IN THE COURT OF COMMON PLEAS COUNTY OF SUMMIT

STATE OF OHIO,) CASE NO. 06-09-3248

Plaintiff,)

VS.) TRANSCRIPT OF PROCEEDINGS

SAHIL SHARMA,

Defendant.) VOLUME II (Of 2 Volumes)

APPEARANCES:

MARGARET KANELLIS, Assistant County Prosecutor, On behalf of the State of Ohio.

KIRK MIGDAL, Attorney at Law, On behalf of the Defendant.

BE IT REMEMBERED that upon the hearing of the above-entitled matter in the Court of Common Pleas, Summit County, Ohio, before THE HONORABLE JUDY HUNTER, Judge Presiding, commencing on April 2, 2007, the following proceedings were had, being a Transcript of Proceedings:

TERRI G. SIMS, RMR Official Court Reporter Summit County Courthouse 209 South High Street Akron, OH 44308

INDEX

DIRECT CROSS REDIRECT RECROSS

DEFENDANT'S WITNESSES:

William D. Evans, II 21 61 82/96 98

Steven Stechschulte 100 118 128 -
Louis Rovner, Ph.D. 134 209 -- --

OPENING STATEMENTS:

By Mr. Migdal: 3, 17

By Ms. Kanellis: 10

CLOSING ARGUMENTS:

By Mr. Migdal: 260, 263

By Ms. Kanellis: 259

MOTIONS:

State's Motion for Separation of Witnesses: 19
Defendant's Motion to Admit Exhibits: 271

EXHIBITS:

- A Report of William Evans
- B Report of Steven Stechschulte
- C Report of Louis Rovner, Ph.D.
- D The Accuracy of Physiological Detection of
 Deception for Subjects with Prior Knowledge
 By Louis Rovner, Ph.D.

* * *

1	AFTERNOON SESSION
2	
3	THE COURT: Mr. Migdal, you may
4	call your next witness.
5	MR. MIGDAL: Dr. Rovner.
6	THE COURT: Good afternoon. If
7	you'd raise your right hand, sir.
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1		LOUIS ROVNER, PH.D.
2		a witness herein, called on behalf of the
3		Defendant, having been first duly sworn as
4		provided by law, was examined and
5		testified as follows:
6		THE COURT: Thank you then. Please
7		proceed to our witness stand.
8		DIRECT EXAMINATION
9	BY MR.	MIGDAL:
10	Q.	Please state your name and spell your last
11		name for the record, please.
12	A.	Louis Rovner, R-o-v-n-e-r.
13	Q.	Dr. Rovner, where do you live?
14	Α.	Los Angeles.
15	Q.	And how are you employed?
16	Α.	I am a private practice polygraph examiner
17		in L.A.
18	Q.	Let me talk about your academic training.
19		Can you tell the Court about your academic
20		background?
21	A.	Certainly. I have a Bachelor's degree in
22		psychology from UNOV, University of
23		Nevada, Las Vegas, a Master's degree in
24		psychology from the University of British
25		Columbia with a specialty in

1		biopsychology, and a Ph.D. in psychology
2		from the University of Utah, with a
3		specialization in psychopsychology.
4		I also attended the Los Angeles
5		Institute of Polygraph, which is a
6		professional polygraph school in 1986 and
7		graduated from that institution, as well.
8	Q.	Have you taught at all regarding
9		polygraphs and/or psychology? Tell us
10		about your teaching background.
11	A.	Yeah. I have taught a variety of
12		psychology courses and statistics courses
13		at the University of Utah, California
14		Lutheran University, and Westminster
15		College, for roughly 20 years.
16		I taught psychology, physiology and
17		psychophysiology at the Los Angeles
18		Institute of Polygraph.
19		And I'm currently an instructor at
20		the Marston Polygraph Academy in San
21		Bernardino, California.
22		I've also given numerous guest
23		lectures and workshops in various places
24		through the years on polygraph issues.
25	0	Are you a member of any organizations.

1		professional organizations?
2	A.	Yes, I am. With regard to polygraph, I am
3		a member of the American Polygraph
4		Association. I'm a member and a former
5		vice-president of the California
6		Association of Polygraph Examiners.
7		I'm a member of the American
8		Society For Testing and Materials, ASTM,
9		which has a committee dedicated to
10		polygraph issues.
11		I'm also a full member of the
12		American Psychological Association, the
13		Society for Psychophysiological Research
14		tell me when you want a spelling and
15		the American Psychology-Law Society, and
16		I'm also on the I'm on the panel of
17		experts for the Superior Court of Los
18		Angeles, the criminal division.
19	Q.	Publications, have you published?
20	A.	I've published quite a few articles about
21		polygraph in a variety of different
22		publications, and I have published some
23		scientific research dealing with polygraph
24		accuracy.
25	Q.	And do you lecture about polygraphs and

- psychopsychology?
- 2 A. Yes.
- 3 Q. Tell the Court about your lecturing.
- 4 A. Well, at both schools and private seminars
- or organizational seminars, I'm talking
- about topics including psychopsychology or
- 7 psychology as they relate to polygraph
- 8 testing.
- 9 Q. Let me go through and talk some more about
- 10 your credentials.
- 11 You attended what school to -- what
- 12 polygraph school?
- 13 A. Los Angeles Institute of Polygraph.
- 14 Q. And how long is that, how many hours? Can
- 15 you tell the Court about your
- 16 certification?
- 17 A. Yeah. That school was a typical polygraph
- 18 training institution. It was, I believe,
- 19 320 hours of training.
- 20 And I -- as a matter of fact, I was
- 21 teaching the physiology part of their
- 22 course while I attended.
- 23 Q. And did you do an internship?
- 24 A. Yes, I did.
- 25 Q. And where was that?

```
1 A. That was an organization called Whaley's
```

- 2 Polygraph in which I did a number -- and I
- 3 can't remember how many polygraph
- 4 examinations that were reviewed by Ken
- 5 Whaley.
- 6 O. And are you a certified polygrapher?
- 7 A. Yes.
- 8 Q. And you've been in private practice in
- 9 polygraphy?
- 10 A. I have.
- 11 Q. And for how long?
- 12 A. I've been giving polygraph tests since
- 13 1976.
- 14 Q. Okay. Now, you talked about you have a
- 15 Ph.D. in psychopsychology.
- 16 A. Well, the specialization was in that area,
- 17 yes.
- 18 Q. Tell the Court, what is psychopsychology?
- 19 A. Psychopsychology is the study of the
- 20 relationship between mental and physical
- 21 events.
- For example, when we experience an
- emotion like happiness or depression, what
- 24 are the physiological correlates of that
- 25 mental state.

1		And for many, many years
2		psychophysiologists have been doing an
3		enormous amount of research in diverse
4		areas to find out how our body and our
5		mind interact.
6	Q.	Regarding the polygraph, how does the
7		polygraph relate to psychopsychology and
8		does it become a valid indicator of
9		truthfulness?
10	A.	That's a good question. That's probably
11		the most practical application of the
12		principles of psychopsychology.
13		What we have here is a situation in
14		which a person is saying something. We
15		research has shown that just by looking at
16		a person, or listening to that person,
17		we're all pretty poor at determining his
18		truthfulness or deception.
19		And so about 100 years ago,
20		actually, it was 1915, a professor at
21		Harvard University, a psychologist named
22		William Marston, asked himself a question,
23		well, could we determine somebody's
24		truthfulness or deception by means of some
25		physiological measurement.

1		And that was the beginning of
2		polygraph testing. His methodology was
3		obviously a little crude, but it's
4		developed over the last 90-some years into
5		a very sophisticated technology and
6		methodology.
7	Q.	Explain how it's progressed and why it's
8		sophisticated and
9	A.	Sure. To understand how polygraph works
10		and how polygraph testing works you have
11		to know a little about psychology, and
12		stress, and threat, and how we respond to
13		threat.
14		When I was teaching psychology, or
15		whenever I would teach a psych 101 course,
16		and we talked about the issue of stress
17		and threat, I gave an example that almost
18		everybody gives to get this across.
19		This is a situation in which we
20		talk about a caveman walking along one
21		day, and he walks into an open field, and
22		he sees a sabre-tooth tiger a couple
23		hundred yards away from him.
24		And he knows, boy, if he doesn't do
25		something right away, the tiger's going to

1	have him for lunch.
2	So what does he do? He has a
3	choice of only two things he can do in
4	order to survive the situation. He can
5	fight the tiger. He can look for a stick,
6	or a rock, or some sort of a weapon to
7	fight him, and hope that he'll succeed in
8	that; or his other choice is running away.
9	So we call that the fight or flight
10	phenomenon.
11	Once he realizes that there's a
12	threat to him, a lot of physiological
13	activity begins, and there's good reason
14	for this.
15	We can all relate to this on some
16	level in our daily lives. When somebody
17	goes to the gym in the morning to work
18	out, or do whatever exercise you do, a
19	typical routine for someone is spending
20	five or ten minutes stretching and then
21	spending another five or ten or 15 minutes
22	on a treadmill or exercise bike, and we
23	call that the process of warming up.
24	What we're doing is stretching our

muscles and supplying blood and oxygen

1	throughout our body to a level that when
2	we actually get into the meat of our
3	exercise, the heavy lifting and stuff,
4	we're less likely to hurt ourselves.
5	We're less likely to pull muscles or
6	strain ligaments or break things.
7	And we know from experience that if
8	you do a heavy workout at the gym, or go
9	into a sporting activity without warming
10	up, the likelihood you are going to injure
11	yourself is a lot higher than if you're
12	fully warmed up.
13	Well, in the situation of the
14	caveman and the tiger, he knows that he's
15	got a life-threatening situation to deal
16	with. And he's going to have to exert
17	maximum physical force or else he'll
18	probably die.
19	In order to do that, nature has
20	programmed us almost with a mechanism that
21	in a very stressful situation where there
22	is a true threat to us, to our well-being,
23	nature supplies an instant warm-up.
24	And that's the activation of part

of our nervous system called the autonomic

1	nervous system; and, actually, a
2	sub-system of that called the sympathetic
3	nervous system.
4	The sympathetic nervous system sets
5	off an immediate reaction of a number of
6	physiological and biological events in our
7	body in reaction to that threat to enable
8	us to more effectively deal with it, while
9	at the same time not hurting ourselves.
10	So that if the caveman picks up a
11	rock and tries to hit the tiger with it,
12	he's not going to pull a muscle in his
13	shoulder and render himself helpless.
14	If he tries to run away, if he
15	tries the flight part of fight or flight,
16	if he tries to run away, he's not going to
17	pull a thigh muscle and be unable to run
18	any faster and the tiger will overtake him
19	and eat him.
20	Well, this is an old, old example
21	that we have all given in psych 101
22	classes.
23	Marston wondered one day back in
24	1915 whether this same fight or flight
25	phenomenon would occur in response to a

1	physical to a mental threat or
2	psychological threat, and thus lie
3	detection was born, because for his
4	experimental variable, he said well, how
5	can I tell what a psychological threat is?
6	What he said to himself finally was
7	that, well, why do we lie? Well, we lie
8	to people typically because we're
9	threatened by what might happen if we were
10	to tell the truth. There are consequences
11	sometimes to telling the truth, and
12	therefore, we lie.
13	He said, if it would be
14	interesting to see, and he had no stake in
15	this game, he wasn't starting a company or
16	anything, he said it would just be
17	interesting from a scientific point of
18	view to see if people had the same fight
19	or flight physiological response to an
20	emotional threat or a mental threat as
21	they have to a physical one.
22	His results for a series of
23	experiments was published in 1917 in the
24	Journal of Experimental Psychology, in
25	which even with his fairly unsonhisticated

1		methodology, he was able to report a 96
2		percent rate of accuracy, and being able
3		to tell who was lying and who was telling
4		the truth.
5		Our methodology now are worlds, of
6		course, ahead of his. We have had the
7		we have 90 years' worth of practice, and
8		decades and decades worth of high-level
9		scientific research now to rely on, and to
10		provide evidence of the real validity and
11		reliability of polygraph testing.
12	Q.	Before we get into the research, how is
13		the explain to the Court what the
14		physical polygraph is.
15		I know Mr. Evans did, but go
16		through that, and why that apparatus is a
17		valid indicator of truthfulness.
18	А.	Both of the examiners gave a good
19		description of the polygraph instrument,
20		itself.
21		We're measuring respiration,
22		breathing, at two different sites on a
23		person's body. One is by the upper chest,
24		the thorax, and one is near the abdomen,
25		and we use two of these because different

people have different patterns of 1 breathing. Some are abdominal breathers 2 predominantly, and some breathe in their 3 chest. We don't want to miss important 4 information so we use both channels. We measure the sweat on a person's 6 7 hand, on the palm or surface of his hand by putting two metal plates on his 8 fingertips to determine how much he's 9 sweating at any given moment during the 10 11 test. And then, of course, we measure the 12 cardio. We use cardiovascular cuff, same 13 kind a physician uses to measure blood 14 pressure in his office, and we're looking 15 for what we call the relative blood 16 pressure, we're looking for changes or 17 increases in blood pressure from time to 18 time in the test. 19 Ouestion arises, why do we use 20 these measures and how do they relate to 21 the fight or flight phenomenon? 22

the fight or flight phenomenon?

When the sympathetic nervous system responds, kicks in, when I spoke about it a few minutes ago, a number of very, very

23

24

1		important things happen inside our body;
2		many that wouldn't be practical to measure
3		during a polygraph examination.
4		For example, during the sympathetic
5		reaction, our digestive system stops or
6		slows down abruptly, which is why you hear
7		people who are under great stress have
8		gastrointestinal problems, their system
9		isn't simply working right.
10		However, for a polygraph examiner
11		to measure that he'd have to use some
12		ridiculously invasive technique, and
13		nobody is ever going to consider doing
14		that.
15		But there are changes in there
16		are vascular changes we can measure
17		adequately by means of a cardio cuff. We
18		can certainly measure the amount of sweat
19		on a person's palm and changes in
20		respiration.
21		If you'd like, I can go into why
22		these changes actually occur.
23	Q.	That was the next question I had.
24	Α.	Oh, okay. The cardiovascular one is the
25		most difficult and complicated of all of

them.

2	When we have a fight or flight
3	response or a sympathetic nervous system
4	reaction, what happens, among other
5	things, is that we want we our body
6	wants to send its energy to the parts of
7	our body that are the most important
8	relative to fight or flight, relative to
9	threat to the threat of the moment, and
10	to take energy away from parts of us that
11	are not related to our survival in a
12	threat situation, such as our digestive
13	system.

So that we talk about something called the blood flow pattern. Blood circulates in our body in order to carry oxygen and supply oxygen to all of our billions and billions of cells.

Oxygen is our body's primary source of energy and food on a cellular level. So that automatically, the muscles of our arms, our upper arm, our shoulders, our chest, and the big muscles in our back, the latissimus dorsi, as well as our thigh muscles, receive an enormously, or an

unusually large amount of blood so they can have the energy to do what they have to do in fighting or running away, and other parts of our body, our skin, our -- many of our internal organs are deprived of blood; e.g, oxygen, for that very short amount of time in which the sympathetic nervous system is being stimulated.

