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Deposition of Dr. Thomas D. Holland

Thomas D. Holland

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1 State of Ohio,) SS:
2 County of Cuyahoga.)

3 - - -

4 IN THE COURT OF COMMON PLEAS

5 - - -

6 ALAN DAVIS, et al.,)
7 Plaintiffs,)
8 v.)
9 STATE OF OHIO,)
10 Defendant.)

Case No. 312322
Judge Ronald Suster

11 - - -

12 THE DEPOSITION OF THOMAS D. HOLLAND

13 THURSDAY, JANUARY 20, 2000

14 - - -

15 The deposition of THOMAS D. HOLLAND, a witness,
16 called for examination by the Plaintiffs under the Ohio
17 Rules of Civil Procedure, taken before me, Evelyn Miyata,
18 Certified Shorthand Reporter, Registered Professional
19 Reporter, and Notary Public in and for the State of Hawaii,
20 pursuant to agreement of counsel, at the office of Miyata
21 Reporting Services, Inc., Suite 2712 Century Square,
22 1188 Bishop Street, Honolulu, Hawaii, 96813, commencing at
23 9:15 a.m. on the day and date above set forth.

24
25 - - -

1 APPEARANCES VIA TELEPHONE:

2 On behalf of the Plaintiffs:

3 TERRY H. GILBERT, ESQ.
4 Friedman & Gilbert
5 1370 Ontario Street
6 1700 Standard Building
7 Cleveland, Ohio 44113
8 (216) 241-1430

9 On behalf of the Defendant:

10 DEAN BOLAND, ESQ.
11 Assistant County Prosecutor
12 The Justice Center
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TELEPHONIC EXAMINATION BY:

MR. GILBERT

3

- - -

PLAINTIFFS' EXHIBITS MARKED:

1

14

- - -

OBJECTIONS BY:

MR. BOLAND

3

- - -

1 THOMAS D. HOLLAND,
2 a witness, called for examination by the Plaintiffs, under
3 the Rules, having been first duly sworn, as hereinafter
4 certified, deposed and said as follows:

5 EXAMINATION

6 BY MR. GILBERT:

7 Q. Mr. Holland, my name is Terry Gilbert. We might have
8 passed each other at the Office of the Coroner's when you
9 were here for the exhumation.

10 A. Yes. I remember shaking hands with you.

11 Q. Okay. Good.

12 And also present today here at my office in Cleveland
13 is Dean Boland, who represents -- who's from the
14 Prosecutor's Office and represents the State of Ohio in this
15 litigation.

16 MR. BOLAND: Hello, Tom.

17 THE WITNESS: Hi, Dean.

18 Q. (By Mr. Gilbert) Would you please state your full
19 name for the record.

20 A. My name is Thomas Dean Holland.

21 Q. And Mr. Holland, where do you currently reside?

22 A. I live at 94-090 Kaweloalii Place, Mililani, Hawaii,
23 96789.

24 Q. Can you spell that street.

25 A. K-A-W-E-L-O-A-L-I-I Place.

1 Q. That's Honolulu?

2 A. It is in the community of Mililani, M-I-L-I-L-A-N-I,
3 which is in the City and County of Honolulu.

4 Q. And you are currently employed where?

5 A. I'm the Scientific Director for the United States
6 Army Central Identification Laboratory in Hawaii. It's
7 known by its acronym CILHI, C-I-L-H-I. It is located on
8 Hickam Air Force Base on the island of Oahu.

9 Q. So you're employed by the United States Army?

10 A. Correct.

11 Q. As a civilian?

12 A. I'm a civilian Scientific Director, yes.

13 Q. Now, I have a copy of your curriculum vitae, which
14 was provided to me back in December. Are there any changes
15 in that curriculum vitae that you can indicate to me today?

16 A. Not to my knowledge.

17 Q. So everything in there is accurate and complete up to
18 this date?

19 A. Yes, I believe you have the most accurate copy.

20 Q. Okay. Can you tell me what your duties are as the
21 Scientific Director at the U.S. Army Central Identification
22 Laboratory.

23 A. I am a forensic anthropologist, and I'm also the
24 Scientific Director. The Scientific Director is in charge
25 of the scientific laboratory at the CILHI. CILHI is the

1 organization charged with the recovery and identification of
2 U.S. war dead. My job is to oversee a scientific staff of I
3 believe at this point 21 forensic anthropologists and three
4 forensic odontologists, forensic dentists. My job is to --

5 Q. How many odontologists? Three?

6 A. Three.

7 Q. Okay. Go ahead. Continue.

8 A. My job is to review the analysis of skeletal remains
9 relating to U.S. war dead that have been recovered by our
10 teams, to evaluate the dental and anthropological analyses,
11 to incorporate any DNA analysis that is done, and to render
12 an opinion as to the identity of that individual, the
13 missing individual.

14 Q. And your unit is the sole location for the U.S. Army
15 Central Identification?

16 A. Correct. The United States Army is what's called the
17 Executive Agent for the recovery and identification of war
18 dead so the Army handles it for all branches of the
19 military.

20 Q. Are there labs in other places of the world than
21 Hawaii?

22 A. No. This is the sole lab.

23 Q. All right. So if there are war dead to recover and
24 identify, your office would send people out anywhere in the
25 world where that would be necessary; is that correct?

1 A. Correct. The only stipulation I would make to that
2 is we don't handle current death. If, for instance, a
3 soldier were to die in Bosnia tomorrow, that is handled by
4 the Armed Forces Medical Examiner. We handle the cases that
5 are considered no longer current.

