

POLYCHROME SCULPTURE IN THE INTERIORS OF DUNHUANG SANCTUARIES, ITS PERIODIZATION, AND ARTISTIC-PICTURE FEATURES

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Abstract

Ritual sculpture of Dunhuang is diverse in size (from 30m to 10cm). In total, there are more than 3,000 sculptures in the sanctuaries. These are three-dimensional sculptures (most of them), high reliefs, and bas-reliefs. To create sculptures from clay, a wooden frame was used, fastened with reeds, with clay coating, grinding, tinting, and painting. Among them are single sculptures, groups/several groups of sculptures, and metric rows of identical sculptures. Three periods of sculpture of Dunhuang sanctuaries are distinguished – the period of development (about 180 years), the period of flourishing (about 300 years), and the period of decline (about 460 years).

Keywords: *Dunhuang; Sanctuary; Interior; Polychrome sculpture; Periodization; Artistic and figurative features*

Introduction

The topic of the unique decoration of Dunhuang sanctuaries has been widely studied, but scholars have focused on Buddhist fresco painting, with less attention paid to ritual sculpture, which is quite diverse in type (round sculpture, bas-reliefs) and scale.

Although sculpture does not play such an important role in the synthesis of Dunhuang arts as murals, it is also notable for its diversity. In particular, the sculptural images of Dunhuang cave sanctuaries range from gigantic ones over 30m to small ones over 10cm. The total number of sculptures is more than 3,000. By variety, these are:

1) Yuan Su (round or three-dimensional sculptures 圆塑) (most of them, over 2000) – three-dimensional images of Buddha, bodhisattvas, celestial deities, designed for a circular view from all sides;

2) Fu Su (high reliefs 浮塑) (more than 1000) – convex images (clothes on statues, ribbons, etc.);

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3) Ying Su (small relief sculptures, bas-relief 影塑) – replicated images of a thousand Buddhas, Fei Tian, glued to the base (walls) and painted.

It should be noted that some of the sculptures are made of clay with a wooden frame. The wooden frame was fastened with reeds, coated with coarse clay, then with fine clay; later the sculpture was polished, tinted with white pigment, and later painted with different colors.

By theme, the sculptures were divided as follows:

- Buddhas (佛) (Buddhas Shakyamuni, Buddha Maitreya, Buddhas of the Three Times, Buddhas of the Seven Times 释迦牟尼、弥勒、三世佛、七世佛);
- Bodhisattvas (菩萨) (Guan Yin, Mahasthamaprapta, Gunyang 观音、大势至、供养菩萨);
- disciples (弟子);
- heavenly lords (maharaja 天王) and deities (malla, Li-shi 力士; apsara, Fei tian 飞天).

According to the type of composition in the sanctuary space, the following types of sculptures are distinguished:

- a single sculpture independent of other sculptures (十分式);
- one centric group of sculptures (向心式) (the most common type): Buddha in the center, bodhisattva disciples, heavenly masters and Li-shi symmetrically on both sides with the hierarchy of characters highlighted by the size of the sculptures;
- a whole group of sculptures within the sanctuary (多中心式);
- rows of Buddha sculptures (thousands of Buddhas) at the same distance from each other (并列式).

The following periods of sculpture development are distinguished:

Stage 1 – development period: Sixteen Kingdoms Period (304–439 AD), Northern Wei Dynasty (439–534 AD), Western Wei Dynasty (535–556 AD), Northern Zhou Dynasty (557–581 AD) (十六国、北魏、西魏、北周) (about 180 years);

Stage 2 – the period of flourishing (Sui Dynasty (581–618), Tang Dynasty (618–907) (隋朝, 唐朝) (about 300 years);

Stage 3 – the period of decline (Five Dynasties and Ten Kingdoms (907–960), Northern Song (960–1127), Xi Xia (1038–1227), and Yuan (1271–1368) (五代、宋、西夏、回鹘、元) (about 460 years).

The study of the existing source base allowed us to formulate the goal and objectives of the study. The goal of the study was to trace the evolution of Dunhuang ritual sculpture and determine its features. The objectives of the study were as follows:

- to systematize Dunhuang polychrome ritual sculpture by periods;
- to determine and argue the features of sculpture in each period;
- to outline the evolution of sculpture in all periods of Dunhuang's existence.

