propped up on the front of his treadmill exercise machine at the shop. He says the author maintains that the most successful painters succeeded in creating interior spaces in their paintings.



Tefferra

Tools of the trade. A tape measure, plaster rasp and trowel. Look again at the Face of Moses for marks of the rasp and trowel left in the wax of Elden's model of Moses.



Teffterra

Bronze *Moses* used in filming the documentary, *Moses: the Creation of a Heroic Sculpture* and wood and steel armatures used in making clay heads.



Teffterra

Boxes of casting wax, a piece of Elden's teacher, Bernard Frasier's, work and a cross made for Saint Benedict's Cathedral in Atchison, Kansas.



Elden in front of his home in Lawrence, Kansas, 2009.

A Good Pour

Two years after Elden Tefft retired from teaching sculpture at K. U. in 1990, he started building a state of the art sculpture foundry a couple of miles outside town that he calls Tefft Terra. Elden and other artists who work at the foundry accept commissions for art bronzes, and every few weeks he oversees a bronze pour at the foundry. As you drive out in the evening after dinner, you can see new streets, roundabouts, and houses that tell you how much the city has grown out toward the foundry in the last twenty years. As you approach a country gate by a gravel driveway leading back a hundred paces to the building, you start to realize why Elden picked an isolated spot to set up his foundry. A roaring whine like a jet plane getting ready to take off emanates from the structure and gets louder as you drive back to the building and park next to eight or nine other cars along the driveway.

Inside the building are ten or fifteen people standing around a green flame that shoots up a foot high out of a hole in the floor. Next to the green fire, five large plaster molds stand in a sand pit like upright concrete cylinders. Each one has a small board with black burned spots sitting on its top.

Pouring hot bronze into a mold is the biggest step in a long series of time consuming stages. Tonight the sculptors will find out if any of a hundred things that can go wrong have all been foreseen and avoided. A complicated ventilation system has been designed in the mold with little tunnels to let out any air that might become trapped inside the sculpture and prevent the liquid bronze from reaching every last part of the piece. These air passages go out from the bottom of the piece and continue periodically up the piece like tree branches. If any air is trapped in a curve somewhere there will be an empty space in the sculpture at that point. An elbow can come out with a hole in it

If the liquid bronze is too cool it will freeze before it completely fills the spaces in the mold. If the liquid bronze is too hot it can cause porosities in the finished piece by generating new gas inside the mold. There can be unseen impurities in the bronze that might keep it from setting up properly when it cools down. Thermocouples and thermometers have been known to malfunction at the high temperatures necessary for bronze casting. You pays you money and you takes you chances.

Elden's son, Kim, is the foreman of a crew of three people who stand like Mishach, Shadrach and Abednigo around the fiery furnace in Babylon, "seven times hotter than hot". They are dressed in green heat resistant smocks and wear welder's helmets with thick glass plates in front of their faces. Heavy leather gauntlets protect their arms and wrists and heat resistant leggings cover their feet and shins. Kim uses long, heavy tongs to pick up a bronze ingot shaped like a brick and gently places it in the thick ceramic crucible that is sitting down in the hole in the floor with the green flames shooting up around it. As he sets the ingot down into the crucible, he takes care not to splash out any of the super heated bronze that is already melted into liquid in the bottom of the crucible. He takes an implement like a garden hoe, but with a metal handle, and scrapes off impurities in the bronze that float like scum on the top of the thick liquid the color of orange kool aid. When he has scraped off the top of the melted pool in the crucible, he

tamps the hoe down onto a steel grate to knock off the slag which is already starting to solidify down to the consistency of a slushy snow ball on the blade of the hoe. He sticks the tip of an industrial-sized thermometer mounted on the end of a three foot handle down into the liquid bronze at regular intervals and calls out the temperature to a scribe standing by a clock with pencil and clip board recording times and temperatures.

“2000 degrees.”

“2100”.

“2150.”

Kim signals to the man that has been handing him his tools. This one turns a valve and the green flame and roaring sound cease. Two assistants use a buckle with handles sticking out four feet on each side to clamp onto the crucible as an electrical winch lifts it up out of the furnace and the crew guides it over to the first mold. Kim removes the board which has been keeping dirt out of the mold and the two people, positioned on each side of the long handles, tilt the heavy crucible while a third person uses a long hook to steady it as the viscous orange liquid pours out of the crucible and flows down into the mold. When the orange bronze fills up to the top of the opening in the mold leaving a small puddle on top of the cylinder, they move over to the next mold and the process is repeated until all four molds have pools of orange glowing liquid sitting in small depressions the size of a coffee cup that have been carved down into the tops of the flasks.