So we're seeing this increase in blood pressure because some arteries are constricting in order to allow other arteries to dilate and carry more blood to where it has to go. That's a basic explanation of the cardio response.

The GSR response that they spoke about earlier in the day, the galvanic skin response, the amount of sweat on your hand, is really interesting, actually, from an evolutionary point of view.

When our caveman was looking for a rock or a tree branch to use as a weapon, the last thing he wanted to do if he found one and decided to stand and fight was to take one swipe at the tiger and have the weapon fly out of his hand.

So what happens is, nature supplies
us with this marvelous little mechanism of
sweating in our palms, the type of sweat
glands on our palms biologically, and the
palms and soles of our feet are
structurally different from the sweat
glands on the rest of our body.

This is called, in the textbooks, emotional sweating. It doesn't serve the same purpose as sweating to dissipate heat or to cool us down, our bodies, when it's real hot out.

This serves to provide a function.

When our hands are a little moister, they develop more friction with whatever we happen to be holding at the time, so it makes it more likely that when he takes his first swipe at the tiger, he'll have a firmer grip, more friction between his skin and the object he's using as a weapon, and he won't lose it.

His survival will be more likely with a second blow, or a third blow, and the same is kind of true with the soles of his feet, because we have that same kind

of sweat gland on our soles, if he decided to run away, well, we know that the -- our skin is more resistant to being punctured or torn if it's slightly wet. And as he's running away if he doesn't have shoes, he might run over twigs, or little rocks and cut himself. The pain or the blood loss could slow him down and make him more vulnerable. And so this mechanism is sort of explained by our common knowledge, too, of

And so this mechanism is sort of explained by our common knowledge, too, of baseball, the batter when he steps up to the plate and spits on his hands to get them a little moist, that's so the bat doesn't go flying into the grandstands after he takes a swing at the ball. The same -- it's the same exact function creating that friction.

As far as breathing, there are several measures we look for when we evaluate a respiration channel on a polygraph, but changes in our breathing which all -- which all translate into breathing less when we are facing a threat

-- excuse me -- allows our ears to receive more information from the environment.

Right now we're all breathing in here and with -- we're so used to it we don't realize it, but we're hearing our own breathing. We have this constant hum in our heads that we have been doing since we were first born, and so we don't realize it. We only realize it when we stop breathing; the great acuity we now have when we're not breathing, or talking, or doing anything else.

It's the same phenomenon that if you're at home alone and it's 3 in the morning and you can't sleep, and you get up, and you pick up a book or something, and you're the only one awake in the house, and the only light on in the house is the room that you're in, and all of a sudden you hear some unexpected noise from the kitchen, another room in the house, the first thing you do, if you think about it, or the next thing that happens, we all stop breathing and turn our ear towards the source of the sound.

1		We instinctively, or maybe we don't
2		know, but our instinct is to stop
3		breathing as to not interfere with all of
4		the information we get from that
5		unexpected sound so we can determine if
6		it's a threat, or if it just happens to be
7		the cat knocking up against the garbage
8		can.
9		The wonderful thing about this
10		fight or flight response that in 2007 we
11		all experience any number of times a day
12		is that it is absolutely involuntary. We
13		can't control it in any sort of systematic
14		way, it just happens.
15		And over the last 90-some years
16		polygraph the polygraph profession has
17		found a way to use this in a very
18		systematic way in order to determine when
19		somebody is telling the truth or not.
20	Q.	You had mentioned before the machine,
21		itself, measures those responses and then
22		a trained polygrapher can determine the
23		truthfulness?
24	A.	That's correct.
25	Q.	You talked about the research. Have you

1		done research, yourself, regarding the
2		validity of that procedure using the
3		polygraph to determine truthfulness?
4	Α.	I have.
5	Q.	And tell the Court about your own research
6		you've conducted.
7	A.	As part of the requirements for my
8		doctorate in Utah, I conducted a study
9		that lasted roughly two years to determine
10		a couple of things. We wanted to
11		determine, using a specific kind of a test
12		format which is now known as the Utah Zone
13		of Comparison Test.
14		Number one, how accurate was this,
15		really. How well do we do when we follow
16		the Utah procedure on a large number of
17		subjects.
18		Number two, this was back in the
19		late '70s, and books were starting to show
20		up on library shelves and information was
21		beginning to become publicly available
22		about polygraph testing techniques.
23		And we were we thought it was
24		time that we should have some experimental
25		evidence to deal with that reality, if

people had -- if a person who is about to
take a polygraph test went to a library or
ordered a book on his own and learned what
it was that we were doing by reading all
about it, because just -- it's not rocket
science. Any reasonably intelligent
person can understand this.

So would that knowledge have any effect on our rate of accuracy when we did tests both with guilty and innocent people.

And then we went one step further and asked the experimental question or the research question, what if a person who then had all of this knowledge by reading were to find a polygraph examiner who was unscrupulous enough to become his coconspirator and to teach him how to beat a polygraph test, would that affect our accuracy.

And so that was the start. Those questions were the basis of this two-year study that became my doctoral dissertation. It was also published in abstract form and presented to the Society

1		for Psychophysiological Research in person
2		at their annual meeting in, I believe,
3		1979, and then the full-blown study, all
4		39 pages of it or so, were published in
5		the Journal of Polygraph, which is the
6		scientific journal of the American
7		Polygraph Association.
8		You want me to
9	Q.	Tell the Court about your study.
10	A.	The study was a typical laboratory study.
11		Let me before I tell you about the
12		specifics of my research, let me tell you
13		about the two areas of research that
14		relate to polygraph.
15		One is called laboratory research,
16		and the other major area of research is
17		known as field research.
18		Laboratory research is done in a
19		laboratory, or it can be done in an office
20		or wherever.
21		It's called laboratory because
22		typically the experiments are designed
23		under standard scientific research
24		designs. They're designed in a way in
25		which we can analyze the results with

standard statistical techniques, apply
concepts like Null Hypothesis and draw
conclusions so that we can present these
results to the world in the same form as
do physicists, biologists, meterologists,
or any other scientist, and we have a long
research history that I'll tell you about
in a while.

Field research deals with the results of polygraph tests of people who have been, or are, under investigation for crimes and have been tested by the police or law enforcement people, or even private examiners.

The -- I use the word carefully.

Laboratory research, the issues for which people are being tested are contrived. We develop what we call mock crime scenarios.

In mock crime scenarios, a crime is essentially designed by the research team. The people who are -- who will be guilty subjects actually carry out this crime, and I'll tell you a little bit more about how this is all done, and then at some later time they're tested on whether they

1	committed it or not.
2	Innocent people, innocent subjects
3	in our laboratory experiments, are simply
4	told that a crime has been committed, you
5	didn't do it, but you're going to be
6	tested about it, anyway.
7	What we have in the laboratory is
8	the ability to determine ground truth.
9	Someone, not the person giving the
10	polygraph test, but someone knows exactly
11	who the people who are guilty of
12	committing the crime are, and who the
13	innocent people are.
14	So at the end of an experiment we
15	can take the polygraph examiner's results
16	and compare them against the ground truth
17	of which he was previously unaware, and
18	that's how we generate our accuracy rates
19	in a high-quality laboratory study.
20	In field research, and this is
21	important, and I'll come back to this
22	later in my testimony, in field research
23	we never really have ground truth.
24	A person who's convicted at a tria.

or who's acquitted at a trial, it could be

1	argued nobody ever really knows absolutely
2	100 percent for sure if that person is
3	actually guilty or innocent. It's
4	you're far more conversant in these issues
5	than I am, but having lived through OJ
6	Simpson in my backyard, I say to people
7	even now, there's one person who knows if
8	he's guilty. One person alive at least
9	who knows if he did it or not, and that's
10	him.
11	We draw our conclusions based on
12	other evidence, but we don't have ground
13	truth. We didn't watch him do it.
14	However, field research takes all
15	of that into account and looks for
16	variabilities, like was there a confession
17	on the part of the defendant? Was there a
18	confession on the part of someone else?
19	What does the physical evidence look like?
20	Essentially, if this person was
21	convicted or not convicted, did it make
22	sense?
23	And then we'll look at his
24	polygraph test and see if that agreed or
25	disagreed with the case outcome and the

1	case evidence and all of that.
2	I'll tell you in advance, and I'll
3	tell you in a little more detail in a
4	while, that there's a real convergence on
5	accuracy rates that are found in the field
6	and the laboratory. They're about the
7	same with field rates being a little
8	higher.
9	My research was a mock crime
10	situation, a laboratory setting, in which
11	we set up a situation in which our
12	subjects, or at least the guilty ones,
13	were to go to a different location, steal
14	a ring out of a secretary's desk, and in a
15	certain amount of time come back and take
16	a test on whether they stole the ring or
17	not.
18	To give you a little bit of feel
19	for this, they would come into our we
20	were on the fifth floor of a 12-story
21	building in the psychology department at
22	the University of Utah.
23	And subjects were recruited for
24	this study by means of a classified

advertisement in a local newspaper. All

it said is: Subject wanted for a

psychological experiment at the University

of Utah, and you'll be compensated at the

rate of \$20, I think. I may be wrong

about the amount, but it was a minimal

amount.

When they came in they were told that this was a polygraph testing experiment, and they were given a set of instructions.

If they were going to be guilty of the theft, they were told how to carry it out.

They were also told if they were able to beat the polygraph test, if they were able to produce what we call a truthful outcome, in spite of the fact that they stole the ring, they would be given a bonus, another 50 percent of their original fee for participating in the experiment. We wanted to motivate them to try to beat us, which all guilty people are motivated, I think, in real life to try to beat the test, to try to look truthful or innocent, as are all innocent

1	people want to have a truthful outcome.
2	So they went through a procedure
3	that we had tape-recorded and described to
4	them.
5	We left them in a room with a tape
6	recorder and a pad and paper so they could
7	take some notes.
8	They were told to get on the
9	elevator, go up to the 7th floor, when the
10	door opened they would see the 7th floor
11	secretary's office.
12	And what they were to do is make up
13	some sort of an excuse to get her out of
14	her office. We did that to get them more
15	emotionally and intellectually involved in
16	the whole situation so it didn't seem so
17	much like a parlour game to them.
18	So they did all spend time coming
19	up with some not so good and some very
20	creative ways of getting our secretary out
21	of her office.
22	Once she went they were told that
23	somewhere on her desk was an envelope
24	containing a ring, and they were to take
25	that envelope out of her office out of

the drawer once they found it, conceal it
somewhere in their clothing, and leave her
office, walk down to the end of the hall
and walk down the stairs.

Now, this engendered more involvement for them because they weren't told where on her desk the ring was, and as I recall there were five or seven drawers, two or three on the side and one in the middle, so some of them went through all of the drawers before they located the ring.

They were told to leave in a manner that was different from the way they got up there and to report back to us.

Now, we had two groups of -- we had three experimental groups. We had what we call the standard group, made up of 50 percent of the subjects in the standard group actually stole the ring, they were our guilty subjects, and the other 50 percent were not, they didn't steal the ring. They were our innocent subjects and we had an equal number of each.

Now, we had a second experimental

group we called the information group.

This was to replicate the group of people in the community who might go to the library and read up on this, and come to their test with real information about polygraph techniques, what we were doing and all of that. And we wanted to know how much this would affect our accuracy.

So these people went through the same procedures the guilty ones went through, exactly the same mock crime scenario, and the innocent ones were just told, well, a theft has been committed, you won't know anything about it.

But after a certain period of time, and I believe it was 15 or 20 minutes that we gave them to either commit the crime or just go away and come back for the innocent people, they were given almost a primer in polygraph testing that I had developed for them in very plain and understandable language.

It was a short course in what a polygraph test is, what we measure on the polygraph physiologically, why it works,

what kind of questions the examiner is
going to ask you.

At that time comparison questions

were called control questions, and I'll tell you a little bit more about those in a little while, in the parlance of the time, we said relevant questions are going to be about the issue at hand, the reason you're being tested. If it's a theft, they'll be about what was stolen.

And then we gave them some examples of what control questions would be, and told them in no uncertain terms that people who are called deceptive; e.g, guilty on a polygraph test, are those whose physiological responses are greater to the relevant questions.

People whose physiological responses are relatively greater to the control questions are those who passed the test who were called truthful or innocent.

They knew all of that. They had examples of the tracings, things -- what a pneumo-tracing would look like, or a GSR tracing would look like. We gave them

1	very nice information.
2	And then there was a section in
3	this primer about countermeasures. We
4	heard countermeasures mentioned a couple
5	of times this morning.
6	We gave them the names and
7	techniques of virtually every known
8	countermeasure that anybody had ever
9	reported using or even thought about
10	using, how to do it and when to do it.
11	Obviously, the time to use a
12	countermeasure, if they're going to work,
13	is during the control question while it's
14	being asked, or just as you answer it.
15	You want to use these control
16	these countermeasures to make your
17	responses artificially large to the
18	control questions, so that an examiner
19	looking at the chart would say wow, he's
20	telling the truth because look at these
21	big responses to the controls.
22	So we gave him or her all of that
23	information, and it was presented rather
24	well.
25	After directly having spent as much

time with that information as they chose,
they told our floor secretary they were
done, and then she escorted them to the
laboratory where I would conduct their
polygraph tests.

Now, we had yet a third experimental group, and that was what we called our information plus practice group.

This was to cover the person who would have all of the information in the — in the community who would go to the trouble of reading up on it, but the — then this person who was so intent on beating his polygraph exam that he would go to the trouble of finding, locating a polygraph examiner, qualified examiner who was so unscrupulous that he would impart his knowledge to this stranger in order to help him beat the polygraph test. We call that information plus practice.

These subjects, both guilty and innocent, after having spent all of the time they wanted with the materials that I had prepared, the primer, as I called it

1	before, they were then shown to yet
2	another room in which another one of our
3	graduate students named John Kircher
4	played the part of an unscrupulous
5	polygraph examiner.
6	We had prepared a test with
7	questions that were similar to, but not
8	exactly the same, as the ones that I was
9	going to use on when I tested them,
10	because in real life, a confederate like
11	I'm describing would not know exactly what
12	questions I would ask.
13	But they would be similar in
14	nature, same ballpark, a theft is a theft
15	is a theft.
16	So John would discuss polygraph
17	issues with that person, answer any of his
18	questions that he might have got from
19	reading the materials, and then John would
20	hook him up to a polygraph and run a
21	polygraph test on him. He'd run what we

22

23

24

25

At that point John would -- we were still using analog instruments, the ones

call one chart, one time through the

question sequence.

with the pens and the ink and all, he'd 1 rip the chart off, and they'd sit down and 2 examine it question, by question, by 3 question, and if John saw nice big responses to the control questions, he'd 5 ask, well, are you doing anything? And 6 the person would say yes or no. And what 7 are you doing? And they'd discuss it and 8 John would give them very sophisticated 9 feedback on how to use countermeasures 10 effectively, how they were doing so far. 11 After that discussion he ran a 12 second chart on them, same questions, to 13 reinforce the practice. And then they 14 reviewed that second chart, too. 15 16

17

18

19

20

21

22

23

24

25

After that session was done, those subjects, both guilty and innocent, were immediately taken to the laboratory where I did their polygraph test.

Now, it's important to know that I never knew who I was testing. I never knew whether the person was guilty or innocent of the theft, and I didn't know which of the three conditions they were in.