Since the ritual sculpture of Dunhuang contains characteristic features of traditional Chinese art, it was analyzed following the general features of Chinese architecture and art. Thus, the spread of polychrome sculpture corresponded to local traditions of active use of colors in architecture and art, where each color had a certain symbolic meaning and was used in a specific place. In particular, sources were studied that highlight the topic of polychromy in Chinese architecture and art:

- publications devoted to ancient temples [1];
- articles devoted to polychrome small architectural forms – pavilions [2];

- studies that highlight the aspect of “object in the environment” [3-4];
- articles devoted to compositional-planning, artistic-figurative, and constructive features of ancient pavilions [5-13];
- studies of ancient Chinese murals [14-25].

It should be noted that traditional Chinese architecture, regardless of the objects’ purpose and scale, was a synthesis of functionality and decoration. Thus, the “dou-gong” construction, which was used for centuries, was maximally adapted to local conditions and construction methods, and the principle of modularity was maintained in construction. However, such perfect functionality was combined with a significant amount of decor and polychromy. Both structural elements and décor—ornaments, reliefs, and sculptures—were painted in color. Thus, the polychromy of the ritual sculpture of the Dunhuang sanctuaries corresponds to the general concept of ancient Chinese culture and art.

Materials and methods

To solve the research problems, the following scientific research methods were applied. The method of historical analysis allowed us to analyze the external factors influencing the spread of a certain type of sculpture in a certain dynastic period and to determine the periodization of ritual sculpture. The method of photo fixation and the graph-analytical method became the evidentiary basis for judgments and conclusions. The method of comparative analysis allowed us to compare the sculpture of different periods and identify common and distinctive features. The method of systematic analysis allowed us to generalize and systematize the conclusions obtained as a result of the research and to draw a conclusion regarding the evolution of ritual sculpture in the sanctuaries of Dunhuang.

Results and discussion

It is worth noting that in Dunhuang sculpture the shortest period was the period of development, and the longest period was the period of gradual decline. If we talk about comparing the periods of sculpture with the periods of mural painting, they do not coincide completely; that is, the “archaic” period of mural painting is also the period of development of sculpture, and the period of greatest flowering in the Sui and Tang Dynasties is the same for both mural painting and sculpture. However, in mural painting, the periods of Xi Xia and Yuan were marked by a certain revival of skill, while concerning sculpture, the latter period is called a period of decline.

The genesis of sculpture from period to period is evidenced by specific examples. First of all, let us analyze the sculptures of stage 1 (Fig. 1). Characteristics: the sculpture is one with the restrained color scheme of the mural and is made in the same ochre colors. In the example of this sculpture, one can see how the general change in color scheme from an ochre scale to a cold one with the dominance of ultramarine influenced the change in the color scheme of the sculptures.

In the Northern Liang period, ochre and warm colors prevail in sculpture and murals, while in the sanctuaries of the Northern Wei dynasty, ultramarine and cold colors prevail (Fig. 1). Sculptures of the middle period (Figs. 2, 3) and the late period (Fig. 3) were also analyzed. It is worth noting that the periodization, which involves the division into early, middle, and late periods, is somewhat different from the aforementioned one, which involves the division into a period of development, a period of flowering, and a period of decline, since in the middle period there were already signs of a decline in the artistic level of decoration.