6 Q. And what's the definition of "no longer current"?

7 A. There really isn't one. Typically, it is anything
8 over about six months, but that's not -- that's not put down
9 in writing anywhere.

10 Q. And how long have you been the Scientific Director?

11 A. Since ninety -- late '94.

12 Q. And before that date, were you employed by that
13 agency?

14 A. I was hired by the CILHI as just a forensic
15 anthropologist, and I started in June of '92. I was there a
16 few months when the laboratory director, the Scientific
17 Director at that time, resigned for another position. An
18 interim director was named. At that point, I became, about
19 a year after I got there, I became the senior anthropologist
20 and functioned as the assistant lab director in that
21 capacity for about a year and a half. So I was initially
22 hired as a forensic anthropologist, served about a year and
23 a half as the senior anthropologist, and was then named the
24 Scientific Director in '94.

25 Q. Now, have you been to medical school?

1 A. No. I'm not a medical doctor. I'm a Ph.D.

2 Q. And have you ever done an autopsy before?

3 A. I have not done autopsies. We are involved with the
4 Honolulu Medical Examiner on skeletonized cases but not
5 autopsy cases. When remains are found, for instance, on
6 this island, the remains of a hiker or something like that,
7 where the remains are badly decomposed or even skeletonized,
8 we are asked to assist at that point when it's beyond the
9 normal autopsy procedure.

10 Q. Is it correct to say that what CILHI does is
11 primarily the identification of remains?

12 A. The recovery and identification of remains, correct.

13 Q. The discovery and the identification?

14 A. Correct.

15 Q. And generally regarding Armed Forces personnel?

16 A. Generally. We do do some civilian cases, people who
17 worked -- journalists, for instance, who were lost in
18 Vietnam or missionaries who were lost in Vietnam, Red Cross
19 nurses who were lost during World War II, that sort of
20 thing. Most of what we do are war-related dead, correct.

21 Q. And give me some recent cases that you've worked on.

22 A. Well, the Vietnam Tomb of the Unknown, for instance,
23 that was identified through our laboratory.

24 Q. And when was that discovered?

25 A. That was exhumed a year ago last summer, so summer of

1 '98 is when we exhumed the remains from the Tomb of the
2 Unknown in Arlington and took about -- took a couple weeks
3 to identify, so summer of '98.

4 Q. Was DNA used to identify those remains?

5 A. DNA assisted in the identification, yes.

6 Q. And what other recent cases -- and I'm talking about
7 the last few years or so -- have you worked on?

8 A. We identified 67 men last year from World War II,
9 Korea, Vietnam. We identified 68 men the year before.

10 Q. All right. Let me ask you just, you know -- I don't
11 want to get into the details of the science, but generally,
12 what are the main elements of identification?

13 A. You mean the main elements that we use?

14 Q. That you use in terms of identification.

15 A. Forensic anthropologists look primarily at what's
16 called the biological profile -- age, race, sex, stature,
17 anomalies, skeletal anomalies that might be documented,
18 pathologies that might be represented in the bony tissue,
19 broken bones, for instance, or arthritis or something like
20 that, and then trauma, blunt force, penetrating trauma.
21 Obviously, most of the cases we do are people who died
22 violent deaths in wartime so we deal a lot with bony trauma,
23 not soft tissue trauma but bony trauma.

24 So the anthropologists derive a biological profile,
25 but identifications are a composite of a number of things

1 including the analysis of the dental remains and
2 increasingly the use of DNA, and my job as the Scientific
3 Director is to pull all those reports in and synthesize them
4 and then render an opinion as to the identity.

5 Q. So you would say that no one element here, no one
6 factor in and of itself, necessarily gives you the
7 composite -- the identification; is that correct?

8 A. I would say dental remains oftentimes come very
9 close.

10 Q. And DNA, I would assume, would be pretty --

11 A. Actually, the DNA that we use is mitochondrial DNA,
12 not nuclear DNA, and that's because it's too difficult to
13 get nuclear DNA out of bone, especially bone that is what's
14 termed "ancient," "ancient" being anything over about six or
15 twelve months. You can get mitochondrial DNA out of the
16 bone, and it's relatively robust. The problem with
17 mitochondrial DNA is it's not unique to an individual, it
18 runs along maternal lines, so that if you have three
19 brothers on board an airplane that crashes, the DNA will
20 tell you which three of those individuals are related but it
21 won't tell you which person is which. So mitochondrial DNA
22 is extremely useful, it's extremely powerful, but in and of
23 itself, it won't give you an identification.

24 Q. Is there a mitochondrial DNA lab there in your
25 location?

1 A. No. We use the Armed Forces DNA Identification
2 Laboratory in Rockville, Maryland. We cut the sample at the
3 CILHI and send them to the -- what's called AFDIL,
4 A-F-D-I-L, and they do all the DNA for the Department of
5 Defense.

6 Q. Have you ever testified before in a trial?

7 A. No.

8 Q. Have you ever served as a consultant or expert
9 outside of the employment that you currently have?

10 A. You mean for cases that have gone to court?

11 Q. For cases in court.

12 A. No.

13 Q. Is there a policy in your organization regarding the
14 procedure of being approved to work on behalf of an outside
15 individual or organization?

16 A. There's no written policy. The guidance from the
17 command is that it is necessary for the scientific staff to
18 maintain their academic and professional credentials. To do
19 that, we have to do outside casework. If it is for the
20 Honolulu Medical Examiner or Honolulu Police Department, we
21 do that as a quid pro quo because we oftentimes ask them for
22 favors on questioned documents and that sort of thing. For
23 other cases, we are expected -- we are encouraged to do it
24 but we are expected to take leave.

