

Analysis of the Expressive Power of Brick Building in the Local Landscape*

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Abstract—Bricks have a "rich and colorful structure". In the long history of development and evolution, bricks have gradually formed a unique cultural form of bricks by virtue of their own advantages and the rich cultural memory connotation accumulated in history. This article mainly discusses how the artistic expression of bricks in the local landscape is created. Against the background of the loss of local memory in the rapid process of urbanization, this paper also explores the artistic expression of brick art in the local landscape, and explores the unique charm of bricks and the inexhaustible vitality of the native landscape in the modern context based on the repeated call for "returning to traditional culture", "combing cultural self-confidence" and "the social environment with accelerated urbanization process" in recent NPC & CPPCC.

Keywords—*rural landscape; brick; brick building art; expressiveness*

I. INTRODUCTION

In general, the most common application form of bricks we know is as a masonry material for buildings, especially as a material for building walls. This also leads to the situation that most people only know the bricks in their practical application, while know little about the other artistic expressions of bricks in our living environment, especially in the field of landscape design, which is even more so in the local landscape. Whether it is traditional Chinese gardens or modern landscape design, bricks have a strong existence value due to their excellent material properties such as

authenticity, economical practicability, long-lasting freshness and flexibility of use.

II. THE CONCEPT AND DEFINITION

A. The Definition of Brick

The typical dictionary definition of brick is as follows: cast rectangular clay that is roasted in the sun or placed in a brick kiln to be fired to harden and then used to build the material.

B. The Connotation of the Rural Landscape

This paper starts from the concept of local landscape. The local landscape is classified according to the landscape style. It can be divided into natural landscape and human landscape. The local landscape is characterized by its human culture and humanity. The human landscape and human development are closely connected, which is the key to the localization of landscape.¹

The human landscape is divided into a settlement landscape composed of natural environment, architecture, structures and external space of the building, and a cultural landscape in the form of material form and intangible culture, and an economic landscape² closely related to human economic activities. This paper explores the brick art expression in the bricks through the cultural landscape in the human landscape under the local landscape, so as to reflect the brick art expression in the local landscape.

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¹ "Native Landscape" Source: Webpage

² "Native Landscape" Source: Baidu Encyclopedia.

III. THE BRICK PERFORMANCE ELEMENTS IN THE LOCAL LANDSCAPE

Bricks have been widely used in construction and landscape construction activities due to their convenient shape, modular mass production, economy, and durability. In today's era, everyone feels familiar and unfamiliar with their hometown, especially in the rapid process of urbanization today, and gradually feels strange to the living environment and customs in memory. The local area is the space where the memory of the hometown collides with the humanities. It serves as a long-lasting nostalgia for everyone.

The same is true of bricks. With its own excellent attributes, it has been used for a long time, and has been widely used in architectural design and landscape design since its discovery. Whether it's the rough texture of the exterior or the nostalgic emotional sustenance, the bricks are inextricably linked to the native landscape.

A. The Characteristics of Brick

1) *Authenticity*: The authenticity of a brick is reflected in its color and texture. The bricks are obtained by firing the clay, and the fired bricks exhibit rich color changes such as red, brown, tan, and cyan. But this is not the effect of artificial additives or fuel on the soil, but the actual organic reaction of the ore components and metal oxides in the soil composition of the brick production area after high temperature firing.

2) *Economical efficiency*: The raw material of the brick is soil, and the production process is relatively simple. Especially after the modular production process of the brick, the production efficiency and specification control of the brick are further improved, which is more economical than the early hand-kneading brick shape. Compared to other construction materials, such as concrete, stone and various synthetic materials, the cheapness of bricks is self-evident. With the development of the times, new materials and new technologies are competing, more and more modern materials and modern construction memories have replaced traditional materials and traditional construction methods. When these materials and memories of the new era are filled in our living environment, the bricks are able to escape with their unique charm, highlighting the warmth, practicality and authenticity of modern materials that are different from urban emotional attributes.

