### Indian Art: Materials, Techniques and Artistic Practices Prof. Rajarshi Sengupta Department of Humanities and Social Sciences Indian Institute of Technology-Kanpur

# Lecture-15 Snap Through Stability Model and Model of Imperfect Geometry

Hello everyone we will be continuing on our module on pigment and we have been talking mostly about the use of mineral pigment in form of minerals and other ways of decorating the architecture as well as sculpted surfaces. Now with this that how we have looked into the caves of Ellora.

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We find that I mean similar those kind of activities were not just limited to the sites of this rock, shelters or these caves, but they were also been included in the temples. So, for example we have one of the temples from the 8th century and that is Kailashnatha or Kailashnathar temple in Kanchipuram and that is one of the temples what we find from 8th century that had remnants of this paints or the pigments from 8th century.

So, this is a temple why we studied this particular temple is because this temple was almost left intact even by the people who came to rule these places later on. For example the Cholas or the Vijayanagara dynasty and so on and the Nayakas and that is the reason we still have some of the remnant of this 8th century pigments in the temple left. So, what we have here again we will not be looking too much into the architectural structure of this temple. But we will be looking more into how the images are there and how architecture and painting and sculptures they all were related closely. So, this is a temple that we find it was made in the city of Kanchipuram which was also the capital city of the Pallava dynasty who were ruling there between 7th and 8th centuries. So, in Kanchipuram we see this temple being dedicated to lord Shiva and who is also known as Kailashnathar.

And so here what we have that there are all those around the main shrine also there are many of the shrines which sort of encircle or which surround the entire h temple complex. So, if there is a rectangular temple complex we can think about then the rectangular temple complex is surrounded by the smaller shrines or the cells. And in this cells, we can see that all these cells had lime plasters.

And in some of the cells in the deeper recesses of the cells like the niches we have sculpted images and then those sculpted images were also painted with lime plaster as well as with paint. So, all these images that we find here in this temple complex they are the ones we which usually come from this recessed areas and also some of the ones which come from the interior of these temples.

So, for example the one we have in the right side of this have on the screen and that is one image where we find there is a image of lord Vishnu and who is identified with his very characteristic the corn shell or shankha and then of course the sudarshana chakra and so what we find here that how the image of lord Vishnu is there with all the iconographic details.

And we have already discussed the importance of the iconographic conventions and how they have been very much ingrained in making these murals whether those are Buddhist murals, Jaina murals or Hindu murals. So, we find that perhaps this is a narrative scene in which Shiva and Parvati's marriage is facilitated by lord Vishnu. In southern India lord Vishnu is considered to be Parvati's brother and that is the reason we also find that how he had also played a very important role in this Shiva narratives.

So, here we see that how the importance of the line, if you see some of the characteristic features of this image how the importance of the line has been grown much more from the images that we have seen earlier. Now here we do not really see the lines are varying in depth. For example if we see the contour lines of his body or his arms and so on. But the thing is that

the lines are much more sort of uniform but they are seamless, they are flowing, they are rhythmic.

And these are all the lines which also are the lifeline of these images. So, we have the contour lines which are drawn with a much more darker tone and then there are the other details which perhaps have been drawn with little lighter colours. So, if a tone like dark amber or brown that is used for making the contour lines as well as the ornaments and so on. Then for details and for tonal variation we find that the lighter tones.

For example this earthy red and lighter tones of brown and so on those are the ones which are used. Now we also see that the use of tonal variation those we have been addressing in the in the images in Ajanta and then to certain extent in the cave paintings of Ellora the way we have looked into this Jaina figure. Those are the ones which are have been reduced further in this images.

So, here in terms of like the tonal variation we see that there are very slight hint of this. For example if there is a contour line and then right beside the line there will be another almost like a light patch of a lighter tone that will be situated there and which does not give the tonal variation, the smooth tonal variation that I used to be there in the images of Ajanta and so on.