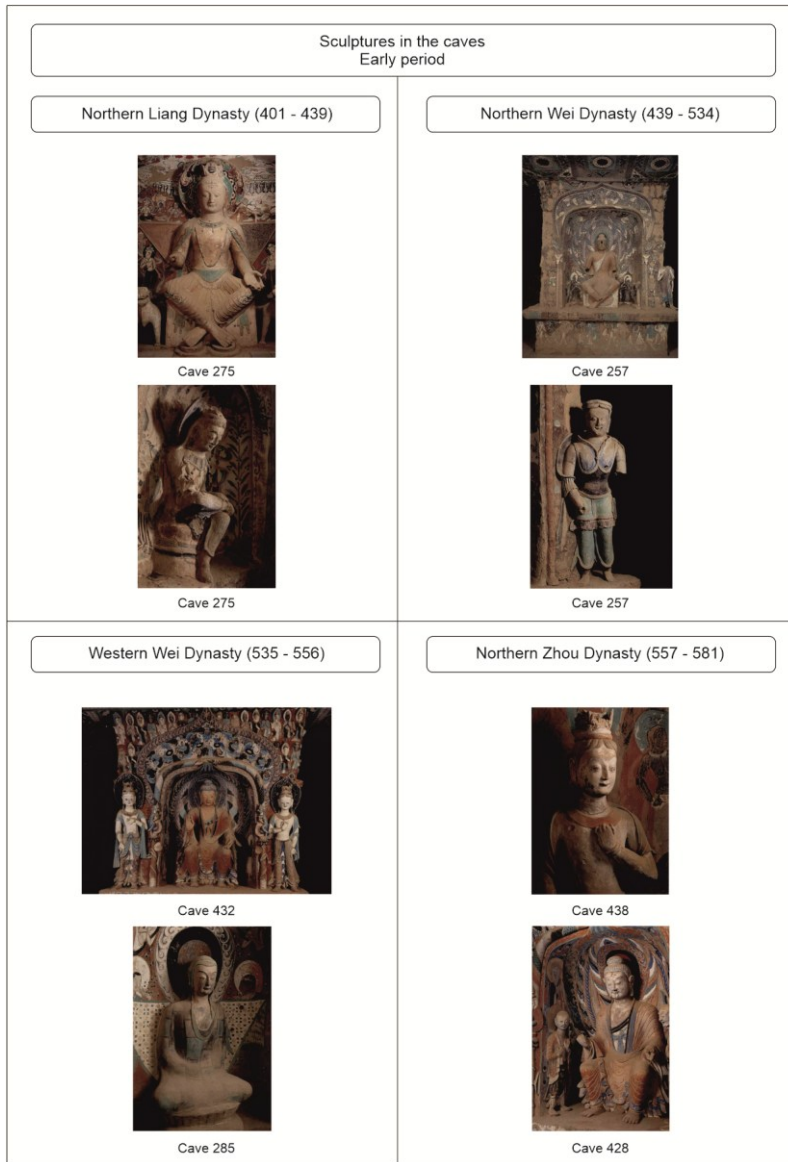


Fig. 1. Sculpture of sanctuaries. Early period

The synthesis of arts in the interiors of the cave sanctuaries of Dunhuang testifies to the unity of compositional and coloristic solutions; that is, the location of the sculpture is subordinated to the general solution of the internal space, and the entire interior is made in one coloristic style in the sanctuaries of the dynasty.

However, even though during the Northern Wei dynasty the general coloristic style changes from warm to cold, a certain number of caves are solved in a warm color scheme; perhaps these are restored caves of an earlier period or created according to their models (Fig. 1). The peculiarity is that such grottoes are essentially a synthesis of the warm other coloristics of the Northern Liang dynasty and the interspersed rich ultramarine color, which is marked by the period of the Northern Wei dynasty.