3) *Historicity*: Bricks have a history of thousands of years. The history of bricks is due to its time-tested tradition of brick making. For the landscape, every new landscape is traditionally built in past parks, towns, squares, gardens and open spaces. Bricks will connect present to the past in vivid and clear ways. Bricks not only tell us about our present, but also about our past. Although bricks can experience the vicissitudes of history caused by the passage of time and years of erosion, they cannot be defined as a "historical" material, that is, it belongs to any particular historical period. However, it is timeless. The most powerful proof of the long

history of bricks is that bricks can be accepted, used and loved by masses today; the second is the growing classification of bricks and the increasingly advanced brick making process.

4) *Flexibility*: The types and specifications of bricks we know so far are varied, and different bricks correspond to different fields. For the brick design, there is no established requirement. In the early stage, it is convenient to use one-handed operation to facilitate the construction. It gradually forms a relatively small size, but the form has become rich and colorful in combination of color, shape and decoration. It also makes the designer have infinite possibilities in the aspects of brick masonry, gray seam treatment, and artistic expression of the facade.

5) *Rich in expression*: Most of the bricks are added with a certain proportion of water in the clay, mixed and stirred, and then made into any shape by using a mold. After the molding, because of the compactness and brickwork of the bricks, different masonry shapes can be obtained through different arrangement and combination, so that it has a rich shape.

6) *Humanistic aesthetics*: The raw material of the bricks is the soil and water that can be directly obtained from nature, and then it is experienced through the fire. Then, according to the construction requirements, the artificial design is used as the performance with both natural charm and artistic expression. It is a warm and rough red brick, or a simple and simple blue brick, which can easily bring the distance between the building and the person and enter the depths of people's memory. Different styling results produce different artistic expressions and also convey different emotional sustenances.

B. Intrinsic Elements

The internal factors mainly refer to the non-physical morphological elements of bricks, mainly referring to the emotional memory contained in the material itself, the warmth of the texture, and the rough texture of the texture. Different from the steel, cement, glass and other materials that are widely used in the market, which have a strong modern atmosphere and a sense of city, the bricks have an innate sense of belonging, and an emotional temperature. Before the arrival of the modern city, the living environment in people's memory is red brick and blue tiles. The things in memory are always accompanied by the sense of time, the feeling of vicissitudes and the feelings of old age. Such contrast is more obvious especially after moving into the high-rise buildings of reinforced concrete. By comparing wood and stone whose raw materials also come from the nature, people are more familiar with the wood. It can be directly applied to the construction activities after processing by physical treatment, while it lacks change. The same is true of stone. Stone material is hard, and the artificial treatment is more difficult than the wood, which makes the stone relatively cold and alienated. Through comprehensive comparison, it's easy to see that the brick is simple to make, and widely applied, which make it the "affordable"

construction material. The performance of bricks is excellent, moisture-proof and fire-proof, and it has become a witness to the history of human construction activities. It has a rich sense of vicissitudes of history; these have formed a rich and intrinsic conservation of bricks, and have become a priority for designers when considering the issues of non-physical forms such as humanistic feelings, historical emotions and social attributes.

Each material has its own characteristics and high recognition, both in the external form and in the emotional attributes given by human memory. After fully understanding a material, including its physical and chemical properties; non-natural characteristics such as history, production process and emotional expression, the materials are processed, combined or constructed differently for different purposes. The materials are fully integrated with regional characteristics and emotional sustenance. Through the ingenious combination and application of the designers, the material displays the rich artistic expression tension.

Whether in the field of architecture or landscape design, the choice of materials is extremely important. The material is the textual basis of the composition of sentences, and the appropriate materials are used in art, which can play a wonderful artistic visual effect. Compared with the practical functionality of architectural design, landscape design pays more attention to emotional experience. Therefore, in the landscape design, in addition to considering the economic and practical appearance of materials, it should also take into account the emotional accumulation brought by it, the materials selected and The application not only carries the inherent tension of rich emotional experience, but also has a unique regional humanistic atmosphere.

