

Taking An Extremely Oversized Calligraphy Off the Wall

Background

Wang Dong-Ling (1945-), the Chinese calligrapher, was born in 1945 in Hangzhou, China. He is a renowned Chinese artist known for his dynamic calligraphy and contemporary ink art. In 2018, one of his exhibitions at the Art Institute Chicago introduced the uniqueness of his art: "He was best known for large abstract artworks that he calls 'calligraphic paintings.'"

Wang Dong-Ling creates his artworks through performances in which he translates the text of ancient Chinese verses into gestural interpretations of traditional characters. He is considered to have brought new freedom to the art of calligraphy.

The textual content of this calligraphy artwork is authored by Zhuangzi (369-286 BC), a respected figure in Daoist philosophy who lived during the mid-Warring States period. His work, "Zhuangzi," is regarded as one of the greatest literary works in China. Employing fables and humor, Zhuangzi conveys profound philosophical meanings. He advocates for inner freedom, encouraging individuals to transcend material pursuits and live in harmony with nature. His philosophy emphasizes effortless action and relinquishing artificial control. His profound ideas have had a significant impact on East Asian philosophy and culture.

In 2003 Wang created a calligraphy artwork inspired by Zhuangzi entitled *Xiao-Yao-Yo*. It is often described as free spirited, joyfully exploring the world. Calligraphy, on the other hand, is a traditional, highly valued, and aesthetically pleasing form of traditional Chinese art. The combination of the two embodies shared ideals of freedom, art, and spiritual pursuit.

This artwork is the largest piece ever created by the artist, measuring approximately 7.5 (24.6 ft) meters in height and 12.5 meters (41 ft) in width. It is composed of 30 sheets of Chinese Xuan paper (248×129 cm) (97 x 50 in) joined together. The completed artwork is considered as a groundbreaking masterpiece, and has been mounted and displayed on the wall of a main hall in one of the buildings at the China Academy of Art in Hangzhou, China, in 2003.

The building was designed as a multifunctional space within the campus, serving as a café, bookstore, and exhibition hall. The massive calligraphy artwork was directly attached to the wall.

Fourteen years later, in 2017, construction was scheduled in the space where the artwork is installed. This meant that it had to be removed from the wall before a specific time, otherwise, there was risk of it being damaged during the construction process by the workers (Fig.1).

Figure 1. Before removal



Before removal

Due to being displayed in an uncontrolled environment for over a decade, the artwork displayed yellowing, wrinkling, mold, foxing, various stains, and structural damage. Safe removal of the huge artwork from the wall without causing further damage posed an extreme challenge.

The academy invited local traditional mounters for advice, they all suggested using the wet removal method. Wet removal is the most commonly used and effective technique in Eastern painting and calligraphy conservation and mounting. However, there were concerns that this was not the best solution for this particular painting.

In 2016, the local team invited us to provide an assessment for removal of the artwork. During the initial survey, we were not only amazed by the enormous size of the piece but knew that removal of an artwork that was directly applied to the wall would be extremely challenging and entirely different from the regular process of working on a table.

After initial observation of the paper, the method of backing, and the environment of the artwork, we thought that the wet removal method was not suitable for this situation. Instead, we recommended using dry removal. It would take longer, but it would be safer for the paper-based artwork.

In addition to its massive size, the artwork is not applied to a flat wall, but rather to a curved wall spanning approximately 12.5 meters in width. Additionally, at the bottom of the artwork, there are only up to three backing layers of Xuan paper, making the overall mounting very thin.

Overall, the artwork exhibited yellowing and brittleness. In the lower part of the painting near the floor there were numerous structural damages, water stains, and biological deterioration as well as obvious tide lines, discoloration, and mold (Fig. 2). On the right side, between the door and the

floor, there were some layers of interior decorative paint. And at bottom left there was a noticeable area of discoloration caused by a wooden board behind the paper that was used for electrical wiring and maintenance purposes (Fig. 3).

Goals and limitations

We had about five months to plan how to safely proceed with this project. To coordinate with the ongoing construction, we had to complete the removal of this enormous calligraphy artwork within 4-6 weeks. If that deadline could not be met, the possibility loomed that they would abandon the plan to preserve the painting.

We were understandably concerned that we would not be able to accomplish the work in the given time frame, but held to the hope that the team could develop superman abilities to work at 7 meters high.

