

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 International Criminal Court
2 Trial Chamber VI - Courtroom 2
3 Situation: Democratic Republic of the Congo
4 In the case of The Prosecutor v. Bosco Ntaganda - ICC-01/04-02/06
5 Presiding Judge Robert Fremr, Judge Kuniko Ozaki and Judge Chang-ho Chung
6 Trial Hearing
7 Monday, 18 April 2016
8 (The hearing starts in open session at 6.01 p.m.)
9 THE COURT USHER: All rise.
10 Please be seated.
11 PRESIDING JUDGE FREMR: Good evening, everybody.
12 Court officer, please call the case.
13 THE COURT OFFICER: Good evening, your Honours.
14 This is the situation in the Democratic Republic of the Congo in the case of the
15 Prosecutor versus Bosco Ntaganda, reference number ICC-01/04-02/06.
16 And for the record, we are in open session.
17 PRESIDING JUDGE FREMR: Thank you, court officer.
18 Now appearances please starting with Prosecution.
19 MS LUPING: Good evening, Mr President, your Honours. Appearing on behalf of
20 the Prosecution this evening are Ms Nicole Samson, senior trial lawyer; myself,
21 Dianne Luping, trial lawyer; James Pace, assistant trial lawyer; and Selam Yirgou,
22 case manager. Thank you.
23 PRESIDING JUDGE FREMR: Thank you.
24 Defence please.
25 MR BOURGON: (Interpretation) Good evening, your Honour. Good evening,

1 your Honours. Representing Bosco Ntaganda, who is present with us this evening,
2 we have Sandrine De Sena; Margaux Portier; Christopher Gosnell; and myself,
3 Stéphane Bourgon.

4 Your Honour, I would like to take this opportunity to also introduce the new
5 associate counsel for the Defence, Christopher Gosnell, who as you know will take
6 over from Luc Boutin, who will leave having finished Witness P-0892. And it's a
7 great pleasure for me to be able to introduce him now. And he will be with us from
8 now on. Thank you very much.

9 PRESIDING JUDGE FREMR: Thank you. And Mr Gosnell, welcome.

10 And now Legal Representatives of Victims, please.

11 MS PELLET: (Interpretation) Thank you, your Honour. The former child soldiers
12 are represented by Mohamed Abdou and by myself, Sarah Pellet, counsel in the
13 Office of Public Counsel for Victims.

14 MS GRABOWSKI: Mr President, your Honours, the victims of the attacks are today
15 represented by Mr Dmytro Suprun, counsel, and by myself, Ms Anne Grabowski of
16 the Office of Public Counsel for Victims. Thank you.

17 PRESIDING JUDGE FREMR: Thank you, Ms Pellet. Thank you, Ms Grabowski.
18 And I know that we also have a video link connection this evening. Could the court
19 officer present at the video link location please note for the record who is present in
20 the video link room and also confirm that the connection is working and that you can
21 hear me clearly.

22 THE COURT OFFICER: (Via video link) Good morning, Mr President. Yes, I can
23 hear you perfectly fine.

24 I am present in the transmission room with the witness, as well as Mark De Leau, the
25 IT technician who set up the video link, and we will be joined shortly by Sergeant

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 Ward Johnson from the Canadian authorities.

2 PRESIDING JUDGE FREMR: Thank you very much, court officer.

3 Our witness today will testify without protective measures and will, therefore, be
4 referred to by his name.

5 The Chamber has noted the Defence does not raise objections to the use or admission
6 of documents with this witness provided that the requirements of Rule 68(3) are met
7 in respect of the report.

8 So unless there are any further observations from the parties, we can proceed
9 immediately to the testimony.

10 Ms Luping.

11 Sorry, Ms Luping, you want like to make some submissions because I have first to
12 instruct the witness? So you would like to just to start questioning or --

13 MS LUPING: No, Mr President. I have no further submissions to make at this
14 point. I assume you will be giving instructions to the witness first.

15 PRESIDING JUDGE FREMR: Okay.

16 Mr Bourgon.

17 MR BOURGON: Yes, Mr President. A very quick submission. I simply forgot to
18 mention that this witness will be handled by Maître Gosnell. Thank you,
19 Mr President.

20 PRESIDING JUDGE FREMR: Very well.

21 Mr Witness, before I start, could you just pronounce your name because I don't want
22 to pronounce it wrongly.

23 WITNESS: DRC-OTP-P-0933

24 (The witness gives evidence via video link)

25 THE WITNESS: My name is John Charles Yuille, Y-U-I-L-L-E.

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 PRESIDING JUDGE FREMR: Thank you, Professor Yuille. So good morning,
2 because I believe that is the morning where you are currently; am I right?

3 THE WITNESS: Yes. Good evening to you and good morning to me, yes.

4 PRESIDING JUDGE FREMR: Can you please confirm that you can hear me clearly.

5 THE WITNESS: I can hear you very well, thank you.

6 PRESIDING JUDGE FREMR: So I will start with a few points of instruction.

7 First of all, this Chamber has been established to try the case of the Prosecutor against
8 Mr Bosco Ntaganda, and you are called today by the Prosecution to testify as an
9 expert to assist us in our search for the truth.

10 I understand that you have testified in various courts on a number of previous
11 occasions; however it's anyway my duty to provide some brief guidance in relation to
12 these proceedings.

13 You may be asked questions posed by the Judges and lawyers in the courtroom. If
14 the question is not clear to you, please feel free to ask for it to be repeated or
15 rephrased.

16 We want you to tell the truth and we want you to only testify within the sphere of
17 your expertise. However, if you do not know an answer or you do not feel that it
18 falls within your area of professional expertise, then there is nothing wrong with
19 saying that.

20 Do you understand this?

21 THE WITNESS: I do.

22 PRESIDING JUDGE FREMR: Very good.

23 Now, can you please read the solemn undertaking to tell the truth, which I guess the
24 court officer would provide you with.