C. External Elements

The emotional experience in material performance is reflected in any material can be perceived. The shape, texture, color and texture of the brick form the external elements of people's vision and touch. The classification of bricks is wide. The difference in color, size, specifications, and shape of the skin caused by porosity may lead to different visual effects and tactile perception effect, which also brings a rich artistic expression aesthetic effect.

Different from urban landscape design, modern urban landscape design prefers steel, concrete, glass and other materials that can create a strong sense of modern urbanism. While the local landscape design aimed at pleasant and friendly environment prefer materials with similar external factors. With suitable size and flexible usage, the rough external texture of brick is similar to the soil. The warm colors of the red bricks complement the sowing activities in

the yellow land; the quaint colors of the blue bricks complement the green and lash of the distant mountains. Thus, brick is undoubtedly a material that is well suited for native landscape design.

IV. BRICK PERFORMANCE CHARACTERISTICS IN LOCAL LANDSCAPE

The construction of bricks in the local landscape mainly refers to the material form of the local landscape, such as the arches, inscriptions, pavements, sketches, structures, etc. in the local landscape, many of which are inseparable from the masonry application of bricks. The masonry performance of bricks in the local landscape is mainly reflected in the color art of masonry, the texture order of masonry, the change of light and shadow of masonry, and the cultural image of masonry. The masonry art value of bricks is mainly expressed in two aspects. The first is the ontological characteristics of material, that is, visually achieve the harmonious integration of artistic visual effects through the combination and interaction of the color, shape and texture of bricks, and the structural form of masonry, giving people a sense of kindness, or pleasure, or surprise, or admiration; secondly, as an integral component of landscape design, forming the beauty of decoration, harmony and order.

A. The Color Art of Brick Masonry

The color of brick is its most authentic, essential and natural expression. It is the organic representation of the composition of the soil where brick raw material located. It is the direct expression of the regional characteristics, and the brick is intimate. At the same time, the trajectory of biological activity will also cause differences in soil composition. Even in the same piece of land, the bricks that are fired will have more or less nuances in color, and it is difficult to artificially unify the bricks. Undoubtedly, brick is a real material.

The color of the bricks comes from the soil on the earth. People often say that "face to the loess while back is facing the sky", the red and yellow bricks are properly echoed with the yellow land; and the green bricks echo the verdant green of the hometown, so that brick is undoubtedly the perfect material for the local landscape. It can create a simple and comfortable space and atmosphere, and show the vicissitudes of the age under the influence of time. At the same time, the comparison of bricks of different colors (see "Fig. 1") and the slight difference of the mottled surface of the brick itself seem not regular at all, while harmonious. It is not messy, and makes people vividly realize its instant charm and time-honored feature (see "Fig. 2").



Fig. 1. Arrangement of bricks of different colors.

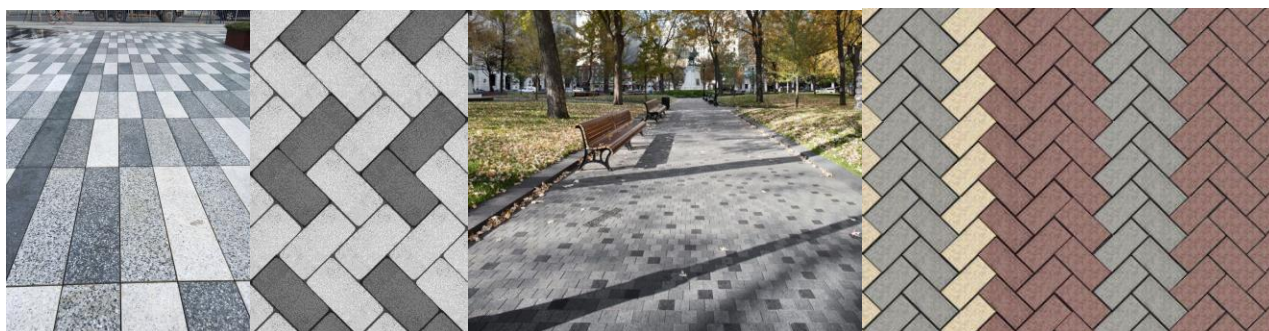


Fig. 2. Masonry art of color matching of common brick.