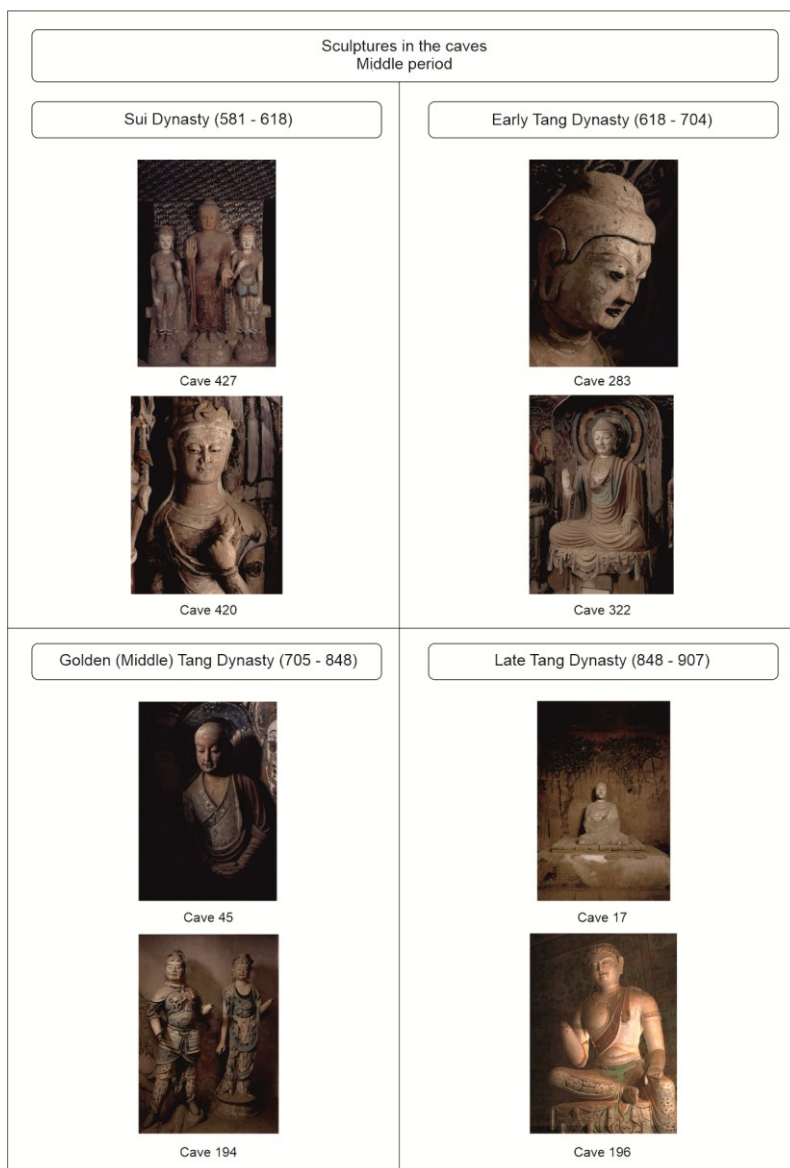


Fig. 2. Sculpture of sanctuaries. Middle period

So, we can say that from the Northern Liang Dynasty to the Northern Wei Dynasty, bright accents began to appear in the interior, and contrast dominated. In the early period, it was still a nuanced combination of colors without revealing accents, and the colors themselves were not bright but muted.

Western Wei Dynasty (西魏) (535–556 AD)

During the Western Wei Dynasty, there is no such clearly expressed color scheme with a predominance of a limited number of colors in the direction of warm or cold colors. We can talk about a simultaneous combination of ocher – the “calling card” of the Northern Liang Dynasty and ultramarine – the “calling card” of the Northern Wei Dynasty.