1		That those decisions were made
2		arbitrarily by our department secretary or
		our floor secretary. She made that
3		
4		decision before we started the experiment.
5		She had a list of who was going to be who
6		and locked it in a drawer and nobody
7		involved with the actual experiment ever
8		saw it until the last subject was tested
9		and my decision was rendered.
10	Q.	Let me stop you there. Is that of some
11		scientific validity, not to know?
12	A.	Yes, yes.
13	Q.	Explain.
14	A.	Any scientist in a situation like this has
15		to be blinded to the condition of his
16		subject so he's not influenced by external
17		factors.
18		If I knew somebody came in and was
19		in the information plus practice group and
20		I knew that for a fact, I might be a
21		little more careful and give him more time
22		and consideration than I would give
23		somebody in another group because that
24		might let my own feelings and emotions
0.5		into the process

1		We want it to be totally objective,
2		totally impartial, and have no real
3		intellectual involvement of the
4		researcher, so that the results are what
5		the results are and can't be assailed.
6		It wasn't until the end of all that
7		that we matched then my outcomes, the
8		people I call truthful and deceptive, with
9		the real ground truth of who was really
10		truthful and deceptive and came to our
11		conclusions about polygraph accuracy.
12		Now, would you like to know what
13		those were?
14	Q.	That was my next question. What were the
15		results of your questions regarding the
16		accuracy of the polygraph that you
17		conducted?
18	A.	Sure. Our first group, the standard
19		group, which had no information, no
20		practice, they just either committed or
21		didn't commit the crime and then were
22		shown to me to take a polygraph test, when
23		I made a decision of truthfulness or
24		deceptive, I was correct 95.5 percent of
25		the time.

1		The point the 4.5 error was what
2		we call a false positive.
3	Q.	What is that?
4	Α.	A false positive is when we call a person
5		when a person is telling the truth but
6		we mistakenly say that he's deceptive, a
7		false positive.
8		In the same way, it's borrowed from
9		medical terminology when, God forbid, if
10		you have some disease and the test comes
11		back positive that says you have it, but
12		if the test is wrong, that's a false
13		positive. We borrowed that terminology.
14		My only mistake in that standard
15		group was a false positive. No liar beat
16		the test. And by the way, that was
17		consistent with other research up until
18		that time.
19		Essentially, my standard group was
20		a replication of some previous experiments
21		which did I did I followed the same
22		procedures that they reported, and got
23		virtually the same accuracy rate as what
24		they did.
25		We then did the statistical

1	analysis of the information group to find
2	out if somebody went to the library, read
3	up, they have any advantage. In that
4	group we got the accuracy rate was
5	exactly the same, 95.5 percent. The one
6	mistake was another false positive.
7	And that kind of, by the way,
8	followed the research up until that point,
9	existing research that when we make a
10	mistake we are more likely to make a false
11	positive than a false negative mistake.
12	People are not very likely to beat
13	the polygraph test, but we sometimes make
14	mistakes in the opposite direction which
15	is unfortunate.
16	The information plus practice group
17	data statistics were a bit different and
18	not quite as good.
19	When we looked at those the overall
20	accuracy rate of the information practice
21	group was 71 percent. And the errors were
22	equally split, false negatives and false
23	positives, which told us a couple of

things.

24

25

First of all, that if you're

1	innocent, the worst thing you can do is to
2	learn a lot about polygraph testing
3	because excuse me because you raise
4	your likelihood of being an examiner
5	error.
6	So we try I try to discourage
7	innocent people from knowing anything
8	about polygraph testing.
9	The guilty people are our error
10	rate was three times as high in the guilty
11	group as it was without this additional
12	practice.
13	And this concerned me to some
14	extent at the time, and I can remember a
15	conversation I had with one of my
16	committee members. His name was Lionel
17	Frankel, and he was a senior law professor
18	at the University of Utah Law School.
19	And I went into his office one day
20	to show him the results before I wrote my
21	dissertation, and I was really sort of
22	down and out about the whole thing, and he
23	looked at me and he said, "No, no, no.
24	You don't realize what this is."
25	What he said, "What you did was

design strong and optimal conditions for any kind of a result."

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

He said, "In real life, a person wouldn't get material written as well as our written material was. In real life our -- our examiner would not be as knowledgeable about psychology and physiology and polygraph testing as our confederate was. And in real life there would be a time span between that practice and the time he actually took his polygraph test. He wouldn't go next door, literally next door, to take his real polygraph test, so there would be a period of time in which what he learned from the confederate would decay a little, as in all things when we learn -- when we're exposed to something for the first time."

He said, "With those extremely optimal conditions, you were still right 71 percent of the time; more than seven times out of ten they didn't beat you."

And he said, "The reality is, it is so unlikely that a professional examiner would risk his livelihood and actually

```
sort of open himself up to prosecution of
1
            one sort or another, it's unlikely that's
2
            going to happen, anyway. But even in that
3
            unlikely set of circumstances," Dr.
4
            Frankel said, "You're still much, much
5
            better than they are," and, frankly,
6
            statistically we were. Statistically,
7
            even in that situation, 71 percent is
8
            significantly better than chance.
9
            Let me ask you just to make sure, false
10
     0.
            negative and false positive.
11
                   A false negative means a person is
12
            truthful with you they come up deceptive
13
            on a polygraph?
14
            You got it backwards. A false negative is
15
     Α.
            a person who is lying to the examiner but
16
            produces a truthful outcome. Essentially,
17
            somebody who beats the test.
18
            And what is the percentage, at least in
19
     0.
            your test and the research in general
20
            regarding a liar beating the test?
21
            In my research, in the first two groups,
22
     A.
            in the information only group and in the
23
            standard group we had zero percent false
24
            negatives. No liar, no guilty person,
25
```

```
beat the test.
```

- In the literature at large, the
- 3 false negative -- the false negative rate
- is very, very low across the board.
- It tends to be, if you look at most
- 6 -- all of the research combined, it's
- 7 probably in the area of three to four
- 8 percent, but no larger than that.
- 9 The false positive rate is at least
- 10 twice that, a little more.
- 11 O. Okay. Now, the research you did in this
- 12 particular dissertation, has that -- that
- 13 was published?
- 14 A. Yeah.
- 15 Q. Is it cited by other researchers?
- 16 A. Yeah. I've lost count of how many times,
- but many, many times it's cited. As a
- matter of fact, it's cited in an article
- 19 appearing that will come out this year in
- the Journal of the British Psychological
- 21 Society.
- 22 Q. So they cite your research back to '79?
- 23 A. Yes.
- 24 Q. Talk about replication in relation to the
- 25 scientific method.

1	Α.	Replication is very important in science.
2		We want to be sure that and any one
3		person or research team can do a piece of
4		research and it can be honest research
5		with no personal involvement in the
6		outcome.
7		However, anomalies happen and
8		everybody's aware of that. Science is
9		very plotting and slow because it's
10		thorough.
11		Any scientist doing research in any
		phenomenon can do an experiment, have that
12		experiment published where the world at
13		
14		large might say, whoa, this is great, new
15		information about whatever it happens to
16		be, other scientists; and, particularly,
17		those involved in that research area, or
18		that knowledge base, will say, okay, we're
19		going to just sit back and wait for a
20		replication. We're going to wait for
21		another research team at another
22		institution to do exactly what that first
23		team did.
24		If they get the same results, or
25		very similar results to the first research

1		team, then we'll say, ah-ha, we have
2		replicated that research in all of its
3		aspects. They found the same thing to be
4		true. Now we believe.
5		Without that replication in the
6		scientific world, research is meaningless.
7	Q.	Let's talk about replication in relation
8		to the polygraph research.
9	Α.	Okay. My study in particular was a
10		replication of some previous studies that
11		had been done and serve as the basis for
12		studies that replicated my research.
13		In all of those cases the results
14		have been fairly similar or exactly the
15		same.
16		As a matter of fact, the study that
17		I mentioned that will be coming out this
18		year is, in fact, a replication of my
19		research of the late '70s showing
20		virtually the same results in that
21		knowledge of I'll tell you, the
22		stimulation for that experiment, there is
23		a lot of sophisticated information on the
24		Internet nowadays available to virtually
0.5		and with an Internet connection

1	The most complete source of
2	information is on a Web site known as
3	antipolygraph.org. It generates out of
4	the Netherlands.
5	And in it the owner of that Web
6	site's name is George Maschke. He has
7	provided a sophisticated and accurate
8	account of what goes on in a polygraph
9	test, essentially what I did in my
10	research, but his is so thorough and
11	complete it's just breathtaking how good
12	and how accurate the information is.
13	And the polygraph community has
14	been a little concerned about this for
15	some years now.
16	Well, a researcher who's been very
17	prolific in the polygraph area, Charles
18	Honts, Dr. Honts, downloaded the
19	information on antipolygraph.org. It's
20	available for download for anybody.
21	Matter of fact, Maschke asks
22	people, suggests they do download it for
23	free.
24	What Dr. Honts did was replicate my
25	research, but instead of the materials

that we gave them, we gave -- he gave them 1 the material from George Maschke's Web 2 site, the one everybody in the world has 3 access to immediately, and found that it 4 did not lead to one guilty person beating 5 the polygraph test. The accuracy rates of 6 people who had not read that information 7 and people who had were identical. Guilty 8 people. 9 I know that there is another 10 replication ongoing of my stuff in 11 Singapore, but it's -- I don't know. 12 not completed yet. 13 So you're saying in the scientific 14 0. community, generally the results are the 15 same as yours doing replications of the 16 same type of test you did? 17 Correct. 18 Α. Talk about the prevalence, if you could, 19 0. of the use of the polygraph in the United 20 States. Who's using it, under what 21 circumstances, and how -- do you know 22 these people, that sort of thing? 23 Yes. It's used extensively, all levels of 24 A.

government, as far as federal government,

1		the Department of Defense is a major user,
2		the FBI, the CIA, the NSA, the DEA, the
3		Secret Service, all branches of the
4		military forces, all of these have ongoing
5		polygraph testing programs, law
6		enforcement agencies for the state, and
7		cities, local law enforcement use
8		polygraphs daily for a variety of reasons,
9		thousands and thousands a day.
10		I was told by a scientist from the
11		Department of Defense that his estimate is
12		that the annual budgets for federal
13		polygraph testing is in the neighborhood
14		of \$50 million. They're very serious
15		about it.
16		In addition, all over the country
17		and, frankly, all over the world there are
18		private polygraph examiners like me who
19		give tests on a regular basis. So we can
20		I can easily say thousands of tests a
21		day throughout the country.
22	Q.	Regarding the polygraph within the
23		scientific or the psychological community,
24		the relevant community, can you speak as
25		to whether it's generally accepted?

1	A.	Yes, it is. We have several sources of
2		evidence for this. Starting in the
3		mid-'80s, there was a survey done by the
4		Gallup Organization. They surveyed the
5		society for psychophysiological research.
6		It's been a point of some discussion over
7		the years as to, does the scientific
8		community accept polygraph as an accurate
9		technique, as a valid technique.
10		Well, clearly there are some
11		scientists whose opinions about this are
12		not particularly relevant, like botanists,
13		or zoologists would be qualified to say
14		that, although they have scientific
15		credentials, they don't have the right
16		kind.
17		So Gallup went to the Society for
18		Psychology-physiological Research because
19		it was made up of Ph.D.s and MDs whose
20		specialty was psychophysiology.
21		What they found in, I believe 1983,
22		give or take a year, was that scientists
23		in that society who knew something about
24		the polygraph research who considered
25		themselves to be informed, 83 percent of

1	them said year, polygraph works. It's a
2	viable and valid technique for
3	discriminating between truth and
4	deception.
5	Some ten years later that survey
6	was replicated by a woman named Susan
7	Amato as her Master's thesis project, and
8	the results were virtually the same.
9	Those scientists who were members of SPR
10	and consider themselves to be highly
11	informed about the scientific literature,
12	some 83 percent, again, said yeah, we have
13	got a good technique here, a technique
14	that we can rely on to discriminate
15	between truth and deception.
16	In 2003 the government commissioned
17	a report or a study by from the
18	National Academy of Sciences.
19	When now, this was a more
20	diverse group of scientists, and, frankly,
21	it was a pretty distinguished panel of
22	people.
23	As a matter of fact, I brought with
24	me all of their names and bios, if that is
25	of any interest to you, but they came from

a wide variety of disciplines; statistics, biometrics, psychology, sociology, some of the physical sciences, as well, I believe, and none of these people had any prior knowledge of polygraph testing. They didn't know much about the polygraph research, but they were given the mission of coming through the existing scientific research on polygraph accuracy, which we call validity, and coming up with some conclusions.

Their conclusions were that when we give a specific issue test, like the general category that Mr. Sharma was given, the laboratory research they said has an average accuracy of 86 percent and the field research has an average accuracy of 89 percent.

I was impressed with how strong these numbers were from a group of people who, I assume, might have had a little negative bias toward polygraph when they went into this, because this whole study was spurred on by a group of disgruntled scientists at one of our national

1		laboratories about the whole issue of
2		testing them; nevertheless, this group of,
3		we can only consider them ultimately to be
4		impartial scientists, said this has a
5		substantially high rate of accuracy,
6		whether we look at the laboratory or the
7		field research and slightly higher in the
8		field.
9		Oh, and one last thing. That is
10		the only decision we have from the broad
11		scientific community, and it's a good one
12		from my point of view.
13	Q.	What about the Department of Defense, they
14		believe it's reliable, National Academy of
15		Science?
16	A.	Oh, yeah. The Department of Defense has
17		an ongoing polygraph program, not only of
18		testing people for a wide variety of
19		issues, but for conducting ongoing
20		research into polygraph accuracy and new
21		techniques and things like that.
22		And so they right now they're
23		probably the most prolific source of
24		research of any one location in the world.
25	0.	Do you know those people personally?

1	A.	Oh, yeah. Yeah. I I have a good
2		relationship with the deputy director of
3		the Department of Defense Polygraph
4		Institute. I know examiners from many of
5		the federal agencies, CIA, FBI, and so
6		forth and so on.
7	Q.	Let me ask you, you just said the National
8		Academy of Science study, you said was 86
9		percent accurate in the laboratory, higher
10		in the field?
11	Α.	Yeah.
12	Q.	And you're saying your research which has
13		been replicated puts it somewhere higher
14		to in the high mid-90s; am I correct?
15	Α.	In their project the NAS panel looked at a
16		wide variety of or a large number of
17		studies that used a variety of different
18		testing techniques.
19		And like anything else, like any
20		other thing that human beings do, there is
21		some variability involved.
22		It can be well, let me tell you
23		how they arrived at that 86 percent
24		number. It's sort of interesting.
25		What they did was take they used

a technique called intercortile ranking,

where they took -- they rank-ordered all

of these studies from the lowest accuracy

to the highest accuracy.

They took the lowest one quarter of the studies and threw them out, and then they took the highest one quarter of all the studies and threw them out leaving the middle 50 percent.

They said, you know, we're just -we want to get rid of the outliers here,
the really high numbers, the really low
numbers. We don't want them artificially
affecting the averages.

Now, we can take issue with that at another time, and I do, but nevertheless, that's what they did.

