Richard C. Hoagland and Dr. Edgar Mitchell Debate

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Transcribed by G. Varano, Part 1 of 6

AB: Now, let me bring these two gentlemen on the air and see if we can properly connect. First, from Florida, Dr. Edgar Mitchell. Doctor, are you there?

EM: I'm here, Art.

AB: Excellent, Um all right and let me see if I can bring Richard on the air, as well, from New York City, I think. Isn't that where you are, Richard?

RH: Well, overlooking New York City.

AB: Overlooking New York City, all right. Welcome to the program. You're both on the air. And what I thought I would do before we even begin is to try to get you two fellow to agree to one thing. I've had some recent guests on the air who have suggested, and it has been suggested for a very long time, that we never went to the moon. Never went at all. Whole thing was done on a Hollywood stage. Would you both agree that's poppycock?

EM: Yes, I think I can agree that's poppycock. (Laughter from all)

RH: I think I can agree, too.

AB: All right, so we start on a point of agreement. Otherwise, what I'd like to do is let this be fairly freewheeling and let you two have what...Dr., you did receive the photographs Richard sent, correct?

EM: Yes, I received the computer disk. I have a color computer and I'd like to hear Richard what he has said.

RH: Well, I'd like to hear what Ed has to say about what we ??? sent.

EM: Ha, ha. I'd like to know what we're looking for. I will make the statement that I saw no unusual artifacts, unnatural artifacts, and so if Richard thinks that there's solid evidence that they're there, I need to know what he considers that evidence.

AB: All right. Those photographs are on my World Wide Web page, and a lot of people have them. So they can sit out there and look at them as Richard describes what you should be seeing or what he thinks is there. Richard.

RH: OK. First of all, Ed, it's nice to talk to you.

EM: Yes

RH: It has been some time.

EM: No, it hasn't been quite 25 years. It's been a long time.

RH: (Laughter) The last time I saw you was with Carol ?Rosen?, as a matter of fact.

EM: We were at the same event in New York here about 7 or 8 years ago or less with, talking about the pyramids.

RH: On Mars, you mean?

EM: Beg your pardon. No, no. I'm talking about the pyra...I'm trying to think of the producers name. They were talking about the chamber under the pyramids. There was a meeting about that.

AB: Possibly, the sphinx?

EM: The sphinx. That's correct.

RH: Oh. This is of the Giza Plateau here on earth.

EM: Yes. That's the last time we've been in the same room, I believe. It's good to ?

RH: OK. This is a little difficult for me, Ed, because there's been a lot of things said, in absentia, that I have not said myself, and let me put on record what my thesis is.

EM: Good.

RH: I was with Cronkite as you are aware. I covered as part of the first amendment, this extraordinary effort that this nation underwent. I remember vividly being at the Cape during your and Shepherd's mission and Stu Roosa's mission. When you left that morning, we were wandering through the old museum at the airport section of the Cape, and I was in the company of Phil Chapman, and it was at that moment, literally a few minutes before you left for the moon, that Phil and a gal named Sheila Scott and I conceived of the idea of helping her fly across the North Pole, waiting for you to launch. And she eventually went on with a Piper Aztec to do that, I believe some months later during the summer of '71. So I had a lot of reasons to remember your mission, not the least of which was because you went where you went, and it is stunning to me to look back in retrospect now and look at this data which has come to us, these photographs which were sequestered, in part by one of your own, Ken Johnston, and to ? what I think is some pretty amazing information. Before people jump to conclusions, I have not said, nor I do not believe, with absolute certainty, that what we are seeing in these pictures, the Apollo crews themselves, at that moment on the moon, could discern. And the reason is that what we have done is to take these original prints, which Ken Johnston has provided and we have put them through a computer process, which involves scanning and enhancement, which is the bringing out of very faint details. They're down in the gray levels of these emulsions. And because we don't have absolute standards because we don't have photometric standards, all I can say is that, qualitatively, the things we're seeing in the images, even if you were on the moon, standing there without helmet or face plate or anything, would be very faint. And it is totally within the physics as I understand it, that you could be in the middle of these things and not notice if you were not looking. And that is something that is very important for people to understand. There is no physical reason, a priori, to automatically assume that Ed and I are on a different page just because he was there and he says he did not notice anything. There's many times in science when