B. The Texture Order of Brick Masonry

The size of bricks is very small, so when bricks are used for masonry, a large number of bricks are needed, which will cause repetition and change, forming a sense of order. This sense of order can be reflected in the facade effect and floor covering of brickwork landscape in local landscape design.

The masonry texture of the bricks is both precise and different in shape, the texture is smooth and the color is even. Grades and order can be seen in the garden layout and the arrangement of flowers and trees in Chinese traditional

gardens, such as the dominant position of the hall, the ideology of flowers and trees. There is also a rich texture order in the brick structure, and the bricks are arranged in a certain order and regularity to form a specific three-dimensional geometric shape with gradual or continuation characteristics. The infinite repetition or sequential gradual change of bricks of the same size, color and texture can express the rhythm and order of the masonry. This sequence of gradual changes includes the shape of surface or hook face through the regular movement, rotation and interlacing of the bricks. (See "Fig. 3")

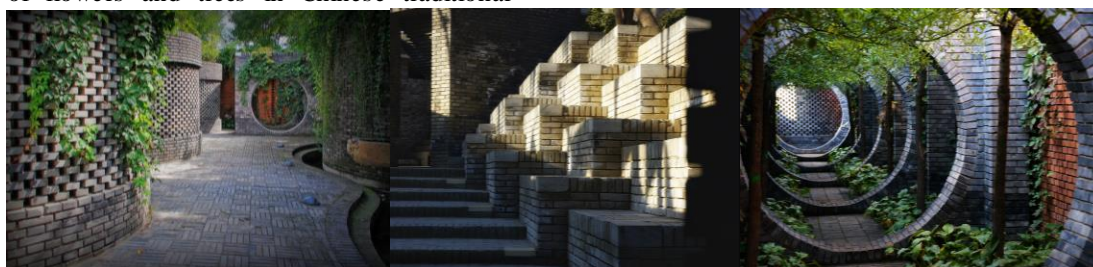


Fig. 3. The art of brick building in the Red Brick Art Museum.

Another method of laying bricks is to put together tiles of different sizes, colors or textures to form a certain pattern or

texture wall surface, thereby enriching the plane effect of the brickwork landscape. (See "Fig. 4")



Fig. 4. Masonry art of common brick color matching.

At the same time, there is also a change effect is to change the gray seam in the brick masonry process, because it will form a bottom relationship between the skin and the solid material, so the gray seam is also an important performance feature of the brick in the masonry process. For the brick art in the native landscape, the bricks and the gray seam treatment between them are all the elements of their artistic expression. It is mainly reflected in the color, size and shadow of the gray seam. The treatment of the traditional gray seam is usually assisted and serves for the expression of overall artistic form.

1) *The color of gray seam:* Most of the gray seams show the gray color of the cement mortar itself. Of course, with the development of the art, it is now possible to blend the gray seams into different colors according to the design

requirements. When the color of the gray seam is similar to the color of the brick, the overall sense of order of the brick and the uniform color expression are presented; when the color of the gray seam is hugely vary from the color of the brick, what's commonly seen is the red brick and white seam with the artistic effect that the grey seam touching up the surface of brick building. The line art effect of the gray seam is highlighted, which can also highlight the sense of order of a certain line shape. In addition, some turf bricks are embedded in the soil, and there is no brick joint formed by cement mortar. At this time, the gap between the bricks will be filled by the lawn, which is another kind of beauty. (See "Fig. 5")