What they then found was the average accuracy for the middle two cortiles were 86 percent, meaning there were a lot of high quality studies that showed higher accuracy rates, mine being one of them, and a lot from our laboratory, that were not even included in that 86 percent.

1		I'll tell you that studies that use
2		the technique that I used in my research
3		are typically finding will typically
4		find the same or very similar levels of
5		accuracy as I did.
6	Q.	Has there been a study done regarding a
7		specific questioning technique that is the
8		most accurate?
9	A.	Yeah. It was just published within, I
10		think it was published in December of last
11		year. It appeared in the journal
12		Polygraph, which is the scientific journal
13		of the American Polygraph Association.
14		The study was done by a fellow
15		named Don Krapohl. Don is the president
16		of the American Polygraph Association and
17		the deputy director of the Department of
18		Defense Polygraph Institute.
19		He is the first one to
20		systematically go through different
21		polygraph testing formats and
22		rank-ordering them in terms of the
23		published research on them, what those
24		accuracy rates are.
25		So he took some publications from

```
-- scientific publications from each of
1
            those formats, got an average, and then
2
            rank-ordered all of those formats on the
3
            basis of that -- on those averages.
4
                    The one that came out on top is the
5
            Utah Zone of Comparison Test. On the
6
            average in the scientific research, it
7
            produced higher rates of accuracy than any
8
            other format.
9
            And what is the Utah Zone of Caparison
10
     Q.
11
            Test?
            It's a technique and a format that is
12
     A.
13
```

- designed to test one specific issue. It's
 the format that we used in our research,
 that I used in my research, that
 repeatedly produced accuracy rates in the
 mid-90 percent range.
- 18 Q. So the study that just came out in

 19 December says the best test is the Utah

 20 Zone of Caparison Test, of all of the

 21 polygraph tests?
- 22 A. The most accurate.
- 23 Q. And that research shows the accuracy 24 research of that test is in the mid --
- 25 A. The accuracy rate of all published studies

- that Don relied on was 91 percent.
- 2 Q. Okay. And is the Utah Zone Test 91
- 3 percent?
- 4 A. Yes.
- 5 Q. Okay. Let's talk about Mr. Sharma's test
- 6 that you actually did.
- 7 A. Uh-huh.
- 8 O. Did you give him the Utah Zone Test?
- 9 A. Yes, I did.
- 10 Q. What information did you have before you
- 11 did the -- gave the test?
- 12 A. Well, aside from what I believed from
- 13 speaking with you on the phone, I had
- 14 several police reports.
- I believe -- I had a report. I
- believe it was a preliminary hearing.
- 17 Q. Did I send you a copy of the preliminary
- 18 hearing?
- 19 A. I think you did.
- 20 Q. Did you listen to it?
- 21 A. The one on the CD, yes, I did.
- 22 Q. Okay. Did you use that to base the
- 23 questions, and can you talk about the way
- you went about conducting the test with
- 25 Mr. Sharma?

Sure. I read through all of that material 1 Α. early one morning, and then Mr. Migdal was kind enough to send me the actual charge, 3 and based on all of that I determined that 4 the way the single issue in this test that was the most salient was whether Miss 6 Sacia was awake or not awake before they 7 engaged in whatever sexual activity they 8 had. 9 When you say "charge," you mean the actual 10 0. crime he's alleged to have committed? 11 That's correct. 12 Α. Go ahead. 13 Q. So that was the basis of me selecting that 14 A. as the relevant issue, the one that we 15 would test on. I don't write questions 16 before I get to the office. In a 17 situation like this, I have all that 18 information and I sort of know what I'm 19 doing, but I do want to spend sufficient 20 time during the pre-test interview to 21 determine if there's something I've 22 missed. 23 And so Mr. Sharma's questions were 24

all developed during that pre-test

- intérview.
- 2 Q. Let me -- before I forget, can you look at
- 3 what's been marked as Defendant's Exhibit
- 4 C?
- 5 A. Okay.
- 6 O. Can you identify that and tell the Court
- 7 what that is?
- 8 A. Well, the first one, two, three -- the
- g first four pages are my report about the
- 10 results of the polygraph test. And then
- 11 there is one page of my CV, the first page
- of my CV, and a motion to amend polygraph
- 13 examinations, and a certificate of
- 14 service.
- 15 Q. Okay. Apart from those last two pages
- 16 which I accidentally stapled to it --
- 17 A. That's my report, yes.
- 18 Q. Okay. Is that an accurate copy of the
- 19 report, the original that you generated
- 20 from the test of Sahil Sharma on --
- 21 A. March 11th.
- 22 O. -- March 11, 2007?
- 23 A. Yes, it is.
- 24 Q. Can you go ahead and continue how you went
- 25 about --

Migdal? Has that heretofore been submitted to the Court? MR. MIGDAL: It should have been attached to my motion to amend. THE COURT: Motion to amend. wonder if I have that. Here it is. MR. MIGDAL: It should be attached? Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Q. Continue on with the way you went and and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or			
3 submitted to the Court? 4 MR. MIGDAL: It should have be attached to my motion to amend. 5 attached to my motion to amend. 6 THE COURT: Motion to amend. 7 wonder if I have that. Here it is. 8 MR. MIGDAL: It should be attached? 9 Judge. 10 THE COURT: Okay. 11 MR. MIGDAL: Is it attached? 12 THE COURT: Yes. 13 BY MR. MIGDAL: 14 Q. Go ahead, Dr. Roven. 15 A. What was the question? 16 Q. Continue on with the way you went and and conducted Mr. Sahil's polygraph examination. 19 A. It was essentially the same as the or	1		THE COURT: Could I interrupt, Mr.
MR. MIGDAL: It should have be attached to my motion to amend. THE COURT: Motion to amend. wonder if I have that. Here it is. MR. MIGDAL: It should be attached? Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Q. Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	2		Migdal? Has that heretofore been
attached to my motion to amend. THE COURT: Motion to amend. wonder if I have that. Here it is. MR. MIGDAL: It should be atta Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	3		submitted to the Court?
THE COURT: Motion to amend. wonder if I have that. Here it is. MR. MIGDAL: It should be atta Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. Mhat was the question? Q. Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	4		MR. MIGDAL: It should have been
wonder if I have that. Here it is. MR. MIGDAL: It should be atta Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	5		attached to my motion to amend.
MR. MIGDAL: It should be attached? Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Q. Continue on with the way you went ahead and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	6		THE COURT: Motion to amend. I
Judge. THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	7		wonder if I have that. Here it is.
THE COURT: Okay. MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went aheand conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	8		MR. MIGDAL: It should be attached,
MR. MIGDAL: Is it attached? THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	9		Judge.
THE COURT: Yes. BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. A. It was essentially the same as the or	10		THE COURT: Okay.
BY MR. MIGDAL: Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahea and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	11		MR. MIGDAL: Is it attached?
Q. Go ahead, Dr. Roven. A. What was the question? Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. A. It was essentially the same as the or	12		THE COURT: Yes.
15 A. What was the question? 16 Q. Continue on with the way you went ahe 17 and conducted Mr. Sahil's polygraph 18 examination. 19 A. It was essentially the same as the or	13	BY MR.	MIGDAL:
O. Continue on with the way you went ahe and conducted Mr. Sahil's polygraph examination. It was essentially the same as the or	14	Q.	Go ahead, Dr. Roven.
and conducted Mr. Sahil's polygraph examination. 19 A. It was essentially the same as the or	15	A.	What was the question?
examination. 19 A. It was essentially the same as the or	16	Q.	Continue on with the way you went ahead
19 A. It was essentially the same as the or	17		and conducted Mr. Sahil's polygraph
	18		examination.
two examiners. He was kind enough to	19	A.	It was essentially the same as the other
	20		two examiners. He was kind enough to fly
out to Los Angeles to my office in	21		out to Los Angeles to my office in
22 Brentwood.	22		Brentwood.
I- When he same in we sport rou	23		When he came in, we spent roughly
when he came in, we spent rou	24		an hour, could have been a little more, or

what we call a pre-test interview, where I

get to learn a little about the person I'm about to be testing.

We discussed the charges and the situation in real detail, and on the basis of that, I developed his questions, or the questions that were to be on his test, on Mr. Sharma's test.

During that period of time a couple of things happened. I explained to Mr. Sharma much of what I explained in this room a while ago about how a polygraph works, why it works, what are the physiological and psychological underpinnings of this technique, stressing to him, as I stress to everyone I ever test, that the responses are involuntary, the physiological responses that we're looking at, and that there's no point in trying to control them because we do know from a great deal of research that it can't be done effectively.

Once I developed the questions I reviewed each question with Mr. Sharma word for word and asked him what his response would be when we actually ran the

1		test, and after that was completed, after
2		the question review was completed and we
3		were well into the second hour of our
4		session, I attached the components of the
5		polygraph to Mr. Sharma, and we did what's
6		called an acquaintance test or a Stim
7		test, in which I asked him to lie about
8		one of a series of numbers I was asking
9		him, and that's primarily to see if he's
10		physiologically responsive at a level
11		that's adequate for evaluating the results
12		of the test and he was. And
13	Q.	That's what the other two polygraphers
14		were talking about?
15	A.	Yes, they each did one. It's standard
16		practice. We all do it and it should be
17		done.
18		Once I found out that he was
19		sufficiently responsive physiologically I
20		went ahead with the test.
21		The Utah methodology is that we
22		one time through the questions, now, there
23		was an 11-question sequence, and we refer
24		to it in the polygraph world as being a
25		chart, one time through the question

sequence, I ran three charts on Mr. Sharma 1 and, frankly, had a conclusion then, but 2 knowing that he had come so far and that 3 he wouldn't be back, I ran two subsequent 4 charts, a fourth and a fifth just to be 5 sure that if I missed something, or 6 erroneously scored something in the first 7 three, I had two more to rely on. 8 Our typical practice in the Utah 9 method is we run three charts. If we can 10 not reach a decision of truthfulness or 11 deception, we run two more for a total of 12 five. 13 I had reached a conclusion after 14 three charts, but thought it was just wise 15 to run two more just for the sake of 16 completeness and thoroughness. 17 While he was there, I did two 18 evaluations of the polygraph charts, found 19 Mr. Sharma to be truthful to the relevant 20 questions, and told him that. 21 I then reviewed all of my own work 22 the next morning at home and found the 23 same -- and reached the same conclusion. 24

What questions did you ask him? Let me

25

Q.

1		strike that.
2		They were relevant questions which
3		had to do with whether he or regarding
4		this alleged incident and then comparison
5		questions. Go ahead.
6	A.	Right. There are actually three classes
7		of questions. There are three relevant
8		questions in this test format about the
9		crime for which he was accused. There are
10		three comparison questions.
11		There are four neutral questions
12		that I'll get to, and there's one what we
13		call a sacrifice relevant, which is no
14		more than a buffer, an initial buffer of
15		responding. We don't attach any
16		significance to it and it's not ever a
17		part of our final evaluation.
18		The relevant questions that I asked
19		Mr. Sharma on the test were these: "Did
20		Michelle Sacia talk to you in bed before
21		your sexual activity with her?"
22		The second was: "Was Michelle Sacia
23		awake and talking with you before your
24		sexual encounter?"
25		And the third: "Was Michelle Sacia

```
unconscious or sleeping when you began
```

- 2 your sexual activity?"
- 3 Q. Let me ask you about the first question,
- because in the prosecutor's response, you
- 5 are aware Mr. Sharma and Miss Sacia had
- 6 talked in the bar hours earlier?
- 7 A. Uh-huh.
- 8 Q. Is there any problem with the way you
- 9 asked that question knowing that hours
- 10 earlier that evening that they had had
- 11 conversations?
- 12 A. I don't think so. I -- I was quite clear.
- 13 I'm fairly thorough in my pre-test
- 14 interviews. That's the most important
- 15 part of this process.
- And in that thoroughness, I was
- 17 convinced, and I am now after reviewing
- the tape, myself, that Mr. Sharma knew, at
- 19 least for that question, that I was
- 20 talking about the -- what transpired after
- 21 2 am or whenever it was that he returned
- 22 to his hotel room.
- 23 Q. Is that why you said, "Did Michelle Sacia
- 24 talk to you in bed before"?
- 25 A. Exactly.

```
1 Q. That puts the place --
```

- 2 A. Yes, exactly.
- 3 Q. All right. Continue.
- A. Do you want to know what the other
- 5 questions were?
- 6 THE COURT: I have them here in the
- 7 brief, but for the purposes of completion
- 8 of the record --
- 9 THE WITNESS: Okay. I have them
- 10 here in my briefcase if you'll just give
- me a second here.
- 12 (Pause in the proceedings.)
- 13 THE WITNESS: Of course they'd be
- 14 down near the bottom.
- 15 BY MR. MIGDAL:
- 16 Q. Let me ask you, the three charts you did
- on Mr. Sharma while you're looking for
- this, were they conducted in a way that
- 19 would yield an accurate result of his
- 20 polygraph examination?
- 21 A. They were conducted in the standard Utah
- 22 Zone of Comparison format using all of the
- 23 procedures that were used in the research
- 24 that resulted in the accuracy rates that I
- 25 mentioned earlier.

- 1 Q. Let me ask you, and I'm just reading from,
- frankly, the statute, is the theory upon
- which the procedure, test, or experiment
- is based objectively, verifiably, or is it
- 5 validly derived from the accepted
- 6 knowledge, facts, or principles?
- 7 A. I would say so.
- 8 Q. The design of the procedure, test, or
- 9 experiment, does it reliably implement the
- 10 theory of psychopsychology in relation to
- 11 telling the truth?
- 12 A. Indeed it does.
- 13 Q. While you're looking for the comparison
- 14 questions --
- 15 A. I'm sorry. I know they're in here.
- 16 Q. That's okay. You've heard talk about a
- 17 stipulation which is an agreement among
- 18 prosecutor and defense lawyer that the
- 19 results will be admitted at trial?
- 20 A. Yes.
- 21 O. Talk about any scientific effect that that
- 22 agreement would make upon the science of
- 23 polygraphy.
- 24 A. In my opinion, there is none at all. As a
- 25 matter of fact, there is some scientific

1 research that leads to the exact opposite 2 conclusion. I think, from my point of view, and 3 I think this is what we're getting at, 4 we're talking about something that's 5 called the friendly polygrapher 6 7 hypothesis. 8 The friendly polygrapher hypothesis 9 is as follows: If someone is going to take a polygraph examination from someone 10 11 who was retained by his attorney, it's 12 understood that the client-attorney 13 confidentiality extends to the polygraph 14 examiner so that the person knows if he 15 goes and fails his test, no one will ever 16 know except for he and the polygraph 17 examiner and maybe his attorney. Therefore, the hypothesis goes, he 18 can go into that test so relaxed and 19 20 care-free that he can pass any polygraph test because there's not the degree of 21 stress or threat necessary to producing a 22 23 valid outcome.