25 Q. All right. Now, how did you get contacted in this

1 case?

2 A. I was contacted by Dean Boland.

3 Q. Do you know how Mr. Boland got your name?

4 A. I believe he got it from Dr. Lowell Levine, who is a
5 forensic dentist with the New York State Police. Dr. Levine
6 is also a consultant to our parent organization in
7 Washington D.C. which is called the Casualty and Memorial
8 Affairs Operation Center.

9 Q. Called what?

10 A. Casualty and Memorial Affairs Operation Center, and
11 they are our parent headquarters in Washington, and he is a
12 consultant to them, and I have known Dr. Levine since I
13 began working at CILHI in '92, and I believe that's how the
14 contact was made.

15 Q. Now, are you doing this work on the Sheppard case on
16 your own time?

17 A. Yes, I am.

18 Q. So you are doing this independently as a private
19 consultant outside of the scope of your employment with the
20 U.S. Army --

21 A. Correct.

22 Q. -- identification Laboratory; is that correct?

23 A. That's correct.

24 Q. And what is the fee arrangement that you have with
25 Mr. Boland or the Cuyahoga County Prosecutor's Office?

1 A. I calculated my lost salary plus lost benefits in
2 terms of retirement and accumulated leave and that sort of
3 thing. It came out close to a hundred dollars. I rounded
4 it to a hundred dollars, and I'm charging a flat hundred
5 dollars per hour.

6 Q. Per hour?

7 A. Mm-hm.

8 Q. Have you been paid yet?

9 A. I was paid for the initial trip to Cleveland, yes.

10 Q. And how much was that?

11 MR. BOLAND: I'm going to object to that question.

12 You may answer, Tom.

13 THE WITNESS: I'm sorry. What?

14 MR. BOLAND: Go ahead and answer.

15 MR. GILBERT: He objected, but go ahead and answer
16 it.

17 A. \$2,800.

18 Q. (By Mr. Gilbert) Does that include expenses or just
19 a fee?

20 A. That included expenses. I didn't charge separately
21 for fees or for any expenses.

22 Q. Okay. And -- let me ask you this. What other
23 outside consulting work have you done other than the Medical
24 Examiner's Office in Hawaii prior to this Sheppard case?

25 A. I'm a consultant for the New York State Police and

1 have worked a number of cases for them and have assisted
2 Naval Investigative Service, DOD CID, and one case in
3 Indiana for the FBI.

4 Q. You've never dealt with a non-governmental
5 organization, have you? You never consulted for either a
6 private party or a non-law enforcement/governmental
7 organization; is that correct?

8 A. No, that's correct.

9 Q. Okay. Did you seek approval for your role on this
10 case from any supervisors or higher authority?

11 A. I requested time off to do it, and it was granted.

12 Q. Now, when was it that you were retained for this
13 case?

14 A. To tell you the truth, I don't know right -- I do not
15 know.

16 Q. Now, do you have a copy of your report with you?

17 A. Yes, I do.

18 Q. Can you bring that out?

19 A. It's out.

20 MR. GILBERT: Will the Court Reporter mark that as
21 Plaintiff's Deposition Exhibit 1.

22 (Deposition Exhibit No. 1 was
23 marked for identification.)

24 MR. BOLAND: Can we go off the record for a second so
25 I can say something to Tom for a moment.

1 (A discussion was held off the record.)

2 MR. GILBERT: Back on the record.

3 Q. (By Mr. Gilbert) Before we get into this report, I
4 just wanted to ask you: What is a forensic anthropologist?
5 You might have answered it in previous questions, but I
6 didn't pose it to you directly in terms of that discipline.

7 A. The classic definition is someone who applies
8 anthropological techniques to a forensic issue. In this
9 case, it is -- in our case, it is both the recovery of
10 remains out in the field where you apply archaeological
11 techniques -- archaeology is a subfield of anthropology --
12 so you apply the archaeological techniques of finding and
13 excavating a body or a skeleton, and then the second aspect
14 of it is the analysis of the remains back in a laboratory
15 setting for the purpose of determining are the remains human
16 versus animal, determining that biological profile that I
17 mentioned -- age, race, sex, stature -- determining any
18 individualizing characteristics about an individual which
19 may be documented in the record.

20 Q. Are you qualified as a forensic anthropologist to
21 make a determination as to the cause and manner of death?

22 A. No. That's within the realm of a forensic
23 pathologist.

24 Q. And you were not called upon to make any opinion
25 regarding the cause and manner of death of Marilyn Sheppard;

1 is that correct?

2 A. Correct.

3 Q. Now, on page -- you have Exhibit 1 there before you.
4 You indicate on page 3 the references and documents
5 reviewed; is that correct?

6 A. Correct.

7 Q. Now, since this report was prepared dated -- this is
8 dated December 1, 1999; is that correct?

9 A. Correct.

10 Q. It was directed to William D. Mason, Cuyahoga County
11 Prosecutor; is that correct?

12 A. Correct.

13 Q. Since this report was done, are there any additional
14 references or documents that you reviewed?

15 A. No.

16 Q. And since this report was prepared, have you been
17 told or has it been communicated to you in any way any
18 additional information concerning this case?

19 A. No.

20 Q. Is there any reason why you might have hesitated
21 there?

22 A. Well, just to be sure. I can't -- I can't recall any
23 contact -- any significant contact with somebody from
24 Mr. Mason's office since December 1. In fact, there was
25 even some confusion about whether this date was going to go

1 because I hadn't heard from anybody. So, no, I don't think
2 I've had any significant contacts since December 1, so
3 obviously I haven't looked at anything else or heard
4 anything else.