The requirements for the project were varied. A team of 5 conservators and assistants traveled from Taiwan to Hangzhou to work with a local team of 4-6 members. We needed equipment that would allow conservators to move and work from floor to 7 meter ceiling. We also need appropriate tools to ensure the dry removal method worked well. There had to be a set of supporting devices that could safely hold the huge detached artwork. And importantly, we had to ensure the safety of all team members while they worked at such heights.

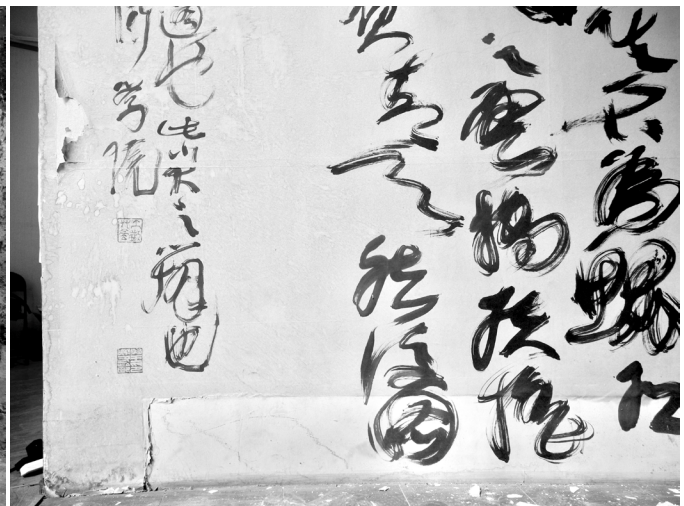
Lastly, we also needed to prepare an emergency plan if we encountered unforeseen circumstances, which would include having alternatives or conservation tools in place, in case problems or damages arose during the removal process.

Despite the tight schedule and many difficulties, we tried to do our best to design a feasible plan and work closely with the relevant teams to ensure the successful completion of this calligraphy artwork removal task.

Figure 2. Mold



Figure 3. Damage at bottom left



Taking An Extremely Oversized Calligraphy Off the Wall, continued

Treatment

During the working period, we closely collaborated with the local team. In order to prepare the area for conservation, they first removed part of the ceiling and wooden floor, as well as cleaned the environment and arranged security management. The conservation team proceeded to document the surface of the artwork, taking ultraviolet images of the mold areas locally.

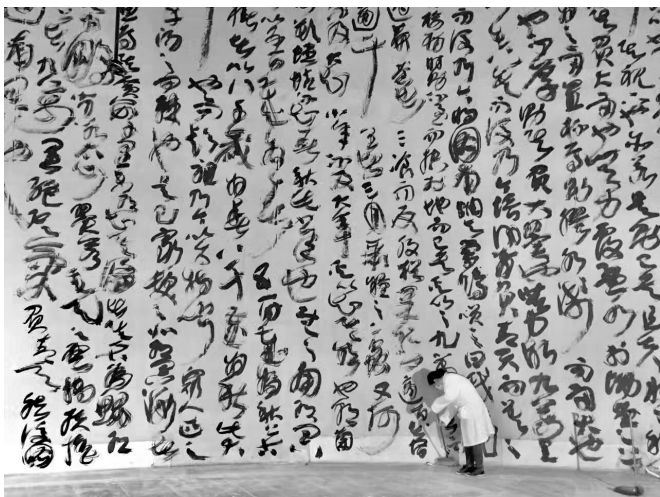
We then put together the plans for the treatment, making sure to allow for flexibility to adjust to any situation we might encounter. The main working steps are as follows.

Surface cleaning

Figure 4. Surface cleaning on an electric lift



Figure 5. Cleaning the floor regularly



The local team provided an electric lift and two sets of work scaffolds to help with the cleaning and inspection of higher areas of the artwork (Fig. 4). At this stage, we began to overcome the fear of working at heights. We brought a vacuum cleaner and soft brushes onto the lift for a thorough surface cleaning.

Additionally, during the on-site working period, we cleaned the floor 3-4 times a day. When working with this artwork, we noticed the size ratio of the conservator and the artwork often resembled a traditional Chinese painting scene in a traditional Chinese style (Fig. 5).

Temporary consolidation

Since the damage to the paper at the bottom was more severe compared to other areas, and the strength was relatively fragile, after surface cleaning we applied temporary consolidation using 1% methylcellulose and non-woven fabric at the cracks on the painting. We used the same method to reinforce the paper joins of the entire surface as a preventive measure to avoid damage during the removal process (Fig. 6).

