

11-A William Parker at Visual Studies Workshop, July 1977

Notes on the transcription: Comments made by Parker during the reading of texts are set in (). Additional information set in { }. Inaudible or gaps in tape indicated by ... Parker laughing indicated by {laughs} Students laughing indicated by {laughter}

Transcription by Bob Martin

Reel 11-A: Camera Obscura, 17th-18th century painting.

...Of the man in the box...this is a portable camera obscura by Athanasius Kircher, and it is dated 1646, and was originally made in...now in the first place, it was drawn in peculiar scale, because this would be something in which a human being could not only enter its space, but it had extended poles, and therefore figures could...like in how certain Oriental cultures...can be carried like a stretcher, like when you have people on a stretcher and you have the poles projecting out from behind it. And you could carry this draftsman around into the world, now this really gets common. And I am not trying to overstate, it's a fact. The world is not believed unless it is intermediated by an instrument. And I might say to you that the majority of landscapes of the seventeenth century, every case of documentation, it doesn't mean they didn't go out...with their drawing tablets to define the landscape, but they constantly turned to the assistance of devices, including the camera obscura, as a better way of recording the objective identity of the world. So here we have this man, he is inside, he is trying to...and has entered into a darkened but life-sized room, portable room...he is now inside a kind of cubiculum...he is a box man as it were, and he had sheets of vellum stretched...they are stiffened...in order to be rigid enough, once stretched, so that you could draw up against it...and look at these peculiar lumen rays coming in through the aperture of the camera obscura...and the original...equipped with the device, lenses...and what happened, they impressed themselves, you can see the tree upside down very clearly, impressed themselves on the vellum. He draws the tree with absolute rectitude and accuracy and then of course he removes the vellum, turns it right side up and he has an immediate cartoon based upon *what*, the impress of nature, not upon his will as to what the tree should look like. Need I say anymore? And notice another...if we speak of the flaneur in nineteenth century photography, he who travels about, peripatetically witnessing the world. Not only does he have a conversation, Hi Dave, what have you been up to today...a bowl of soup? Notice that man over there sitting on the roof. Look at the physiognomy of his forehead, we might not take pictures, but we'd have a chat. That is the flaneur. It is even the better sense of the dandy, who moves about, finding out through direct observation. *That* creates the camera with the need for the darkened room, *that* is what Manet is interested in. That is what other artists of the early

nineteenth century were trying to do, was get *back* to the directness of the world and then let the materiality of their painting become the thing. By the same token, as this moves about, it seems utterly absurd, can't you see it with two wheels front and back, almost like a little car. {laughter} Can you imagine Andrew Wyeth in a box? Or Picasso in a box? In essence they still are...by virtue of what they were trying to define when they were trying to...while they were recording. And the idea of the studio: Barbizon painters got upset with that idea, they went out and painted directly from nature. As with Vincent, running along with a straw hat and a knapsack, and early third world experience, going out and painting...Kirk Douglas, you know that guy with the one shot with the...in his chin. {laughs} In that one scene, all you have to do is read the letters to Theo, that he complained about the wind blowing his candles out. He says I must be directly next to the earth, he takes earth, this is late, this is Post-Impressionism, and pushes it into the paint. He digs into the matter....all these factors...become exquisite in the whole development of Post-Impressionist painting and ultimately of Expressionism...and Abstract Expressionism...asked that question...click, we are all gone. It is actions. We really had to become primitive again to get to the next level of consciousness.

Student: What was that?

We had to have an Abstract Expressionism to become primitive again in order to rebuild our consciousness...So it is not only an issue that the world is confirmed by being witnessed by something that can objectively define that world and then be used as evidence. It is also the principle of parapanises {?} and the peripatetic viewer who can be carried around like the later flaneur. There is also a third level...for this early box...with the camera obscura...I gave you two, what would be a third level of import here, meaning in the seventeenth century? There is another level. It means that there is an increasing disinterest in the direct tactile sense in relationship to witnessing the world: true, we don't touch it, we draw it. I am not after some big deal but it is a very important issue. In other words, this is where the tactile sense recedes. That is why in our time, it may surprise you, some people pay hundreds of dollars to go get a massage, or get in water and be rebirthed...or to read books like *Sensory Relaxation Below the Mind*, coming back to all those things I said before. I am hoping that you will get this relationship now. Or when someone says that we have to, it is called body language, or a sense of touch, or Earth Art. Or the wonder that comes when we suddenly find, I just noticed it this morning, I had great pleasure in seeing Niagara Falls with Bonnie and John and Joan. And it was interesting to me when I heard today, we were sitting down to breakfast and Dave says, well I understand that maybe it looks more remarkable from the other side, the Canadian side and Bonnie said, well...we find that it is much more remarkable to be standing next to the falls...rushing down...this remarkable sense of

