

# Practice and Exploration of Artistic Techniques in the Course of “Ice and Snow Sculpture Creation” - Study on the Correlation of Shaping Techniques Between Ice and Snow Sculpture Creation and Figurative Sculpture Creation

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## ABSTRACT

Due to its special requirements for the environment and unique material properties, ice and snow sculpture is quite different from urban public sculpture and easel sculpture in terms of the creation process and artistic effects. Based on practice teaching and application of the course of the “Ice and Snow Sculpture Creation”, taking the accumulation of creation experience and theory as the basis, this paper studies sculpture techniques and expression forms of ice and snow sculpture space shaping, explores the artistic practice in the creation of ice and snow sculpture, and makes a comparative study on figurative sculpture creation techniques and ice and snow sculpture creation techniques, aiming to fill the theoretical and practical gaps in related fields, provide reference and guidance for professional talent training and theoretical basis for urban ice and snow sculpture creation practice.

**Keywords:** *Decorative Feature, Image, Realistic Art and Abstract Art, Figurative Sculpture.*

## 1. INTRODUCTION

China's recorded ice and snow entertainment activity appeared in the Sui and Tang Dynasties, and it was started by the northern minorities. In modern times, there are various forms of ice and snow entertainment activities, such as “Quebec Winter Carnival” in Canada, “Sapporo Snow Festival” in Japan, and “Holmekollen Ski Festival” in Norway. In China, the most representative ice and snow activity is the Harbin International Ice and Snow Festival held from January 5<sup>th</sup> to February 5<sup>th</sup>. In recent years, the northern grassland city of HulunBuir has made ice and snow art activities an important outdoor landscape in winter as part of its urban construction. The unique climate conditions make the elements of ice and snow appear in various forms, which not only decorate the white northern prairie cities in winter but also enrich people's outdoor life during the long winter. At the same time, this city has become an important ice and snow art city after Harbin.[1]

## 2. INTRODUCTION TO THE COURSE OF “ICE AND SNOW SCULPTURE CREATION”

“Ice and Snow Sculpture Creation” as a professional elective course was offered by HulunBuir University for students majoring in sculpture. The course is set in the sixth semester, with 48 credit hours of theory and practice study, 2 credits in total. With the objective of investigating students' comprehensive aesthetic quality, this course takes the training of practical ability as orientation and collaborative innovation and education as the guidance, and actively adapts to the training needs of applied technical talents in the new era. After studying this course, students are required to master the basic rules of ice and snow sculpture creation, have the ability of practical operation and academic evaluation, and be able to design small sculptures independently and master related tools. In this course, excellent ice and snow sculptures will be analyzed and interpreted from technical skills, theme selection, volume space, and other aspects. Combined with previous experience in urban sculpture and public art creation, the urban environment

is regarded as the concept of large space and sculpture as the component of the environment. Students will consider the volume, orientation, deep meaning and language expression of these sculptures. The class teaching combines easel sculpture with outdoor space art creation, allowing students to participate in the process through teachers' early-stage guidance, task arrangement, shaping demonstration. Starting from the preliminary composition, teachers conduct thematic teaching to cultivate students' innovative thinking, avoiding letting them merely learn how to reconstruct pictures.

Ice and snow sculpture art, named for its materials, has similarities and uniqueness compared with traditional figurative sculpture in shaping techniques. Ice and snow art refers to the art of using ice and snow to create images and reflect those related to ice and snow in cold regions, including ice and snow sculpture, ice and snow calligraphy, ice and snow painting, ice and snow photography. Based on the characteristics of regional cultural attributes and professional attributes, this course starts with the teaching of ice and snow sculpture art and studies the relationship between artistic techniques in the course of "Ice and Snow Sculpture Creation" and figurative sculpture techniques. The horizontal contrast between theoretical research and vertical practice creation is reflected in the later relevant practice teaching, which can promote the diversified transformation of the subject. This course combines theory in the classroom with art practice in public spaces to serve the local area and society.[2]

Ice and snow sculpture art is another way of presenting culture, which can add vitality to cities, enrich people's lives and enhance the brand influence of grassland winter cultural tourism in the extremely cold weather in northern China. Therefore, offering ice and snow sculpture art creation courses in colleges and universities in northern China is a strong proof of talent training that fully combines theory with practice. Through the study of this course, students can obtain practical operation opportunities and combine sculpture theories and shaping techniques they have learned before. In this way, it can realize the purpose of "learning for application" and fully achieve the goal of cultivating applied technical talents with certain academic research abilities.