But it seems to be moving towards a different kind of image making practice where different priorities were there. So, for example here we also find how the ornaments and the use of the lines in these ornaments have also been grown much more from what we have seen in the images of Ajanta and so on. So, perhaps the importance in this image is that stayed with line and all these intricacies as opposed to providing this three-dimensional quality in these bodies.

Now the other thing if we are comparing these images, we can also imagine that how certain kind of characteristic features, for example how the slide bent of his head or this Tribhanga posture that we have already discussed in terms of the Bodhisattva Padmapani. So, similar kind of postures and the body gestures and so on. Those are also something they have been here.

So, a theme which we have addressed in the earlier module that how certain kind of architectural forms or sculptural forms are not really exclusive to one religion but several religions which are growing side by side. So, that is also something we can find in terms of this painting traditions as well that how certain ideas. For example this idea of the beauty, idea about like this ideal body types which are usually been associated with the deities or the god figures.

Those are the ones and then of course that how to represent a godly figure in this very rhythmic and elegant Tribhanga posture and so on. All these ideas we find they are also not been exclusive to one particular form of painting but they have been there across religions almost around the similar time period. So, it also suggests that there must have been an exchange of the knowledge between the painters who were painting in the cave temples as well as in these temples and the cave sites.

So, this also tells us about that even though we are talking about 6th century AD or 8th century, 9th century, the correlation between these geographical areas were perhaps been there, it is the idea about knowledge sharing and how to do painting and how to apply paint or like how to emphasize the use of lines. These things were also communicated between the painters the artisans something we see in our practice even today.

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So, from there I also wanted to draw attention to one of those painted niches or those painted shrines in which we see that how there are the layers of the paint and the layers of this lime plaster that actually gives us a sense of how this temple might have been constructed when it was made in the 8th century. So, here there is this niche in the Kailashnatha temple which shows Shiva and Parvati.

And here we see that the majestic and the monumental images of Shiva and Parvati they are seated in the center stage and they are been carved out of the stone and there are also other figures who are been there in the background. So, we see that there are the attendant figures or perhaps the divine figures who have been there in the background and all of them are absolutely either paying their homage or greeting the central deities and they are Shiva and Parvati.

Now what we also see here that how this painted these sculptures who are being carved and they have the basic characteristic features of both these figures and then there is also an importance of how the gesture and the posture and everything else have been also there in the iconographical convention. However, for adding the additional details or the finer details we see that there is a high degree of reliance on the painted imagery.

So, on the top of the sculpted image the lime plaster was added and parts of the lime plaster we can see in all these different areas. So, the lime plasters were added on the top of it and then on the top we find that perhaps only after the lime plaster was completely dry then the layers of paint were added on the top of it. So, we can imagine that in some cases we have the remnants of the paints.

For example here we see how there are some of the yellowish paints which are there, so both Shiva and Parvati they are perhaps been shown as the fair skinned ones and that is the reason we see that this yellowish paints are there in their body. However, here in the depiction of the textile we find that multiple colours are perhaps been used in different parts to show how the textile surface is different from the skin of these deities.

So, this kind of strategies of combining this sculpted forms with painted imagery this is something we find that it was also there all across in various parts of the Indian subcontinent and that also tells us about that how many of the images as I have already mentioned before that many of these sculpted images and parts of the architecture that we see in the Museums or in various collections today.

Even though they do not have remnants of paints, in most of the cases they were painted. So, the use of the mineral based pigments as we have been talking about the use of the mineral based pigments were much more expansive than what we see them today.

(Refer Slide Time: 13:14)



So, this use of the mineral based pigment and the tradition of painting on the top of the sculpted surface or on the top of the architecture is something that we see that was there during this time period at least this Kailashnatha temple from 8th century that suggest how this tradition persisted in 8th century in Tamil Nadu or in the Southern India. And that is something we still see today that how some part of this tradition or like some part of this habitual practice is still continuing in Southern India.