being in matter, or in the phenomena as opposed to seeing it in panoramic...the idea of do we seeing things better from afar or do we see them from within it. Now the ...in this image is one in which we could say it not only confirms the documentary objectivity of the intermediary instrument, it also confirms the idea of moving about in the world and making sure that documentation occurs in precincts that not only imply other subjects can be admitted other than which is idealized or thought of as a classic theme. We pick the alley way, the roof, the basement, the backyard, the front yard, the castle, the flea, that sort of thing. All things can be recorded because we have this wonderful device that permits us to view the world objectively. And we can carry it about, and we ourselves can move about. And if you think about it, it really doesn't require you to have an instrument to be able to look at a flea or a backyard, front yard, a rooftop, a basement, or what have you. It is just that we didn't believe the world was there so we had to have something else, separate from ourselves, to make us want to know that it is there....the image of, that where this places a conflict...It is as if now Locke, Locke does not articulate the issue we have to wait until later...It is like that Lockean man really does start wanting not just the drawing of the tree but is obsessed with the interest to have, in essence, the *closest* approximation to the tree, to lie so orderly upon the plane so that it can be returned to for observation. And of course it is very interesting, the word simulacra, and that means the exact cast or type or same thing. It is not just like a copy, the simulacra is almost like the impression, the imprint, the form that relates to the original source. And of course, obviously, that theme of the simulacra will become extremely important to the urgency to want to make forms that have a relationship to their original source. And when they can't do it, painting seems to leave the realm of what we might call a concentration upon the mimetic, exactitude, and slavish detail and into the realms of more tactility or physicality. And the camera obscura will be used by those painters who will have *that* and will also add eye level viewpoints of camera vision to their paintings in order to cultivate a more logical or believable relationship to the world. And that suggests that we have a really true example of the Cartesian split: here this idiot is drawing a tree that could best be drawn by standing outside of that camera obscura, even if he were to egg his vellum...and returned to 1524, and put a grid device in front of him, a glass plane, he could at least be a little more direct in association with the tree than encased in this kind of a prison that he has to enter surreptitiously by a trap door in the bottom in order to be able to carry the sight of the tree in the turret {?}... that simpler device that Durer used for a more immediate experience of the model reclining on the couch. Even the plumb lines in a way had to touch the figure and then have the mark repeated on the plane. Do you see what I mean, you see this {camera obscura} is a further removal from direct sensory contact from what is being observed... It is like saying that earlier devices were actually in more contact with reality...have to enter the camera so we can have...an early cubiculum. It is pretty heavy for one person to lug, but if you set it up on a table top, and draw from this device...and the box-type

camera obscura, mainly in the seventeenth century...we not only have those, which have a...bellows extension...some are operable, others are fixed...transformed onto a plane, a vellum plane with glass...to draw from a reinversion of the image, and as I said, it is portable. The box-like image is one in which, it permits the painter to use this as if... if I want to draw the world as it appears, to use the camera obscura is very simple, we simply have a box...the top of the plane...we have this kind of box-like device and this will become very important in Vermeer's work...the complexities of Seymour's article (Charles Seymour Jr., *Dark Chamber and Light-Filled Room: Vermeer and the Camera Obscura*, The Art Bulletin, vol. 46, no. 3, Sep. 1964, pp. 323-331)...is exquisite, you must read it, it is a beautiful study of the camera obscura in the 17th century. Have any of you ever read it?

Student: He has a number of articles on that whole area, the Dutch in the seventeenth century.

I'll bet. Optics and philosophical concerns in relation to...drawings...the work that we will look at, is the work that Seymour postulates, we cannot know for sure: the likelihood that Vermeer is working in his room, now notice this...we know exactly where he lived, we know exactly how he behaves as an artist, we know exactly what floor he is on. He is on the second floor of his home where his studio was. He is behaving as a painter who earlier in his development tended to work out of doors on the spot. There are a few signs that require an objectivity of being somewhat detached from the world in order to make an observation...He is in a room. We don't know whether he used a cubiculum, a box type...or whether he used a chink in the wall, or a light leak in the shutter. The thing is, this little section that you are looking at...is typical of the use of his little points of light that are called...circles of confusion...remember I showed you the...that when you see this from afar it looks utterly detailed. I mean there is no question about the identification of this wonderful...accurate...the strings tied to the...The sense of the buildings...the sun is now shining off in the distance...but a dark subduing of chromatic value contrast and chromatic clarity. You will notice that the foreground is subject to the principle of repressed value contrast...but off in the distance we have a lot of value contrast, a very clear identification of bricks on the walls...Now what happens is, when we come close to the painting...or Amsterdam and other places...here is what this looks like close up. In the first place it is a fractured image...that means to break down into parts. There is a certain degree of tactility. It is also an image which has *fracture*. That means a tactile surface based upon units that also have globular extensions off the plane. You see fracture is a process, a breaking of things down to a particle structure. Fracture has to do with the surface identity, its tactility...I'd like to see a painting today of a photograph today that has large grain, I might be inclined to say, oh of course, the fracture of the work is more evident, meaning the particle structure, although the process to do it is by