5 Q. You haven't been provided any other reports from any
6 other forensic experts that are currently working on this
7 case?

8 A. No, I have not.

9 Q. Including the Lowell Levine report? Have you seen
10 his?

11 A. I have not seen his. He told me in a telephone
12 conversation -- he told me over the telephone what some of
13 his conclusions were going to be, but I don't believe I've
14 seen a report.

15 Q. And you refer to Lowell Levine in your report as the
16 one who is dealing with the question of tooth damage, right?

17 A. Correct.

18 Q. But you have no opinion one way or the other
19 regarding that aspect of this case; is that correct?

20 A. I think that's an issue best addressed by a forensic
21 dentist.

22 Q. Okay. But you're not prepared to offer any opinion
23 regarding the forensic dentist in this case, Lowell Levine;
24 is that correct?

25 A. No.

1 I'm sorry. That's correct.

2 Q. Okay. Now, you have had an opportunity to review the
3 Report of Autopsy originally conducted by the Cuyahoga
4 County Coroner's Office in July of 1954 of Marilyn Sheppard;
5 is that correct?

6 A. Correct.

7 Q. And you also, according to your report, had the
8 opportunity to observe the remains of Marilyn Sheppard
9 subsequent to her body being exhumed on October 4, 1999; is
10 that right?

11 A. Correct.

12 Q. Prior to coming to Cleveland --

13 I'm sorry. I think it was October 5th, actually.

14 But prior to coming to Cleveland --

15 A. It was October 5.

16 Q. Yeah, I stand corrected.

17 Prior to October 5, had you reviewed the material
18 listed in your references before you came to Cleveland and
19 actually observed the body?

20 A. I did see them before I observed the body but not
21 before I came to Cleveland. I was in Cleveland I believe
22 two days before the exhumation, and I saw them at the
23 Prosecutor's Office the day before, maybe a day and a half
24 before.

25 Q. So the various photographs that you used from the

1 original autopsy, you looked at a day or two before; is that
2 right?

3 A. Yes. I believe in my report, I indicate 3 through 6
4 October is when I had access to those documents.

5 Q. And I'm going to ask you a general question first,
6 and we'll get into more details. You, in your work as a
7 forensic anthropologist, in terms of reviewing the remains
8 of non-current deaths, have you ever been involved in a case
9 where the remains that you reviewed had already been
10 autopsied?

11 A. Let me think about this, make sure.

12 Q. Do you want me to rephrase the question?

13 A. No, no, no. I just -- let me reflect back.

14 Yes, there have been a couple cases for the Honolulu
15 Medical Examiner that had been autopsied prior to us looking
16 at them. I couldn't tell you how many. Not more than two
17 or three probably.

18 Q. And were those -- were any of those exhumed?

19 A. No.

20 Q. So it would have been within a very short period of
21 time that you would look at those bodies, right?

22 A. Correct.

23 Q. Okay. I guess my question was you used the term --
24 you used the term "non-current" as a -- or "current" versus
25 "non-current" as a term. Do you recall we talked about

1 that, that you don't handle -- currently handle current
2 cases?

3 A. Right.

4 Q. I'm referring to have you ever done work involving an
5 aged case where the person was autopsied and then buried or
6 interred and then did a forensic anthropologist's
7 examination.

8 A. Can you define what you mean by autopsied.

9 Q. Well, a typical autopsy protocol where the body is --
10 I don't know how to put it, but you know where they make
11 incisions, open up the cranial cavity, they do a pathology,
12 they do lab work where they do dissections, they take out
13 organs, they look at bony structure, they look at wounds and
14 that kind of thing, and then the body is then, for lack of a
15 better term, put back together and then submitted to the
16 family for disposition. Have you ever been involved in a
17 case where, as a forensic anthropologist, you examined those
18 kind of remains?

19 A. No.

20 Q. And would you agree with me that in this case, the
21 Marilyn Sheppard case, there was an autopsy as I've
22 described to some extent, not particularly artfully, and
23 there was a funeral disposition; would you agree with me
24 that that was the case here?

25 A. Yes, I would agree.

1 Q. And normally when you look at -- when you find
2 bodies, they are in the field, right, and in some sort of --
3 they're buried or they're --

4 A. In most cases, yes.

5 Q. Basically where they were either after they died or
6 after the body was moved in some way; is that right?

7 A. That's correct.

8 Q. But never interacted with any medical professionals?

9 A. I wouldn't say never. We have had the occasion to
10 exhume some remains that were identified during the Vietnam
11 war, incorrectly identified.

12 Q. I see.

13 A. They were identified while they were still relatively
14 current, within hours of being on the battlefield. They
15 were examined sometimes by doctors, sometimes by dentists,
16 they were embalmed and buried, and we exhumed them later,
17 but they were not formally autopsied. That's the reason I
18 was wanting to know what you meant by a formal autopsy.

19 Q. Let me ask you, then, what was your -- what was the
20 reason that you were called upon to get involved in this
21 case?

22 A. The Sheppard case?

23 Q. Yes.

24 A. To take a look at the bony trauma, to see if there
25 was any pattern to the trauma that might indicate what sort

1 of weapon was used, to see if perhaps the sequence of
2 injuries could be determined, and to examine the extent of
3 the trauma.

4 Q. And was that question that was posed to you within
5 the realm of your professional qualifications?

6 A. I believe so.

7 Q. And in looking at the autopsy report and from what
8 you saw at the exhumation when you reviewed -- when you
9 looked at her remains, was there anything in what you
10 observed that was different than what was described as to
11 the wounds in the autopsy report?