25 THE WITNESS: I solemnly declare that I will speak the truth, the whole truth and

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 nothing but the truth.

2 PRESIDING JUDGE FREMR: Thank you. Professor Yuille, it means you are now
3 under oath. And I am obliged to note that it is an offence within the jurisdiction of
4 this Court to give false testimony. Do you understand that?

5 THE WITNESS: I do, thank you.

6 PRESIDING JUDGE FREMR: Very well.

7 There are a few practical matters you should have in mind when giving your
8 testimony. I understand that you will be testifying in English today, but everything
9 we say is written down and also translated into French. It is therefore important to
10 speak clearly and at a slow pace. Please only start speaking when the person asking
11 you the question has finished.

12 To allow for the interpretation, everyone here has to wait a few seconds before
13 starting to speak. If you have any question yourself, please, let us know, we will
14 then give you the opportunity to speak.
15 Finally, your well-being is also important to us, and if at any stage you would like to
16 take a brief break from testifying, please just let us know. That will be not a
17 problem.

18 Have you understood all this?

19 THE WITNESS: I have, thank you very much.

20 PRESIDING JUDGE FREMR: So now I finish with those instructions and we can
21 really move into testimony itself.

22 Ms Luping, you have the floor.

23 MS LUPING: Thank you, Mr President, your Honours.

24 QUESTIONED BY MS LUPING:

25 Q. Good evening from The Hague, Dr Yuille, and good morning your time.

1 A. Good evening.

2 Q. My name is Dianne Luping. I'm with the Office of the Prosecutor. We have
3 spoken previously, and I'll be questioning you this evening.

4 Dr Yuille, just to explain one practical matter, we had indicated to the Chamber that
5 we estimated approximately four hours for your testimony but, just for your
6 information, we will be aiming to complete your examination-in-chief within,
7 hopefully within a two-hour period. We'll obviously see how it goes, but that is
8 certainly what we'll be aiming for.

9 So I will start first with just some background questions. Could you state what is
10 your full name?

11 A. John Charles Yuille.

12 Q. And when were you born?

13 A. December 1, 1941.

14 Q. And where were you born?

15 A. Montreal, Canada.

16 Q. And, Dr Yuille, were you retained by the Office of the Prosecutor to provide an
17 expert opinion in this case?

18 A. I was.

19 Q. And have you reached an opinion concerning trauma and memory based on the
20 questions posed to you by the Prosecution?

21 A. Yes.

22 Q. I will be asking you some questions in relation to your expert opinion shortly,
23 but before I do so, I'd like to first turn to your qualifications to testify as an expert.

24 Mr President, your Honours, the Defence has stated that it doesn't challenge

25 Dr Yuille's qualifications as an expert in light of his curriculum vitae, and I refer to

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 filing 826 at page 8, paragraph 20. May I seek your leave, Mr President, in the
2 interests of time to lead Dr Yuille on the aspects relevant to his qualifications as an
3 expert?

4 PRESIDING JUDGE FREMR: Defence, any objection?

5 MR GOSNELL: No objection, Mr President.

6 PRESIDING JUDGE FREMR: Then please proceed.

7 MS LUPING: Thank you, Mr President.

8 Q. Dr Yuille, you are a professor emeritus in the department of psychology,
9 University of British Columbia; is that correct?

10 A. Yes.

11 Q. You're a forensic psychologist registered with the College of Psychologists of
12 British Columbia, registration number 753?

13 A. That's correct.

14 Q. You hold a BA, MA and a Ph.D. from the University of Western Ontario; is that
15 correct?

16 A. Yes.

17 Q. Sorry about my artificial pauses, Dr Yuille. I'm just, in the interest of the
18 interpreters, I'm pausing between each. Because we're both English speakers, it will
19 be very tempting for both of us to speak quickly, but if we could also just leave an
20 approximately 3-second pause between your answers and my questions.

21 Now, Dr Yuille, you've been conducting research in the general area of human
22 memory for over 50 years; is that correct?

23 A. Yes, it is.

24 Q. And your work has included studies of adult and children's memories?

25 A. That's correct.

1 Q. You've conducted research with witnesses of actual crimes, victims of crimes
2 and convicted offenders?

3 A. That's correct.

4 Q. You have interviewed or assessed witnesses' evidence in more than 1000 cases
5 of alleged sexual or physical abuse or murder; is that correct?

6 A. Yes.

7 Q. You lectured in psychology and related subjects at several institutions in
8 various capacities between 1965 and 2006; is that correct?

9 A. Yes.

10 Q. You have provided training to police, child protection workers, prosecutors and
11 judges on memory, interviewing and on credibility assessment procedures, and
12 you've also conducted more than 170 of such workshops; is that right?

13 A. Yes.

14 Q. And you have authored or co-authored and published more than 125 articles
15 and chapters and 8 books and monographs; is that correct?

16 A. Yes.

17 Q. And you have also delivered or co-authored over 240 speeches or presentations
18 in various countries; is that right?

19 A. Yes, it is.

20 Q. And the subjects of your research and of the various articles, chapters, books
21 and monographs which you have authored or co-authored as well as of the speeches
22 or presentations you delivered include victim and witness memory, trauma and
23 memory and child witnesses; is that correct?

24 A. Yes, it is.

25 Q. You have received several awards, grants and recognitions in relation to your

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 work; is that correct?

2 A. Yes.

3 Q. You have provided expert testimony on issues including memory in various
4 courts in Canada and the United States of America, having been called to do so by
5 both the Prosecution and by the Defence; is that correct?

6 A. Yes, that is correct.

7 Q. Now, Dr Yuille, you provided the Prosecution with a copy of your curriculum
8 vitae, this is annex A to your report.