hand, and I would also say, and yet close up the fracture of the surface looks blown up and granulated but then let me go down a block away like an Avedon photograph, I could say that the thing coalesces and so I lose that sense of fractured or fractured surface. And this is exactly the same principle that occurs in Vermeer's work: from a proper distance we see things coalescing, from close up they fall apart and break down into units and surface. Now, indeed what interested Seymour... are these little points of light...there is a slight degree of sparkle that is on this read value...Seeing the structure...on the basis of points, or units, and also those units had to be defined by points of light...No human eye could have quite accomplished what has been defined by...the logic of optical scatter...the circles of confusion...optical points of light. If it was so, then we would have to say it is an extraordinary vision on the part of one individual...only by the camera obscura...recording the exactitude of what happens when one...or uses certain lenses...If you start backing up, then things start falling into place. I was telling a student the other day, there was one of the most beautiful demonstrations of this principle occurred several years ago at the Museum of Modern Art. John Szarkowski was showing me a work done by...it was a series of polaroid shots taken by taken of a simple form like a still life...bottles, bowls...Now they used a scanner, a computerized scanner that dealt with, at least insofar as they could reduce it to points of reflection. The scanner would pick up, they had illuminated this actual still life...on a table, not a big deal about the subject, but they were showing the gradual build up of the points of highest reflection to the points of lowest reflection. So it was all based on light, it talked about the absence of light in the foot, when we talked about the presence of light in the photogram of where light is affected around the foot. Now in this still life, the first print showed maybe 45 or 46 points of highest reflectivity. Then at each stage, next print...63...then the next step is added to the first...added to what was there before...the next stage was 38. And in essence now recorded the next highest form, each successive order down to no reflective light. So the next print shows 1423...skipped phases. But then they will say step number 8642 shows blah blah blah number extended numbers until they finally arrive at the little photograph of the still life....and you step back and say, my god, I see it...by various points of light. It was almost as if you might refer to the idea that there could be one...you see that was confirming the particle structure of light as effects, and those points of light reflected from the subject and how they are recorded, but yet when you go 'click,'...and it comes out through the Polaroid rollers, or you pull it out...you see what you are getting is all of it at once, but still in unit structure, point structure...This is Vermeer...and it is seventeenth century. Peter vor Hopsich, he is already showing how the image changes our world with something that has to do with planes and gestalts and ideal schema into the realm of the natural...of light...What you notice is that certain units, you might often think of as idealizing a subject of coarse banality. In reality...even the blurring of her face, we have the principle of differential focus. Not only did Vermeer throw some things into focus, but

he would push some things out of focus in the same painting...If I throw the projector out of focus, suddenly the forms seem to coalesce more satisfactorily than when it is in focus, it is true here as well...Look at this, look at the finial on the chair in the foreground...even the threads...being re-corporealized in the process of painting...now things break down into light, by illusion {?}...Globular areas...these experiments of taking furniture of the period. I want you to concentrate simply upon this lion's head finial on this chair...a world defined by light...not a confirmation of what the eye sees... you don't see things with clarity in your peripheral vision, you have to shift your eyes...

Student: On the last painting, can you explain the background? It seems extremely flat.

It is a tapestry.

Student: It is a tapestry, OK.

...Now, this is an actual photograph showing what happens when we have something thrown out of focus, we get these discs or circles of confusion. That is the same wood carving that appears in the painting you just saw...the finial of the lion, do you see it?...what happens when we throw it, and we are looking at it, and now remember this is just a gross object being seen with a camera, Vermeer is using both focus and non focus elements. In other words, if we throw something out of focus, or if we move through the various points of focus within the same painting, reveals the way the eye scans, we are also dealing with the way certain peripheral vision aspects are being honored, and we are also dealing with the idea of how the camera instrument observes the world by units of points of light. Now let's take *Officer and Laughing Girl*. If I show you this in black and white first and make it seem like a photograph, and Seymour does this beautiful thing...now tables, this is one thing that we can confirm in Vermeer's...I used to know a woman named Georgine Oeri, she died of cancer, and she had a profound influence on my life, she told me that things were discovered...She studied the way different cultures used their fecal matter: whether they throw it away, use it as fertilizer, or what have you. She is one of the first ecologists...she has written a number of books: O-e-r-i. There was one right before her death that was really quite peculiar. She was more like a scientist, she was concerned with industrial design, she was a pragmatist. Her last book looks at relationships and images over various periods of time...relationships among people that use certain types of symbols, and she kind of rediscovered, although she had never read Jung, she just dipped her hat in the same well that Jung and others had done. Well Georgine was talking once about how, what later became a course in Architecture or Industrial Design, in terms of what is called human factors analysis. That is to say the type of roles defined by the height of the door in a...When I teach a basic design course with one of those human factors

problems I always point to, you will just have to forgive this is a way of getting my point across about this. At the University of Connecticut, there seem to be and in every school I have ever taught at, there are always in the rooms shelves, wooden shelves, about this high, and they always have these, you see them everywhere, these little prongs where you hang up your coat, and there is a little prong underneath...and you got the little nob that comes out like this...And these are always screwed in along the wall. And I say to my students, why don't you people ever use this marvelous utilitarian device? I mean you don't come in and hang your coat on it, and you don't put your books up on the shelves...and they say oh come on Parker, we don't wear coats inside, and if we wear them we put them on the back of the chair. So then I say what is this thing for? And they say what do you mean what is it for, it is for books, and some dumbbell spent state money to put it up there and nobody ever uses it. It catches dust or what have you. And I say oh no you are wrong: that was part of the assigned, and still continues, on the state specs for any public building. If it is going to be used, if it is public, then you must have these. It extends from the 19th century specs, because you're not supposed to put your books up there, that is for hats. And that upper hook is for your coat, but what is that lower one for? That is for your umbrella. And the same principle extends literally from the mid-19th century. It shows you how human factors analyses are an important issue. You don't use it, right? And they say, right, right. And I say, well why is it still appearing here? Because someone didn't catch up with an understanding of what people do and how they behave in one period of time compared to another. I gave them another illustration: come over here let's go outside. Now look at these beautiful rectilinear sidewalks everywhere, all over this campus. Do you notice where people have been walking?

Student: On the grass.

On the grass. And what do we notice what happens to grass when it is walked on?

Student: It wears out.