12 MR. BOLAND: Can I interrupt for a minute.

13 Tom, do you have a copy of the autopsy report in
14 front of you right now?

15 THE WITNESS: Yes, I do.

16 Q. (By Mr. Gilbert) Do you need to look at that?

17 A. No, I don't. I can give you a general --

18 Q. If you need to look at it, fine, but I figured if we
19 need to go there, we can go there, but I just wanted to --

20 A. Yeah. I can give you a general response to that, and
21 if we need to get into details, I might look at it.

22 Yes, there were some differences. The main
23 difference was the extent of the trauma to the lower -- mid
24 and lower face, which was not, I don't think, fully
25 appreciated at the time of the autopsy, and part of that is

1 because it was covered with tissue and it was difficult to
2 observe. In my case, since there was no tissue on the
3 skull, it was easy to see the full extent of the fractures
4 to the face.

5 The coroner's report -- or the autopsy report,
6 rather, refers to a broken nose with what he determined --
7 what he called crepitus upon manipulation, meaning that when
8 he kind of wiggled and moved the nose bone or the nose, it
9 made a crunching, grinding sound because the bone was
10 fractured, and so he indicated in his report that
11 Mrs. Sheppard had a broken nose. Actually, the trauma was
12 much more extensive than that, and the nasal bones
13 themselves were not broken but all the supporting bone
14 around the nasal bones were broken, so it wasn't so much a
15 broken nose as it really was a broken face. The entire
16 middle face was fractured.

17 So in that sense, I would say, yes, I saw something
18 that is -- it's not at odds with the autopsy report, but I
19 had the advantage of not having a lot of obscuring tissue.

20 Q. And the discussion in your report that relates to
21 what you just said is on page 2 in relationship to the
22 "Mid Face"?

23 A. Correct.

24 Q. So the -- what you just said is indicated in that
25 paragraph; is that correct?

1 A. Correct.

2 Q. Okay. Now, can you say with any degree of scientific
3 certainty that those fractures in the mid face were caused
4 by the assault leading to her death?

5 A. They are entirely consistent with blunt force
6 trauma. They're -- they're entirely consistent with blunt
7 force trauma.

8 Q. Are they consistent with any other means?

9 A. I would say no.

10 Q. And your opinion is based on what? How do you feel
11 certain that it was in direct relation to blunt force
12 trauma?

13 A. The skull is pretty robust. It's a hard shell, and
14 it takes a fair amount of force to fracture it. LeFort
15 fractures, which is what Mrs. Sheppard had -- she had what's
16 called a LeFort I with some other involvement -- LeFort
17 fractures are -- LeFort is a man who classified blunt force
18 trauma to the face, and a LeFort fracture is the result of
19 massive trauma to the face that you just -- you don't get
20 otherwise. They used to be quite common in pre-seatbelt
21 days when people would -- their faces would hit the
22 dashboard of the car. We see them in aircraft crash
23 victims. They're usually a little more splintered and
24 fractured when you're talking about an aircraft crash, but
25 the pattern of injury is the same.

1 Q. And it's your belief that those injuries that you saw
2 in the nasal area were blunt force impacts?

3 A. Correct.

4 Q. You recognize in your report that there was the
5 presence of a large mass of plaster in the cranial vault?

6 A. Correct.

7 Q. Would that in any way have affected your ability to
8 make a determination such as you have regarding the injuries
9 in the nasal area?

10 A. No. The plaster didn't intrude upon the nasal
11 region. It affected just the interior of the vault. It did
12 keep me from getting an accurate determination of the
13 sequence of events involving the forehead, and it also
14 precluded determining much about the sides of the vault --

15 Q. The what?

16 A. The sides of the head, the vault.

17 -- but it did not -- it didn't affect the middle or
18 lower face.

19 Q. And there's no possibility that the cutting that
20 might have been done in the autopsy or the work that was
21 done pursuant to the autopsy would have, either indirectly
22 or directly or inadvertently, caused those fractures?

23 A. I really can't see how.

24 Q. But it's a possibility?

25 A. Well, if I stand on your face while I'm sectioning

1 your skull, yes, but, I mean, it would take something so
2 extreme to explain it that the answer, of course, is no, I
3 don't think anything involved with that autopsy cut could
4 have resulted in the trauma to the face.

5 Q. And the modeling that was done to make a model of her
6 head, the work that was done, that would not in any way
7 affect your decision?

8 A. No.

9 Q. Opinion?

10 A. No.

11 Q. What about the work done at the funeral home to put
12 her -- to try to shape her face in order to make her
13 presentable at the funeral; could that have caused these
14 fractures?

15 A. No, it could not have caused the main LeFort
16 fractures.

17 Q. Could not have what?

18 A. It could not have caused the main fractures that
19 constitute the LeFort fracture.

20 Q. What I'm speaking of is regarding the sentence on
21 page 2 where it says, "In fact, it was not the nasal bone,
22 per se, that was fractured but rather the entire nasal
23 region was segmently fractured." You see that?

24 A. I see that.

25 Q. Okay. Could that have been caused by the mortuary

1 interference?

2 A. Well, I can't speak for what Cleveland mortuaries did
3 in 1954, but I would be extremely, extremely surprised if
4 they did anything that would do that.

5 Q. But you would agree with me, Mr. Holland, that the
6 body was subject to interference prior to the time that you
7 observed it because you weren't discovering the remains
8 where the remains lie after the death; is that correct?