This hypothesis was generated by a man named Martin Orne in 1975. Orne did

24

not then, nor has not since, produced any evidence whatsoever of any kind that there's any truth to this. It's nothing but mere speculation. It's certainly unscientific speculation, but to answer this, a couple of researchers, one of whom gave a recent address to the American Psychological Society, went through his own files and found that it didn't make a difference, he had done stipulated tests where everybody knew the results would be made public, and he gave plenty of tests that were not stipulated in which no one would know if the person had failed it or not, and found that the results of that analysis were opposite what the friendly polygrapher hypothesis would have predicted. The friendly hypothesis -- the friendly polygrapher hypothesis predicts

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

The friendly hypothesis -- the friendly polygrapher hypothesis predicts if you go to a private polygraph examiner who's retained by your attorney, what will happen is that more people will pass the test. You have a higher likelihood of passing because it's going to be such a

1		breeze and there's nothing really at
2		stake. There's no piper to pay if you
3		flunk.
4		The fact is that he had a higher
5		rate of failing tests, a substantially
6		higher rate of failing tests in his
7		non-stipulated tests than he did in his
8		stipulated tests.
9		Totally counterintuitive if one is
10		to believe that there is something, you
11		know, intuitive about the friendly
12		polygrapher hypothesis. Other people have
13		published similar data.
14		Frankly, most polygraphers who keep
15		records and are asked this question will
16		say that what we call private tests,
17		non-stipulated tests, still the majority
18		of the tests you give end in deceptive
19		outcomes, failing outcomes, and it
20		shouldn't happen that way if the friendly
21		polygrapher hypothesis was correct, we
22		would all pass, almost everybody.
23	Q.	Now, you know he took Bill Evans' two
24		tests, Steve Stechschulte's test, you've
25		seen both of those, and your own test?

1	A.	Yes.
2	Q.	Do you have an opinion regarding the
3		probability of somebody passing all of
4		those tests?
5	A.	Yes, I do.
6	Q.	Go ahead.
7	Α.	When you generate these probabilities, you
8		have and as when you're generating all
9		probabilities, probability is based on the
10		assumption that we really don't know for
11		sure, so we have to make certain
12		assumptions.
13		For example, if I gave anyone in
14		this courtroom who's here right now a
15		polygraph and with no knowledge they'd do
16		a polygraph test on anybody in this
17		courtroom on any issue and come up with a
18		result, I would say the likelihood of them
19		being correct is 50 percent, a coin toss.
20		It would have nothing to do with
21		their ability as a polygraph examiner,
22		obviously, or their acuity in evaluating
23		polygraph charts, or anything.
24		They probably would be looking at

all of the wrong things and guessing. And

we tend to guess half right, half wrong on things we don't know anything about, or at least scientifically. That's the hypothesis, 50 percent.

When we look at a trained polygraph examiner, the odds of him being right go up a little bit because he's working with an established technology and set of procedures, and as he gets more and more experienced and proficient, the odds go up even more.

So that if we hypothesize, or if we speculate that the odds of my being wrong, or the probability of me being wrong in my test were ten percent, one out of ten, and I think I'm better than that, but let's say it, and that the odds of Mr.

Stechschulte's are ten percent him being wrong, and then the odds of Mr. Evans being wrong are ten percent, what we do statistically is multiply ten percent, by ten percent, by ten percent, and if we, going on those assumptions, the probability that all three of us made the same exact mistake using different

```
questions, but questions about the same
1
            exact issue, the probability of us all
2
            being wrong is one out of 1,000.
3
            Do you have any background in statistics?
4
     0.
            Yes. I have taught statistics for a
5
     A.
            number of psychology departments which are
6
            statistics for the social scientists.
7
                    I taught business and economic
8
            statistics in the MBA program at --
9
            When -- I'm sorry.
10
     0.
                    When you say one in 1,000 it's not
11
            just some saying, I mean, that's an actual
12
13
            I think that's a reasonable assumption,
14
     A.
            veah.
15
            Regarding Mr. Sharma's Utah Zone of
16
     0.
            Caparison Test that he did with you, based
17
             on your education, training, and
18
            experience, and to a reasonable degree of
19
             scientific certainty, do you have an
20
             opinion on whether there is significant
21
             physiological changes indicative of
22
             truthfulness which occurred on Sahil
23
             Sharma's test?
24
             I do have an opinion. I believe Mr.
25
      Α.
```

```
1 Sharma was truthful when he answered the
```

- 2 relevant questions.
- MR. MIGDAL: Thank you, Judge. I
- don't have any other questions.
- 5 THE COURT: Let's just take five
- 6 minutes and break here and stretch and
- 7 then come back to it.
- 8 (Recess had.)
- 9 MR. MIGDAL: Judge, may I ask one
- 10 more question?
- 11 THE COURT: Yes.
- 12 BY MR. MIGDAL:
- 13 Q. Dr. Rovner, I've marked Defendant's
- 14 Exhibit D. Can you identify that?
- 15 A. Yes, that's the published report of the
- 16 research that I described that I had done
- in the late '70s.
- 18 Q. Is that a complete and accurate copy of
- 19 the report that was generated?
- 20 A. Yes, it is.
- MR. MIGDAL: Thank you.
- 22 THE COURT: All right. Let's turn
- 23 to cross-examination. Miss Kanellis.
- MS. KANELLIS: Thank you, Your
- 25 Honor.

1		CROSS-EXAMINATION
2	BY MS.	KANELLIS:
3	Q.	You had an opportunity to hear Bill Evans,
4		and I know I'm going to say his name
5		wrong, Stechschulte from BCI testify,
6		correct?
7	A.	I did.
8	Q.	What and you heard them talk at length
9		about the polygraphs they did on Sahil
10		Sharma?
11	Α.	Yes.
12	Q.	How is the polygraph that you did on Sahi:
13		Sharma, how is that different from what
14		those two did, if it is at all?
15	Α.	It's different in that we used different
16		testing formats. And by that I mean,
17		although we used control or comparison
18		question tests, we ordered the questions
19		differently.
20	Q.	Could you explain what you mean by that,
21		that the questions were
22	A.	Well, my control and relevant questions,
23		or my comparison and relevant questions

were ordered according to the procedure

under Utah Zone of Caparison Test. Theirs

24

- were in a different order.
- 2 Q. But you state that they, too, in your
- opinion, used the Utah Zone of Comparison
- 4 Test?
- 5 A. No, I didn't.
- 6 Q. No? Okay. What did they use? If you
- 7 know.
- 8 A. They used something called the Modified
- 9 General Question Test.
- 10 Q. And they both used the same?
- 11 A. They used different formats or different
- 12 variations of the same test, yes.
- 13 Q. I'm sorry, what?
- 14 A. The Modified General Question Test. MGQT
- is how we speak of it.
- 16 Q. And how -- and does that -- is that
- 17 different from the Utah Zone of
- Comparison, just in the order of the
- 19 questions, or is there something else
- 20 that's different about those two different
- 21 tests?
- 22 A. Primarily, it's different in that the
- 23 order of the questions is different and
- they don't look at just a single issue.
- 25 They will look at different -- or

```
different issues or different aspects of
```

- 2 the same issue.
- 3 Q. Do you, in your practice, ever use the
- 4 . Modified General Question Test?
- 5 A. No.
- 6 Q. Why not?
- 7 A. It's a choice of mine. I feel -- my
- 8 reliance in what I do is based almost
- 9 entirely on techniques that have strong
- 10 scientific foundation.
- 11 The Utah Zone of Caparison Test, as
- I said, has now been shown to be what I
- 13 always assumed it was, the most accurate
- of all of the testing techniques, and
- 15 that's why I use it.
- 16 O. Is it your opinion that the Modified
- 17 General Ouestion Test is less accurate
- 18 than the Utah Zone of Comparison?
- 19 A. My -- well, frankly, there hasn't been
- 20 enough research done on the MGQT to really
- 21 satisfy me or for me to give a really good
- 22 answer to that.
- However, I will say that it's a
- 24 testing technique that's widely used
- 25 throughout the polygraph world.

- 1 Q. Now, you do not have any -- I'm assuming,
- any background in law enforcement; would
- 3 that be fair to say?
- 4 A. That's correct.
- 5 Q. Other than that, how -- did you notice any
- 6 difference in the credentials that you
- 7 have and the other two polygraph
- 8 examiners?
- 9 A. Yes, I noticed some differences.
- 10 Q. What were those?
- 11 A. Well, I have some advanced degrees and I
- 12 didn't hear them state that they have. I
- did some university teaching, and I don't
- 14 know that either of them has.
- 15 Q. And you are also certified?
- 16 A. Yes.
- 17 O. And who are you certified by?
- 18 A. By the California Association of Polygraph
- 19 Examiners, CAPE, and I also have a
- 20 certificate of advanced training from the
- 21 American Polygraph Association.
- 22 Q. Now, is there -- is California primarily
- where you practice?
- 24 A. Yes.
- 25 Q. Okay. Have you ever testified in Ohio

1 before?

- 2 A. No.
- 3 Q. Is there such a thing in California, do
- 4 you have to be licensed to perform
- 5 polygraph examinations?
- 6 A. I'm sorry to interrupt.
- 7 Q. That's okay.
- 8 A. We used to have a license. Polygraph
- 9 examiners were licensed until the late
- '80s or 1990, actually, when the Employee
- 11 Polygraph Protection Act was passed in
- 12 1988 prohibiting employers from giving
- 13 pre-employment polygraph tests to job
- 14 applicants, which, by the way, is a
- 15 totally different kind of test than what
- 16 we're talking about here, probably a
- 17 majority of the examiners in California
- found some other way to make a living.
- 19 There were so few licensing fees
- 20 being paid that the office could not
- 21 sustain itself based on the fees that they
- 22 collected, and the governor made a
- 23 decision to let the licensing law go. And
- so, no, we don't have a license now.
- 25 Q. You're certified by the American Polygraph

- 1 Association?
- 2 A. Well, I have their certificate of advanced
- 3 training.
- 4 Q. In order to perform or administer
- 5 polygraph examinations, I guess I have to
- 6 be specific, are you aware in Ohio, do you
- 7 have to have any type of certification?
- 8 A. I don't know anything about Ohio law.
- 9 Q. What about California?
- 10 A. California, unfortunately, there are
- 11 absolutely no requirements for legally
- 12 giving polygraph tests. There are those
- of us who are working hard to see that
- change, but the reality is, anybody with a
- 15 polygraph in California can call
- 16 themselves an examiner.
- 17 O. And you had an opportunity to administer a
- 18 polygraph to Sahil Sharma?
- 19 A. Yes.
- 20 Q. Were -- prior to your administering the
- 21 polygraph, were you able to determine how
- 22 many polygraphs he had taken prior?
- 23 A. I was aware of those, yes.
- 24 Q. And how did you become aware of that?
- 25 A. Mr. Migdal told me.

```
1 Q. Is it something that you asked the
```

- defendant, yourself, or did you just base
- 3 -- did you rely on what his attorney had
- 4 told you?
- 5 A. You know, I don't recall.
- 6 Q. Okay.
- 7 A. I wouldn't think that Mr. Migdal would
- 8 tell me he had three tests if he didn't.
- 9 Q. I'm not suggesting he would, I was just
- 10 asking if you knew.
- 11 So you're aware of three. Did that
- 12 cause you any type of concern, or did that
- give you any pause for thought, the fact
- 14 that Sahil Sharma had taken three
- polygraphs prior to coming to you?
- 16 A. Not particularly.
- 17 O. Is it, for lack of a better term, is it
- 18 common for someone to come to you to take
- a polygraph exam when they have taken
- 20 prior polygraph exams for the same
- 21 scenario or same issue or same --
- 22 A. Although it's not unheard of, it's not
- 23 common.
- 24 Q. Not common?
- 25 A. But I'll tell you, when Mr. Migdal first

```
called me I was the one who suggested the
```

- test. It wasn't him. He didn't ask me to
- 3 test.
- To be complete and honest, Mr.
- 5 Migdal wanted me to come and testify as an
- 6 expert witness about all of the other
- 7 topics that we have discussed so far
- 8 today. And it was I who suggested that I
- 9 also test Mr. Sharma.
- 10 Q. And there was one test that you did?
- 11 A. I'm sorry, one test?
- 12 O. One test.
- 13 A. Yes.
- 14 Q. And I think you had indicated that you --
- 15 before you formed your questions, you had
- 16 an opportunity to review the police
- 17 reports, you had an opportunity to listen
- to a transcript of the preliminary
- 19 hearing?
- 20 A. That's correct.
- 21 O. And you also had a conversation with
- 22 Attorney Migdal where he kind of gave you
- the run-down of the facts?
- 24 A. I did.
- 25 Q. Anything else that you know of or can

- 1 recall?
- 2 A. I can't recall any other documents.
- Q. Okay. And did you have a conversation
- 4 with Sahil Sharma prior to administering
- 5 the test about the facts of the case?
- 6 A. Prior to his coming to my office?
- 7 Q. Well, no, prior to actually the test
- 8 questions being read.
- 9 A. We had an extensive pre-test interview,
- 10 yes.
- 11 O. And in that interview, he indicated to you
- 12 that it was, in fact, the victim or
- 13 Michelle Sacia, who had initiated the
- 14 sexual activity?
- 15 A. Correct.
- 16 Q. And he indicated to you that she was awake
- and that she had spoken to him before they
- 18 engaged in sexual activity?
- 19 A. Yes.
- 20 Q. Did he indicate to you what it was she had
- 21 said to him?
- 22 A. My recollection is that he told me that
- they had earlier in the evening, not in
- the room, but at some other location,
- 25 discussed a clothing design business or

```
something like that, that Mr. Sharma was
1
            contemplating, and that she had some
2
            experience or interest in designing
3
            clothes, and so that some of their talk up
4
            in the bedroom, or in the hotel room, was
5
            a continuation of that discussion.
6
            Now, you indicated there's a point value
7
     0.
            system that you used in your test; is that
8
            accurate?
9
            That's correct.
10
     Α.
            Could you explain that?
11
     0.
            Sure. By the way, Your Honor, if you'd
12
     Α.
             like -- I found the list of questions I
13
14
            asked if you --
            I'm going to get to that, actually.
15
     0.
            Are you?
16
     A.
17
     0.
             Yes.
             Okav. We looked at -- we compare the size
18
     A.
             and the nature and the strength of the
19
             physiological responses people have to
20
             relevant questions and comparison
21
             questions.
22
                    At any given point on the test, as
23
             you can see each of the three relevant
24
```

questions that are included on every chart

1		is preceded by a comparison question. So
2		that pair of questions is evaluated
3		channel by channel, the two respiration
4		channels, the GSR, and the cardiovascular
5		channel.
6		The response on each of those
7		channels to the comparison question is
8		compared to the response on the same
9		channel of the relevant question, and so
10		that is repeated four times for each pair.
11		If the response to the relevant
12		question is bigger, or more dramatic, or
13		stronger than the response to its paired
14		comparison question, we award that
15		comparison a negative one, two, or three
16		points based on certain scoring criteria.
17		If the physiological response is
18		stronger to the comparison question than
19		it is to the relevant, we assign positive
20		points to that comparison, one, two, or
21		three.
22	Q.	And I believe you had indicated that Sahil

Sharma had a positive six? 23

24 Correct. A.

And positive five to negative five would 25 Q.