9 And for the record it bears the ERN, and I'll ask the court officer, please, if he could
10 call up this document, and it is DRC-OTP-2085-0184.

11 Do you see the document before you, Dr Yuille?

12 A. I do.

13 Q. And is this the curriculum vitae that you provided to the Prosecution?

14 A. Yes, it is.

15 Q. And can you confirm whether this accurately reflects your educational and
16 professional experience to date?

17 A. It does accurately reflect that, yes.

18 MS LUPING: Mr President, the Prosecution now seeks to have the curriculum vitae
19 of Dr Yuille admitted as evidence. We do ask that the version of the curriculum
20 vitae be admitted initially at least as a confidential document. We'd seek that a
21 redacted version, at least redacting his current contact information and place of
22 residence, for example, be entered into the record as a public document once it's been
23 redacted.

24 PRESIDING JUDGE FREMR: Mr Gosnell, any objection to that?

25 MR GOSNELL: No objection, Mr President.

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 PRESIDING JUDGE FREMR: So then this curriculum vitae is admitted into evidence
2 with the comments made by -- in accordance with comments made by Ms Luping as a
3 further Prosecution exhibit.

4 Ms Luping, you may proceed.

5 MS LUPING: Thank you, Mr President. Now, we understand the Defence does not
6 challenge Dr Yuille's status as an expert. And at this point, Mr President, your
7 Honours, the Prosecution seeks your leave to tender Dr Yuille as an expert witness.
8 And we ask formally now if we may please qualify him as an expert so that we can
9 then seek your leave to question him as an expert.

10 PRESIDING JUDGE FREMR: Defence, any objection?

11 MR GOSNELL: There is no objection to that, Mr President.

12 PRESIDING JUDGE FREMR: Thank you.

13 Then you may proceed.

14 MS LUPING: Thank you, Mr President.

15 Q. Now, Dr Yuille, did the Prosecution send a letter of instruction to you dated 1
16 April 2015 asking you to prepare a written report on trauma and its effect on memory
17 and on a person's ability to recall and narrate his or her experience in a court setting?

18 A. That's correct.

19 MS LUPING: I would just ask the court officer if we could please have the letter of
20 instruction brought up, it's DRC-OTP-2084-0141, so it can be shown to the witness.

21 THE COURT OFFICER: (Via video link) The document is currently presented to
22 the witness.

23 MS LUPING: Thank you, court officer.

24 Q. Dr Yuille, is this the letter of instruction that was provided to you by the
25 Prosecution?

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 A. Yes, it is.

2 MS LUPING: Mr President, with your leave the Prosecution would like to seek to
3 have this letter of instruction admitted into evidence.

4 PRESIDING JUDGE FREMR: Mr Gosnell.

5 MR GOSNELL: No objection, Mr President.

6 PRESIDING JUDGE FREMR: Then the letter of instruction is admitted into evidence
7 as a further Prosecution exhibit.

8 Ms Luping, please proceed.

9 MS LUPING: Thank you, Mr President.

10 Q. Now, Dr Yuille, we've mentioned previously that the Prosecution asked you to
11 provide a report on a number of issues related to trauma and memory. Now, the
12 report which you provided to the Prosecution dated 5 May 2015 -- I would ask the
13 court officer to bring up the document which bears this ERN, it's DRC-OTP-2085-0221.
14 If it could please be shown to the witness.

15 THE COURT OFFICER: (Via video link) The document is presented to the witness.

16 MS LUPING: Thank you, court officer.

17 Q. Now, Dr Yuille, can you confirm who wrote this report?

18 A. I was the sole author of the report.

19 Q. To the best of your knowledge, are the contents of this report a true and
20 accurate reflection of your views impartially stated?

21 A. Yes.

22 MS LUPING: Mr President, I will subsequently be asking specific clarification
23 questions in relation to this report, but at this point the Prosecution would already
24 ask that the report DRC-OTP-2085-0221 be admitted into evidence.

25 PRESIDING JUDGE FREMR: But in this context I will have one important question

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 to Mr Witness, because its condicio sine qua non.

2 Mr Witness, do you agree with the admission of this report as an exhibit for this
3 Court?

4 THE WITNESS: Yes.

5 PRESIDING JUDGE FREMR: Thank you.

6 Mr Gosnell.

7 MR GOSNELL: No objection in light of that question and answer, Mr President.

8 Thank you.

9 PRESIDING JUDGE FREMR: Very well. Then this report is admitted as a further
10 Prosecution exhibit.

11 Ms Luping, you may proceed.

12 MS LUPING: Thank you, Mr President.

13 Q. Dr Yuille, appended to this report as annex B that you refer to also within the
14 body of the report is an article.

15 I'd like the court officer, please, if she could show to you an article bearing the ERN
16 DRC-OTP-2085-0103. It's entitled Biopsychosocial perspectives on memory
17 variability in eyewitnesses.

18 THE COURT OFFICER: (Via video link) The document is presented to the witness.

19 MS LUPING: Thank you, court officer.

20 Q. Can you see the article, Dr Yuille?

21 A. I can.

22 Q. And may I ask, was it co-authored by you and two other individuals, Hugues
23 Hervé and Barry Cooper; is that correct?

24 A. That's correct.

25 Q. Now, you have referred to this article at page 0222 of your report for the

1 Prosecution. I'm going to quote what you stated there where you stated, "I have
2 appended a chapter to this report that provides the reader with a theoretical model to
3 explain the variability in eyewitness responses to traumatic events (Appendix B).
4 This chapter also provides a more extensive review of the relevant research
5 literature."

6 And you also refer to this article at page 0224 of your report where you stated, and I
7 quote, "The attached paper by Hervé et al provides details about these factors."
8 And then you then refer to predisposing, precipitating and persisting factors; is that
9 correct, Dr Yuille?