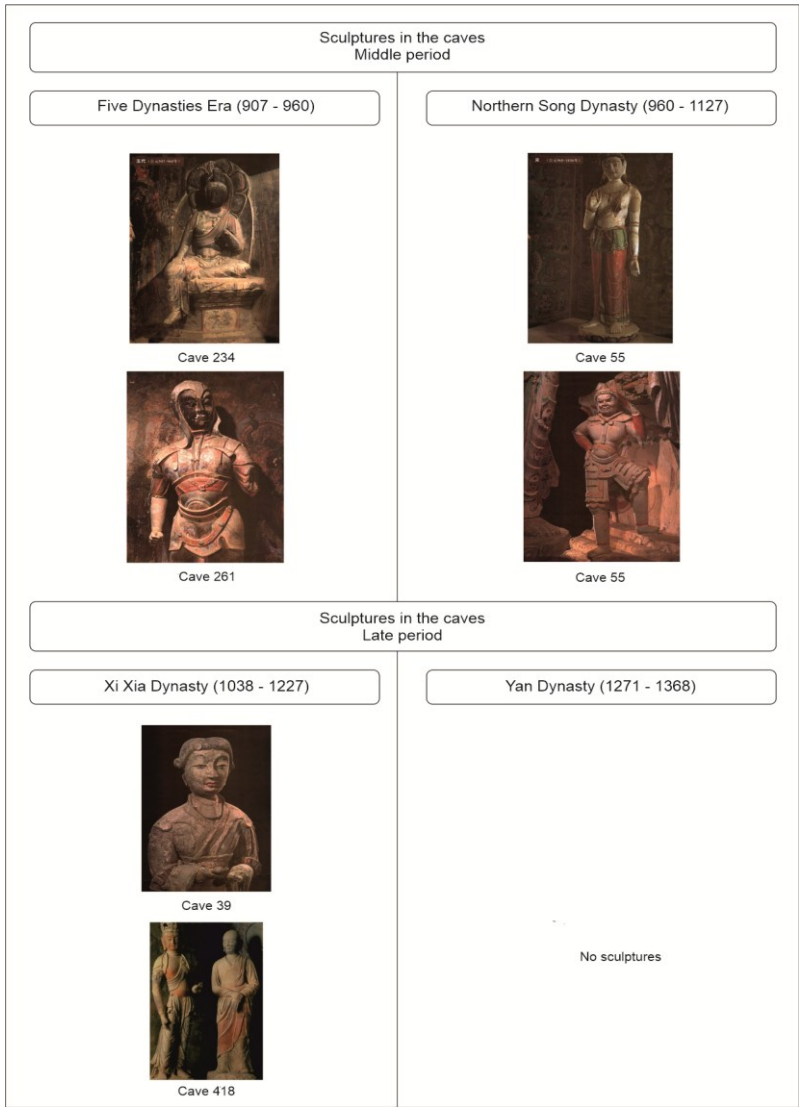


Fig. 3. Sculpture of sanctuaries. Middle and late periods

More attention is paid to the detailing of ritual sculpture; in particular, clothing is modeled and painted in detail, and other options for the sculpture compositions appear.

The period of the Western Wei dynasty is marked by greater attention to modeling the faces of sculptures and giving them individual features; a new type of sculpture appears – the sculpture of people, ordinary Buddhist monks, not Buddhas, not bodhisattvas, and not their disciples.

The appearance of sculptures of ordinary Buddhist monks with certain features of individuality indicates that during the Western Wei dynasty, purely religious art begins to be supplemented by secular art, and this is the process that at the same time gradually manifests itself in fresco paintings, when features of realism appear in them.

Northern Zhou Dynasty (北周) (557–581 AD)

The above-mentioned features of the development of sculpture from period to period can be traced in the Northern Zhou Dynasty, when the compositions of ritual sculpture became more diverse and complicated (Fig. 1).

One can see how changes occur in ritual sculpture in the direction of diversification of the general composition, poses of figures, and their detailing. There are also color changes, which relate to the general concept of cave sanctuaries of this period; in particular, in the Northern Zhou period, the interior as a whole, the murals, and the polychromy of sculptures acquire a pronounced variegation due to open, bright, contrasting colors. There is a shift from single-figure compositions to multi-figure, finely detailed types of compositions (Fig. 1).

The Northern Zhou Dynasty completes the 1st stage (period of development) of sculpture. Its characteristics are as follows:

1) color changes:

- genesis from a monochrome warm colour scheme through a change to a cold color scheme to variegation by combining the features of a warm and cold colour scheme;
- departure from monochrome to polychrome, from muted to open bright tones;
- correspondence of the sculpture's color scheme to the general color scheme of the interior with wall paintings.

2) changes in figurative interpretation:

- genesis from generalization and abstraction towards detailing and giving individual features;
- departure from single sculptures towards various group sculptural compositions;
- appearance alongside ritual sculptures of sculptural images of ordinary monks (people).

If we compare these trends with the trends that occurred at this time in wall painting, they are similar; the genesis goes towards complexity in composition, plot, imagery, color, and degree of detail, along with the ritual-mythological, and a secular motif appears with the image of people.

Stage 2 – the stage of the flourishing of sculpture – begins with the Sui dynasty and covers the periods of the Sui and Tang dynasties (Fig. 2).

Sui Dynasty (隋朝) (581–618)

Visual analysis of the techniques used to apply sculptures during the Sui Dynasty testifies to a fundamentally new approach to interpreting sculpture as a component of the synthesis of the arts of the Dunhuang sanctuaries. In particular, changes are noted in the coloristic solution of the sculpture, as well as the interior; the colors become more consistent, not so “flashy”; there is a complication in the constructive solution of the columns and their transformation into a complex, finely detailed decorative element; the varieties of sculptures, even those types that existed in previous periods, are diversified to the maximum; and the number of various group sculptures is expanding. In some cases, the decoration becomes so exaggerated that the main accent element disappears in the interior; the entire interior seems to turn into a continuous “carpet” ornament, which includes both wall paintings and sculpture. Instead of one central niche, several of them are arranged, placing in each niche not one or three, but several finely detailed sculptures. The effect of the visitor's attention being dispersed occurs, and the effect of the interior being multi-focused is achieved with several separate content centres – compositions, connected by a common idea, stylistics, and polychromy.

Even established ritual sculptures known from the early period, such as the “iconic” Buddhist composition of the Buddha on the throne, undergo significant changes. It becomes as complicated and detailed as possible, and the polychromy is marked by a calmer, more nuanced combination of colors.