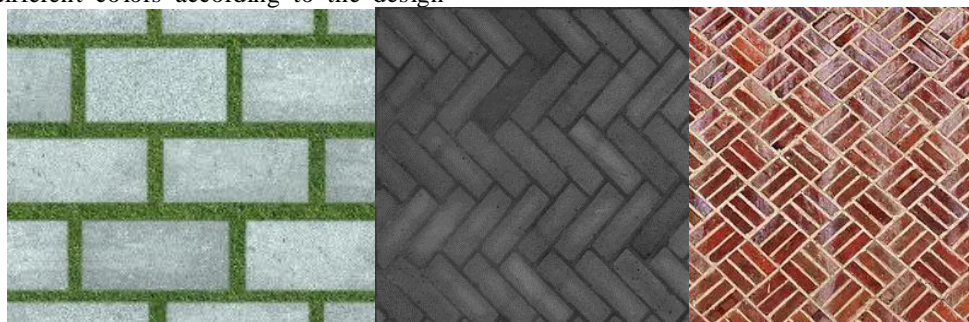


Fig. 5. Artwork effect of bricks formed by different colors of gray seams.

2) *The size of gray seam:* Generally speaking, the gray joints when bricks are built are relatively small. If we try to increase the width of the gray joints, of course, the width is still smaller than the bricks, which will make the surface effect more exaggerated, the effect of grey seam is consistent with the bricks, and even more prominent and eye-catching.

3) *The shadow of gray seam:* In the masonry process, the grey seam has various surface shapes, which can be flat when equal with the brick surface and lower than the brick surface, which can be hook face when equal with the brick surface, lower than the brick surface and other external forms. In addition, it can also cleverly hang the bricks on the façade effect, design more façade light and shadow art

effects, and greatly enrich the hierarchical structure of the overall light and shadow effect.

C. Light and Shadow Changes in Brick Masonry

People can see everything in nature, and the most important thing is the existence of light. From the early learning of painting teaching, we know that under the action of light, the object forms a bright surface, a dark surface, and a transition surface, also called a gray surface. As the light and shadow move or the human visual movement, each surface also changes. It is not fixed, but relative. Light is a prerequisite for us to perceive the color and shape of the material of the object. Under the action of light, we can think of brick as brick, and because the surface of the brick we know is not smooth, but it is rough and has particle defects, its special surface features cause a large difference in the

absorption and reflection of light. The surface of a brick can produce subtle but rich changes in light and dark under the action of light; then bricks are built to obtain the whole effect.



Fig. 6. Light and shadow charm of brick masonry.

There must be darkness in the light, and lightness in the dark. Under the harmonious effect of light and shadow, the appearance of bricks becomes more prominent; the contrast between light and shadow, light and dark enhances the effect of brick material, highlights the three-dimensional sense of structure, and the existence of light and shadow is the primary factor of brick art performance. The artistic expression of the brickwork landscape is inseparable from the influence of the form of light and shadow. The appropriate light and shadow effect is extremely important for the performance of the brick in the environment. Brick masonry walls and brick masonry doors have different masonry techniques on the façade, combined with the performance of light and shadow, the visual effects will be more abundant. For example, in the landscape design, the method of hollowing out the concave and convex walls of the wall is common.

1) *Hollow-out method — leaking through scenery*: The hollowing method is echoed with leaking through scenery — one of the traditional landscaping techniques of Chinese gardens. The leaking through scenery is the sight seen through the virtual partition, also known as the venting. In the landscape design, the design of the landscaping can not only give rise to the tourists' curiosity to find a secluded scene, and the design of the leaky scene itself has a plausible aesthetic.

Drawing on the leaking through scenery, one of the traditional garden landscaping techniques, the hollow work of bricks also forms a variety of hollow work methods due to the rectangular shape of the bricks, such as hollows, rotations, stacking faults, etc. The wall forms a rich shade change under the light and shadow effect, and also plays an important role in improving the ventilation effect in the environment, the visual art effect and the spatial microclimate adjustment.

When the effect is achieved, the light and shade changes become more abundant, and the light and dark changes of each brick are different. (See "Fig. 6")

2) *Concave-convex method — adding scenery*: In the traditional Chinese garden landscaping techniques, when visitors look at the landscape of the garden, they will pay special attention to add scenery. It can be a willow branch hanging nearby, a beautiful black-striped flower, a huge tree, etc., so that the original open view suddenly has a close-up, medium-range and long-distance view, adding a sense of spatial depth. In the brickwork method, build the flat brick wall surface with concave-convex method, so that the original brick wall is no more regular, and the three-dimensional feeling is highlighted. At the same time, rich light and shadow changes are formed, and the originally monotonous brick wall become vivid.