It wears out. It is just that simple. Giorgione Oeri...and along comes an architect, is it Ohio...they built a new campus, and they said, well where are the sidewalks, that is part of the state plan? Look at the state specs. And he said look I am telling you, we are not putting these sidewalks down now. I am under contract, but that is a subcontracted element. It will not be done for three years. But we can't have this, says the legislature. And he says, well, the buildings are built, and everything is done...and you can commission someone else to put up the sidewalks. But let's wait and find out where they should be. And now isn't that brilliant? And he finally convinced them. He said I promise you, when I put down the sidewalks, or have the subcontractor do it, you will

never put down another sidewalk and you will save yourself countless billions of dollars over the period of let's say 25 to 30 years, of having to put in new sidewalks. So people found out where they wanted to walk. And where the grass got worn, that's where they laid the sidewalks and nobody made any more shortcuts. It is true. She is a major figure in the development of ecological and human factor studies and you have other people who work on... automobiles, and how they make you perform different acts...let's say this chair...you know how you sit in a wooden chair and you have the little division that is supposed to represent your posterior? Now this chair...by human factors analysis, you notice there is a little depression in the seat. And that is to accommodate, I hope you can notice it while you are sitting in it, that is to accommodate the elevation of the tissue of your buttocks, and you are supposed to be comfortable...your blood vessels are restricted and your legs fall asleep, your feet are swelling up like watermelons, and so on...And the back is subjected to human factors analysis, it is not accidental...those others could really hurt your spine. And certain can openers, they ruin...certain devices...hundreds of things...where people thought, this is a better mousetrap...but a device that seemed simpler, so people would buy them, but also...Chairs like this will hurt you. And so do the Barcelona chairs, by the way, hurt you. And they look exquisite...Bauhaus furniture, they will crucify you...things may be exquisite, in reality, what is a better chair than anything a human being has ever manufactured? To get this point across. What would a better chair be than anything anyone has ever manufactured?

Student: Lazy Boy.

Lazy Boy?...What would be better to accommodate sitting?

Student: A rocking chair.

You are still in the realm of manufacturing. I just want something that is.

Student: A tree stump.

Well that could be a little bit difficult...

Student: A hammock.

That is still manufactured. I am talking about things like wet sand, mud, and clay. I am talking about something that is not made...water beds designed for your body...

Student: Moss.

Moss, exactly...furniture based upon natural formations...depressions in rocks. Things like mud: press yourself into mud...

Student: Foam rubber is probably on that principle, right, to some extent? Your body could leave an impression within it...

...Take an impression from a typical type, I always feel sorry for people who...typology...look at this group...and then try...all these bodies trying to fit into this chair...What Georgine established was the fact that quite often... furniture, you know what kind of period, you can know the very real factors relative to instruments and devices in the way that they were used, the height of the windows...have done a lot of studies on things that had to do with way costumes have been worn and what that had to do with the heating facilities that are particular to that period. You have got to deal with that in the Van Eyck about that gown, it was perfectly natural that she would wear that long gown, because she is...and they wore those things...They wouldn't be standing there barefoot...The height of tables...typical...tables, is the height of a window sill...a full window, a domestic Dutch mid-seventeenth century image...and then I thought that the table height that was comparable back then and then I know what the box type of camera obscura that is used, and then I might get a reference point as to whether the artist was obeying the camera...image. Now all of these things are a long-winded way of getting to the point that to know where things would be set, where it would be used...like putting a camera, a box camera on this table...putting that projector on that stand, that gives me a clue as to where things should be within a work of art and whether or not the instrumentation was obeyed or whether something decision in sight was made. Because if the eye level falls where the instrument should be, it means that the artist, if he is drawing a room where we would normally be standing in the viewpoint given, he wouldn't be painting it or seeing it. He wouldn't be seating down like this at the eye level point, or trying to bend over and do it, it is the instrument that is at that eye level as it were as opposed to the artist. Do you understand the point I am trying to make? Now what happens here in the...this is exactly what happens, as in camera vision with respect to scale. Now what do you notice about this that looks just like what you would expect to get a camera directly aimed...right at the center of these two figures...what would you expect...what does this confirm as far as instrumentation?

Student: Foreshortening.

Foreshortening, a compression of space as when a telescopic lens would do...or remember Walker Evans' wonderful, in *The Americans* photograph where you get those

landscapes with great distances, by using a telescopic lens that pulls the background forward, so that it compresses the space. What else happens, there is another thing?

Student: Out of focus.

There are those features in the differential focus in various parts of things. Remember, if he didn't select the areas, if you want to show something...to confirm that idea that painting disappears into the world through aerial perspective...where the main focus is, he had to use aerial focus, otherwise everything would go out of focus. What is the other aspect?

Student: Scale...scale ratios between the man and the...

Yes, painters, prior to Vermeer, and I might add there are a few, remember Savoldo, that figure...with the light playing up from the oil lamp...She is in the foreground. The gigantism of the man, if he stood up, he would probably tower over her by some three or four feet. But you see, this shows you that camera lenses do distort, don't give all this objectivity and the objectivity of the lens, it has to do with the objectivity of the recording process, the task of reproduction. And a typical, standard lens...increases the scale of the foreground units and compresses or reduces the scale of that which is even slightly removed in this case. I know it is much more complicated than that but this is what happens when Vermeer begins to use what the camera presents him as a scale differentiation and what had never before been developed. This would look absurd. You would never find this kind of relationship in Italian painting. You won't even find it in Van Eyck. You will find all the obsessive plenitude...but what Vermeer confirms for us, he paints what the world looks like in a box and permits the idea of these strange, peculiar scale relationships which the eye sees, but prior to Vermeer the painter's mind did not permit because it looks unnatural. And you just imagine yourself in the 17th century and suddenly seeing these forms and I dare say your experience would be...what was wrong, how are you seeing this, do you have an eye problem?