### **3. ARTISTIC PRACTICE OF "REALITY" IN THE COURSE OF "ICE AND SNOW SCULPTURE CREATION"**

"Realistic Art" is a generalization of figurative shaping techniques in "realistic art and abstract art" of sculpture creation, rather than figurative realistic techniques traditionally. It is a shaping technique combining linear decoration techniques with figurative realistic techniques, with the former accounting for a large proportion. It emphasizes the decorative and

expressive nature of the work, integrates its own structure into the whole body, and follows the rhythm of the whole body. For example, when shaping characters, it is unnecessary to completely follow the anatomical rules, but it is much better to exaggerate or simplify the body according to specific status and spatial arrangement, leave out local details or underline structural features, extract the point, line, and face that play key roles in the rhythm. In this way, the body obtained is more aesthetic and more visual tension, which is the re-creation of the figurative body.[3]

The decorative features of "Realistic Art" are reflected through figurative shaping techniques, which mainly refer to the processing techniques of point, line, face, and body.

The method of shaping "body" through "line" has long been used in painting. The turning of lines forms a visual spatial relationship as well as a body. How to use "line" to represent "body" in sculpture art? "Line" in sculpture art is changed with the change of "body" and the viewing angle, and it is not only the outlined line of the "body". We should put the "line" into the whole and weaken the specific image to make the lines form a sense of movement and continuity and play a role in the overall direction, so as to achieve a perfect combination of decoration and art through the line.

Analysis of the decorative feature of "face" mainly focuses on the direction and turning of "face", which is a problem that sculpture art needs to face in the field of public art. It is rarely mentioned in the existing literature on ice and snow sculpture art, and related discussion is too generalized and conceptualized. From the author's point of view, "face" is an important factor to balance the composition of the whole, with its layout, direction, shape and curvature all affecting the final presentation of the work; Viewing shape figuratively is the foundation. The selective spatial arrangement of "face" requires significant professional competence, which can be seen as the artistic treatment of "Realistic Art".[4]

"Body" is the final form of the sculpture, while the "body" of ice and snow sculpture is realized by "line" and "face". Different from traditional urban sculpture and easel sculpture, the "body" of ice and snow sculpture needs to conform to the structure of snow block, and the "body" with visual tension can be obtained through compression or deformation, which is also a non-objective and figurative body. In the creation of traditional sculpture, "line" constitutes "face", which in turn constitutes "body". In the creation of ice and snow sculpture, "line", "face" and "body" can exist independently or be integrated and unified. When "line", "face", "body" exists independently, individual decoration and coordination is highlighted, and the sense of space weakened by inherent color is enriched. They constitute the language style of external decoration, which is not only different from traditional figurative

realistic sculpture, but also uses the shaping techniques of figurative sculpture.

With years of social art practice and professional teaching experience, decorative techniques are integrated into the figurative shaping techniques in the creation of ice and snow sculpture, which conforms to the artistic creation rules of ice and snow sculpture and better strengthens the beauty of ice and snow materials. Ice and snow sculpture works have high artistic value and certain academic value, playing a positive guiding role in the future creation practice of ice and snow sculpture.[5]

#### **4. PRACTICE OF “SHAPE” WITH LIGHT AND SHADOW IN THE COURSE OF “ICE AND SNOW SCULPTURE CREATION”**

Light and shadow makes the structure of the picture clear and enhances the three-dimensional and space sense of the plane. Artists can affect the viewer's mood through the light and shadow subjective processing in the picture. The light and shadow of the two-dimensional plane is created by using virtual space; The light and shadow of the three-dimensional plane is reflected in the layers of the real space, which is actually created by the visual and tactile artistic features of sculpture art, rather than by changes in viewing angles. Due to the special properties of the materials, ice and snow sculpture art is weak in the spatial environment and visual hierarchy of art subject; Because of the combination of three-dimensional and two-dimensional shaping techniques, the subjective treatment of the “body” becomes very important, and light and shadow shaping techniques also combine shaping techniques of two-dimensional virtual space with the figurative shaping techniques.

##### ***4.1. Carve Lines to Enhance Shapes***

The outlined line or boundary line of the “body” is represented by line carving, while the depth and width of line carving directly determine the depth change of light and shadow and affect the sense of the “body” volume visually, which is widely used in relief work. In the creation of figurative sculpture, line carving can strengthen the relationship between the “body” and change its internal tension.