D. Cultural Imagery of Brick Masonry

The brickwork landscape has innate temperatures and emotions that are unmatched by other materials. This may be related to the land on which we depend, or to the human visual identity. For humans with a rich sense of sensibility, the bricks can be rough and express a simple feeling; they can also be refined and pure. It can be important, become essential in the structure; it also can be beautiful, become the icing on the cake.

1) *Word brick*: The bricks carry this landscape function and also interpret the local historical and cultural forms at that time. The Qin Dynasty had a system of "the name of the object." This kind of brick making system with targeted individual responsibility has been handed down as a Chinese culture. In the later generations, Zhu Yuanzhang built the Great Wall and followed the system. He asked for inscriptions on the bricks. The Ming Dynasty Wall in Nanjing was still solid. (See "Fig. 7")



Fig. 7. Various bricks such as the ancient city wall.

2) *Tile*: The ancients paved tile in the ground for beauty. At the same time, they also printed the accumulation of the culture on the scrolls of history for future generations to taste. In different historical periods, the patterns of the ground pavement are not the same, but they all reflect the historical culture at that time. For example, the term "standing tile" in the Tang Dynasty was originally derived from Buddhism, and was later used on the ramp in the palace. The brick surface was decorated with three-dimensional patterns, which resembled "tiles", commonly known as "standing tile." Because the martyrdom is the place where the officials waited for the emperor to summon, the ancient imperial examination talents all took the "standing tile" as their lifelong dream.

3) *Bricklaying*: In today's view, bricks are relatively cheap and available materials, but in ancient times, when the brick making process was still immature, bricks were not something that ordinary people could afford, and they were generally affordable for the wealthy. Therefore, in ancient times, the wealth level of the occupants was identified by bricks.

Because of the limitation of the brick making process at that time, the surface of the brick was relatively rough, so the bricks should be polished like a mirror before use, and then the masonry was built, and a ruler could not be inserted after the bricks were built. This kind of masonry process is time-consuming and laborious. Ordinary people can't afford it at all. They can only use the old bricks and broken bricks of the house. The middle-class people can barely use the whole piece of brick, but there is no extra financial resource to polish. The use of bricks reflects the cultural attributes of the class. Whether it is the delicate and subtle aristocratic life culture, the simple middle class taste, or the roughness of the poor class, it is the carrier of the vitality of ancient Chinese culture, the diverse artistic expression of the masonry and the artistic form of rich cultural imagery.

V. THE ARTISTIC EXPRESSION OF BRICKS IN THE NATIVE LANDSCAPE

In the design of local landscape, we should fully consider the principles of regionality, ecology practical aesthetics, etc., and rationally select and use the materials to create a local landscape with rich color, pleasant scale, orderly sense,

cultural connotation, strong expressiveness, and deep artistic style.

A. The Charm of Brick Art

Brick is a suitable masonry material in the design of local landscape. It is indispensable in the design of the native landscape with its size and specifications suitable for handicraft construction, natural and simple color, rough texture or the emotion and temperature that carry too much historical and cultural memory. The beauty of brick art is not only the color art expression of brick masonry, the texture order of brick masonry, the light and shadow change of brick masonry, the cultural imagery of brick masonry, but also the possible solution provided by brick building when facing the context of local landscape design.

The result of rapid urbanization is that the local landscape design is becoming more and more equal, the local customs are gradually missing, and the human atmosphere and regional characteristics are gradually lost. This makes people begin to miss the taste of their hometown in memory and begin to pay attention to regional characteristics and humanities custom. Bricks have an extremely important position in China after thousands of years of development. They not only carry the heavy historical culture accumulated during the years, but also become part of human civilization.