Tang Dynasty (唐朝) (618–907)

Sculpture reaches even greater realism and perfection during the Tang Dynasty. Three subperiods of the development of Tang sculpture are distinguished: Early Tang, Middle (or Golden) Tang, and Late Tang. This division is associated with certain features of the interpretation of sculpture. The Tang period was distinguished by a wide variety of types of sculptures.

Early Tang (初唐)

The review and analysis of sculptures of the early Tang period was carried out according to the following defining features (Fig. 2):

- the number of sculptures (single sculpture, group compositions);
- the scale of sculptures (large-scale, medium-scale, small-scale);
- the level of detail and artistic and figurative skill:
- color solution.

It was determined that, as in the Sui period, in the early Tang period there is a shift towards group sculpture, although there are examples of single monumental sculptures. A combination of compositions with different numbers of figures is used. Most sculptures are medium-scale, and large-scale and giant figures are single. The number of compositions in niches is also smaller compared to round sculptures near walls and columns. As a rule, group figures near walls or the central column are medium-scale; in niches they are small-scale with emphasized detail.

Several varieties of the traditional composition “Buddha with Bodhisattvas” (佛与菩萨) in niches have been noted; some compositions are replicated (caves 48 and 328; the differences relate to detailing). Even though all varieties of this composition are made strictly according to Buddhist canons, unlike the early period of sculpture, in the early Tang period there are attempts to artistically and decoratively diversify such compositions even within the canon by decorating with ornaments, changing the color scheme, and detailing the characters’ clothing. This indicates that sculptors of the early Tang period went beyond the replicated canon and tried to give their compositions a certain individuality, so even replicated compositions are not completely identical.

Middle (Golden) Tang (盛唐)

The survey and analysis of sculptures of the Middle Tang period was carried out according to the following defining features (Fig. 2):

- number of sculptures (single sculpture, group compositions);
- scale of sculptures (large-scale, medium-scale, small-scale);
- level of detail and artistic and figurative skill:
- color.

The Middle Tang period is generally characterized by the same phenomena that occurred in the Early Tang, but brought to perfection. We have examples of both single figures and group compositions; there is special attention to a high level of skill, including modeling of clothing; the interior is marked by polychromy; and the colors are harmoniously combined.

There are known examples of combining in one composition a giant figure of Buddha and small-scale figures of bodhisattvas and disciples in the background. The plot “Buddha in Nirvana,” with a giant figure of Buddha with people standing in front of him (grotto 96 and grotto 148), is becoming widespread. This is a plot that is characteristic of the Tang era, but in the early Tang it is single-figure and less detailed. The plots in the niches undergo certain changes compared to the early Tang. In particular, in the early Tang they are distinguished by a larger number of figures, while in the middle Tang the number of figures decreases.

Separately, it is worth mentioning the sculptures of celestial deities, which are distinguished by the anatomical detailing of the muscles. Traditionally, they are depicted as young male warriors with naked torsos.

Late Tang (晚唐)

The review and analysis of sculptures of the late Tang period was carried out according to the following defining features:

- the number of sculptures (single sculpture, group compositions);
- the scale of sculptures (large-scale, medium-scale, small-scale);
- the level of detail and artistic and figurative skill:
- color.

The period of the late Tang is characterized by the beginning of simplification. The plot with a reclining giant figure of the Buddha, which arose at the stage of the early Tang and reached its maximum flowering in the middle Tang, disappears. The altars of the Buddha are

simplified. The sculptural images of monks are also simplified, becoming monochrome. In general, the interior decoration of the interiors of cave sanctuaries, including sculpture, becomes less detailed, with simpler artistic and figurative techniques.

Although the entire Tang period is called the period of maximum flowering of the synthesis of Dunhuang arts, the level of mastery of sculptural compositions of the early and middle Tang periods is higher than that of the late Tang period. Therefore, this indicated the beginning of certain hidden problems in the state, to which art was the first to react.

The 2nd stage of sculpture development (the period of flourishing) is marked by the following:

- the emergence of several compositional centres;
- the emergence of new types of compositions: group compositions and “Buddha in Nirvana” (涅槃像), diversification of the type of composition in niches;
- the fusion of murals and sculpture in terms of colour and composition;
- a high level of coloristic solution with a harmonious combination of colors.

Stage 3 – the period of decline

The Five Dynasties (五代) era (907–960 AD)

This period was marked by a sharp decrease in the number of sculptures compared to previous periods of flourishing; the compositions are simplified, and the number of variations of sculptures and sculptural groups is reduced (Fig. 3). The detailing and coloring are also noticeably simplified.