- be inconclusive?
- 2 A. That's right.
- 3 Q. So what would -- so positive six, would it
- 4 be fair to say that starts where you pass
- 5 -- where you're going to come and say
- 6 you're truthful, you passed the polygraph?
- 7 A. That's the criteria for truthfulness, yes.
- 8 Q. So would it be -- am I understanding
- 9 correctly a negative four --
- 10 A. Negative six.
- 11 Q. A negative six, okay, and down would be
- 12 where you're saying you're being
- 13 deceptive?
- 14 A. Correct.
- 15 Q. You fail?
- 16 A. Yes.
- 17 Q. Okay. Let's say just hypothetically I, or
- anyone, for that matter, you administer a
- 19 polygraph test and I -- my score is a
- 20 positive 13?
- 21 A. Uh-huh.
- 22 Q. What would that mean to you? How would
- you interpret that?
- 24 A. A positive 13? That you were truthful to
- 25 the relative questions.

```
Am I -- because that number's higher does
1
     0.
            that mean I'm being more truthful than
2
            someone who had a positive six?
3
            No, you can't be more truthful. You can
4
     Α.
            only be truthful.
5
            And have you ever had somebody who had,
6
     0.
            say, a positive 13 --
7
            Yes.
8
     A.
            -- in your experience?
9
     0.
10
     Α.
            Yes.
            How would you compare -- why would that
11
     0.
            person have a positive 13 and Sahil Sharma
12
            have a positive six, what's the
13
14
            discrepancy there?
            That's a good question.
15
     A.
16
     0.
            Thank you.
            As human beings we are variable in the
17
     A.
             extent to our response to things, some
18
```

people are less nervous, some people are 19

more nervous. Some people are more 20

talkative, some people are less. 21

And the extent or the strength of 22

our physiological responses to these 23

questions is just one example of a 24

variability in the human race. 25

1		That number six, plus or minus, is
2		not an arbitrary number. After looking at
3		the results of hundreds or thousands of
4		subjects in laboratory research, we looked
5		at we had different, in an experimental
6		way, or post-hoc way, we looked at cut
7		offs of plus one to minus one, plus two to
8		minus two, plus three to minus three and
9		so forth, and we found that plus six is
10		the optimal level.
11		If you use a plus seven, or plus
12		eight, or plus nine, the accuracy rate
13		doesn't increase. The only thing that
14		increases is the number of inconclusive
15		outcomes.
16		So the number six is not arbitrary.
17		There's an experimental basis to it so
18		that a person who scores a plus 13 is no
19		more likely to be truthful than somebody
20		who scores a plus six.
21	Q.	It's just they are having a stronger
22		physiological reaction?
23	A.	No, it may be that their personal
24		characteristics of response are different
25		from a person with a lower a positive

```
score.
1
                   It's almost like shoe size. Some
2
            people have bigger feet. It doesn't mean
3
            that they walk better or can run faster.
4
            They just have bigger feet.
5
            We spoke about -- or you spoke about the
6
     0.
            test questions, the three test questions.
7
            And there were some other questions that
8
            you had asked.
9
                    Could you go through what those
10
            questions were, and what the responses
11
            were, and what your conclusions were?
12
            Sure. In any particular order?
13
     Α.
            No.
14
     0.
            Okay. These questions were set -- I'll
15
     Α.
            read them in categories, but not -- unless
16
            you'd like the actual order they were
17
18
            asked in.
            That's up to the Judge. It might be
19
     0.
             easier for the record. I don't know. It
20
            might be easier to do it in the order they
21
             were asked.
22
            Okay. The first question was what we call
23
     Α.
             a neutral question. It's not considered
24
```

in the evaluation of the test. And that

1	was: "Is today Friday?"
2	Mr. Sharma's answer was yes,
3	because it was Friday.
4	The next question, number two, is
5	what we call a sacrifice relevant. It
6	approaches the relevant issue itself and
7	is there to get any unrelated tension away
8	from the person. It's not included in the
9	evaluation process.
10	And that question is this, similar
11	to ones you've heard before today:
12	"Regarding Michelle Sacia's accusations,
13	do you intend to answer truthfully each
14	question about that?"
15	The third question was another
16	neutral question: "Are we in California?"
17	Our viewpoint in Utah was that
18	these three questions were not really
19	important to us except in that they
20	provided a buffer from initial responding
21	when the subject knows, boy, the test is
22	started now, the chips are down, this is
23	important, people will always respond to
24	the first question no matter what you ask
25	thom and that's just what we call an

```
orienting response.
```

- You want to get that out of the way
 so it doesn't obfuscate the real responses
 to the important questions that we need to
- 5 have.
- 6 The fourth question was a
- 7 comparison question that was: "Before
- 8 2006, did you ever break a law, rule, or
- 9 regulation and get away with it?"
- 10 I'll go through all the questions
- if you'd like and then I'd like to say a
- 12 few words about comparison questions,
- 13 okay?
- 14 Then question five was --
- 15 Q. I'm sorry to interrupt. What was his
- 16 response?
- 17 A. I'm sorry.
- 18 Q. That's okay.
- 19 A. No.
- 20 Q. And then what was your -- I mean, did you
- 21 -- did it appear he was being deceptive,
- 22 truthful? Did you make a conclusion on
- 23 that question?
- 24 A. What we do with comparison questions, and
- 25 maybe I should take this opportunity to

tell you why we use comparison questions 1 and what they do. 2 Actually, I think the record is full of 3 0. that. I understand. 4 Well, I can't really answer your question 5 Α. without giving that explanation, I'm 6 7 sorry. Go ahead and give that explanation and you 0. 8 can answer my question. 9 Okay. Years, and years, and years ago 10 A. when polygraph examiners gave tests they 11 used the technique called 12 relevant-irrelevant. 13 In a case like this, they would use 14 questions like my questions to Mr. Sharma 15

16

17

18

19

20

21

22

23

24

25

In a case like this, they would use questions like my questions to Mr. Sharma about Miss Sacia's accusations. These have an emotional psychological loading; particularly, to the innocent person because he didn't do it, he's shocked that he's been -- I'm not talking about him specifically, but any innocent person who's wrongly accused of something is going to have an emotional reaction to that, not only to what others think about him for having been accused, but to

1	possible consequences that could arise
2	from being convicted of a crime that he
3	didn't commit.
4	And that relevant-irrelevant
5	technique they would have relevant
6	questions like these and a lot of
7	irrelevant questions, are you sitting
8	down, is today Tuesday, are we in South
9	Dakota, or whatever.
10	Well, what they found is that
11	almost everybody failed these
12	relevant-irrelevant tests because the big
13	reactions to everybody's test were always
14	to the relevant questions.
15	And after some years of that,
16	somebody scratched his head, actually a
17	fellow named Reid in Chicago, John Reid,
18	who said, wait a minute, we have to give
19	innocent people something to focus their
20	emotion on, their stress.
21	And he came up with the concept of
22	a control question, which we now call a
23	comparison question, but it's exactly the
24	same thing.
25	His feeling was, and it's been

that if the person is asked a comparison question that we characterize as a possible lie comparison question, that he is almost certain to be lying about, and a question in the same general category as the relevant questions, that the innocent person should respond more strongly to the comparison questions if the examiner during the pre-test interview has established what we refer to as a psychological set.

The technique is very simple. When we give tests like this, the subject is told after the relevant questions are all reviewed, I'll tell him, "I have some other questions that are going to be on this test. I call them character questions, and the reason these are in there, these questions are on your test, is to help me when I do my evaluation later, to determine if you're the kind of a person who would have committed this crime."

So, you know, if you've done a lot

of the things that I'm going to be asking 1 you about, clearly, you know, it would 2 sort of influence my decision at the end 3 of the day and I can only come to one 4 conclusion then. And I'll discuss this at 5 length with him. And then I'll start 6 reviewing the comparison questions. 7 The first one I asked Mr. Sharma 8 for example was: "Before 2006 did you 9 ever break a law, rule, or regulation and 10 get away with it?" 11 I said to him something like, 12 "Well, you know, you've been accused of 13 breaking a law, clearly. And I'm asking 14 you this question to determine if you've 15

16

17

18

19

20

21

22

23

24

25

"Well, you know, you've been accused of breaking a law, clearly. And I'm asking you this question to determine if you've gone through life breaking a lot of laws and rules and regulations, because if you are, this -- you would certainly be the kind of guy who wouldn't have a lot of problems breaking laws and rules."

This is done purposely to have the person not make a lot of admissions so that he will probably be lying when he says no to this question.

Later on in the test or between

1		charts he may make an admission, or he may
2		make one right then.
3		And in Mr. Sharma's case he did.
4		And so I modified that question to read:
5		"Other than what you told me before 2006,
6		did you ever break a law, rule, or
7		regulation and get away with it?"
8		We have found once again, I keep
9		repeating myself by extensive repeated
10		research that innocent examinees will
11		respond physiologically far more strongly
12		to those comparison questions than they do
13		to the relevant questions, and the
14		opposite is true for guilty people.
15	Q.	Okay.
16	Α.	Would you like me to keep going?
17	Q.	Well, I just want to go back to question
18		number 4, the question number 4.
19		He had answered so if I'm
20		understanding correctly, you said, "Before
21		2006, have you ever committed a crime or
22		broken a law, or broken a rule and gotten
23		away with it," and he said, "No," and with
24		you that was indicated as being deceptive,
25		and you asked him to another question,

```
and he told you something, and then you
```

- said, "Well, except for what you just told
- 3 me"?
- 4 A. We are -- okay. We are hoping or assuming
- 5 that the person is lying to these
- 6 comparison questions. Indeed we want them
- 7 to be lying.
- 8 Q. I'm not judging whether -- I'm not saying
- 9 he should have been lying or not. What
- 10 I'm trying to get to on the first question
- 11 you asked him about that, when he said no,
- 12 he was being deceptive?
- 13 And I understand that's what you
- 14 want, that that's what he's supposed to be
- 15 --
- 16 A. I don't know if he was being deceptive or
- 17 not.
- 18 Q. You were unable to tell?
- 19 A. That's why it's called a probable lie. We
- 20 don't evaluate those questions
- 21 individually. We don't evaluate any
- 22 question individually.
- 23 Q. But you later found out that there was, in
- 24 fact, something that he told you about
- 25 that had happened prior to 2006?

- 1 A. Yes.
- 2 Q. So you revamped your question?
- 3 A. Correct. And that's standard practice, by
- the way, in any questioning in any format.
- 5 O. Okay. What was the next question after
- 6 that?
- 7 A. Let's see. That was -- number 5, I can't
- 8 remember where we stopped. The first
- 9 relevant.
- 10 O. I believe number 5.
- 11 A. Okay. "Did Michelle Sacia talk to you in
- 12 bed before your sexual activity with her,"
- to which Mr. Sharma answered yes. Keep
- 14 going?
- 15 Q. Are we getting into the --
- 16 THE COURT: Yes.
- 17 BY MS. KANELLIS:
- 18 Q. Are questions one through four the only
- 19 non-polygraph questions, the questions
- 20 that are not in your report that were
- 21 asked or were there more?
- 22 A. I'm going through the entire sequence of
- 23 11 questions. I thought that's what you
- 24 asked.
- 25 Q. We can probably skip the ones that we have

1		already talked about.
2	A.	Oh, okay. We talked about the three
3		relevant questions.
4	Q.	Right.
5	A.	Okay. Question okay. I'll just
6		mention for the record that question five
7		was one of those relevants. Question six
8		was another neutral question: "Is this
9		the month of March?"
10		His answer was yes.
11		Question 7, the modified version
12		was, "Other than what you told me, did you
13		ever do anything sexually that you were
14		ashamed of, or embarrassed about before
15		2006?"
16		Question
17	Q.	And what was the response to that?
18	A.	Sorry; no.
19	Q.	Okay.
20	A.	Question 8 was another one of the relevant
21		questions.
22		Question 9 was a neutral: "Are you
23		sitting down," to which he answered yes.
24		Question 10 was a comparison
25		question. "Other than what you told me

```
prior to last year, did you ever lie to
1
            anyone who loved or trusted you?"
2
                   He answered no.
3
                    And then question 11 was the third
4
            of the three relevant questions.
5
            Now, question 7, is that the same kind of
6
     Q.
            question that question 4 was, where it's a
7
            probable lie?
8
9
     A.
            Yes.
            Okay. What about question 10, same thing?
10
     0.
            Yes, uh-huh.
11
     A.
            You talked a lot about at the beginning
12
     0.
            people's physiological response and how a
13
            polygraph works and all of that.
14
                    But what about someone, if I say
15
             someone's -- and I know this isn't the
16
             medical term -- but a compulsive liar or
17
             habitual liar, do you know what I mean
18
             when I say that, somebody that can just
19
             lie all the time and does it through the
20
             course of a period of years?
21
             I understand what you're talking about, I
22
      A.
23
             think.
             If you're used to doing that, would that
24
      0.
```

have any effect on the polygraph if you're

```
1
            that type of person?
            No. And actually there is pertinent
     Α.
2
            scientific research addressing that.
3
            Shall I tell you about that?
            Yes, please.
5
     0.
            The ultimate pathological liar or
6
     A.
            systematic liar is what we call the
7
            psychopath, or at least a psychopath --
8
            that's one of the behaviors that a
9
            psychopath will exhibit, but -- more
10
            strongly and routinely than anyone else.
11
                    There have been several experiments
12
            published about the rate of accuracy of
13
            polygraph examinations when they're done
14
            with psychopaths, as well as people who
15
            are not as socialized as other people, who
16
            score low on socialization scales, so
17
            forth and so on.
18
                    All of those show that there is
19
            either -- well, that there's no
20
            significant difference between the
21
            accuracy rates of pathological liars or
22
            psychopaths, or low-socialized individuals
23
            than there is with normal people.
24
```

Now, in California are unstipulated

25

0.

- polygraphs admissible in court in a
- 2 criminal trial, to your knowledge?
- 3 A. No.
- 4 Q. And just so that the record's clear, the
- 5 polygraph that you administered to Sahil
- 6 Sharma, that was not a stipulated
- 7 polygraph, correct?
- 8 A. It was my understanding that it was not
- 9 stipulated.
- 10 Q. You indicated in your testimony that you
- 11 believed that the ultimate issue or the
- 12 key issue here was, was Michelle Sacia
- awake or not awake; is that accurate?
- 14 A. Well, I understood that's what the
- 15 criminal charge is.
- 16 Q. Okay.
- 17 A. And that's why I chose those questions.
- 18 O. So do you agree or disagree -- I think
- 19 Bill Evans indicated there was an issue as
- 20 far as something being consensual or
- 21 forced. Do you agree with that?
- 22 A. I'm not quite sure what the question is.
- 23 Q. Well, am I correct in saying you felt the
- 24 -- your questions are geared toward was
- 25 she awake or not awake?