Student: Is it optical vision versus natural vision?

Exactly. And it's both cases. In this case, the natural vision has now become that which is assisted by instruments...

Student: ...Was the camera still used, in the literature, one of the problems that...had was that painters never really document the use of the camera obscura, is that because instrumentation was so widely used that no one bothered to even justify its use in terms of...

...I would say yes, for two reasons: not all used it, because they also had paradigms that they could implicate the same point in vision, or type of vision without ever having to mention it... in ...developing a particular viewpoint, one doesn't need an instrument to be able cultivate that viewpoint. You understand what I am saying, so therefore... doesn't appear. By the same token I could say even in photography, if I am talking about numbers, it is a reduced number of images of the picture-taker with the instrument itself. Sure there are...you could have a daguerreotype or two and then fifty landscapes before you could name me two camera workers, and the camera itself. And seldom do we find the instrument itself being defined. In the nineteenth century we still have camera obscuras defining drawings and paintings and so on, the person holding the camera obscura. I didn't say cameras...light sensitive materials... in the nineteenth century. It isn't that there is an absence of...we will find the artist standing before the easel looking out at us and we'll see the recording of the brush and the brush is held in the hand. That is the instrument with which a painting is made. But you never find a painting of brushes prior to the nineteenth century, it would be very unlikely to see the attention given to the instrument. Afterall, it is not that it is honored or revered as a special secular object, it is an assisting aid which confirms the credibility of the world, but obviously the artists would carry that confirming evidence into the realm of the painting, so painters still...it is the camera that is doing the work, it is me who is using the camera to objectify the world and therefore I am now the one...of bringing dumb substances, so I should definitely...encouraged to take myself at the easel with a brush than I would of myself in the act of painting...Remember Giotto, that he would include figures, where we enter the scene and we see them from the back and then observe the event taking place. Here we have an illustration of a painter doing that in the seventeenth century...the late Gothic period, sure people knew to observe and to even paint images that confirm the way we might possibly see things or events taking place. But the very notion again of scale differentiation...in Giotto the shallow space wouldn't shut, so therefore the figures would still be painted somewhat in relative scale. He is more of what we might call a naturalist than Vermeer, in terms of the scale of figures, from foreground to mid-ground to background. Whereas Vermeer uses the camera...so we are dealing with peculiar reductions of scale...more in focus...and as I said, it is not a subject painted by Vermeer...in photography for a person has an occupation to be at the camera...you can have Talbot, you can have Rejlander, with the camera showing...if you said one out of fifty, isn't that surprising. How many of you have seen photographs of people who use the camera then become part of the subject matter. Today it has become increasingly popular...and I could name among contemporary photographers thousands of images which include the camera as an integral part of the subject matter. But if I step back to when I grew up with photography in the 50s, I might find two or

three. How many Weston's can you name in which the camera appears as part of the subject? How many Steiglitz's?

Student: They are usually portraits and landscapes...

It doesn't make any difference...what the content is...you don't see the camera...he says it in the *Allegory of Painting*, and *View of Delft*, the *Lacemaker*...why shouldn't he have drawn the camera obscura...you understand what I mean, it is the same principle. Today it has become an issue...In the Daguerreian period, you'll find it in the Western photographs, to show the photographer in relation to the dark tent and so on, but I think that all amounts to someone recording the site...These points of light, down into the threads themselves...Look at that cluster of thread...reflecting...a point of light...These are real photographs that represent sections of the paintings by Vermeer...and some things will focus the mirror reflection and throw the surrounding area out of focus...Or the middle ground clarification where the lower part where the edge of the mirror...and to the reflectivity of the skull itself so he is focusing on the middle ground areas of that unit and the foreground falls into a lack of focus...and reduction. And then in turn, the idea of the foreground in focus and the background breaks up into points...also points of light... Works of art which include this idea of differential focus...you see in close up, the points of light on that thread...and the way it breaks down into points of light and unit structures.

Student: {inaudible}.

No, I am saying it reaffirms two things: it reaffirms that the structure is based upon reflected light. It confirms the fact that no longer is reflected light to be thought of as something that defines planality or volume, it confirms atomistic structure. Atoms, parts, particles. It reaffirms also that it can be doubted unless it is the light that enters the room that brings nature into the interior and lies so orderly there as to be observed. The only problem is, it is done in paint. We don't have...here, this is physics.

Student: ...I thought you were saying that the camera obscura was included in the image, as cameras now are...

No, never, they are not. They are not important to be documented as a vehicle. They are the instrument that enables the artist to perform...their painting...the camera is regarded as a scientific instrument, it enables Vermeer to perform...the utter fidelity all through Vermeer...identified as actual surfaces...

Student: Is Seurat's work the obvious point of the idea of coalescing the dot pattern...