During this period, the Mogao Grottoes were largely neglected, so the Cao family took up their restoration (Cao Family (曹氏家族) Period). At this time, Dunhuang belonged to the Tang Dynasty (914–1036), which was unable to open more caves but restored a large number of caves of the previous generation.

Northern Song Dynasty (北宋) (960–1127)

The Northern Song period is characterized by the simplification of the compositions of sculptural groups and the interior as a whole. There is a simplification of the decorative decoration of the interiors of sanctuaries.

On the example of the central altars of Buddha in Grotto 55, it is noticeable that the compositions acquire a greater intimacy (Fig. 3). The sculptures lack skillful detailing, including clothing, and there is no exquisite polychromy of the sculptures. The enormous scale is characteristic of the Cao family cave. The area of this cave, which is the best from the Song Dynasty period in the Mogao Grottoes, is about 140 square meters, and the height is about 9 meters.

Xi Xia Dynasty (西夏王朝) (1038–1227)

The sculpture genre experienced an even greater decline with the arrival of the foreign Mongol dynasties of Xi Xia and Yuan. Guanyin sculptures spread.

The sculptures of the Xi Xia period in the Mogao Caves were mostly destroyed, and only the sculpture of Shakyamuni in Cave 263, which was rebuilt during the Tangut dynasty, can be identified as Tangut sculpture.

It should be noted that the appearance of a multi-armed sculptural image of the bodhisattva – the deity of mercy Guanyin is characteristic of the grottoes of the times of foreign rule during the Xi Xia and Yuan dynasties. The sculpture is not used.

All the sculptures in the Yuan Dynasty caves were made during the Qing Dynasty, and it is not known whether there were sculptures from the Yuan Dynasty period.

Figures 4 and 5 show the characteristics of each stage of development in the polychrome ritual sculpture of Dunhuang sanctuaries.

Early period	Northern Liang (401 - 439)	Sculptures in the caves			
					
					
					
					
Middle period	Sui (581 - 618)				
	Tang (618 - 907)				
	Five Dynasties (907 - 960)				
	Northern Song (960 - 1127)				
	Late period	Xi Xia (1038 - 1227)			
Yuan (1271 - 1368)		No sculptures			