Elden brought the lost wax technique of bronze casting back north with him after his trips to Mexico in the 1950’s. Archeologists tell us that Native Americans down in Meso-America were already casting bronze when Hernando Cortez showed up in 1520. When Elden he came back from Mexico, along with the Mexican bronze casting techniques, he also brought back a ceremony dating back possibly to before the conquest. Glasses of fruit punch are passed around the room and the guests, especially any children that might be present, are counseled not to drink from the cup in their hand until Elden, as the high priest, pours some of the punch out onto the hot bronze pooled on the cylinders and says in a loud voice, “Buena Suertes!” (“good luck”). The pale yellow juice sizzles and pops on the surface of the bronze, no longer glowing but still very hot.

What’s done is done and this is all that can be done until the bronze inside the cylinder cools down enough to solidify. The faces of the artists relax and people start talking more animatedly in the room. Like harvest time on a farm, the fruits of nature’s processes have been gathered in.

It is difficult to understand just how hot 2000 degrees is. Following the pour, yellow corn is popped over the empty crucible in a wire basket with a long handle. The children are allowed to do this even though they usually burn some of it because they are used to campfire temperatures. In Mexico corn and fruit drink were sufficient, but over the years, here in Kansas, the variety of food offered at the pour has grown. Kim said this is as a result of a sculpture student from Thailand who was a professor back home, and the way the Thai community would turn out for his pours with whole tables set up with food to celebrate. The children stick fat sausages on the end of long steel kabob sticks and thrust them down into the empty crucible. After half to three quarters of a second, the fat in the sausages starts to heat up and explode in a shower of little fat droplets that shoot out from the meat and burst into flame as they near the sides of the hot crucible, like a sparkler on the fourth of July. And, the children look at each other, the sauseges are cooked.

After the plaster molds have sat and cooled for an hour or so, they are hauled outside and the sculptors break them open with hammers and hatchets. The bronze inside is solid now but it still glows a dull red in the night as the white plaster is separated from it and the bronze is sprayed with water to cool it down enough to handle. Now the artists can see their sculptures for the first time cast in bronze. They not yet a pretty sight with rough, black tarnish covering all the surface of the metal. Bronze has crept up into the ventilation system of each mold as it pushed the air out and dried in the little air tunnels forming the branches of what they call a “Christmas tree”. Any cracks or separation in the mold, caused by the extreme heat of the liquid bronze, will allow little fins of bronze called “flashing” to emerge from the sides of the sculpture. All this will have to be cut off from the surface of the sculpture with a chisel in a process called “chasing”. It’s called “chasing” because each time the chisel removes a small section of flashing or Christmas tree there is more bronze left and you have to set the chisel down a little farther back and strike again. It seems like you are “chasing” after the metal. Little burrs on the sculpture will have to be ground off and cavities in the metal filled in and smoothed over. It will be sand blasted and polished, complex pieces assembled, and the finished piece sprayed with a chemical to give it a patina and make it look old right away. All this other work is gladly accepted if only the pieces come out of the mold properly set up.

Tonight everything looks good as the bronze emerges from the mounds of crumbled plaster. After the guests have left, the artists are still outside scraping the last little pieces of plaster off their pieces with dental picks. The most critical, expensive and chancy step in the process has been successfully completed and the sculptors are happy. “Buena Suertes!”

Elden's Chronology

1919 Bn. Heartford, Ks.

1939 Graduates Lawrence High School

1939 Enrolls K.U.

Award - Drawing and Painting, Outstanding Student Scholarship

Elective Sculpture - Faun

1941 W.W.II begins

1942 Elden drafted into Army Air Corps.

(1) first trips to Mexico

1943 Relief Murals, U.S. Army air force, Deming New Mexico

Award - Kansas Free Fair Art Exhibition, Sweepstake Award

Exhibition - Kansas Free Fair Art

Exhibition - Santa Fe Museum of Art Santa Fe, N.M.

1944 Recreational Therapist - Far Eastern theater

Elective Sculpture - Heremo

1945 W.W.II ends

Exhibition - Santa Fe Museum of Art, Santa Fe, N.M.