9 MR. BOLAND: I'll object to the question, especially
10 the use of the word "interference."

11 MR. GILBERT: Well, he knows what I mean by that.

12 Q. (By Mr. Gilbert) You know what I mean by that?

13 A. Could you define it.

14 Q. What's that?

15 A. Could you define it.

16 Q. In other words, that the body was worked on.

17 Correct?

18 A. Correct. The body had been autopsied, and then there
19 was some reconstructive attempts at the mortuary; I will
20 agree to that, yes.

21 Q. And in your line of work, you usually see bodies that
22 have not been worked on subsequent to the death by medical
23 professionals or funeral directors?

24 A. Correct.

25 Q. Okay. So you can't really say anything about the

1 sequencing; is that right?

2 A. No, I cannot.

3 Q. Can you say anything about whether there was one blow
4 or more than one blow to cause the segmental fracture?

5 A. I cannot.

6 Q. Can you say anything about the amount of force that
7 caused that blow, those injuries?

8 A. The term that is commonly used in the literature is
9 just "massive blunt force trauma." I don't know that anyone
10 has tried to quantify that term. As I said, the fractures
11 that you see are consistent with what you used to see in
12 pre-seatbelt days in car crashes and is consistent with what
13 you see -- what I see in slower speed airplane crashes, so I
14 would characterize it as massive blunt force trauma, but --

15 Q. This is not an accident.

16 A. Correct.

17 Q. It's a homicide, right, presumably?

18 A. Presumably.

19 Q. Okay. I mean, according to the Report of Autopsy --

20 A. Correct.

21 Q. -- it was a homicide by assault; is that right?

22 A. Correct.

23 Q. And that's different -- at least, there are some
24 differences between a seat belt or a crash situation as
25 opposed to an assault?

1 A. Well, there are some differences, but there are also
2 some similarities. Whether your face hits an object at a
3 high rate of speed or whether an object hits your face at a
4 high rate of speed, the fractures are essentially the same.

5 Q. But typically when your head hits the windshield, it
6 hits one time, is that right, usually?

7 A. Usually.

8 Q. And this was, as you know from this case, there were
9 multiple impacts?

10 A. Correct.

11 Q. All right. So that would distinguish, to some
12 extent, this case from those cases, right?

13 A. Correct.

14 Q. And then there is -- would there be -- would it be
15 relevant that when there are multiple fractures, that there
16 is a relationship between the order of fracture from blunt
17 impact in terms of the ease or non-ease of fractures
18 subsequently being produced? Do you follow the question?

19 A. I follow the question. To some extent, I would
20 agree.

21 Q. Okay. Were you able to determine the kind of weapon
22 that was involved?

23 A. No, I was not.

24 Q. So other than the nasal region where you saw
25 segmental fractures that were not noted in the original

1 autopsy, that was the only difference that you --

2 A. That was the major difference.

3 Q. What else did you see?

4 A. The right lateral side of the skull had a depressed
5 fracture that was not noted in the autopsy. It was down low
6 just slightly above the ear.

7 Q. Slightly below the ear?

8 A. I'm sorry. Slightly above the ear. And it
9 corresponds to a soft tissue injury that was noted in the
10 autopsy, but I don't think they realized that the bone below
11 it had actually been fractured. It's in an area of the
12 skull where there's some tissue depth. There's a lot of
13 tissue over that area, and so if you get swelling from an
14 injury, the swelling doesn't necessarily come out. There's
15 room for it to expand in both ways. So they noted an injury
16 to the right side of the head at autopsy, but I don't think
17 they realized that there was a depressed fracture associated
18 with it.

19 Q. What is a depressed fracture?

20 A. Where the bone is actually pressed in.

21 Q. Okay. Are there breaks?

22 A. Yes, there were fractures associated with it.

23 Q. But the bone actually is depressed in?

24 A. Correct.

25 Q. And is that also consistent with blunt impact?

1 A. Yes, very much so.

2 Q. And once again, that fracture might not have been
3 able to have been detected in the original autopsy because
4 there was skin around it?

5 A. Yes, correct.

6 Q. Anything else that was -- that you saw in addition to
7 or different than was noted in the autopsy?

8 A. I noted the fractures of the teeth were more
9 extensive than I believe the autopsy noted, but I left that
10 to the dentist.

11 Q. Okay. Would you say that the injury to the nasal
12 area that we've talked about was consistent with the various
13 other fractures that you noted on Marilyn Sheppard's skull?

14 A. Yes, I would -- yes.

15 Q. There was really -- so ultimately, would you
16 characterize your findings from the exhumation as
17 substantially consistent with the findings of the Cuyahoga
18 County Coroner's Office autopsy in 1954?

19 MR. BOLAND: Objection.

20 A. I would say they are consistent to the extent that
21 they document blunt force trauma to the skull. They are not
22 consistent as to the extent.

23 Q. (By Mr. Gilbert) When you say extent, what do you
24 mean? Just more injuries?

25 A. There was much more trauma to the mid and lower face

1 than was documented in the autopsy and to the side of the
2 skull, the right side of the skull; but to the extent that
3 they document blunt force trauma, I would say that, yes,
4 they are consistent with the autopsy report.

5 Q. Well, in your report, I don't see anything about the
6 lower face. Am I missing something here? I see upper face,
7 mid face, right lateral vault, and left lateral vault. I
8 don't see any discussion about lower face. Is that correct?

9 A. Well, that's the involvement of the teeth, and I
10 didn't address that in my report.

11 Q. Okay. So in terms of non-teeth areas, you didn't
12 have any appreciable additions or differences as to the
13 lower face, right?