10 A. The third term I think is perpetuating, but yes.

11 Q. Thank you for that clarification.

12 Dr Yuille, can you explain why you appended the article to your report, in particular
13 if you can explain briefly what are the topics that are dealt with in the article that are
14 relevant to your report?

15 A. In a sense, the core issue in the report has to do with the great variability that
16 we find with victims of traumatic events, that we will see some victims with detailed
17 vivid and fairly accurate memories. We'll also see victims with amnesia, that is no
18 memory at all, and everything in between.

19 This chapter is the first attempt in writing to explain that variability, what are the
20 causes of the various responses that people have when they are traumatised. And
21 those three levels of factors predisposing refers to, if you like, characteristics of the
22 individual that predispose some people to respond one way to trauma, some people
23 to respond another.

24 The second group concerns issues at the event itself. What's the nature of the event?
25 How long does it last? How does the person respond to it at the time?

1 And then finally the perpetuating factors are what the victim does with this memory
2 following the traumatic event, and that of course can have some major impact on the
3 subsequent quality of the memory.

4 Q. Thank you for that clarification, Dr Yuille.

5 And may I ask the court officer to show you this article, DRC-OTP-2085-0103.

6 Do you have it before you, Dr Yuille?

7 A. Yes. Yes, I do, yes.

8 Q. And is this the article that you co-authored, that you attached to your report to
9 the Prosecution?

10 A. Yes.

11 MS LUPING: Mr President, your Honours, the Prosecution seeks to have this article,
12 appendix B to Dr Yuille's report, admitted into evidence.

13 PRESIDING JUDGE FREMR: Defence?

14 MR GOSNELL: No objection, Mr President.

15 PRESIDING JUDGE FREMR: Thank you. So this article is admitted into evidence
16 as a further Prosecution exhibit.

17 Ms Luping, please.

18 MS LUPING: Thank you, Mr President.

19 Q. Dr Yuille, you also annexed to the report to the Prosecution another article, a
20 second article. It's annex C entitled, "Psychological trauma: Theory, Research,
21 Practice, and Policy. Memory and Narrative of Traumatic Events: A Literature
22 Review," written by Maria Crespo and Violeta Fernández-Lansac.
23 Now, I refer to page 0225 of the report you wrote to the Prosecution where you
24 mentioned this article that you appended, and I quote, "I have appended (Appendix
25 C) a recent paper that summarises the results of 22 studies of individuals with PTSD

1 symptoms. This literature review found that memories for traumatic events were
2 dominated by sensory/perceptual and emotional characteristics (when compared to
3 non-trauma memories). Otherwise there were no consistent patterns: The major
4 finding was that trauma memories are enormously varied."

5 Is that correct? Is that a fair reflection of what you stated in your report, Dr Yuille?

6 A. It is, yes.

7 Q. And again, can you please briefly describe or explain, what is this article about
8 which you appended as an annex to your report?

9 A. It's a study of victims with Post-Traumatic Stress Disorder, and it's one of the
10 few studies that looked at memory as a component of the research, and again this
11 emphasised the variability that one finds in the memory of traumatised victims.

12 Q. And may I ask, Dr Yuille, why, why did you append it to your report? What is
13 it about the article that is relevant to the report you prepared for the Prosecution?

14 A. Well, I appended it for a couple of reasons. One is so that the Court would
15 appreciate that the opinions that I'm expressing are not simply my own. So this is an
16 independent study completely unrelated to me or to my own work and yet coming to
17 very similar conclusions.

18 And it's my opinion that in order to evaluate the evidence of a traumatised victim, it's
19 essential to first of all determine the quality of the memory and then see what factors
20 have likely played a role in creating that quality of memory.

21 In other words, since you're going to get different patterns of memory with different
22 witnesses, it becomes essential to see if any particular pattern makes sense, that is, if
23 the predisposing and precipitating and the perpetuating factors are present that are
24 consistent with the pattern of memory that's being reported by the victim.

25 Q. Thank you for that clarification, Dr Yuille.

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 Mr President, your Honours, the Prosecution -- sorry, I think I haven't actually asked
2 the court officer to show it to you yet, Dr Yuille.

3 Could the court officer please show to Dr Yuille the article, the second article that we
4 were just discussing, DRC-OTP-2085-0094.

5 Do you have it before you, Dr Yuille?

6 A. No. Yes.

7 Q. And, Dr Yuille, can you confirm that this is the article that you just -- we were
8 just discussing and that it was annexed to your report for the Prosecution as annex C?

9 A. I can so confirm.

10 MS LUPING: Now, Mr President, the Prosecution seeks to admit as evidence this
11 further annex to Dr Yuille's report.

12 PRESIDING JUDGE FREMR: Mr Gosnell.

13 MR GOSNELL: No objection, Mr President.

14 PRESIDING JUDGE FREMR: Very well. Then this article as annex C to the report
15 is admitted into evidence as a further Prosecution exhibit.

16 Ms Luping, please proceed.

17 MS LUPING: Thank you, Mr President.

18 Q. Now, Dr Yuille, just simply in the interests of time, I will not be asking you to
19 simply repeat or summarise in full the contents of your report. Instead, I
20 will -- because we all have your report and we have the articles, instead I will be
21 asking you some specific follow-up questions flowing from your report to just clarify
22 certain points.

23 Now, first, you were asked: Does a traumatic event impact persons in the same
24 way?

25 Now, you stated at page 2 of your report, that's ERN 0222, that, and I quote, "The

1 same event may be traumatic for one person and not traumatic for another" end of
2 quote.

3 So my first question is, can you please explain why that is that the same event may be
4 traumatic for one but not for the other?

5 A. Well, for example, if you consider a predisposing factor of personality, one of
6 the dimensions of personality is arousal sensitivity is the term that we use, arousal
7 sensitivity.