1946 Elden discharged Army Air Force

Exhibition - Philbrook, Tulsa, Ok. Honorable Mention

Marries Mary Winfred Hammer

Bronze portrait bust "Kenny"

Enrolls University of Tulsa

1947 Tulsa Artists Annual Competition: Honorable Mention

1948 Exhibition - Philbrook Art Center Tulsa, Ok. (one man show)

1949 Returns to K.U.

Completes B.A. program

Award - Design, Scholarship, University of Kansas

Award - Syracuse Museum of Fine Arts, Syracuse, New York, 14th Ceramic National, Honorable Mention

Exhibition - Syracuse Museum of Art, Syracuse, New York

Award - Handy and Harmon Prize in Silversmithing

1950 MFA

Begins teaching, K.U.

Exhibition - Museum of Art, one man show, Kansas University

Exhibition - Minneapolis Institute of Art Minneapolis, Mn.

Exhibition - Des Moines Art Center Des Moines Iowa

Exhibition - San Francisco Museum of Arts, San Francisco, Ca

Exhibition - Los Angeles County Art Institute, Los Angeles, Ca

Exhibition - Fine Arts Gallery of San Diego, San Diego, Ca.

Exhibition - Dallas Museum of Fine Arts, Dallas, Tx

Exhibition - Museum of Fine Arts of Houston, Houston, Tx.

Exhibition - J. B. Speed art Museum, Louisville, K.Y.

Exhibition - Carnegie Museum, Philadelphia, Penn

Exhibition - Associated American Artists Galleries, New York, N. Y.

1951 Cranbrook Academy of Art, Bloomfield Hills, Mich.

K.U.. Begins teaching classes.

Studies and Research, lost wax technique. Sets up teaching foundry
3rd floor Strong Hall, K.U.

Exhibition - Akron Art Institute, Akron Oh.

Medallion - Russell L. Hayden
(K.U. school of medicine)

1952 Advanced study and research Cranbrook Academy of Art Bloomfield, Mich..

Exhibition - Joslyn art Museum, the Midwest Show, Omaha, Ne.

Medallion - Samuel J. Crumbine
(Kansas Public Health Association)

Medallion - Washburn Distinguished service Award (Washburn University)

Medallion - William Allen White Children's Book Award (Kansas State Library
Association)

Medallion - Jayhawk (The University of Kansas)

1953 Founding - (2) Mexico - casts doors for Memorial Campanile, K.U.

Establishes K.U. Sculpture Foundry, Baily Annex, K.U.

Southwest Kansas Sculptors Association

Exhibition - Denver art Museum, 58th Annual Exhibition for Western Artists, Denver,
Co.

- Elective sculpture - Muser 1
- Medallion - Washburn Distinguished Service Award
(Washburn University, Topeka Kansas)
- Medallion - Kansas Territorial Centennial Coin
(The State of Kansas)
- Medallion - The University of Kansas Seal
(The University of Kansas)
- Plaque - Chemistry Recognition Award
(Cook Paint and Varnish Co. Kansas City, Mo.)
- Architectural Sculpture Relief for Tennessee School of Medicine Memphis, Tn.
- Founding - (3) Mexico, University Endowment Association
- 1954 Exhibition - Annual Kansas Designer Craftsman Show, K.U.
- Exhibition - decorative Arts Exhibition, Wichita Arts Association , Wichita, Ks
- Exhibition - City Art Museum of Saint Louis, Missouri Show, St Louis, Mo.
- Exhibition - Museum of Art, Kansas University
- Award - Annual Kansas Designer Craftsman Show: First Prize
- Portrait Bust - Dean Donald Swarthout, Swarthout Auditorium, Murphy Hall,
K.U.
- Medallion - The University of Kansas Seal
(The University of Kansas)
- Founding - (4) Mexico
- 1955 Exhibition - Nelson Gallery of Art, Mid-American Annual, Kansas City, Mo.

- Museum of Art. K.U.
- Medallion - The Seal of the State of Kansas
(The State of Kansas and the University of Kansas)
- Plaque - The Seal of the State of Kansas
(The Kansas Armory Board)