So, for example here we have a painted porch gopura and that is from the Thyagaraja temple from Tiruvarur in Tamil Nadu and it was made between like 12th and 13th century. And here we have this painted gopura or the entrance gateway to this temple complex. So, the idea of painting the exterior walls of the temples and also like covering them with lime plaster.

Then adding individual colours to indicate the different deities, the divine forms, the semi divine forms and the human beings. This is a practice that we see that it has its roots in the history and that is also something that is still being continued even today. So, this is also a reminder for us that how the use of the pigments that something that we perhaps that the lime plastered walls and the use of this pigments, it is not always the most viable thing to survive for the weather conditions and so on.

But such kind of traditions of painting them annually for example how the temple gopuras and so on. They are either painted annually or after a particular interval of time. So, this kind of traditions also suggest that how this use of the paints and so on that that had been there in the past was usually being renewed with each ritualistic purposes. So, this is also something that tells us about the correlation between the historical practices and something that happens in the contemporary times.

And it is also a reminder for all of us that this use of the pigments. And the use of the paints that something that we are studying from the second century BC and so on is not something that is completely disconnected from the living practices that we see around us even today. Now one perhaps the difference we might find in terms of the use of the colours today that there are many places in this or like there are many sites or the temples that we have here.

For example the one we have on screen. In this kind of cases we see that there are more and more the use of this synthetic colours or the industrial colours which are now being prioritized more than the mineral based colours. That is because the mineral based colours and the lime plasters they wash away with every rain. So, in the monsoon they will perhaps been washed away.

So, to avoid those kind of issues we see that how the waterproof colours are being used today. However, that the way in which the colours are used and painting each and every deities and the other forms in this architecture and sculpted areas. So, that is the practice of using colours on this surfaces is something that makes us think about their correlation to this historical objects and monuments.



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So, from there I just wanted to come back to this comparison or at least the correlation between the images that that we have already studied. So, for example if we see the images of Ajanta and the one, we have on screen that is Bodhisattva Padmavani and the way in which we can see or we have discussed the idea of tonal variation. The way we have also discussed the use of lines that how the use of the subtle lines as well as the lines which vary in their depth.

All those kind of features and how that gets transformed into this uniform lines in h some of the murals in the other parts of the Indian subcontinent. So, for example if we compare this Pallava mural from the Kailashnatha temple with the once when Ajanta. So, there we see that how similar kind of colours and similar kind of this the gestures postures and the movement of the hand and so on.

All those things have been employed but at the same time if we also see how the similar pigment is treated very differently for creating a different kind of visual effect is there that that also mark their individuality. So, as I have already mentioned earlier that these are the images from which we cannot really make a value judgment of whether one thing is better than the other.

But here we need to understand that how there were different kind of priorities, the priorities can be in terms of what the patrons had their requirement about or it can also be the artisan or the artist choice. But these priorities were also there in terms of how these images were constructed and how we see them and we read them today. Now even when we talk about all the similarities and differences it is also very important for all of us to think that the kind of materials which were used for painting both the surfaces that we have on screen.

They were very similar, the way we have already mentioned it at the outset of this module or this week that how the similar kind of minerals and the pigments those were used from the rock shelters of Bhimbetka to the medieval paintings as well as the early modern and then something that had happened perhaps very most recently. So, similar kind of this mineral based colours for example as we see here the green earth.

And then perhaps here red oxide and some kind of like amber colour which might have some element of manganese and iron in them. So, this kind of this mineral based colours which are there and even here we see the use of similar kind of green earth and this are the red and so on. So, these are the colours that we find that they remained almost similar in most of these murals and these paintings all across the Indian subcontinent. But their priority like the way in which they were they are applied onto the wall surface and then of course very importantly how the lines were drawn with this darker tones that made a whole lot of difference and that is how we find how one image is distinguished from the other and with the same material how different kind of visual expressions are created, different kind of emotions were evoked. And of course the different kinds of skills were displayed.