8 This refers to the ease or difficulty by which any individual becomes aroused. The
9 ends of this dimension in a way can be defined by two personality types. One
10 would be someone who is hypersensitive, that is it takes very little for that person to
11 become aroused and therefore little for that person to also become traumatised. An
12 example would be borderline personality disorder, someone who is extremely volatile
13 and changeable.

14 At the other end of the scale is someone who is hyposensitive, that is they don't
15 respond easily to stimulation. It takes a great deal to get them aroused. And the
16 personality type there is the psychopath. This is someone who actually seeks
17 stimulation.

18 So, for example, an event like, oh, let's say skydiving, a hypersensitive person would
19 first of all never go skydiving. This would be way too arousing, way too debilitating
20 for them. While a hyposensitive would seek out such activity, would find it
21 stimulating, exhilarating, enhancing.

22 So this is just an example of one dimension in which there is quite a bit of variability
23 in how we respond to a situation.

24 And of course, a hypersensitive person is much more likely to experience an event as
25 traumatic than a hyposensitive person is. So there is huge variability just in that

1 predisposing factor all by itself.

2 Q. And speaking of variability of responses, at page 3, that's ERN 0223, you refer
3 again to the potential, and I quote, "range of responses that an individual might have
4 to a traumatic event."

5 Could you explain or elaborate a little bit further as to what can be the range of
6 responses to a traumatic event?

7 A. If the event is traumatic, so the thing about trauma is this is a unique human
8 response. Trauma triggers and engages both physiological and psychological
9 responses in us that are unique. It is in a sense a physiological and psychological
10 response to deal with an emergency, to mobilise all of the resources of the body to
11 deal with an emergency.

12 If an event is traumatic, once those bodily and psychological responses are in place,
13 there are different ways in which people can then respond.

14 For example, one term that's often used to describe a certain type of psychological
15 response is a flee-er. What is meant by that is when the person is feeling -- when the
16 person is knowing they're in a traumatic situation, the flee-er is someone who wants
17 to get out of there in any way possible. So that person is going to be looking for help
18 in the environment, looking around to see if there is a door, a window, something to
19 get away.

20 Memory is entirely dependent on what we pay attention to. So if someone responds
21 as a flee-er, their memory is going to be about where the door was or where the
22 window was or where the other person in the room was and much less perhaps about
23 the actual source of the trauma.

24 Alternatively, some people respond with what is called a fight response, that is their
25 psychological and physical resources are mobilised to deal with the source of the

1 trauma. Of course, that person's memory is going to be much better about the
2 attacker, about the nature of the trauma itself.

3 So one kind of, if you like, a range of responses is simply where does the person's
4 attention go in that traumatic environment? And that attention will determine
5 what's in their memory later on.

6 Q. Now, you provided the two examples as I understand it of the flee-er and the
7 person who responds by a fight response. If you had a hypothetical situation of a
8 person who can neither flee nor fight, say they're unable to escape and they don't
9 have the power to resist, they're not able to fight, what might be other responses in
10 that situation to that, to a traumatic event?

11 A. Yes, one of the psychological responses that can occur, it's not really common,
12 but it certainly does happen is dissociation. Dissociation is an alteration in the
13 psychological state of the person so that they are proceeding and representing their
14 environment differently than they normally do.

15 For example, one form of dissociation is a derealisation. It's an awkward term,
16 derealisation. And this is where the person begins to feel as if what's happening to
17 them isn't real, that it's as if they were watching it on TV or it's happening to someone
18 else, that it provides a distancing of the impact of the event.

19 Another form of dissociation is depersonalisation, depersonalisation. And this is
20 where the person actually later says they experienced the event as if he or she was
21 outside of their body watching the event happen to them but not, not in themselves, if
22 you like.

23 As you can see, these are quite dramatic psychological adjustments, but they're ways
24 of lessening the immediate psychological impact, emotional impact of the traumatic
25 event.

1 Q. Dr Yuille, I will be asking you more questions specifically about dissociation
2 and the impact, if any, on recall and the ability to narrate events, but I won't ask you
3 those additional questions quite yet.

4 Just moving to the diagnosis of PTSD, and you were asked what can a diagnosis of
5 PTSD include, and you set out various symptoms at pages 3 and 4 of your report.
6 That's at ERN 0223 and 0224.

7 Now, at page 2, that's 0222, you refer to the DSM-V or the Diagnostic and Statistical
8 Manual of Mental Disorders, Fifth Edition, published by the American Psychiatric
9 Association 2013.

10 My question is this, how commonly is the DSM-V basis of describing PTSD used?

11 A. Well, it's pretty much universally used in the North American context. What's
12 happened, particularly in the United States, is that in order for healthcare support to
13 be triggered, there has to be in fact a DSM diagnosis. So it's become the Bible, if you
14 like, of diagnoses in that context. Outside of North America it's less so.

15 Q. Now, you were also asked, and I refer to page 4 of your report, that's ERN 0224,
16 is every person who experiences a traumatic event affected by PTSD? At page 4 you
17 actually describe how the impact of trauma on individuals can be variable, and you
18 explain in some detail how whether a person manifests PTSD depends on the factors
19 that you just described before including predisposing, precipitating and now I
20 understand perpetuating factors, and these factors are also described in more detail in
21 annexes B and C.

22 My question is this, can you briefly explain, you've touched upon these factors when
23 you explained why you annexed the article you co-wrote to the Prosecution report,
24 the report to the Prosecution, rather, but can you briefly explain why and how these
25 factors, predisposing, precipitating, and perpetuating, how they impact on how a

1 person experiences a traumatic event?

2 A. That's a very big question. And I do invite the Court to read that chapter,
3 because it provides a pretty full answer to that question.

4 All three of these predisposing, that is the characteristics that the person brings with
5 them to the event, the precipitating factors, those things that have occurred at the time
6 of the event, and then what the person does with the event post-trauma, that all of
7 these are -- and within each of these there is a number of factors that determine the
8 complexity of the ways in which people respond to trauma. We're only beginning to
9 understand what this complexity is.