- Consult - Eisenhower Committee on Pilon Plaques, Abilene, Ks.
- Elective Sculpture - The Trio
- Son, Kim Trevor Tefft, born.
- Exhibition - Art Gallery, Ball State Teachers College, Muncie, In.
- Exhibition - Joslyn Art Museum, the Midwest Show, Omaha, Ne.
- Plaque- The Regent's Plaque, Strong Hall Rotunda
(The University of Kansas)
- Plaque - Planter's House Historical Plaque
(The City of Leavenworth, Lv., Ks.)
- "Wheat" constructed steel for exterior wall Hutchinson K.S. (Collaborated)
- Exhibition - Nelson Art Museum, Kansas City, Mo.
- 1957 Exhibition - City Art Museum of Saint Louis, 16th Missouri
Show, Saint Louis Mo.
- Award - City Art Museum of Saint Louis, 16th. Missouri show, St. Louis,
Mo., Anon Award
- Exhibition - Joslyn Art Museum, Regional Art Today, Omaha, Nebraska
- Exhibition - Wichita art Museum, Air Capitol Show, Wichita, Ks.
- Award - Wichita Art Association, Air Capital Show: First Award
- Medallion - Lawrence Paper Company 75th Anniversary Medallion
(Lawrence Paper Co., Law., Ks)
- Plaque - Ottawa University Distinguished service Award
(Ottawa University, Ottawa, Ks.)
- 1958 Exhibition - Ottawa University Gallery, one man show, Ottawa
University, Ottawa, Ks.
- Exhibition - St. Benedict's College Gallery, one man show, St. Benedict's College,
Atchison, Ks.
- Exhibition - Iowa state Teachers College Invitational, Cedar Falls, Iowa.

Exhibition - Art Gallery, Ball State Teachers College, Muncie, Indiana

Medallion - Kansas City Power and Light Company 75th Anniversary
(Kansas City, Mo.)

Plaque - University of Kansas Athletics Board

"Rose" Wall sculpture bronzed steel Alpha Omicron PI Sorority
Lawrence, Ks. (Moved to University of Alabama, Tuscaloosa, Al.)

Film - "Sculpture by fire" (live T.V. show)
(KCMO)

1959 - Exhibition - Bob Jones University, one man show, Greenville, South
Carolina

Exhibition - Wichita Art Association, Decorative Arts Exhibition,
Wichita, Ks.

Exhibition - Ottawa University Gallery, one man show, Ottawa
University, Ottawa, Ks.

Exhibition - City Art Museum, of Saint Louis, 17th Missouri Show, St Louis, Mo.

Award - City Art Museum of St. Louis, 17th Missouri Show, St. Louis, Mo: Prize

Portrait Bust - Bishop William A. Quale, Quale Library, Baker
University, Baldwin, Ks. Placed in new library 2nd
dedication 1962

Sculpture - "Quest for Space" Bronze and Aluminum, Fairfax Elementary School, Ks.
City Ks.

"St. Francis" - bronze in the round Augustine Hall St. Benedict's College
Atchison Ks.

1960 - Portrait Bust - Chancellor Franklin D. Murphy
Murphy Hall, K.U. (The University of Kansas)

(1) Bronze Casting Conference (Chairman)

Sculpture Casting in Mexico: A Report on Bronze in Mexico
(Kansas University Endowment)

Proceedings of the National Bronze Casting Conference March 31, April 1,2 1960
National Bronze Casting Conference

Film - "Bronze Casting of Sculpture" (International film Bureau, Chicago)

Plaque - Academic Honors Award Plaque
Department of Zoology, Strong Hall
(The University of Kansas)

1961 - Norway, Denmark, England, France, Spain, Italy

1962 - Founding - (1) Costa Rica, Carnegie foundation

Portrait Bust - Chancellor Francis Snow, Snow Hall, K.U. (The
University of Kansas)

Portrait Bust - Chancellor Frank Strong, Strong Hall, K.U (The
University of Kansas)

(2) Sculpture Conference (Chairman)

Proceedings of the Second National Bronze Casting Conference
April 12, 13, 14, 1962 Second National Sculpture Casting Conference

Article - "Sprue systems for Lost Wax Casting" Ibid.

"Report on European Foundries" Ibid

Member - National Metal Sculpture Exhibition committee

1963 - Plaque - University of Kansas Alumni Distinguished Service Award
(The University of Kansas)

Founding - (5) Mexico, Honduras, Guatemala, Panama, El Salvador,
Panama, Columbia. Taught, University of Costa Rica
University (Endowment Association)

Plaque - Laura Ingalls Wilder, Montgomery County Courthouse,
Independence, Ks.