- 1 A. Clearly.
- 2 O. And based on the charges you feel that is
- 3 the important issue here?
- 4 A. Yes.
- 5 Q. Okay. Did you hear Bill Evans testify
- 6 that the issue in his mind was, was this
- 7 consensual sex or did it involve force?
- 8 A. Okay.
- 9 Q. I mean, if you didn't hear him say that --
- 10 A. I heard him testify, yes.
- 11 Q. Do you recall him saying that part?
- 12 A. Not particularly, no. I'm sorry.
- 13 O. Would you agree with that statement?
- 14 A. Only indirectly. I mean, certainly if
- 15 someone is unconscious or sleeping what
- they do is not consensual at the moment.
- But once again, that's a legal
- issue that I'm not qualified to comment
- on, I don't think.
- 20 Q. Was there anything that either Bill Evans
- or the polygraph examiner from BCI said
- 22 that you disagree with?
- 23 A. Nothing I can recall.
- 24 Q. Do you -- in your opinion, would three or
- 25 four -- of the fact that we have four

```
polygraphs here, is that cumulative?
1
            What do you mean?
2
     A.
            Do you feel that would be cumulative?
3
     0.
            mean, as Bill Evans said, he took one, he
4
            passed it, and I think Bill Evans used the
5
            term, I think the rest is just beating a
6
7
            dead horse. Do you feel these are
            cumulative?
8
            Would you define "cumulative" for me,
9
     Α.
10
            please?
            Well, we have one polygraph. He comes in
11
     0.
12
            and says, here's a polygraph, he passed
            this polygraph. What is your
13
            understanding what the purpose or reason
14
            behind having three more?
15
            That wouldn't my decision and I don't
16
     A.
            recall why. I know why he was given the
17
            fourth, it was given at my suggestion and
18
            I explained why I suggested that. I don't
19
            know why more than one examiner ran tests
20
            on him and I -- personally, I wasn't all
21
22
            that concerned.
            Okay. When you administer a polygraph in
23
     0.
            general, is there ever a confidentiality
24
25
            agreement that is executed?
```

- 1 A. Yes.
- 2 Q. Was there one in this -- in Sahil Sharma's
- 3 case?
- 4 A. Of sorts, yes.
- 5 Q. Of sorts. But you're here testifying
- today, and you've turned over some -- can
- 7 you explain that, I guess?
- 8 A. Well, I can't remember the wording in the
- g release form that I ask people to sign,
- 10 but I pledge to them confidentiality
- 11 unless they or their representative in the
- form of an attorney asks me to say
- 13 something about it to someone else.
- 14 Q. So if he had -- if you had given him the
- polygraph exam and he had failed, no one
- 16 would ever know about it because of the
- 17 confidentiality agreement? You would
- 18 certainly never disclose that information?
- 19 A. That's correct.
- 20 Q. Did you review the newspaper articles on
- 21 this case prior to administering the
- 22 polygraph exams?
- 23 A. No.
- MS. KANELLIS: Thank you.
- THE COURT: You're finished here?

1	I was deep in my own thoughts and I have
2	some questions before we go to redirect.
3	You mentioned the pre-test?
4	THE WITNESS: Uh-huh.
5	THE COURT: I think you said it's
6	the most important part of the
7	examination?
8	THE WITNESS: Well, in a sense.
9	And I realized when I said that I might
10	have misspoken, but it's a part of the
11	examination that I do feel is extremely
12	important, because it it allows me to
13	establish the ground rules, and I use that
14	phrase loosely, the ground rules for the
15	examination.
16	It allows me, or any good examiner,
17	to establish a kind of a focus of
18	attention on the person being tested that
19	we refer to in the industry, or in the
20	profession, as a psychological set.
21	It allows me to establish that
22	focus, without which I don't think the
23	results would be meaningful.
24	THE COURT: It's not more important
25	than the actual question and answer part

1	of the polygraph, itself?
2	THE WITNESS: That's correct, yes.
3	I misspoke there. It's not more
4	important, but it is without it, the
5	test is meaningless.
6	THE COURT: The pre-test becomes or
7	is very subjective?
8	THE WITNESS: In what way?
9	THE COURT: In the sense that each
10	tester would approach that differently.
11	THE WITNESS: In a way, but when I
12	watch other professionals at their work,
13	different surgeons approach the same
14	operation differently, too, but tend to
15	get the same results.
16	Different lawyers prepare cases in
17	their own particular idioms, but they, you
18	know, they can be equally effective.
19	As long as the examiner is
20	knowledgeable and aware of the purpose of
21	the pre-test interview and its component
22	parts, his individual style shouldn't have
23	that much of an effect on the validity of
24	the test.
25	THE COURT: That's what I was

1	getting at.
2	THE WITNESS: Yeah.
3	THE COURT: That kind of subject
4	I'm calling it subjective. You didn't
5	really let me get away with that, but
6	doesn't impact the objective results of
7	the polygraph?
8	THE WITNESS: Exactly. It doesn't.
9	THE COURT: Okay. Let me approach
10	another question.
11	Suppose Mr. Migdal had come to you,
12	or anyone for that matter, with different
13	input.
14	It's hard for me to imagine a
15	scenario right now, but it might come in
16	in an employment context or something like
17	that where someone from human resources
18	says, for instance, we think this
19	particular person to be tested is guilty.
20	THE WITNESS: Uh-huh.
21	THE COURT: And suppose you were
22	approached with the scenario that the one
23	to be tested was guilty, instead of
24	innocent
25	THE WITNESS: Uh-huh.

1	THE COURT: do you think that
2	would affect your outcome at all?
3	THE WITNESS: I don't think so at
4	all. When I personally do tests, I work
5	very, very hard to maintain my own
6	impartiality. I'm always paid well in
7	advance of when I give the test. So
8	and I remind the subject of that, too,
9	before we get started, that I've been paid
10	and the outcome of the test is not going
11	to be influenced by me worrying about my
12	paycheck.
13	In a sense, tomorrow's another day.
14	The outcome of this test is not that
15	important to me. Whether the outcome of
16	the test is truthful or deceptive.
17	The only thing that's truly
18	important to me is that I do an impartial
19	and professional job.
20	I can assume when a defense
21	attorney calls me and asks me to test his
22	client that he believes the he either
23	believes that his client is innocent or
24	he's not sure and he wants to know, or
2.5	have more information.

1	So I go into that knowing that he's
2	asked me a question, and it could be
3	construed as being biased in one
4	direction, and I have been contacted by
5	people who say the kind of thing that you
6	said, that we know who probably did it.
7	I work very hard at not allowing
8	that to bias me. And, frankly, I do that
9	by following the same set of procedures in
10	every test.
11	THE COURT: And so you don't think
12	the input provided can skew the outcome?
13	Has there been any scientific testing on
14	that?
15	THE WITNESS: No, not if you're
16	diligent. No, there has not. But if
17	you're diligently following the rules and
18	don't have a personal stake in the
19	outcome, the fellow isn't your cousin or
20	something, then I don't particularly think
21	it matters.
22	THE COURT: You know, I have to
23	confess, there's something mingling around
24	in the back of my mind about a show that I
25	saw on TV some time ago. It was either

1	Dateline or 60 Minutes, or something like
2	that, where there was a scenario where
3	that kind of input was tested in a series
4	of polygraphs that in the end made the
5	whole concept, or the whole testing
6	procedure look bad.
7	Are you aware of that show at all?
8	THE WITNESS: No. I'm sorry.
9	THE COURT: You missed that?
10	THE WITNESS: I don't watch
11	Dateline. I do know that shows that I
12	have seen about polygraph, not dramatic
13	shows, but I think I recall a 60 Minutes
14	segment some years ago, they don't have
15	enough time to portray polygraph
16	accurately.
17	If I wanted to stack the deck
18	against polygraph, I'd know how to do it.
19	I mean, you know, the way you cut and edit
20	a piece of film can portray anything as
21	anything.
22	The fact is, we have got too much
23	science behind this to let a TV show
24	influence us in the other direction.
25	Once again, I'd like to say that if

1	procedures that have been demonstrated in
2	scientific research over decades and
3	decades now are followed diligently, the
4	results are going to be phenomenally
5	accurate.
6	THE COURT: I'm thinking of the
7	body of case law that we have here in Ohio
8	when I ask this question, and you don't
9	have to be a legal expert to answer this,
10	but our key case, I think on this, was
11	issued in the late '70s, okay?
12	Since that time frame, that general
13	time frame, have polygraph examinations
14	become more reliable?
15	THE WITNESS: Oh, far, far more.
16	THE COURT: Why so?
17	THE WITNESS: Well, there are two
18	areas in which we have made tremendous
19	advances.
20	One of those is the technical or
21	the mechanical part of things. Polygraph
22	instruments have become far better at
23	measuring and recording physiological
24	responses.
25	In fact. I was delighted to see in

1	the testimony here that both of the
2	examiners use computerized polygraphs.
3	They it's sort of like relating a word
4	processor on your computer to the old
5	manual typewriters we used to use 50 years
6	ago. It's just a far better way, and
7	records of polygraph tests can be
8	maintained forever, where paper, charts,
9	used to get lost, burned, or destroyed
10	accidentally.
11	Most of us have backup copies of
12	the exams on other disks, or other drives,
13	and so it's a far safer way to do it.
14	These new computerized polygraphs
15	measure each response hundreds of times a
16	second, so the quality of the tracings is
17	really, really accurate, and they allow
18	you to make pinpoint measurements from one
19	part of a response to another. Something
20	we could only eyeball or use rulers in the
21	old days when we were working with paper
22	and ink.
23	So the technology from the hardware
24	is far, far more far better than it
2.5	used to be in 1978

1	As far as procedures and
2	technology, there was really a scarcity of
3	high quality scientific research in 1978.
4	There were a handful of good studies, but
5	it was the real important research was
6	in its infancy around 1969 or '70. And
7	there were only a handful of people even
8	doing it in the early '70s.
9	Since 1978 there's been an
10	explosion of polygraph research around the
11	world. Institutions, both research and
12	universities in the United States, have
13	conducted and published serious scientific
14	research, in Canada, in Israel, Japan,
15	Germany, Russia, Singapore, and I'm
16	forgetting some other countries.
17	Our knowledge of how to structure
18	and conduct a polygraph test, our
19	knowledge of how to evaluate the results
20	of a polygraph test, and our knowledge of
21	how to estimate accuracy is light years
22	beyond what it was in 1978.
23	THE COURT: When you drafted the
24	test questions for Mr. Sharma, did you
25	know the questions that the other

1	polygraphers asked him?
2	THE WITNESS: No. Wait a minute.
3	Actually, I think Mr. Migdal had read them
4	to me over the phone, yeah.
5	THE COURT: So maybe you had it
6	somewhere in your psyche?
7	THE WITNESS: Except there's only
8	so many questions you can ask about this
9	issue.
10	THE COURT: All right. I don't
11	have anything further.
12	MR. MIGDAL: I have no other
13	questions, Judge.
14	MS. KANELLIS: Nothing, Your Honor.
15	Thank you.
16	THE COURT: I do have one other
17	question.
18	If Miss Sacia, the alleged victim
19	in this case, were in a drunken stupor, as
20	opposed to being either conscious or
21	unconscious, awake or asleep, does that
22	affect your test results here, or would
23	the questions be essentially the same?
24	THE WITNESS: They would be exactly
25	the same.

1	THE COURT: And it wouldn't affect
2	your test results then, do you think?
3	THE WITNESS: No. No effect.
4	THE COURT: I don't have anything
5	further. I've enjoyed hearing this
6	discussion on this topic.
7	THE WITNESS: Thank you.
8	THE COURT: Counsel, do you wish to
9	make any wrap-up remarks or briefs to the
10	Court? How are we going to wrap this up?
11	By the way, sir, you're excused.
12	Your testimony is concluded. You may step
13	down.
14	THE WITNESS: Thank you very much.
15	(Witness excused.)
16	THE COURT: Do you wish to make any
17	wrap-up remarks?
18	MR. MIGDAL: I would, Judge, and I
19	request rebuttal, also.
20	THE COURT: All right. In wrap-up
21	then.
22	MR. MIGDAL: As I put in my brief,
23	Judge, and I know the law and I know
24	everybody knows the law in here regarding
25	the polygraph, but when you read Souel and

1	I think it's Levert, in those cases, and I
2	think that's probably, frankly, why you
3	asked that last question, and I'm glad you
4	did, has there been a change, significant
5	scientific change since 1978, because the
6	language I put in my brief in Souel and
7	Levert contemplate that we may revisit it
8	at another time regarding the effect on a
9	jury and whether the science has changed.
10	I think clearly it has. I think
11	after Evans and Stechschulte and,
12	especially, Dr. Rovner because he talked
13	about polygraph in general, the research,
14	because he, in addition to being a
15	polygrapher, is a researcher, the
16	cross-examination did not question the
17	results of either of the three polygraphs.
18	There was no cross-examination
19	regarding questioning Dr. Rovner's opinion
20	regarding the validity of polygraphs,
21	whether it qualifies under 702 as I went

through each criteria under 702, his own test that he did, his 96 or the mid-90 percent reliable.

22

23

24

25

Again, and I think the key legal

1	question is why does polygraph require a
2	stipulation, as opposed to any other piece
3	of science?
4	It frankly makes no legal sense
5	whatsoever. I can't think of a legal
6	reason why, if it meets 702, which the
7	testimony in front of you clearly shows it
8	does, why one side in a criminal case can
9	stipulate away the results just by saying
10	we're not going to agree.
11	Imagine DNA, fingerprints, any
12	other piece of science. One side could
13	say, "I don't agree," even though it's
14	reliable, it doesn't come in. There is no
15	difference with polygraphs. It makes
16	absolutely no sense.
17	The prosecutor has argued in its
18	brief, and I think very disingenuously,
19	"We weren't there for the stipulated
20	polygraph; therefore, we don't know what
21	happened."
22	As with any other piece of science,
23	if we do that test privately, they're not
24	there. That is grounds for
25	cross-examination, or a motion in limine

1	under 702 to see whether the procedure was
2	done correctly. And they will have the
3	right to cross-examine.
4	Why is this different than any
5	other science? There's no reason.
6	Judge, the reason they weren't
7	there is because they wouldn't agree.
8	That's why.
9	I asked, as you know in my other
10	motions, and as an officer of the Court,
11	we had an examination set for December
12	12th with Mike LoPresti. Connie
13	Lewandowski and I had that appointment.
14	It was cancelled.
15	They had every right in the world
16	to ask any question they wanted, to
17	formulate the test any way they want, to
18	be there, and they wouldn't agree.
19	And now they say, "Well, we weren't
20	there."
21	That's why I had these other tests
22	done. So I find that quite disingenuous.
23	They cite the case, I think it's
24	Roper, and they're right, in Roper there
25	was a stimulation And the Court said

1	even though with the stipulation I'm not
2	going to let it in, which says to me, what
3	value is a stipulation if a Court won't
4	let it?
5	The Court did its own 702 analysis,
6	which exactly says the stipulation means
7	nothing.
8	Each expert that got up there said
9	the stipulation makes no difference. If
10	we agree or if we don't agree we get the
11	same results. There is no legal basis for
12	keeping this out.
13	Any question they have about
14	whether people are licensed, whether
15	you're certified, whether the test was
16	done right, is grounds for
17	cross-examination.
18	Whether Rovner agrees with Evans,
19	who agrees with Stechschulte, or doesn't
20	is cross-examination. As in any other
21	piece of science.
22	Why do we treat this so
23	differently? New Mexico understands that,
24	and the case I attached and the article I
25	attached talks about it's repugnant

State v. Dorsey, New Mexico Supreme Court 1 says that it's repugnant to the rules of evidence and particularly incompatible 3 with the purpose and scope of the rules of 4 evidence. 5 It is. It's repugnant that somebody who took four separate exams that the State -- and they know polygraphs are 8 reliable. I heard no questioning that 9 it's not reliable. They can't argue that 10 it's unreliable when, how many times do 11 they dismiss cases because somebody 12 passed? How many times? In the two or 13 the three they responded to the discovery 14 motion, what about in murder cases? 15 I have a murder case right now. 16 They questioned a witness, he passed the 17 polygraph, end of the case. 18 In this very courthouse, as you 19 probably know, Judge Cosgrove, to deal 20 with some missing evidence, had questioned 21 on polygraphs the court reporters. They 22 passed. End of story. 23 Everybody uses it. Everybody knows 24 it's reliable. The prosecutor is telling

1	you, we use it. We use it all the time.
2	But it's for investigative purposes, and
3	we rely upon the results.
4	Does somebody I find that
5	incredulous that they don't consider it
6	reliable. Who cares why you're using it,
7	you're doing it for very important
8	reasons. It's determining the outcome of
9	investigations.
10	When Bill Evans testified that he
11	has testified on behalf of the Summit
12	County Prosecutor's Office on stipulated
13	polygraphs, and the defendant is
14	deceptive, do they really want to argue
15	that we put up knowingly unreliable
16	evidence because the defense lawyer
17	agreed?
18	I think that borders on unethical,
19	and they didn't do that because they rely
20	on it. I can't believe they're going to
21	the argue that. They agree simply by
22	utilizing and spending money on polygraphs
23	for whatever reason. Their actions tell
24	you it's reliable.
25	So the only question really would

1	be does the stipulation make a bit of
2	difference. And it doesn't, as testified
3	to by three people.
4	So now he's passed four polygraphs

So now he's passed four polygraphs and we're supposed to go to trial. And maybe the jury will never hear about reliable, scientific evidence because one side can say, uh-uh. That makes no sense as opposed to any other piece of scientific evidence.