##### ***4.2. Strengthen the Turning Face***

“Creating from square to circle” and “creating a square in a circle” are the processes of understanding and shaping the “body” in the sculpture creation. In the creation of ice and snow sculpture, the reserved “square” is an important shaping technique and body language. The natural light source is not as concentrated and orderly as the indoor light source, and their influence on the sense of body volume is always changing. The color of ice and snow sculpture is close to the environmental color, and

the visual sense is weak. Strengthening the processing of surfaces and blocks can reinforce the changes of light and shadow, the relationship between black, white and gray, and visual sense. It is similar to the shaping techniques of body tension in the creation of figurative sculpture. [6]

##### ***4.3. Combine Virtuality and Reality***

Compared with clay sculptures, ice and snow sculpture has fewer shaping techniques and less diverse artistic effects, but the unique artistic beauty presented by the special material attributes is irreplaceable. In the creation of ice and snow sculpture, due to the limitations of the shaping techniques and materials, it is hard to express the sense of distance and virtual and real spaces. However, by learning from the shaping techniques of virtual and real spaces in the creation of figurative sculpture, it is easy to distinguish the shaping techniques of close shots and long shots and consciously emphasize the spatial hierarchy in the ice and snow sculpture. Close shots are realistic and can be created by surfaces and blocks with line carving; Long shots are virtual and can be created by gray color tones and weaker lines, with outline lines to stand for the body, even if the sense of space is compressed, it will not lack a sense of spatial order. Therefore, ice and snow sculpture and figurative sculpture can learn from and influence each other in artistic techniques.

Light and shadow is an important tool to examine the body. Henry Moore believed that light and shadow were also part of the body, and that body, light and shadow made up a whole. Outdoor sculpture gradually sketches the outline and inner body of the body through the changes of light and shadow, forming a complete artistic whole. Therefore, when creating ice and snow sculptures, it is necessary to strengthen light and shadow to reduce the weak sense of the body caused by the single color and deepen the relationship between space and hierarchy.[7]

#### **5. PRACTICE OF “REDUCTION” IN THE SPACE IN THE COURSE OF “ICE AND SNOW SCULPTURE CREATION”**

The sculpture is composed of basic “faces”, and “faces” in different directions are organized together to form a “body”. Due to the limitation of the basic structure and the shaping techniques, it is not suitable to process the body with large spaces and depth in the creation of ice and snow sculpture. In teaching, we often take the amount of snow as a standard for evaluation. How to reduce the amount of snow as much as possible and form a reasonable space shaping are difficult problems in teaching. Therefore, when we start working with a snow block, we should be well prepared, predict the final shape, and know how to do subtraction.

The sculpture is inseparable from space. Easel sculpture can be arranged in space through color, texture,

material, and density. The space of the ice and snow sculpture art is a weak space based on a single color, which is exposed to outdoor light and can change with the light. So, how to break through this limitation and strengthen the spatial level and depth of ice and snow sculpture outdoor space is also an important topic of this course.

The artistic creation of ice and snow sculpture is different from that of traditional public space sculpture in shaping techniques. The urban sculpture uses a variety of creative techniques, for example, figurative expression techniques are fit for war, historical figures and other scenes. Abstract expression techniques are suitable for modern space composition, emotion and visual situations. Decorative techniques are better at decorating cities and creating symbols of beauty. Figurative techniques are more suitable for expressing the creator's emotion. The traditional clay shaping techniques use more addition, where the body is shaped by adding materials together. Ice and snow sculpture use more subtraction, similar to stone carving and wood carving, by subtracting the excess volume to obtain the desired shape. In my opinion, subtraction is more difficult than addition. Subtraction requires the creator to have the higher professional ability and comprehensive ability and clearly know how the last step connects to the next. Since most ice and snow sculptures are shaped in large spaces ranging from dozens to hundreds of cubic meters, the spatial composition of the body needs to be analyzed before shaping. The creation work should be completed from top to bottom efficiently, accurately and smoothly, avoiding repetition.