10 And just as one example, one predisposing factor is whether or not someone has
11 experienced trauma in the past, because if they have experienced trauma, and let's say
12 they dissociated during that traumatic event, what we know is that the likelihood of
13 them dissociating again in a future traumatic event is very high so that, in other
14 words, dissociation can become a learned response to cope with a traumatic event in
15 the future.

16 Q. And just to be clear, even if a person finds an event traumatic, and it meets the
17 definition of a traumatic event, does it necessarily mean that they will develop PTSD
18 as such?

19 A. No, it does not. PTSD as the name implies is Post-Traumatic Stress Disorder.
20 And if you look at all of those terms, so post-traumatic, this is something that occurs
21 not at the time of the event but subsequent to the event, that it's a response of being
22 stressed, and it's called a disorder because it disrupts the person's life.

23 Some people have characterised PTSD as a kind of a delay of the full impact of the
24 trauma, that is that there was some impact at the time, but then weeks or months later
25 the full impact, if you like, overwhelms the person, and they have PTSD. A number

1 of people will go through a traumatic event and never develop PTSD.

2 Q. And for individuals, say, confronted with a traumatic event other than PTSD,
3 what might be the potential range of, say, psychological responses to a traumatic
4 event?

5 A. Well, one of the issues in the literature here that is an important one is a
6 predisposing factor of resilience. Resilience is, you know, the capacity that each of
7 us has to bounce back, to recover from life's difficult challenges. A highly resilient
8 person may have, although they'll be quite traumatised perhaps at the time of the
9 event, may recover quite quickly and may even benefit from the trauma. What I
10 mean by that is that they will become psychologically stronger, better prepared to
11 deal with a similar situation in the future.

12 Another person will go through the same kind of trauma, not have that resilience and
13 be debilitated for life by the traumatic event. So the range is considerable.

14 Q. Now, returning to PTSD and the diagnosis of this, you were asked: "Are the
15 symptoms of PTSD the same for all people and all types of traumatic events?"
16 And at page 5 of your report, that's ERN 0225, you state, and I quote, "The symptom
17 presentation does vary from individual to individual. One person with PTSD may
18 show a strong aversion to anything related to trauma while another may experience
19 repeated recall of the event," close quotation marks.

20 Dr Yuille, my question is, why does the symptom presentation of PTSD differ person
21 to person?

22 A. Truth is we don't know. We do know that the pattern you've just described
23 does occur. So you'll get one person who will have what are often called flashbacks,
24 that is a vivid repetition or vivid recall of the traumatic event and it occurs over and
25 over again; and another person who has gone through the same circumstance will do

1 everything to avoid anything that reminds them of the event, will not think about it,
2 may self-medicate, alcohol, et cetera, to avoid thinking about it and so on.

3 It's interesting that just this one fact shows two opposite symptoms for PTSD. So
4 with one person you get what is called hypermnesia. Hypermnesia is
5 better-than-normal memory, and that's because they're repeatedly reliving the
6 experience. In another person you get almost no memory or very poor memory
7 because they've been avoiding thinking about it and dealing with it in any way.

8 So there are some contradictory, if you like, symptoms for PTSD. And we do not
9 know what is it that makes one person hyper -- have hypermnesia and another
10 person totally avoidant. There has not been enough research yet for us to
11 understand what is at the basis of that.

12 Q. Now, Dr Yuille, you were also asked: "Are the nature of the circumstances of
13 the traumatic event relevant to the occurrence of PTSD or its severity?"

14 And again, you said yes, but precipitating and predisposing factors may impact.

15 And I refer to page 4 of your report, that's ERN 0224, where amongst examples in
16 your report you gave one of sexual assault and another of, and I quote, "some battle
17 contexts."

18 Now, starting first with your example of some battle contexts, in your opinion, what
19 types of battle contexts might affect the occurrence or severity of PTSD and why?

20 A. One of the things that clearly impacts both trauma and the degree of trauma is
21 helplessness. This is an extremely strong component. So, for example, the victim of
22 sexual assault is feeling helpless because there is nothing that she can do to get out of
23 the situation.

24 In the battle context, often one of the things that produces the strongest trauma is
25 shelling, so a constant long-term shelling of the position, the person, the soldier is

1 helpless. He can't get out of the situation. These shells are falling all around him.
2 Maybe he sees a buddy's head blown off next to him. These are absolutely terrible
3 situations and the main feature is the helplessness, having absolutely no control.
4 That's one of the reasons, by the way, that before there was PTSD there was a
5 diagnosis in the First World War that was called Shell Shock that was really the same
6 phenomenon. The label "Shell Shock" made so much sense in that context because
7 that was such a constant regular feature of the trench warfare that went on in Europe.

8 Q. And just to go back to your example of the sexual assault and you refer to this
9 factor of helplessness, and the specific question that was posed to you that you
10 responded to in your report, which is "Is it relevant to the occurrence of PTSD or its
11 severity?" And you referred to different factors that might have an impact, the
12 precipitating and predisposing factors.

13 Just to clarify on the example of sexual assault, if you had two people, say,
14 experiencing almost identical forms of sexual assault, would they necessarily react in
15 the same way in terms of the occurrence or severity of PTSD in your opinion?

16 A. No. I'm sorry, I answered too quickly there. No, not necessarily at all. And
17 again it would depend on some of the predisposing things we've already talked about,
18 the nature of the sexual assault itself, that person's history, do they have coping
19 mechanisms that they developed in the past?

20 Q. I'm now moving to a different topic, and that's looking at the section of your
21 report where you dealt with the topic of storage and retrieval of traumatic events.
22 And I refer to the question that was posed to you which is, "How are traumatic events
23 stored in our memory and how are they retrieved?"