What if I had a some sort of forensic examiner, fingerprint, gunshot residue who tested Sahil Sharma if that was the critical issue in the trial and it meets 702, and the expert is qualified, and he did test correctly, can you imagine if one side, the prosecutor, said, "Oh, that doesn't come in because we don't agree."

It is the only piece of evidence like that. It is an anachronism to the rules of evidence. It is repugnant to the rules of evidence, to the purpose of the rules of evidence.

Judge, you should let it in, and I

think you do it and you don't deny
precedent, because the wording in Souel
and the wording in Levert talked about at
some future date we will revisit it.

As what happened in State versus
Thomas and Koss, as I put in my brief, one
day Battered Women's Syndrome didn't meet
the qualifications, then there was more
research on it and more testing and the
Supreme Court simply said, at this point
we're going to let it in. That was too
bad for Mr. Thomas who spent time in
prison until the Supreme Court realized
it, or Mr. Koss, I don't remember which
way it was, and he sits in prison, you
know, you're right.

But it was interesting, when you look at that case, the assignment of error, the trial court erred by not letting it in. That was the assignment of error.

You are the trial court. Judge,
you should let this in because at some
point this Supreme Court and, frankly, all
the supreme courts are going to let this

1	stuff in because it meets 702.
2	It's scientifically reliable, it's
3	gone through the scientific method. It is
4	replicated and can be tested. They have
5	research.
6	The Department of Defense, the NAS,
7	the Summit County Prosecutor's Office,
8	police departments, everybody uses it.
9	Judge, you should let this stuff in
10	in this case and let the trier of fact
11	determine whether to believe these guys,
12	to give it what weight it wants.
13	It's not going to supplant the jury
14	as New Mexico has said time and time
15	again.
16	Thank you, Judge.
17	THE COURT: All right. Thank you.
18	And, Miss Kanellis, please.
19	MS. KANELLIS: Your Honor, the
20	State would request that this Court follow
21	the well-established law in this state and
22	many others.
23	This is not something as Attorney
24	Migdal portrays it, at any minute the
25	floodgates are going to open and

1	polygraphs are going to be admissible in
2	every state. That's not the case.
3	There's one state. One state.
4	No other state allows unstipulated
5	polygraphs in, and I've provided an
6	enormous amount of case law, both state
7	and federal that states why.
8	Your Honor, this is character
9	evidence. By allowing a polygraph
10	examiner to come in and testify, you are
11	allowing character evidence, someone to
12	talk about the defendant's character
13	without having the defendant take the
14	stand or subjecting him to
15	cross-examination, which, as we all know,
16	would be the case.
17	If this defendant wanted to take
18	the stand and say, "Well, I'm being
19	truthful. I'm a truthful person," he
20	would subject himself to cross-examination
21	by the State.
22	What the defense wants is to allow
23	people to come in and testify that this
24	defendant is truthful and he's being
25	truthful and there's no

1	cross-examination.
2	I can cross-examine the
3	polygrapher's credentials, but that's not
4	what the issue is. The issue isn't
5	attacking the people necessarily who
6	conducted the polygraph exam, it's that
7	they're being allowed to come in and make
8	and testify to otherwise inadmissible
9	character evidence.
10	And, certainly, the defense wants
11	this to come in, but, Your Honor, there's
12	lots of evidence that doesn't come in.
13	Had this defendant confessed and
14	not been read his Miranda warnings, it's
15	entirely possible that that key piece of
16	evidence wouldn't come in.
17	There are rules of evidence, and
18	they are very strict, and they are very
19	specific, and they should be enforced.
20	There's lots of evidence, both
21	favorable and unfavorable to the defense
22	and the State that doesn't come in because
23	of the case law, because of the rules of
24	evidence. This is not some novelty.
25	And, yes, the fact of the matter is

1	the State is not stipulating to a
2	polygraph. We have that ability. Just
3	that's what the case law says, that's the
4	way it has been for years, and that's the
5	way it is in every state except New
6	Mexico. The fact of the matter is
7	polygraphs aren't admissible.
8	Now, in certain instances, if the
9	parties choose to agree and the Judge was
10	willing to go along with it, then it would
11	come in. But that is not the case here,
12	and I think that is significant.
13	Does it change the results? Well,
14	certainly not, but it certainly does
15	change the fact that the State was not
16	present, has been denied any effective
17	cross-examination, and you would be
18	allowed, not only for the defendant to
19	comment on his good truthful character,
20	but you're also going to allow him to
21	testify to facts that occurred.
22	The polygraph examiners weren't
23	present at the Sheraton hotel when this
24	happened, but you're going to allow facts

to be testified to without any

1	cross-examination.
2	And polygraphs are used for
3	investigative purposes. Our office uses
4	them. They're used for a variety of
5	things.
6	Also, hearsay is relied on for
7	investigative purposes, but that doesn't
8	mean that it is admissible at trial.
9	Your Honor, we would ask that you
10	not allow this evidence to be put forth at
11	the trial.
12	MR. MIGDAL: Judge, in rebuttal.
13	THE COURT: All right.
14	MR. MIGDAL: The prosecutor's
15	argument, frankly, makes our case because
16	she's not talking about the 702 issues.
17	She is not talking about 702 issues. It's
18	not admissible because it's not
19	admissible.
20	I said when I argued to you any
21	other science, if he has the money we can
22	conduct it on our own.
23	What do the rules say? If I intend
24	to call that witness at trial I give the
25	other side the report.

1	They're saying they were denied
2	effective cross-examination. So I assume,
3	based on that argument, if I would get a
4	separate fingerprint examiner, any other
5	science, we do that test alone, when I
6	share it with them, do I ever hear, "Oh,
7	we don't get to cross-examine because we
8	weren't there when your expert did the
9	test"?
10	Based on that argument, the defense
11	could never conduct its own experiments or
12	investigation, ever. Because they're not
13	there. That makes no sense.
14	They will get the reports as they
15	have. And if they want to cross-examine
16	as, again, any other piece of science.
17	It is character evidence, and the
18	prosecutor keeps saying and I don't
19	know where this comes from this will
20	come in without the defendant testifying.
21	THE COURT: I want you to develop
22	that thought for me more. How does it
23	implicate or not implicate the Fifth
24	Amendment right? This evidence here that
25	we're talking about.

1	MR. MIGDAL: Uh-huh.
2	THE COURT: Go on.
3	MR. MIGDAL: I'm not sure of the
4	Court's question, because the State keeps
5	arguing that comes in without the
6	defendant testifying, because
7	THE COURT: Do you think that's the
8	case?
9	MR. MIGDAL: That's an interesting
10	issue, Judge. Whoever said he's not
11	testifying?
12	If you're going to limit that it
13	comes in if he testifies, that's a
14	different issue, because all the polygraph
15	is, I put in my brief on a particular date
16	in response to particular tests, he was
17	telling the truth. That's character
18	evidence. It's no different.
19	Can I come in and say, in my
20	opinion this person has led a truthful
21	life and is a truthful person. Character
22	evidence comes in all the time.
23	I can come in and say I've known
24	John Doe for ten years, and in my opinion
25	John Doe's a truthful person.

1	What's the implication? When they
2	testified they're telling the truth. It
3	happens all the time. All the time it
4	happens.
5	THE COURT: It happens with certain
6	prerequisites having occurred. I guess
7	that's something I need to look at.
8	MR. MIGDAL: Of course. Under, I
9	believe, 608 or 609, I can't remember, but
10	I knew the person. I have some
11	longstanding relationship, but in my
12	opinion they're truthful. We do it all
13	the time.
14	Again, why do we treat this
15	evidence as so different? What is the
16	syndrome evidence that will come? It may
17	even come in in this case.
18	They may, as Connie Lewandowski
19	told you, want to bring in rape trauma
20	syndrome.
21	All that is, is anybody can say
22	whatever they want, and I know what the
23	case law is. They're saying they're
24	telling the truth when they're raped.
25	That's why the syndrome evidence comes in.

1		Why are you bringing an expert?
2		She told me this happened, and this
3		happened, and this happened; therefore, my
4		opinion and it happens all the time in
5		child sex abuse cases, too, Judge, and you
6		let it in.
7		And what do the Courts always say?
8		Doesn't go to the admissibility, goes to
9		the weight the jury gives it.
10		It's the same thing. Why do we put
11		that they exhibit these symptoms,
12		therefore what they're telling is the
13		truth. It happens all the time. The jury
14		gives it the weight it wants to give it.
15		The prosecutor told you, Judge,
16		again, without any argument, this is in
17		violation of the rules of evidence.
18		Uh-uh. This is exactly what the
19		rules of evidence talk about. It's meets
20		all the qualifications of 702.
21		Where in 702 does it say, by the
22		way, you got to have a stipulation
23		regarding any other evidence? Nowhere.
24		It meets 702.
25	2	It doesn't violate the rules of

evidence. It complies with the rules of 1 evidence. It's just not true. 2 They -- again, the prosecutor never 3 questioned its reliability because they can't, because it makes no sense, they've 5 never questioned the reliability, and, 6 frankly, they've never questioned the qualifications of the particular people 8 that testified. 9 All they're saying is, that is the 10 law. And follow what is precedent on --11 as far as the law, but they're not -- they 12 can't guestion and they haven't in any of 13 the arguments that it qualifies under 702. 14 They have simply said it requires 15 stipulation. 16 And I thought I would hear that the 17 stipulation affects the results and it 18 doesn't. There's no evidence of any of 19 that. They called no experts to tell you 20 21 otherwise, anybody who disagrees with Rovner, because they can't. 22 You can't use polygraphs and then 23 say they're not reliable. You just can't 24

25

do it.

1	All they can say is follow old law
2	because that's the way it is. Well, you
3	know, DNA, you know, what's Pierce? I
4	don't remember what year Pierce is, I
5	think 1990.
6	Imagine if you were a defendant in
7	1988 before DNA and you have DNA that
8	exonerates you.
9	That's just the way the law is,
10	sorry, Judge, sorry, Mr. Defendant, it
11	doesn't come in. That doesn't make any
12	sense.
13	You know, just because that's the
14	way something was doesn't make it right.
15	And at some point, and I'm hoping it's
16	you, Judge, some judge will stand up and
17	say that law is frankly baseless and
18	repugnant to the rules of evidence.
19	And, Judge, you had a Fifth
20	Amendment question, and I'm not sure
21	THE COURT: Well, I think you've
22	touched on it somewhat about the fact that
23	this man may want to admit this evidence,
24	yet not take the stand.
25	MR. MIGDAL: That's a different

1	issue.
2	Now, if the Court's saying and I
3	know there was a case that talked about
4	that, whether that implicates the Fifth
5	Amendment, I don't think it implicates the
6	Fifth Amendment whatsoever. Frankly, he
7	has the right not to testify.
8	But if the Court is saying that I
9	will let it in if he testifies, that's a
10	different legal issue. But that's
11	separate and apart from, does it meet 702?
12	That's a completely different issue.
13	But you have to can somebody
14	it wouldn't make sense, frankly, to do it
15	otherwise, just off the top of my head,
16	I'm not committing to that, but that's
17	like putting somebody on to give opinion
18	testimony about the truthfulness of the
19	defendant who doesn't testify. It doesn't
20	make any sense.
21	So chances are, again, off the top
22	of my head, it would only make sense if he
23	does testify. But that's a different
24	issue.
25	I don't think it implicates the

1	Fifth Amendment necessarily. And I know
2	there was a case, and I can't remember
3	which one talks about it, but the
4	prosecutor keeps saying he's not going to
5	testify; therefore I mean, who said
6	that? I never said that.
7	MS. KANELLIS: You're missing my
8	point, but that's not what I said.
9	MR. MIGDAL: I don't know what the
10	point is. If the point is it can only
11	come in with his testimony, that may be a
12	different legal issue. That may be a
13	different legal issue. And maybe you're
14	right. I don't agree with you but I don't
15	disagree with you. That may be a correct
16	issue.
17	But if you're saying, you know, it
18	meets 702 but he's got to testify, that's
19	a different question.
20	THE COURT: I guess first things
21	first.
22	MR. MIGDAL: Right.
23	THE COURT: You know, that's the
24	question we have today.
25	What I'm saying to you, I think, is

1	that if this Court should agree to admit
2	this testimony that may raise other issues
3	we have to work through.
4	And so we have had a good
5	discussion of the issues today, and let me
6	suggest maybe a unique one. I don't know
7	whether this kind of discussion has ever
8	occurred in as it relates to polygraphs
9	in the State of Ohio.
10	MR. MIGDAL: Judge, I didn't move
11	to admit my Exhibits A through D.
12	THE COURT: All right. Is there
13	any objection to those?
14	MS. KANELLIS: No objection, Your
15	Honor.
16	THE COURT: All right. Well, the
17	Court must deliberate on this. There's no
18	fast pronouncement from the bench. So
19	I'll do that as soon as practical.
20	MR. MIGDAL: Thank you, Judge.
21	THE COURT: We're concluded. Have
22	a good day, everyone.
23	* * *
24	
25	

CERTIFICATE

I, Terri G. Sims, Official Shorthand Reporter, Court of Common Pleas, Summit County, Ohio, do hereby certify that I reported in Stenotypy the proceedings had and testimony taken in the foregoing-entitled matter, and I do further certify that the foregoing-entitled TRANSCRIPT OF PROCEEDINGS, consisting of 272 typewritten pages, is a complete, true, and accurate record of said matter and TRANSCRIPT OF PROCEEDINGS.

Official Court Reporter

Dated: AKRON, OHIO April 4, 2007