Note: characteristic examples of sculptures from each period have been selected

Fig. 4. Genesis of sculpture by periods

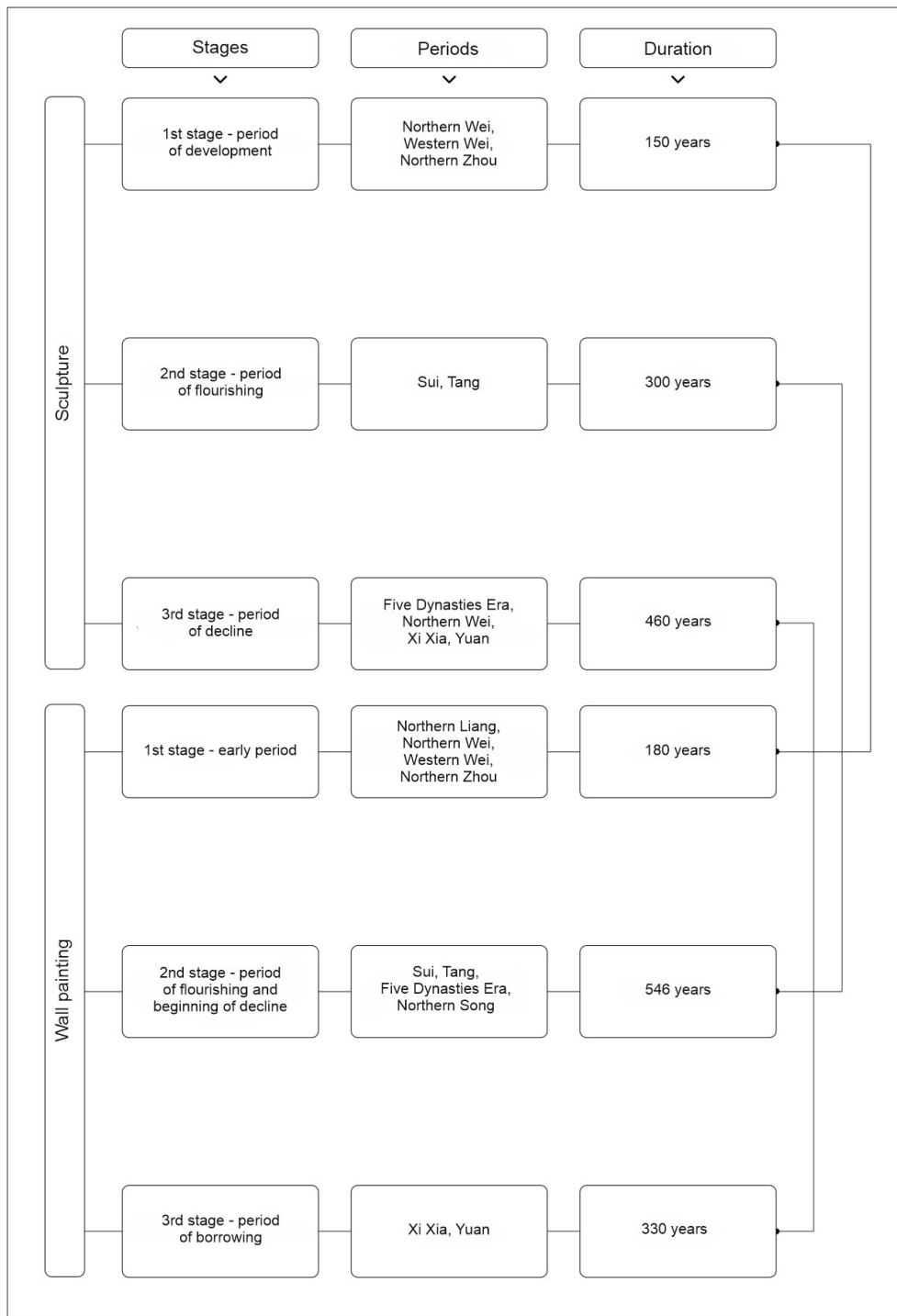


Fig. 5. Comparison of periodization of wall painting and sculpture

Conclusions

The characteristic features of each stage of development of polychrome ritual sculpture of Dunhuang sanctuaries have been determined (according to Figs. 4, 5):

At the 1st stage (development period), the changes concerned color and figurative interpretation. In particular, in color there was a departure from the warm color scale of ocher (赭石) tones, first to a cold scale with a predominance of ultramarine, (群青) and later to a combination of warm and cold color scales, from monochrome to polychromy, and from muted to open bright tones; the sculpture corresponds to the polychromy of the interior. In figurative interpretation, there is a transition from abstract sculptural images to individual ones; during the period there is a departure from single sculptures towards various group sculptural compositions, and sculptures of people appear, not only deities.

At the 2nd stage (period of flourishing)—genesis towards complication and artistic and figurative improvement, within the same room, the appearance of several compositional centers and new types of compositions absent in the 1st period (group, “Buddha in Nirvana” 涅槃像, compositions in niches). Perfection in the combination of composition and color of murals and sculpture, maximum expression of the phenomenon of the synthesis of arts.

At the 3rd stage (period of decline)—primitivism of sculpture in comparison with previous periods, the appearance of a multi-armed sculptural image of the bodhisattva – the deity of mercy Guan Yin (多臂观音).

The period of flourishing was marked by the appearance of giant figures; the beginning of decline was indicated by the decrease in the figures’ size. Also, at the level of composition, in the period of prosperity there was a large number of various compositions, including multi-figure, but as soon as the period of decline began, multi-figure compositions gradually disappeared and group compositions became simpler.

However, although the entire Tang period is attributed to the maximum flowering of the synthesis of Dunhuang arts, the level of mastery of sculptural compositions of the early and middle Tang periods is higher than in the late Tang period. Therefore, this indicated the beginning of certain hidden problems in the state, to which art was the first to react.

Thus, the analysis of the number of caves in different periods and the genesis of the decoration of the cave sanctuaries of Dunhuang proved that the development of planning, constructive schemes, and decoration with frescoes and sculpture took place in the direction of complication and diversification until the time when negative political and economic processes began in the state, and the subsequent domination of foreign Mongol dynasties affected sculpture and murals in different ways. If murals began to revive, albeit on borrowed principles in combination with local traditions, then sculpture ultimately declined quite quickly, and the number of types of plans in the later period did not diversify.

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