In the process of practice, teachers should guide students to rationally observe the body. The reason is that the size and volume of outdoor ice and snow sculpture are far beyond that of easel sculpture, and due to the special properties of materials that can only be reduced but not added, rational thinking in the creation process is more important than subjective sensibility. Meanwhile, the teaching team should discuss and make plans for creation themes, shaping techniques, and space shaping, so as to achieve the identity of artistic techniques. The creation techniques of ice and snow sculpture are not as diverse as those of figurative sculpture, nor are the artistic effects as rich as those of easel sculpture. However, the same origin of artistic language and aesthetic evaluation makes their art practices closely connected, so that they can learn from each other and influence each other.[8]

## 6. CONCLUSION

Ice and snow sculpture art is also a category of sculpture, and its creation process has many similarities with traditional sculpture. From observation methods to shaping techniques, from the whole arrangement to the detailed presentation, from space tension to artistic choice, the basic rules of the two kinds of sculptures are consistent. Simultaneously, figurative techniques,

abstract techniques and decorative techniques serve for specific artistic presentation, and the two kinds of sculptures have their own uniqueness in body performance, space relationship, and theme. The feature, combined with traditional clay sculpture teaching, becomes an important supplement to ice and snow sculpture creation. There are many factors that influence a sculpture, such as body, sense of volume, sense of touch, rhythm, movement, space, etc. In the course practice of "Ice and Snow Sculpture Creation", line, focus, distance, proportion, repetition, rhythm and image are important factors for students to understand the creation of ice and snow sculptures. In the shaping process, not like easel sculpture that needs repeated deliberation, ice and snow sculptures require the creator to have high artistic judgment and practical ability, accurately shape the body, have a view of the overall situation, and have the ability to summarize. These are exactly what needs to be supplemented in teaching and what students are missing.[9]

In the practical exploration and research of artistic techniques in the course of "Ice and Snow Sculpture Creation", the study of the correlation of shaping techniques between figurative sculpture creation and ice and snow sculpture creation should be taken as the main line, the similarities and differences of shaping techniques between traditional sculpture and new material sculpture in an outdoor public environment should be analyzed, the theoretical teaching and practical teaching in the class should be sorted out, and the previous observation method of subjective feelings should be transformed into an objective, rational and rigorous processing method that comprehensively arrange the change of spatial body. The change of observation mode is based on the recognition that figurative sculpture creation pays attention to people's feelings towards the body, and the general shaping techniques make the figurative image depend on the fluctuation of surfaces and blocks forming the body. The subjective artistic feeling of the creator is also needed in the process of thorough arrangement, which determines the final artistic performance of the work. We open the professional sculpture course of "Ice and Snow Sculpture Art" to serve the local area and make a new attempt to create an outdoor large-scale urban sculpture by taking public art practice as an opportunity. The author hopes that the description of this paper can supplement the theoretical basis for the creation of ice and snow sculpture and fill the gap in the theoretical and practical part of the course "Ice and Snow Sculpture Creation" in domestic universities.

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## REFERENCES

- [1] Li Xinze. *Ice and Snow Sculpture Art* [M]. Harbin: Harbin Institute of Technology Press. Nov. 2007.
- [2] Zhu Jinsong. *Ice and Snow Sculpture Art* [M]. Harbin: Heilongjiang Fine Arts Publishing House. 2006.
- [3] (USA) Robert Garroff, Randy Finch, Derek Maxfield. *Modern Sculpture Techniques* [M]. Translated by Zheng Yun et al. Shenyang: Liaoning Science and Technology Publishing House. 2006.
- [4] (USA) William Tucker. *Language of Sculpture* [M]. Translated by Xu Sheng. China National Photography Art Publishing House. 2017.
- [5] Sui Jianguo, Lv Pinchang. *The Way of Sculpture* [M]. China National Photography Art Publishing House. 2018.
- [6] (USA) Rosalind E. Krauss. *Passages in Modern Sculpture* [M]. Translated by Ke Qiao, Wu Yan. China National Photography Art Publishing House. 2017.
- [7] Maria Beatrice Andreucci.(2019).ECLAS Conference 2019.Lessons from the past,visions for the future:Celebrating 100 years of landscape architecture education in Europe.*Journal of Landscape Architecture*,14(3)
- [8]Mcneill,K.L.,Pimentel,D.S.,& Strauss,E.G.(2013).The Impact of High School Science Teacher' Beliefs, Curricular Enactments and Experience on Student Learning During an Inquiry: Based Urban Ecology Curriculum. *International Journal of Science Education*, 35(15), 2608-2644.
- [9] Discussion on how to infiltrate Chinese traditional Culture in Art Education [J]. Chinese National Expo. 2021(04)
- [10] "Public" and "Art" -- Personality and Commonness of Public Art Teaching [J]. Zhang Xinyu decoration. 2006(10)
- [11] Regional Characteristic Course -- Construction and Practice of Snow and Ice Sculpture Art [J]. Li Xinze, Zhang Yan. Popular Literature. 2012(16)