discoveries are made after the fact when years have intervened, when the emotions of ? are not there, when other techniques and technologies have been developed, where information is discovered in retrospect, that was missed, but honest, sincere men and women who were there at the time and who were looking for other things. So, with that as the frame, what I am struck by, Ed, on these images, is the fact that there is discernible geometrical material above the lunar horizon that should exist, and the most impressive piece of evidence, the most impressive single thing that I sent you a couple days ago is that panorama. And I sent you four different versions of it, which is up on the web site. It is a 360 degree series of handheld photographs taken by Shepherd when you were out directing the TV camera north of the Antares, stretching completely around the lunar horizon from a position just in front of the front porch of the LEM. It was created at the manned spacecraft by someone in the photo lab physically cutting the individual prints apart and putting them, physically together, pasting them on a board, to make one of these 360 panoramas where you basically turn around in a circle at take a picture, picture, picture, picture. And then it was rephotographed, and that print, we actually have a series of prints of those particular mosaics, was then put away in an archive at the Oklahoma City University by Ken Johnston, Jr. roughly in 1972 and extracted just about a year ago and given to us to be looked at. It is the scan of that panorama which shows a rather remarkable brightening and bluish scattering above the horizon in a 360 degree mosaic, and the fact that the brightening is dependent upon the angle to the sun. In the down sun position it is brightest due west of the spacecraft. At 90 degrees north and south, the brightening is much less, It falls off dramatically, in fact, it looks, on those enhancements, even black in some sections. And then toward the south, behind the lunar module, behind the Antares, it brightens up again, which is totally consistent with scattering functions in some kind of material above the horizon created by something on these separate images, that were put together, pasted physically together in this one 360 degree panorama. And without actually having the original photographs to examine, it's difficult, I know, to come to any absolute conclusion, but I'm just curious as physicist, Ed, how, apart from scattering in a lab, you can explain the function of the scattering on that panorama, and, more important, the geometry of the detail within the scattering above the horizon.

EM: OK. Dick, I cannot disagree with anything you've said to this point. The question, now, is in looking at those pictures, just exactly what is it you think is there, and what is its specific duration, what description of whatever structuring, whatever ? conclusions you come to from looking at this?

RH: Well, we know from our model of the moon before you guys even went that nothing like that should physically above the horizon.

EM: Exactly

RH: That you landed on an airless, small world, roughly 2000 miles across, that there isn't sufficient gravity, and that's another one of the weird disinformation things out there, that the lunar gravity is much greater than NASA told us and all that. I can say, categorically, tonight that the numbers and the calculations and the observations and the even the experiments that were done, unquestionably categorically refute all of that nonsense. The lunar surface gravity is one sixth that of earth. Phil Chapman and I, by the way, during your mission, actually it began in your mission. We kind of conceived of an experiment which Dave Scott actually carried out in July of '71, which was the hammer and the feather, so we know that things fall on the moon at one sixth of the rate they do on earth, they accelerate. Some wonderful live TV sequences where the collection bags, thinking on one sequence during Apollo 17, where the collections bags with rocks is swinging like a pendulum from the ladder of the LEM, and there are other ways of measuring the lunar gravity, so we know the physics of the moon. We know it is one sixth g. Therefore, any atmosphere that it ever has had, according to the ?James? Theory, left billions of years ago, so it

should be absolutely airless. So if we're seeing scattering above the horizon and geometric scattering, were forced to the conclusion that it's one of two things: it's either an artifact in the camera, in terms of sun reflection within the lens itself, or it was introduced in the laboratory, in ?Digget? Underwood's laboratory on earth when the photos were made, or it's real structure above the moon photographed by you and Shepherd. And the art form, the science here is to discern which of those three alternatives is the correct alternative.