14 A. To the lower face, no.

15 Q. Subsequent to your involvement in this matter, did
16 you look at any x-rays?

17 A. I looked at x-rays there at the Medical Examiner's
18 Office in Cleveland of the skull, but the large mass of
19 plaster in the vault really precluded getting any usable
20 x-rays.

21 Q. So basically, in terms of these fractures that you
22 saw that we've talked about, it was confirmed solely by
23 visual examination; is that right?

24 A. Correct.

25 MR. BOLAND: Just to clarify, Tom, the x-rays you

1 just referred to are x-rays taken at the time of exhumation
2 and not x-rays taken at the time of autopsy?

3 MR. GILBERT: I'm going to object. I'm doing the
4 deposition here.

5 MR. BOLAND: Well, which x-rays are you talking
6 about?

7 MR. GILBERT: Well, you can object and I can ask.

8 Q. (By Mr. Gilbert) Did you get any x-rays after your
9 visit to Cleveland?

10 A. No. The x-rays I saw were those taken by the staff
11 there at the Medical Examiner's Office in Cleveland. We
12 looked at them at the time and saw that they were of limited
13 value, and I have not seen any since.

14 MR. GILBERT: Dean, if you know of any x-rays from
15 the autopsy, I've never heard of any, but --

16 MR. BOLAND: Just for the record, I don't know of
17 any, and I wanted to be clear that Dr. Holland was not
18 implying that he saw some.

19 MR. GILBERT: All right. I knew what he was talking
20 about.

21 MR. BOLAND: Well, I want the record to be clear. I
22 knew, too, but I want the record to be clear.

23 Q. (By Mr. Gilbert) By the way, you mentioned in your
24 report that you had Paul Kirk's affidavit.

25 A. Correct.

1 Q. Did you review that?

2 A. Yes, I did.

3 Q. Do you have an opinion regarding that affidavit or --
4 in any way?

5 A. I have an opinion as a scientist.

6 Q. Okay. Are you going to be called upon to give an
7 opinion regarding that affidavit?

8 A. I have no idea.

9 Q. It's not part of your report, is it?

10 A. No, it's not part of my report.

11 Q. What is your opinion, anyway?

12 A. While I applaud his efforts, I think that it was, in
13 many regards, less than scientific.

14 Q. And you're referring to what area in particular?

15 A. Mostly the speculation about the teeth.

16 Q. Okay. That was your primary criticism?

17 A. Yes.

18 Q. And have you talked to an anthropologist by the name
19 of Lovejoy?

20 A. He was present during the exhumation and the
21 subsequent examination at the Cleveland M.E.

22 Q. All right. And did you consult with him about this
23 case?

24 A. I did not consult with him directly. It's my
25 understanding he was there representing the Cleveland

1 Medical Examiner, and we did the examination jointly. I
2 pointed some things out to him, he pointed them out to me,
3 but I wouldn't characterize that as consulting.

4 Q. Did you have -- have you talked to him since you were
5 in Cleveland?

6 A. No, I did not. I sent him -- I e-mailed him a
7 courtesy copy of my report a week after -- several days
8 after I submitted it to Mr. Mason. I have not heard from
9 him back.

10 Q. Are you aware of any experiments that he conducted?

11 A. I'm not aware of any.

12 MR. GILBERT: Okay. Let me just take a second and
13 collect my thoughts, and I think we're almost done.

14 (Brief pause)

15 Q. (By Mr. Gilbert) I take it you've never had a
16 criminal offense?

17 A. Me personally?

18 Q. Personal question.

19 A. No.

20 Q. It's one of those standard questions that lawyers
21 ask.

22 A. No, I have not.

23 Q. And have you ever been fired from a job?

24 A. I have not, and I hold a top secret clearance from
25 the Department of Defense.

1 MR. GILBERT: I wouldn't doubt that.

2 All right. I have concluded with this deposition.

3 Thank you very much.

4 THE WITNESS: Okay.

5 MR. BOLAND: Tom, you're permitted, if you'd like, to
6 request that prior to this deposition becoming the official
7 record, you be permitted to review the entire deposition for
8 any typographical errors that are made in the transcription
9 process or you can just rely on the skill of the Court
10 Reporter there with you and waive that right to review it
11 ahead of time.

12 THE WITNESS: I think I can waive it.

13 MR. BOLAND: Okay.

14 MR. GILBERT: Fine.

15 (The deposition concluded at 10:15 a.m.)

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1 December 1999

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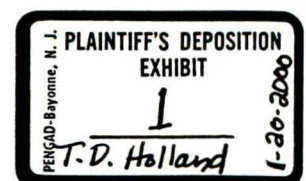
Re: Analysis of skull associated with Cuyahoga County Medical Examiner Case 76629

BACKGROUND: On 5 October 1999 remains were disinterred from a mausoleum crypt in Mayfield Heights [Cleveland], Ohio, by direction of the Cuyahoga County [Ohio], Prosecutor. The remains were identified by cemetery records as those of Marilyn Reese Sheppard. Upon disinterment the casketed remains were taken to the Cuyahoga County Medical Examiner's office for analysis. Anthropological analysis was confined to the mandible and cranium and was conducted in the presence of Dr. C. Owen Lovejoy, a physical anthropologist representing the Medical Examiner. The remains were examined on 5 October 1999 and reinterred the following day.