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So, from there I just wanted to wrap up the entire session on what we have spoke about so far and all of them are certainly around the use of pigments. So, if we go back to some of the issues that we have addressed in the beginning. So, for example how this red pigment is used in the cave sites of Bhimbetka. And then we have also addressed that how there are some of those superimposition like here and what that suggests.

Like for example if there are one community or if there is one group who paint or like who draw one image and then in the later times we find that how those images are superimposed by someone else and by doing that they do not remove the earlier surface but they add to this, this is a way in which we find that how the history and the layers of a different kind of practices they coexist.

So, this is also a practice we do not really see them being evident in all the mural practices or all the painted surfaces in India but we also see that in many cases this kind of coexistence of the paintings or the painted surfaces from different time periods they appear side by side in this various monuments and architectural sites. Now the other thing we also find that how there are even though like the similar kind of colours are used.

But perhaps some of the additive materials or perhaps some kinds of polishing techniques those are also employed on the surface for adding to the visual effect of them. So, for example the kind of the finish that we find in the cave temples or the caves of Sittanavasal that we have here. It was perhaps even though like similar mineral based colours like the green earth or terre verte and then this red oxide and the yellow pigments and so on.

Those are the ones which are used but it is also possible that for Sittanavasal as well as for Ajanta the lime plastered surface were polished. And they were treated in particular ways for which like they became much more receptive to the mineral based colours which were applied on the top of them and that is also something that we find that why these images have become much more h sophisticated in their visual presence.

And the result the final outcome of this entire painting process that that became starkly different from the ones that we see in the cave sites of Bhimbetka and so on. So, these are some of the ways in which we can imagine that how different kind of techniques were involved even though similar kind of materials were there. Another thing that we also can imagine that how the tools of painting were also been very much important part of all these images.

So, if we can think about that how a crayon like material like for example if I am thinking about a block of red oxide or a piece of charcoal which is used as a crayon and then it was used for drawing onto the cape surface. So, if that is the kind of application of colour that was evident in the cape sites of Bhimbetka as well as in Jogimara and places like that. Then we see the application of colour became drastically different when there was incorporation of brush.

For example when we see the images in Ajanta or in Sittanavasal we know that the images were not really drawn with a crayon like surface or not something that is crude. But it was much more sophisticated and the layers of paints or the layers of this pigment based paints were applied onto this wall surface with the help of different kinds of brushes. So, from very early times we see that how different kind of animal hairs, like the goats hair or the squirrels hair those are the ones which are used for making different brushes of the varying thickness.

So, that is something we find that how they also makes a huge difference in terms of how the visual impact of them are created. So, if these are some of the issues we see in terms of that this difference in or the similarities between techniques material and so on. And that is also something for us to think about that how certain this overall practices of painting and painting onto architecture or painting onto the sculptures.

That is something that had been there from very early period in the Indian subcontinent and that is something we can see in the Kailashnatha temple and of course in the other places for example in Ajanta Ellora and so on. The last thing I would say that even though there is always been a thrive towards understanding that how Bhimbetka paintings are much more cruder or much more archaic in their style and Ajanta paintings of the paintings in Sittanavasal and so on.

They are much more refined in their appearance but we can imagine that it is not really a way in which a linear progression could take place. Because similar the images that we find in Bhimbetka we see their resonance in many of the other wall paintings we see even today in the contemporary times. For example the gold painting, the worldly painting and so on in which stick like figures and very minimal material.

Those are employed for painting onto this wall surfaces. So, it can be imagined that the painting style like Bhimbetka and the painting style of Ajanta they might have co-existed in the history, but in different pockets. So, if there are much more skilled artisans and group of people who are patronized by the royals and so on they must have preferred the way in which more sophisticated ways of visual depiction were there.

Whereas the groups we which prioritized simple forms of expression with minimal materials and so on. They must have opted for the figures that we see in the context of Bhimbetka and so on, thank you.