24 And I'll refer to the relevant sections of your report where you provided the answer,
25 and that's at pages 6 and 7, and that's ERN 0226 to 0227, where you responded that

1 "Traumatic memories can be stored differently to non-traumatic events and can be
2 recalled in a more fragmented way than non-traumatic memories."

3 Now my question, first question is: What do you mean when you say that traumatic
4 memories can be stored in a more fragmented way than non-traumatic memories?

5 A. The research that this relies on is mostly with war veterans. And what we've
6 learned is that at least immediately after trauma and perhaps for some time after it,
7 that the memories of the traumatic event, the components of the memory of the
8 traumatic event remain fragmented and disconnected from one another, that it takes
9 some time often for the victim to be able to integrate the pieces of the traumatic event
10 into a complete narrative.

11 It's assumed that because the trauma is difficult to relive that this is the reason for this
12 fragmentation and difficulty in putting the fragments together.

13 Q. And, sir, to clarify that, does the fact that traumatic memories can be recalled in
14 a more fragmented way, and that it might take some time for the victim as you say to
15 integrate the pieces of the traumatic event into a complete narrative, can that have an
16 effect on a person's ability to recall these memories in an organised way?

17 A. Yes.

18 Q. For instance in a chronological manner.

19 A. Oh, absolutely. These fragmented memories may often, if they are -- the
20 person is able to recall them, they will come out in a piecemeal fashion. They have
21 not been organised as a complete narrative. So it's very unlikely that they will be
22 chronologically consistent with the actual chronology.

23 Q. Sir, as a follow-up question to that, how in your experience, how easy is it for
24 individuals who have suffered a traumatic event to describe the event in a proper
25 order and structure just to be clear?

1 A. Well, like every other question in this area, the answer is it depends. Some
2 victims of trauma will have a well organised, detailed, chronological memory, and
3 they will be able to answer questions. That's a very different person from the one
4 who, for whom their memories are still in fragments, and they're going to have a lot
5 of trouble recalling events, they won't be in chronological order, they'll be disjointed.
6 So it depends so much on the individual.

7 Q. And for the individual who is able, the individual victim of trauma who is able
8 to provide a well organised, detailed, chronological memory, what can be the factors
9 that enable that person to do so in a more structured way?

10 A. Well, typically again it would be someone who has resilience as a predisposing
11 factor, someone who may not have been debilitated by the trauma.

12 By the way, also another factor here is training. So if someone has received a lot of
13 training in how to respond in a situation -- by the way, the training doesn't prevent
14 trauma, but the training gives the trainee the right things to do in the circumstance
15 and helps to organise their behaviour and makes them respond more effectively.

16 Q. And going back to the person who perhaps is recalling in a more fragmented
17 way, their memories are more fragmented, does that mean that the information is lost?
18 Can it be -- is it lost in any way?

19 A. The information that is not contained in the fragments is lost. So whatever is in
20 that person's memory is all that they have, and memory is not going to improve with
21 the passage of time. The ability of the person to describe the event may improve
22 with the passage of time.

23 Q. Are there any psychological tools or methods to help a person who perhaps has
24 not narrated an aspect of their memory yet for them to recall certain aspects that have
25 not actually been recalled yet?

1 A. Yes. One of the main ones that has emerged is that when we recall an
2 event -- human memory is reconstructive, by the way. We don't play a tape back.
3 We recreate a memory at the time of recall. And when we recreate the memory,
4 there are two different forms that the memory can take. One form is where the
5 person perceives the event as they originally -- excuse me, they remember the event
6 as they originally perceived it. So they're looking through their eyes and recalling
7 the event as it unfolded in front of them.

8 There is a second kind of recall in which a person will recall an event but see
9 themselves in it, that is they don't perceive it as they originally did. It's as if they
10 were at a different place in the room and watching it unfold and they actually see
11 themselves in the event.

12 What we've learned is if you instruct someone who has been traumatised to use that
13 latter form of recall, that is you might say to someone "Remember the event as if you
14 were standing in the doorway and then tell me what happened." So you're
15 encouraging them to take this other perspective, this removed perspective.

16 In one study of ours, for example, with sex trade workers who had been sexually
17 assaulted, we found that that perspective, being outside perspective, those women
18 were able to recall twice as many details of their sexual assault compared to those
19 who recalled, you know, as they originally experienced it.

20 If you think about it, this makes some sense because that more remote perspective
21 gives some distance, some psychological emotional distance so that the event is not
22 being relived in the immediate sense. It's being re-experienced from the outside, and
23 so it's easier presumably to recall details when you can take that more remote
24 perspective.

25 By the way, we did not get the same difference with physical assault. It was only

1 with sexual assault. So with physical assault you get the same details whether it's
2 the original perspective or that more remote perspective. So this seemed to be
3 unique to sexual assault.

4 Q. And is there any basis for this difference that you're aware of? Is there any
5 basis for --

6 A. I don't --

7 Q. Is there any basis for this difference, in particular with sexual assaults in your
8 opinion?

9 A. I'm not sure I understand the question.

10 Q. Well, you said that there is this difference in terms of the recall when you have
11 either the remote perspective or at the original perspective that it seemed to be
12 particular to victims of sexual assault, this ability to recall almost twice the number of
13 details.

14 A. Yes, yes.

15 Q. And you said it seemed to be very specific to sexual assault. Is there any
16 understanding at this stage as to why that is?

17 A. No, just the speculation again that the helplessness that's an integral part of
18 sexual assault plays such an important role and that perhaps taking that observer
19 perspective can reduce that feeling of helplessness.

20 Q. Dr Yuille, I've just been reminded that we're both speaking too quickly and not
21 giving enough pauses in between for the interpreters. So just a reminder for us both.
22 It's more difficult when you are speaking the same language to one another.
23 You just referred to a study of ours in relation to sex trade workers. I've just noticed
24 that on the transcript. Could you explain? Is this a particular study that's referred
25 to in your curriculum vitae, if you could explain who produced this report and the

1 study and when that was done?