(3) Sculpture Conference (Chairman)

Taught - University of Oregon

Lost Wax Sculpture Foundry and Equipment: Sources and Prices
(Information Center)

Proceedings of the Third National Sculpture Conference (Third National Sculpture Conference)

Article - "Mexican and Central American Foundries" Ibid

(1) Philippines and Japan

1965 - Founding - Hawaii, Japan, (2) Philippines

Article - "The Primitive Foundry" *Craft Horizons*, Vol. XXV 1965 pp.26-31

1966 - Workshop - Kalamazoo

Director, Sculpture Technical Information Center (to 1968)

(4) Sculpture Conference (Chairman)

Lost Wax Sculpture and Foundry and Equipment: Sources and Prices
2nd Edition (Sculpture Technical Information Center)

Proceedings of the Forth National/International Sculpture Casting Conference May 5, 6, 7 1966 (Fourth National / International Sculpture Casting Conference)

Article - "Mexican Sculpture Founding" Ibid.

"Sculpture Casting in Japan and the Philippines" Ibid

1967 Workshop - Crested Butte, Co.

Consult - School of Religion Stained Glass Window

Award - Fidelity State Bank, Topeka, Kansas, Architectural Sculpture Competition:
First Award

Start work on Statue of Moses

1968 - Medallion - The Darrow Award
(The University of Kansas School of Medicine)

Director National Sculpture Center (1968 to 1978)

(5) Conference (Chairman)

Lost Wax Sculpture Foundry Equipment, Sources and Prices

3rd Edition (Sculpture Technical Information Center)

Sculptor casting in Mexico: A Report on Bronze Casting in Mexico
2nd Edition (National Sculpture Center)

1969 - Portrait Bust - Chancellor Franklin D. Murphy, Murphy Hall, K.U.
(The University of Kansas)
2nd Edition Franklin D. Murphy Sculpture Garden,
University of California

Clark Wescoe, Wescoe Hall
(The University of Kansas)

Plaque - University of Kansas Professorship Plaque
(The University of Kansas)

Workshop - Crested Butte, Co.

1970 - (6) Sculpture Conference (Chairman)

Proceedings of the Fifth National Sculpture Conference, May 9, 10, 11 1968
(National Sculpture Center)

Waste Mold Casting (The Sculpture Publishing Foundation)

Medallion - "William Allen White Foundation Award"
(William Allen White Foundation)

1971 - Visits Archeological sites - Mexico, Guatemala, Honduras, Costa Rica, Nicaragua

Research - (Glass) Corning, New York. Verona, Wisconsin. Madison,
Wisconsin. Ceredo, West Virginia. Huntington, West Virginia.
Milton, West Virginia.

Proceedings of the Sixth National Sculpture Conference April 23, 24, 25 1970

Figure Modeling (The Sculpture Publishing Foundation)

Head Modeling (The Sculpture Publishing foundation)

1972 - (7) Conference (Chairman)

1973 - Workshop - Virginia Polytechnic Institute and State University

Proceedings of the Seventh National Sculpture Conference April 27, 28, 29

- (National Sculpture Center)
- Jury - Kansas Governor's Bicentennial Medallion Design, Wichita, Ks.
- 1974 - (8) Conference (Chairman)
- Member Oregon International Sculpture Symposium Advisory Committee
- Jury - Springfield Annual Regional Exhibition, Springfield Mo.
- 1975 - Portrait Bust - Dean Thomas Gorton, Music Library, Murphy Hall, K.U.
(The University of Kansas)
- Medallion - Fred Ellsworth Distinguished Service Award Medallion
(Kansas University Alumni Association)
- 1976 - Portrait Bust - Skipper Williams Allen Field House, K.U.
(The University of Kansas)
- (9) Conference (Chairman)
- Proceedings of the Eight National/International Sculpture Conference April 24, 25, 26 1974 (National Sculpture Center)*
- Jury - Saenger National Juried Jewelry and Small Sculpture Exhibit
Hattiesburg, Miss.
- (2) Thailand
- 1977 - Expands foundry, Visual Arts Building, K.U.
- Award - Southern Association of Sculptors, "Outstanding Service to
Contemporary Sculpture,"
Presented in the National Sculpture Conference, Jonesboro, Ak.
- Director - International Sculpture Center
- Board of Overseers - Johnson Atelier Technical Institute of Sculpture, Princeton,
New Jersey
- Advisor - Tenth International Sculpture Conference Executive Committee
Toronto, Canada
- 1979 - Member - Eleventh International Sculpture conference Selection Committee
- 1980 - Elective Sculpture - Ghost Dancer

- 1982 - Moses
Wings (Buddy Rogers Award)
- 1986 - Elective Sculpture - Mariposa
- 1990 - Retires teaching at K.U.
Award - State of Kansas Governor's Award for Lifetime Achievement
(The first time the award was ever given in field of Education.)
Jung Kong Lee's grave marker
- 1995 - Trails West
- 2000 - Baker University Wildcat
- 2003 - Holey Hawk
- 2009 - Maria
- 2010 - James Naismith
- Professional Societies -
Delta Phi Delta, National Honorary Art Fraternity
Alpha Ro Gamma, Silversmithing Fraternity
American Craftsman Council
Southern Association of Sculptors

STATE OF KANSAS

SENATE RESOLUTION No. 1828

A RESOLUTION recognizing and commending sculptor Elden Tefft.