DESCRIPTION OF REMAINS: The skull and mandible are those of a young, gracile, caucasoid female. There was a thin layer of desiccated soft tissue (skin) adhering to the bone upon first examination. Some of this adherent tissue was flaked off using a dental explorer to facilitate analysis. The skull had been previously reconstructed using a white substance that appeared upon examination to be plaster of Paris (hereafter termed plaster). The entire cavity of the skull was filled with plaster to the extent that it extruded through the foramen magnum. The frontal bone was largely missing, having been replaced by plaster. There is an apparent autopsy cut that intersects fractured bone on the left side of the skull at the coronal suture near the temporal line and on the right side at the juncture of the right parietal and the right temporal bones immediately superior of the mastoid process.

DESCRIPTION OF FRACTURES: There are no readily apparent fractures of the mandible upon gross examination, although several teeth (including a prosthetic cap) are damaged (these are addressed in a report by Dr. Lowell J. Levine, Forensic Odontologist). The fractures of the cranium are typical of blunt force trauma and are localized in four areas: upper face, middle face, right lateral vault, and left lateral vault (References 1, 2, 3, and 4).

Upper Face: There is an impact focal point located on the frontal bone approximately 1.5 cm above the medial margin of the left orbit. Fractures radiate from this point to involve both orbits. This focal point corresponds to the location of a soft tissue wound noted during the 1954 autopsy of Marilyn Reese Sheppard (Injury number 3, page 2, Report of Autopsy, Case 76629 [Reference 5]). Color photographs from the 1954 autopsy of Marilyn Reese Sheppard supplied by the Cuyahoga County Prosecutor's office suggest a second impact focal area nearer the midline of the frontal bone (References



REFERENCES

1. Color Photograph on CD-ROM 76629-03, MSEXNEG 011.tif
2. Color Photograph on CD-ROM 76629-03, MSEXNEG 024.tif
3. Color Photograph on CD-ROM 76629-03, MSEXNEG 029.tif
4. Skull Diagram Showing Primary Fracture Lines. Hand labeled at top "Case 76629 TDH 5/OCT/99"
5. Xerographic Copy: Report of Autopsy Held on the Body of Marilyn Sheppard, Case No. 76629, Autopsy No. M-7280, Date: 7-4-54; S.R. Gerber, M.D., Coroner, Cuyahoga County, State of Ohio [Copy marked Cuyahoga County Coroner's Office March 1996 Case #76629 A-1];
6. Color Photograph; 5x7 inches; Labeled on Back: "SET NUMBER 3, 19, Cuyahoga County Coroner's Office Photography Dept Cleveland Ohio 44106 Name: Marilyn Reese Sheppard Case: 76629 Autopsy: M-7280 Date Of Death: 07/04/54; Not To Be Copied Without Permission"
7. Color Photograph; 5x7 inches; Labeled on Back: "SET NUMBER 3, 22, Cuyahoga County Coroner's Office Photography Dept Cleveland Ohio 44106 Name: Marilyn Reese Sheppard Case: 76629 Autopsy: M-7280 Date Of Death: 07/04/54; Not To Be Copied Without Permission"
8. Color Photograph; 5x7 inches; Labeled on Back: "SET NUMBER 3, 3, Cuyahoga County Coroner's Office Photography Dept Cleveland Ohio 44106 Name: Marilyn Reese Sheppard Case: 76629 Autopsy: M-7280 Date Of Death: 07/04/54; Not To Be Copied Without Permission"
9. Color Photograph; 5x7 inches; Labeled on Back: "SET NUMBER 3, 7, Cuyahoga County Coroner's Office Photography Dept Cleveland Ohio 44106 Name: Marilyn Reese Sheppard Case: 76629 Autopsy: M-7280 Date Of Death: 07/04/54; Not To Be Copied Without Permission"

DOCUMENTS REVIEWED

1. Xerographic Copy: Report of Autopsy Held on the Body of Marilyn Sheppard, Case No. 76629, Autopsy No. M-7280, Date: 7-4-54; S.R. Gerber, M.D., Coroner, Cuyahoga County, State of Ohio [Copy marked Cuyahoga County Coroner's Office March 1996 Case #76629 A-1]; Reviewed in Cleveland, Ohio, on 3-6 October 1999 and in Mililani, Hawai'i, on 28-30 November 1999.
2. Xerographic Copy: Vital Statistic Report; Coroner's Office, Cuyahoga County, Ohio Coroner's Office, Case No. 76629 [Copy marked Cuyahoga County Coroner's Office March 1996 Case #76629 A-12]; Reviewed in Cleveland, Ohio, on 3-6 October 1999 and in Mililani, Hawai'i, on 28-30 November 1999.
3. Xerographic Copy: Coroner's Verdict; Case No 76629 [Copy marked Cuyahoga County Coroner's Office March 1996 Case #76629 A-18]; Reviewed in Cleveland, Ohio, on 3-6 October 1999 and in Mililani, Hawai'i, on 28-30 November 1999.
4. Xerographic Copy: Affidavit of Paul Leland Kirk; State of Ohio vs Samuel H. Sheppard; Court of Common Pleas, Criminal Branch, No. 64571 [Marked Exhibit 44]; Reviewed in Cleveland, Ohio, on 3-6 October 1999 and in Mililani, Hawai'i, on 10, 28-30 November 1999.
5. Color Photographs; 5x7 inches; Labeled on Back: "Cuyahoga County Coroner's Office Photography Dept Cleveland Ohio 44106 Name: Marilyn Reese Sheppard Case: 76629 Autopsy: M-7280 Date Of Death: 07/04/54; Not To Be Copied Without Permission" Reviewed in Cleveland, Ohio, on 3-6 October 1999 and in Mililani, Hawai'i, on 1 December 1999.