Figure 6. Temporary consolidation with methylcellulose



We then started the detachment of the painting from the floating wooden board at the bottom, to prevent new cracks occurring. This area was very close to the ground which made it difficult to work. The team had to sit and lie on the floor to slowly proceed with the removal procedure (Fig. 7). But once the bottom was separated from the wooden board, the subsequent steps became relatively easier and safer.

Figure 7. Detaching the damaged area at the bottom



Taking An Extremely Oversized Calligraphy Off the Wall, continued

Protection nets installation

In order to provide safer protection for the calligraphy during the process of removing it from the wall, we tried two methods. The first was placing plastic netting in front of the artwork, but we quickly gave up this option as it blocked the conservators from working effectively. The second way was using fine stainless-steel wires, adjustable screws, D-shaped hooks, floor hooks, and wall hooks as accessories (Fig. 8).

Starting from a position 30 centimeters away from the curved wall, we placed floor hooks and adjustable screws at one-meter intervals along the floor and ceiling, (Fig. 9).

Figure 8. The floor attachments of the protection net



Figure 9. The hooks and wires on the floor following the curved wall



Then, we proceeded to install vertical steel wires between the floor and ceiling and set up horizontal steel wires in a similar way. Once we adjusted the tightness of each wire, we secured the junctions of vertical and horizontal wires using cotton ropes, creating a large and sturdy net.

This arrangement created a safe space between the wall and the steel net, allowing the cylindrical tube intended for rolling up the artwork to move smoothly inside and protect it from tipping outwards. The conservators could easily work around the wire lattice.

Two PVC pipes with a diameter of approximately 12 centimeters were cut and joined to the desired length with the assistance of local team, then cleaned and wrapped with paper. This served as the central axis for rolling up the artwork after drying. PVC pipe was also used to make two protective covers that could be installed on the protective net to shield the tube. With everyone's help, the tube was successfully positioned vertically and secured to the ceiling using steel wires.

Challenge of removal

We initially attempted to separate the four layers of paper used in the artwork together with an unrelated underlying wallpaper from the wall at the same time. However, we found that the wallpaper was not continuous across the entire wall area beneath the artwork. This made it difficult to separate from the wall and risked damage to the artwork. As a result, we had to give up this plan. It left only the basic but the more difficult option of removing only the artwork and the associated layers. (Fig. 10).

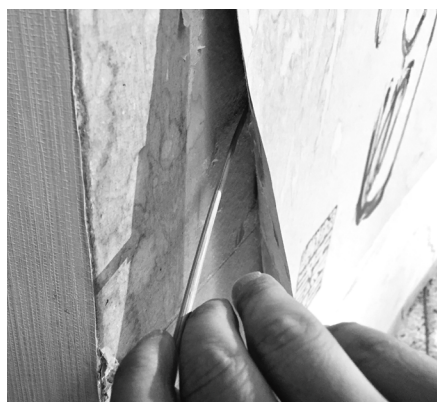


Figure 10. Separating the third and fourth layers of paper with a bamboo spatula

We had no information about the order of the backing papers and how the painting was pasted onto the wall. So in our initial attempts we tried removal from both the left and right sides to determine which side would release more easily. (Fig. 11).

We hoped to be able to work from both sides simultaneously. However, the trial process did not go well. After days of working tirelessly for over ten hours each day, our disappointment grew, and the time pressure we faced increased. Everyone on the team felt that we were going to fail.

Figure 11. Attempt to remove from the left side



Taking An Extremely Oversized Calligraphy Off the Wall, continued

This occurred before a long holiday weekend, so we decided to set aside our work and relax for a few days. After the vacation, the team members returned with revived moods and strength, and also with better luck.

When we were back to work again, we finally found an area on the right side that could be removed smoothly, and as long as the separation was from between the third and fourth layers of paper, we could remove the calligraphy from the wall without damaging it. This result encouraged us; thus, we adjusted our working arrangement once again, concentrating everyone and the tools to the right side for the removal process.

We reorganized our working scaffold into five levels, with one person at each level for the removal in the respective areas. It took us several days to completely separate the first section on the right side of the calligraphy, approximately 30-50 centimeters wide, from the wall, from floor to ceiling.

We positioned the tube (Fig. 12) at an appropriate distance to the left of the detached section. Then we hung a blank paper sheet that had been prepared in advance to attach the artwork to the tube. The artwork was rolled face in at this stage.

Figure 12. Installing the tube



Throughout the process, we continuously used a laser measuring tool that projected a red light to ensure our tube remained vertical. This was important as it determined whether we could successfully roll up the 12-meter-long artwork along the curved wall (Fig. 13).