WHEREAS, Elden Tefft was born December 1919, in Hartford, Kansas. He served in the United States Army Air Forces from 1942 to 1946; received a bachelor's degree in fine arts in 1949 and a master's degree in fine arts in 1950 at the University of Kansas; and initiated the major and master's sculpture programs at the University of Kansas. Presently, he is a Professor Emeritus of Art at the University of Kansas; and

WHEREAS, Mr. Tefft has used his talents to become a nationally recognized sculptor of bronze. His famous pieces include "Moses," which is located outside Smith Hall at the University of Kansas; "Jayhawk," which is located outside Strong Hall at the University of Kansas and stands as the school's symbol; "Ichabod," which is located at the Washburn University stadium; "Wildcat," which is located at Baker University; "James Naismith," which is located at Springfield College in Massachusetts and a second, identical statue is scheduled for installation this spring at Naismith's hometown in Almonte, Ontario; "Keepers of the Universe," which is located at Burcham Park in Lawrence; "Trails West," which was first located at the former Kansas Travel Information Center in Olathe but is now located at Lone Elm Park in Olathe; "Chesty Lion," which is located at Lawrence High School; and "Hawk," which is located at Olathe East High School; and

WHEREAS, in addition to his sculpture work, Mr. Tefft redesigned the University of Kansas' seal, which is now the current seal of the university; and

WHEREAS, Mr. Tefft began experimenting with bronze work in the 1940's. In the early 1950's, he received permission to establish a sculpture foundry while teaching sculpture classes on the third floor of Strong Hall at the University of Kansas. The foundry was first built in Bailey Annex and the sculpture classes were then moved to that facility. In 1960, he established a biennial conference that brought together sculptors from around the world and founded what would eventually become the International Sculpture Center based in New Jersey; and

WHEREAS, since 1960, Mr. Tefft has published numerous books and articles on sculpture and bronze casting, wax sculpting, waste mold casting and head and figure molding; he has documented his research in techniques, sculpture founding and finished sculptures in film and has edited and compiled the first nine biennial International Sculpture Conferences; and

WHEREAS, during his accomplished career, Mr. Tefft helped to further establish educational sculpture foundries throughout the United States, Latin America and Asia. He has a monumental sculpture in Tianjin, China, titled "Peace Star," which was placed in 2009 as part of "The China and the United States Memorial Sculpture of Peace and Friendship Project," in commemoration of the 30th anniversary of opening diplomatic relations between China and the United States; and

WHEREAS, Mr. Tefft is the recipient of the Phoenix Award in exceptional artistic achievement from the Lawrence Cultural Arts Commission in 2008, an honorary Doctorate of Fine Arts from Baker University in 1999, the state of Kansas Governor's Artist Award for Lifetime Achievement in 1997, Recognition of Contribution to City Enhancement and Cultural Interchange from the Lawrence Cultural Arts Commission in 1982, the Outstanding Service to Contemporary Sculpture citation from the Southern Association of Sculptors in 1977, and is listed in *Who's Who in American Art*; and

WHEREAS, Mr. Tefft continues to create bronze and stone artwork on a daily basis out of his and his son's studio, Tefft Terra Studios. Now, therefore,

Be it resolved by the Senate of the State of Kansas: That we congratulate and commend Elden Tefft for his outstanding accomplishments and thank him for his many contributions to Kansas; and

Be it further resolved: That the Secretary of the Senate shall be directed to provide 15 enrolled copies of this resolution to Senator Holland.

Senate Resolution No. 1828 was sponsored by Senator Tom Holland.

I hereby certify that the above RESOLUTION originated in the SENATE, and was adopted by that body

March 15, 2011

Joseph A. Morris
President of the Senate.

Pat Saville
Secretary of the Senate.

Kansas Senate Resolution honoring Edlen for his service

Bibliography

Le Norman - Romain, Antoninette *Sculpture The Adventure of Modern Sculpture in the Nineteenth and Twentieth Centuries* 1986 Taschen