There is a difference between the surfaces: Seurat is being influenced by a number of optical experiments, particularly by Chevreul, principles of simultaneous contrast and... another kind confirmation of the human sense...to go out and experiment...would still allow the physics of color relationships to occur on the plane...like red/green, or blue/orange, or yellow and violet...a confirmation of your eye: your cones....and the rods give you information about value...the response *in the eye*: you make the mixture, because in the painting, it ain't there...Confirms the unit structure, atomistic structure, but not an intermediary device. He doesn't want to confirm the world, he wants to confirm you...Now what you see in this Vermeer, in certain areas, these unit structures...they do indeed coalesce, they come together, a style that is convincing...stylization...what is most important...from a closer view...is broken down into smaller units. It {Seurat} is not at the service of mimicking anything...When you get closer to a Seurat, what you are seeing now is a picture of a kind of burnt orange, it is really the admixture of three different chromatic hues: cadmium red light, cadmium orange, and a violet which has been raised to the level of...so that you read this as shadow...light drops {?} It is a violet and a blue violet admixture within...When you read these brush marks here, every one of these are tiny unit structures, and the chromatic mixture occurs in your eye. There isn't any mixture in the painting. Does that make sense? That confirms two things: one, that your senses are being honored: the cones in your eye are being honored, but also the particle structure of the world...

Break

...Unit structures but really confirming optical aspects of the eye...the rods and cones and how they respond...The definition of the points of light as they might appear, for example in the...from a distance, again, we find these studs...leather, on the furniture, are reflecting light...when we are close, we find...they break down into painterly marks that lose the sense of a heightened attention to detail, which you can see...a very selective little area...little bits of opalescence...forming points of light. Here is an example of pearls...the units are the pearls themselves...we see the points of light...Here are associated with the pearls but at the same time the unit but at the same time when we get closer they break down into little unit particles...On the fur, on the edges of the fur...and even...in the background. He shows not the thread, but the points of light that reflect...Here is a good example, the *Officer and the Laughing Girl*...the gown...the light on the sleeve...break down to little points of light. Now particularly notice the finials on the chairs: the points of light, when we get closer, anything that confirms the idea of reflection that confirms the legitimacy of the world, but now...will be brought to bear within the construct of even the subject matter figures being in a room. Now, granted in Italian painting you have porticos and interior scenes and so on. Typically the

architecture doesn't seem to contain figures, here you notice in the experience of domestic scenes like, the visiting of an officer to his maid servant, or the painter painting his model. Things that take place indoors, or still life subjects and so on, that is so true of the entire 17th century, and I can show you a few examples... Now I told you about the Daguerrian views... I am going to go through these... and say seventeenth century, ok? Watch these things that show what painting does in sort of successive order in relationship to forms. This is Heda, Willem Claeszoon Heda, 1634 still life... You see what I meant by the Daguerrian view: Heda is working with an almost obsessive... detailed analysis of form... you almost have to get this close to see it break down into matter, but he is working with camera vision as well. And even elements like the window pane in the reflection and the points of light that appear across these crystal surfaces. Even the lemon peeling, breaks down into points, not to rendered detail, but to points of light. And they also have a ...structure... seventeenth century starts dealing with the phenomenology of the light source, in this case, it comes up... the table, with the candle flame... the issue in the northern countries, remember I highlighted the atmospheric qualities like *Jupiter and Io*: Zeus/Jupiter visits Io on a cloud... smoky... vaporous... Here is Ruisdael, *The Jewish Graveyard*. The somber, just approaching the moment before twilight... in the definition of Van Dyck's work... occurring in Spain, or Holland, or England, or where ever else, with this idea of painting the fracturing of surfaces... illusion... view is coalescent, but if you go up to it and it breaks apart into strokes of paint. Or Rubens, seventeenth century, landscape forms that show a tremendous amount of spatiality... called it grand dramas... that show an energy in which the individual unit stroke becomes very important. Rembrandt's *Nightwatch*, it is actually a day watch. Go down to the Rijksmuseum and see this painting. It is called the *Nightwatch*... but it has been over-glazed with varnish... a wonderful sense, it is a scene of a national guard unit coming out to... the one who commissioned... popular stories about him being very upset, and therefore Rembrandt had to go his own way... just not true... it's like saying Van Gogh never cut off his ear... All of this wonderful bluish light... and everything fills up, and here we have... the head of the national guard... getting together with muskets, and people were more outraged by the fact he included the dog, and the little girl coming... had nothing to do with... painted the effects of light... comes in from our left and slightly in front of us, the light is coming in from the left, from the front to define our figures. Even in bible subjects, we have a kind of peculiar light... the cave in which Delilah has wickedly stripped Samson of his virility, she carries the locks of hair in her hands and rushes out toward the light. And yet notice the way the light, although we don't know the source, is obviously there... And we have these figures, and you notice how the light behaves, it breaks down into little points of light... not planes of light but points of light. Or even in Velazquez in the 1630s, *The Forge of Vulcan*. We have this... figure who is a kind of patron of these workmen and therefore the... appears, it has a kind of medieval strain... this light coming in from the forge... this is still in what we

might call the Renaissance manner, coupled with obsessive detail from the Northern spirit, but it still shows distinct light sources. Here is *Old Woman Cooking Eggs*. Now this is definitely influenced by the camera obscura... Certain vantage points, view points which are totally influenced by the use of the camera obscura... or Isaac van Ostade, I mentioned him in relation to Emmet Gowin's work... deliberately developed pastiches of Ostade's imagery. This is *Vase with Flowers*... is definitely camera obscura assisted, points of light more influenced by... this is a work by Pieter De Hooch, *Dutch Interior*. Here you have a certain degree of, De Hooch was influenced by what we speak of as certain... aspects of the way light behaves. He paints the flowers in the metal container, or the image will break down into points of light on the rough fabrics... He also tends to use differential focus, blurring... to get the effect of distance. Up close... points of light in some areas... If you get close... the moth, the butterfly, and other elements, look at the little droplet of water. This obsessive attention to the world being defined to its sub unit levels. And also *anything* that reflects: anything; silver, water, metals of all sorts... See the light source, the fire with a candle... and even the hidden light source that often appears, like the candle on the table, notice what he does, the silhouetting of the figure in the foreground while it bathes in light the other two figures. But again, it would never occur... with this kind of... silhouetting, with.... do you remember? How is silhouetting linked to Leonardo?... Now we have silhouetting occurring not only because the light is blocking the definition of the forms, but look at the scale of that figure... by the use of the camera obscura to observe peculiarities of scale that could not have been accepted prior to the use of the camera and it becomes a popular instrument for even public fairs, carnivals... like someone taking photographs at a state fair... Didn't someone just tell us about that? About the xerox machine? Joan Lyons.