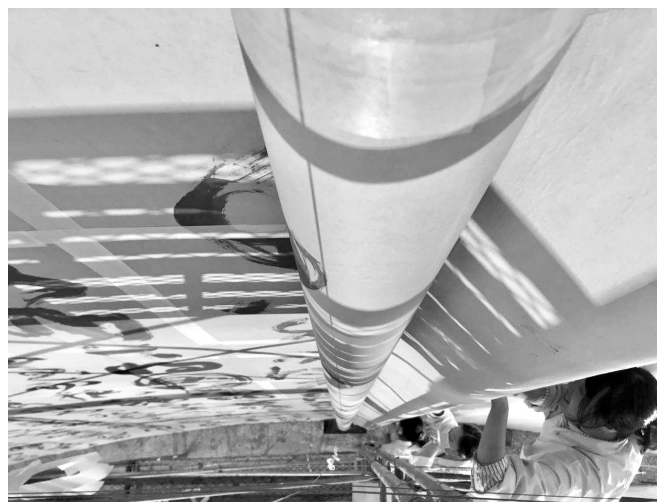
After several adjustments, we successfully connected and rolled the artwork, blank paper sheet, and tube together and waited for it to dry. After this stage, we were finally ready to proceed with the actual challenging removal process.

Because of the varying backing conditions of the five layers, the removal was sometimes easy and sometimes very challenging. Generally, we would roll the painting onto tube approximately every 20-30 centimeters. Since the artwork

was very close to the ceiling and the floor, we had less than 5 cm space for rolling the tube.

The team had to be very careful each time to coordinate well when rolling and moving the artwork, always using the laser measuring tool to ensure the vertical position of the tube. Each day, only a small width of the painting could be separated.

Figure 13. Rolling the artwork onto the upright tube along the curved wall



Bamboo spatulas

Separating in between the third and the fourth layers from the four-layered backing Xuan paper without damaging the upper layers was not an easy thing. Conservators often could not see their hands, tools, and paper layers, making it even more difficult. After testing various regular spatulas and conservation tools, we eventually decided to use spatulas made of bamboo (Fig. 14).

Figure 14. Bamboo spatulas



Taking An Extremely Oversized Calligraphy Off the Wall, continued

The bamboo spatula is one of the most commonly used tools by Eastern painting conservators. A regular-sized bamboo spatula is typically used for removing a painting from the drying board. We had brought bamboo spatulas of several different sizes with us from Taiwan, but we needed more, so we asked the local team to help us find suitable dried bamboo.

Bamboo is very easy to process by hand; we set up a small workshop on-site to teach our fellow team members how to make bamboo spatulas and showed them the tips. We made various sizes, lengths, shapes, thicknesses, and flexibilities of spatulas. Thus, each of us had several spatulas at hand, ready to be used accordingly. Generally, everyone each had at least a 20, 30, and 40-centimeter bamboo spatula.

Owing to the rolling up of the artwork, conservators could-sometimes see their hands during the removal work, but they were unable to see the precise position of the tip of the bamboo spatula in relation to the paper.

So, how to accurately perform the separation and removing of the paper layers? The conservator must remain focused on the subtle feedback from the paper while using the bamboo spatula and sense whether the spatula is sliding precisely between paper layers or the wall. (Fig. 15). This feeling is delicate, our chief conservator Ting-Fu always said, it is just like feeling whether a fish has taken the bait.

Figure 15. Concentrating on the removal process through the protection net



Other fun parts

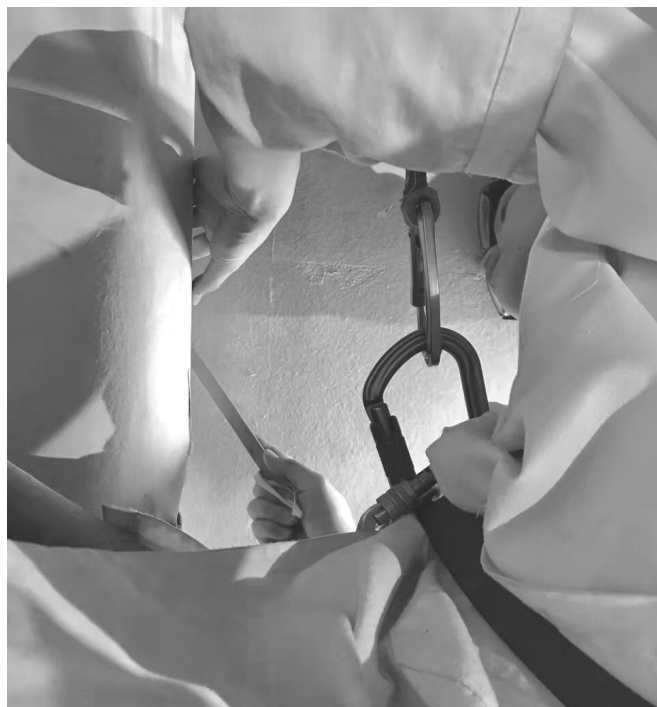
Since we had to work on different levels of scaffolding, we needed to arrange positions according to each one's tolerance for heights. For example, our chief conservator Ting-Fu had previous experience in rock climbing (despite being afraid of heights), so he was assigned to the highest level, while the one who was most afraid of heights was positioned on the ground level. We purchased rock-climbing equipment such as carabiners, quickdraws, safety harnesses, helmets, and ropes locally.