B. The Charm of the Old Bricks with New Usage

When talking about the new usage of brick, one should never ignore the design master Wang Shu and the Xiangshan Central Campus of China Academy of Art created by him. In the design and construction of Xiangshan Central Campus (See "Fig. 8"), it used a lot of old bricks that were previously removed from traditional buildings, tried traditional materials and techniques, combined with the simplicity and elegance of modern design, to integrate the relationship between architecture and venue to create the traditional material under aesthetic of modern design — the artistic presentation of the brick and its masonry skills.

Due to its own characteristics and construction process, bricks can be removed from the old building when they are dismantled, and their material properties are not changed. They can still be used again for construction activities. In addition to its humanistic atmosphere and historical sentiments, old bricks have a richer history; at the same time, there are more mottled traces of use in the external form,

which can deepen the story, history and humanity of the old bricks. In addition, the new use of old bricks is also a strong echo of the ecological design principles. The acceleration of the urbanization has caused more and more old buildings to be demolished, which has increased the risk of abandoning for large quantities of bricks, making the service life of

bricks shorter. The new use of old bricks not only turns waste into treasure, reducing a large amount of industrial waste, but also adds the artistic expression of bricks, continuing the historical memory of bricks, and renewing the artistic charm of old bricks.



Fig. 8. Xiangshan Central Campus of China Academy of Art.

C. The Charm of Multi-material Combination

Many materials have commonalities at some point, such as color, texture, quality, and luster. There are also materials with opposite property in a certain point or all points. The use of these materials alone or in combination can obtain rich or contradictory, or harmonious and unified ultimate visual effects, thereby greatly enriching the landscape space. In the design of the local landscape, the stone, wood and brick with deep natural properties are mostly used.

1) *Brick and stone*: The use of stones in landscapes has begun in ancient time. They can be widely used in bricks and wood for various facilities in the landscape. The stone is a large piece from mining. Compared with the small-sized bricks used for masonry construction, the mined stone must be cut, polished or processed according to requirements. Therefore, the stone looks like uniform in texture and hard to feel from appearance, and the specification is much larger than the brick. The bricks are relatively small and rough.

Therefore, in the traditional pavement, the paving of a single brick often feels less solid. Although the color is relatively stable, the texture is not strong enough. Therefore, the bricks paved in the ground can only bear an individual and cannot bear heavy weight. However, when paired with stone, it will look much stronger, and the texture will give people different psychological feelings.

2) *Brick and wood*: Although brick and wood are derived from nature and have the original attributes of nature, but their characteristics are still very different. After artificial chemical treatment of materials in nature, bricks are obtained. Compared with pure wood with original natural attributes, the bricks have more styles and more industrial beauty. Wood can be used directly by cutting the trees, giving people a more intimate feeling. The wood is mostly yellow and red, which makes it warmer.

The combination of brick and wood is quite like the comparison between artificial beauty and natural beauty. Although this contrast is far less strong than the contradiction between steel, cement, glass and wood, it often makes people surprised but not too abrupt. In use, the

combination of wood and brick is mainly used on landscape facilities, and the small scenery is dotted with large landscape. The brick wall that's commonly seen in daily life is partially added with wooden window partition or wooden seat, or wooden signs.

The combination of various materials can greatly improve the artistic conception of the local landscape, enrich the diverse visual effects of the local landscape, enhance the interest of the landscape space environment, and at the same time satisfy the existence of a single material characteristic to a certain extent, better playing the regional and cultural atmosphere of different rural landscape environments. Of course, the richness of materials has led to a variety of artistic expressions, but it must be integrated with nature through visual harmony, deep conceptual, comprehensive region, humanistic, and aesthetic factors to design a good rural landscape.

VI. CONCLUSION

Brick is the inheritance of human history and culture. It has witnessed the development and changes of our long history. It contains profound cultural images, emotional values and historical accumulations, and has gained universal psychological identity.

It is unmatched by many other materials. Although new materials and new technologies have brought more choices, it also brought "replicas" of bricks. However, the unique natural characteristics and historical value of traditional bricks cannot be replaced. The brickwork landscape, as a brickwork combination, not only serves as a physical object to meet functional needs, but also conveys people's demands, displays the culture of society, and of course continues to carry the values of customs and humanities.