EM: OK. Where, if it is above the surface, as you're proposing...

RH: Let me add one more thing. It also, in this model, has to be a long distance away from the camera. When you're looking parallel to the horizon, you're basically looking tangent to the moon.

EM: Correct.

RH: Straight out. On earth, we notice from our experience, and most of us, Ed, were not where you were so we have to look at the terrestrial experience, we know that at sunset and sunrise the sun looks distorted and the moon looks distorted when it rises because you're looking through a long air path, a lot of air, roughly, I think about 600 miles is the tangent path, before you get out into space where is no air. That's why moonrises and sunrises are distorted. That's why you have interested effects at sunrise and sunsets that you don't have at high noon. You're looking through a lot of air.

EM: Totally agree.

RH: On the moon, if we're looking very, very, very, very ancient, deteriorated, battered and meteor-eroded glass, which is the model here. I say, "Domes," people think salad bowls. It's much more ragged and deteriorated than that. Then the best chance of seeing that kind of structure would be horizontally, where you're looking through a long path length of a lot of stuff accumulating light scattering over many, many, many miles before the ray gets out into space, where there is no stuff.

EM: OK. If you say, "a long distance away," let's be very clear. What do you mean by a long distance? Are you talking several lunar module radii or several hundreds of meters or what relative dimension are you speaking of?

RH: Oh, I think we're talking miles here and tens of miles. Fiertek, who is one our architects, who has coordinated measurements of the surface photography with the orbital photography from other missions, and I've restricted our discussion, per your request, to only Apollo 14 tonight, so I haven't provided you with other correlating data from other missions. He was able to do this, and he comes up with tens of miles away from the spacecraft and tens of miles thickness, which gives us a very small optical depth over a very long path line.

EM: OK. Now, we're getting to it. We're pinning it down here so we're in agreement to what we're talking about. Then you're suggesting that they're the remnants of a structure that is surrounding that area. Is that correct?

RH: mm-hmm (yes)

EM: That is ? miles away.

RH: and miles away.

EM: and miles away. And does it, at some point, touch the lunar surface, or are we still talking about something in the lunar, quote, atmosphere, the lunar environment that's above the surface?

RH: No, it touches the lunar surface...

EM: somewhere

RH: and if you look in the photograph 9301C or CC, I can't remember how I coded these. That's the close-up of you putting up the camera. It's a companion to one of the frame in the mosaic. It's not the same frame as the mosaic. It was taken a few seconds earlier or later, we don't know which. If you look at the inset, that rectangular inset?

EM: Yep. Out here. ?? in front of me now, but I...

RH: Right. You'll see a series of lighter and, in the model, denser slanted structure impacting the horizon to the north of the LEM, coming down at the horizon. And it appears that this slanted buttress-like geometry is indicative of how this stuff reaches the surface. But that is miles away, according to or numbers of the Fiertek's calculation.

EM: Shouldn't this be visible in quite a number of these photographs?

RH: Uh. Yeah. Of course. Depending upon the exposure and the..Now, when you say the number, do you mean the number that I sent you or the number that..

EM: Well, any number of photographs.

RH: Yes, yes, it should.

EM: And if it's a dome of some sorts, I mean that's what comes to mind as I hear your description here.

RH: Think Bucky Fuller.

EM: Ok. That's fine.

RH: Think shattered Bucky Fuller, nested inside..

EM: All right. Somehow, we had to get inside of it.

RH: That's right.

EM: How did we possibly get inside of it without destroying it.

RH: I presume that it's got tremendous amounts of holes, and you safely came down through pretty open structure. In other words, the reason that this apparent at all is when you look parallel to the horizon, you're looking a long way away, tens of miles, and the optical depth gets sufficient where you can see it.

AB: All right, gentlemen, I've got to break in here. We've got a break at the bottom of the hour. Everybody take a deep breath, and we'll be right back.

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