With Ting-Fu's guidance, we learned the basic skills of using the equipment and were able to safely move and work on the scaffolding (Fig. 16, 17). He was very happy that his rock climbing skills could be applied in a conservation project and found it fascinating compared to the usual work in the lab. And of course the team also came away with new knowledge and physical skills through this project.

Figure 16. Moving safely on the scaffolding with quickdraws and safety harness



Figure 17. Hanging in the air to work on difficult areas



Taking An Extremely Oversized Calligraphy Off the Wall, continued

Even though we were working independently on our own level or on the ground, it was necessary for all team members to maintain constant communication and double-checks (Fig. 18). We needed to ensure that the same sections of the artwork were being simultaneously separated on different levels, allowing us to roll the tube together.



Figure 18.
Coordinating
removal
from ceiling
to floor



Figure 19.
Working
across lev-
els to keep
the line of
removal
straight,
often in
unusual
positions

Simultaneity was very important, but the difficulty of removal often varied across different areas, thus we would assist neighboring work levels and move up and down between different levels (Fig. 19). As we focused on our hands and spatula, it was common to see everyone in unconventional positions but all concentrated and smoothly carrying out the work.

Taking breaks is absolutely necessary for prolonged focus and high-intensity work! The necessary concentration was indeed exhausting. Our local colleagues noticed when we were nearing exhaustion and would remind us to take a rest, and very thoughtfully provided us with Taiwanese style bubble tea, which helped us regain our energy. The culture of mutual care and consideration contributed to a positive working atmosphere and enhanced teamwork and working efficiency (Fig. 20).

Conclusion

After nearly a month of on-site work, we finally removed the artwork completely from the wall and using the top-rope technique from rock climbing, we safely lowered the artwork to the ground where it was rolled on a large tube and carefully wrapped. The artwork will remain in storage during construction.

This project has revealed the difficulty of dealing with large-scale artworks. In addition to the basic conservation skills, other personnel's abilities such as climbing and rope access provided great help and variety of flexibility and possibilities to adapt to the on-site work. Furthermore, teamwork has been one of the most important reasons for successful completion of this project.

Acknowledgment

We would like to thank the China Academy of Art and the administrative team, who assisted in this project with us in 2017. Also appreciations to the amazing main crew: Chun-Mei Lin, Chia-Chi Li, Hsiao-Han Fang, Bin-Feng Chu, Hun Shan, Anan Wang, Min-Jie Tao, and Feng-Chun Li. We could accomplish this massive project only with you.

Biography

Ting-Fu FAN

Ting-Fu Fan majored in Asian Paintings Conservation and received his M.A. degree at the Graduate Institute of Conservation of Cultural Relics, Tainan National University of the Arts, Taiwan, in 2004.

He worked as a Chinese painting conservator at the National Palace Museum in 2006. Afterward, he worked in the Hirayama studio at the British Museum. In 2008, he established a conservation studio San-Jian in Taipei, Taiwan.

Ting-Fu's professional interests focus on conservation research, treatment development, and preventive conservation for Eastern painting and artwork on paper. He led his team to provide conservation services for public museums and private collectors and completed many conservation projects, collection care projects, documentation and condition reports, and digitization projects.

Yi-Chiung LIN

Yi-Chiung Lin works as a conservation project manager at San-Jian Art & Conservation Co., Ltd. She had led and assisted projects with museums in Taiwan, such as the National Taiwan Museum, Taipei Fine Arts Museum, National Museum of History, Taipei City Government, Bureau of Cultural Affairs, etc.

Taking An Extremely Oversized Calligraphy Off the Wall, continued

Figure 20. The conservation team