The local landscape design under the influence of urbanization faces the modern predicament of "one thousand villages with same appearance", blind antiques, regional culture loss, and shortage in local artistic conception. It also needs to inject new artistic design ideas into the local landscape design; however, the expression of art design is inseparable from the reasonable presentation of the material. The material is the inevitable carrier of the design form. To

solve the modern rural landscape design dilemma, it's possible to start with the material, the physical properties of the color, texture, texture and size of the brick; historical sense, kindness and other rich connotation of feeling, emotional temperature makes it play an important role in the design of local landscape. Using brick as an entry point to explore the rich artistic expression of brickwork in the native landscape, the organic combination of brick and brick, brick and other natural materials, bricks and other non-natural materials, between the materials fully expressed the artistic charm of such combination, connected the "sameness" and "difference" of materials, met the regional characteristics, blended the local and humanistic atmosphere, and pursued the perfection of the surrounding environment to show the unique vitality of the local landscape.

[20] Brick and tile civilization. Wall material innovation and building energy conservation [J]. 2015(1).

REFERENCES

- [1] Chen Zhidong. Study on the expressiveness of the skin of the hollow brick building and its indoor light and shadow performance [D]. Guangzhou: South China University of Technology, 2012. (in Chinese)
- [2] [United States] Rob w Sowinsky, translated by Huang Huiwen. Brick landscape [M]. Beijing: China Architecture & Building Press, 2004.
- [3] Kandinsky. On the spirit of art [M]. Beijing: People's Education Press, 1980.
- [4] Liang Sicheng. History of Chinese Architecture [M]. Tianjin: Baihua Literature and Art Publishing House, 2005.
- [5] Wang Zhenfu, Yang Minzhi. Habitat Culture — Individual Image of Chinese Architecture [M]. Shanghai: Fudan University, 2001.
- [6] Shan Jixiang. Cultural Landscape Heritage Protection [M]. Tianjin: Tianjin University Press, 2015.06.
- [7] Yang Huancai (Editor-in-chief). Art of Solidification — Architectural Volume [M]. Jinan: Shandong Science and Technology Press, 2007.
- [8] Peng Xuekai. The Chronicle of Xiangdong Geographical Names [M]. Changsha: Central South University Press, 2009. [8] Xinjiang Uygur Autonomous Region Cultural Relics Bureau. Important historical and representative buildings of Xinjiang in modern times [M]. Beijing: Science Press, 2011.
- [9] Alaneverett (Editor-in-chief). Building Materials [M]. Chongqing: Chongqing University Press, 2008.
- [10] Wang Shouhua, Ma Yunfang, Yao Tingzhou. Practical Building Materials Science [M]. Beijing: China Architecture & Building Press, 1998.
- [11] Jicheng. edited by Liu Yanchun. Yuanye [M]. Nanjing: Jiangsu Phoenix Literature and Art Publishing House, 2015.
- [12] Song Yingxing. Tiangong Kaiwu [M]. Shanghai: The Commercial Press, 1933.
- [13] Dong Yuzhen. The Wall and Ruins: Architecture and Garden/Red Brick Art Museum [M]. Shanghai: Tongji University Press, 2012.
- [14] Yu Changbin. Edited by Chen Yuan. Modern landscape design from China. Materials and details [M]. Beijing: China Machine Press, 2010.
- [15] Lou Qingxi. Masonry Art [M]. Beijing: China Architecture & Building Press, 2010.
- [16] Lou Qingxi. Ancient Chinese Architecture [M]. Beijing: China International Broadcasting Press, 2009.
- [17] Xu Dexiu, editor. Landscape building materials and construction [M]. Chongqing: Chongqing University Press, 2014.
- [18] Liu Feng. Brick Building [M]. Jiangxi: Jiangxi Science and Technology Press, 2002.
- [19] Okamoto Takashi, translated by Xu Zhilan. The Sensation of brick. World architecture [J]. Beijing: World Architecture Magazine, 2012 (9).