Student: It is Joel Schwartz.

Joel, that was it. I couldn't think of it... it is not much different from a person taking their camera obscura to a fair and doing credible drawings of people... Here is one I always show Veheen {?}... still lifes. And by the way, Daguerre was very aware of these works. In fact he did a pastiche... there is another thing that happened in the seventeenth century, if you think that these keys are dangling off the edge... is hanging off the edge of a compass... anything that shows weight or ... an emphasis on the theme of gravity, you things will fall off the edge of the table... or falling through... or things showing decay or a change their structure... expiration, all of these things are relevant... generally this type of thing is much more in the southern influence of certain types of structures... triangular... certain perspectival orientations. This isn't like the Pompeian style of random order of things laying side by side on a table.... Here is a van Hum... {?}, seventeenth century. How about that for light, and camera vision in terms of the scale... 1665. Scale, look at the way the light is hitting... De Hooch... 1656... This is a situation,

where the light is coming from, it is often very obvious but guarded. You see in other words, the held candle, and the hand guarding it. And not for any other reason than the idea that it is the light, this is the proof in the pudding, if there is light being held there and have that degree of illumination, it would also shine on you. So it must be guarded so that it shows that the light is within the room of a painting, so that we observe the reality of things taking place, as if it were lying there so orderly as to be inspected again. Actions now become recorded in the seventeenth century...{artist's name} again, he is the best. *Death of a Saint*, an historical subject, again that light source...from the candle, guarding within the plane, we saw all the way back, the first...of Fabriano, the first time that was used. Here is Heda again, a Still Life. This breaks down into pontils. This is later than the earlier one we saw...the silver chalice is turned over...that is not an accident...This is proving the whole principle of change, decay, alteration, various territories, what happens when something external reveals the internal, that is all about science {signs?} This is an allegorical...it is not just a little genre subject, it is not what is left over after a party. It is like internal and external structures, it is not at the service of describing the light of the...There are definite texts, manuals, that describe whether you want to deal with the principles of gravity, or internal external...they describe exactly what you are supposed to do. And as I said, things will roll off and fall off the plane. Treatises on physics, these weren't just people painting lovely pictures of the fabrics and so on, and reflected light, different types of reflection: all of that leads to those early primitive's interest in light. It is doubtful, otherwise they are setting up their still lifes with this kind of exquisite internal order...the directional lines...

Student: Whose painting was that?

Heda. H-E-D-A. This is a detail of Heda. You see again, this idea that when you get close to the form...Even these little grape-like forms, or berry forms, from a distance they look absolutely, meticulously rendered. When you get up close, they break down into particulate matter. And there are different degrees of tactility. Go to the Frick collection and look at Rembrandt...he was approaching about 55, look at his self portrait. It is one of the most magnificent in the latter period of his life. You stand back across the room, and you see this stunningly detailed analysis of a man in a wonderful gold smock: a gathered, ribbed smock. And he has an over-cloak on, and the head is bare, it has a slight cap at the top...curls in the hair. And as you go closer and closer and closer, just look at the tip of the nose: there is a splurt, a gluttony little impasto stroke that makes a reflection and is standing out about an eighth of an inch. That whole painting materializes, that is the way to put it. You see, when you get close, it loses its subject matter and becomes simply the most extraordinary exploration of physical matter that you can imagine. The Frick...and the Met...is a prime unit paradise: you got Duccio, Giotto...I go to the Frick from about nine until twelve...and the Metropolitan in

the afternoon. Here is Heda again...how about that for an accomplishment. An obsessive identification of form. And for those of you who might have walked in later, I am not trying to repeat something, I just want to remind you, don't ever forget that I said to you, prior to the seventeenth century, we have the issue of the room, the Locke...all the evidence suggested that I have given you, and confirmations of the change in human consciousness as to what people will accept, this is not to be thought of as genre painting in relation to still life painting, this is imagery within a box. Again, this "lying so orderly there," and trying to get a medium to behave as if it were self-reflexive. Here is another, Willem Claesz Heda. He used some very strong schemas. Little things that break down into parts, too. Notice how the constancy of things, like tobacco, berry pies that are opened up so you see the berries spilling out, you see the solid form that breaks down into a genus...the background all spilling out onto the table. Or what happens in the divided lines on a little piece of paper. Or elements that suggest a different density, different atmospheric qualities, forever ensuring to point out that this still life, by virtue of its reflections, is in a room and relative to a window, keep that in mind. These are very telling signals...but the aperture of the room itself. This one I love. This is Van Der Ast, *Still Life, Insects, Shells and Beetle*...The little structures of our world, do you remember I talked about some things that most people wouldn't even be attentive to...two centuries earlier would have been defining beetles. With that sticker, it seems to be a complete eye sore. And he uses part of an iconographic system. He would define the fly as a sign of, not evil, but of renaissance. Because after all...even in the Renaissance, the fly was not thought of as a carrier of vermin, it still carried an ancient image. One of the positive images of the fly was the fact that it was a symbol of resurrection, renaissance. Why? All I have to do is look in my garbage can. If I leave off the lid, flies go in and lay their eggs, right? And then I walk there, it is still not seen, and if you close the bag, it is filled with all of these little wriggly creatures, worms. But if I were to observe, and one day I sat and watched the process take place, when suddenly there were no worms, and suddenly there was this {makes a swishing sound} rising out of the trash can, the flies came. A transformation, the permanent struggle of the great chain of being up to the diaphanous...the transformation into the spirit. It became more of a positive motif, so when a person says, 'There ain't no flies on me' (laughs)...Panoramic views, again, a confirmation of the world that continues into the atmosphere. The plane is not to be thought of as flat surfaces, it is to be thought of as a fluctuating surface of atmosphere. Figures posited in the foreground to represent inhabitation or to even show scale. Figures off in the distance or of domestic architecture. Hardly different from the same impulse toward early photographers, I am inclined to think of Maxime duCamp and others, that the figures are there primarily for scale...mid-century...I think it is fascinating to read Flaubert and other stuff about stealing souls and so on, if they don't stand still they will lose their life and all that business, but the main thing is they were originally used for scale...an early Ruisdael,

have you seen it, the idea of the genre scene and the idea of tactility begins to occur. I chose this one because even though it is apparent here, it shows where he has left some of the brushwork naked in the treatment of paint. And this is a later Ruisdael in which you can see, mid-seventeenth century...you see where some of the syntax is guarded, and the interest in the, I told you about the, I showed you dozens of examples of the Southern element, there is this interest in the gradual, even in mythological paintings, you go back to *Jupiter and Io*, where something mythological takes place but it is treated as though it were real. Now there is this scientific interest in the way water behaves, how waves occur. How water eddies, how figures walk, how sails billow, how light behaves when it is darkened by shadows from clouds. The whole principle of vertical location of a type that says things are larger and more detailed in the foreground plane, and as it moves back and aerial perspective takes over, as you would rise above the plane, the vaporous parts of the clouds get larger and closer to us. So we are now in a spatial envelope. You never saw that in Bellini. You remember how I waxed on about the importance of his aerial perspective...his clouds sort of stayed the same size off into the distance. This would never have been able to occur without the assistance of the camera obscura.

Student: When Marey does work with motion studies with water, is that the same kind of scientific investigation?

Yes, now. You see, Leonardo leaves you somewhat with the map or diagram that is as opposed to...it will be seventeenth century painters who will take that idea and carry it to the point that they will convince you that what you are seeing is indeed the case. Although they are dealing with the painting of the still life with scientific principles. They didn't start out painting by apprenticing to...they had to learn special subjects, botany, early types of chemistry, physics, movements, things like that. And then people became specialists in one thing. This is the grand period of the division of labor. In a painting...he doesn't paint his own paintings, although there are some where students do introduce certain features. But typically, in Rubens, Rubens hardly touches the canvas. He establishes a schemata cartoon, and then as I said, we have the dog painter, the tree painter, the architecture painter, the face painter, the eye painter. People specialize because there is too much to know now. You see the evidence that the camera has offered us, not just the camera, there are other things as we have already pointed out. But primarily in terms of visual sense it is the camera obscura that taught us the need for everyone to specialize. So that ...paintings occur and they become absolutely more valuable than the idea of visual paintings of the seventeenth century. Here is van Ostade again, in a print that has been colored. Here is one I like to compare to Emmet's slaughter of the ox...came after he had seen the van Ostade...drawing attention to the relationship of his work to van Ostade where he too would show...{inaudible}...Robert

Hook in 1689...this little space cone, or rocket cone {laughs} with an accommodating paper. Now this is to be worn over your head, and you get into this thing and you put the seat of your consciousness, and the most important element, your eye, the hierarchical order in the great chain of being...looking out and you could see the landscape...and draw the world. You see one cannot observe it directly without being inside the laboratory....this obsessive interest occurring for getting inside these turrets and encounter the world through the use of the camera...now honestly, that man could have held up his transparent...or translucent fabric...he is not being assisted by magnification here, he just simply aims the translucent material...but it is this need to enclose oneself in that darkened room that becomes the basic image of the mind, so that whatever is drawn in a way reconfirms that was taking place, the world is not there, it is only legitimized by being *in here* {the mind}...The material I have given you confirms that this is absolutely connected to innumerable examples of various...of the period. And if you read the David C. Lindbergh material you will have no doubt about it: that you don't know anything until it has been intermediar-ily presented to you by an instrument, and by that point you don't know anything about objectivity until you literally have the little room, in a laboratory, a separate and removed precinct where empirical research takes place. It is not the world out there, because after all, you have been told now, for the entire century, that matter doesn't count. It is mind. So therefore you bring matter to you and make it obey *your* wishes. It is recorded with fidelity, yes, but it is mind that operates upon it...A seventeenth century camera obscura aerial view...drawings made side by side with two lenses, we will see the stereo view...eighteenth century cameras...now we have not only optical bellows...drawing on a monstrous scale...imposition of the camera...we have got...prior art forms...drawing and the immediate transfer into the etching or the engraving or into other media. I wouldn't want one of those, I'm still back into the old fifteen foot...system.

End of 11-A