2 A. Yes. I'm just looking at my vitae to find it. Too many publications.

3 Q. We can also come back to that, Dr Yuille, at the end if you like. We might even
4 be able to --

5 A. This was -- this was a study done by Barry Cooper as part of his graduate work
6 and...

7 Q. Dr Yuille, we can move on. I'm going to ask a colleague to also review your
8 CV and seek to identify that study that you've just mentioned.

9 A. Okay.

10 Q. And we can come back to that. Now, I'm just going to turn also to something
11 you said previously about how that there can be psychological tools to improve the
12 way a person may narrate their fragmented memories. Could you elaborate a little
13 bit more about that on the psychological tools that can be used to assist the way a
14 person narrates perhaps in a clearer, more complete, more chronological manner?

15 A. As I mentioned earlier, whether they can provide a chronological order of the
16 events depends on what stage their memory is, whether they've been able to integrate
17 it into a narrative or not. If they have not done so yet, there's nothing we can do,
18 that's a process that's still going on in that person and there's nothing that we can do
19 to -- to suddenly change that.

20 We can't make it chronological if they're still struggling with issues of putting that
21 memory together.

22 Q. Now, turning to the part of your report where you explain it a little bit in more
23 detail the nature of memories. And that's at page 6 of your report, that's ERN 0226.
24 And you stated and you've already mentioned it in your testimony today, which is
25 that "memories (whether traumatic or not) are reconstructive in nature. Human

1 memory has many components." End of quote.

2 And you refer to different types of memory in your report including episodic or
3 narrative memory, the script memory and I note that there's also a reference in the
4 article you co-wrote to, as I understand it, remarkable memories.

5 Now, my first question is, turning to the episodic or narrative memory, could you just
6 briefly explain what that is?

7 A. Yes. As you just alluded to, memory's really a term for a variety of different
8 mental processes. Episodic or autobiographical memory is that aspect of memory
9 that allows us to recall a personally experienced past events.

10 This kind of memory doesn't develop until sometime around two years of age, which
11 is why none of us remember things we did when we were six months or one year.

12 This is a -- so it's a unique kind of memory, very important because it gives us our
13 sense of self. And usually, of course, it's the kind of memory that the courts are
14 concerned with, individuals reporting their own personal experiences.

15 Q. Now, I refer to the question that was put to you, which was: How does the
16 reconstructive nature of episodic memory impact on the ability to recall traumatic
17 events?

18 And I wanted to refer to a passage from your report that's at page 6, ERN 0226, and I
19 quote:

20 "The reconstructive nature of episodic memory permits us to have an unlimited
21 memory capacity. However, this benefit has a cost: the reconstructive process can
22 make errors. The content of reconstructed episode can be influenced by current
23 information (i.e., at the time of recall) as well as by original experience. Thus, an
24 episodic memory may change over time as a result of re-interpretation of an event or
25 as a result of suggestion. The change in memory over time can happen without the

1 awareness of the rememberer."

2 Now my first question in relation to that section I just read out to you: What did you
3 mean by "current information" and "the original experience"? What does that mean?

4 A. Well, by "current information," what I meant is that, for example, let's say that
5 there's a bank robbery and there are ten witnesses and, for whatever reason, the
6 witnesses are allowed to talk to one another before the police talk to them.

7 Now, any particular witness' memory may now be influenced, changed, modified by
8 what they hear another witness say about the event. So that would be, you know,
9 current information being supplied that contaminates or changes or modifies a
10 memory.

11 Q. And just to clarify, is it always the case that the reconstructed episodic memory
12 will be influenced by current information?

13 A. No.

14 Q. Can you explain why that is?

15 A. Yes. It depends on personality factors and circumstances. Let me give you an
16 example. In doing training at a police academy, one of the things that I did was to
17 show the trainees an automobile accident on, you know, on video. And then I tried
18 to influence their memory subsequently by telling them that there was, say, a yield
19 sign at an intersection instead of a stop sign, or that a car that had driven past was
20 blue when in fact it was red. So I provided post-event information deliberately to
21 change the memory.

22 And it's known from university research that this works, in quotes, that is, university
23 students will often adopt this information.

24 I couldn't get a single police trainee to adopt this information. And the reason was
25 that they pay attention to these things. They pay attention to the colour of vehicles.

1 They pay attention to the nature of a stop sign.

2 So if -- if the person with the memory is convinced that their memory is accurate, and
3 the source of the misinformation is not believed, then it's going to have no effect.

4 Q. And perhaps this -- this is -- your answer to my next question will be the same,
5 it just -- I just want to clarify this statement, this is at page 7 of your report, ERN 0227,
6 where you stated, and I quote:

7 "...episodic memory may change over time as a result of re-interpretation of an event
8 or as a result of suggestion." End of quote.

9 My first question is: What does re-interpretation of an event mean? What do you
10 mean by that?

11 A. What I mean is that if the person is reframing the event, let's say for example
12 someone behaves in a very foolish manner at a party that's totally inconsistent with
13 their own self-image and they dance on a table with a lamp shade on their head, okay,
14 over time that memory is likely to change if it's so inconsistent with who they see
15 themselves, they may start to remember that it wasn't them that danced on the table
16 with the lamp shade, it was their, you know, cousin Albert or whoever. So that it's
17 consistent with their self-image.

18 Q. And just following on from, perhaps, your previous answer, even if there
19 was -- say there was suggestion, can an episodic memory still be accurate?

20 A. Yes.

21 Q. And is it the same answer as you gave before with the example of the police
22 officers in the prior explanation?

23 A. Yes.

24 Q. And if an individual has re-interpreted the events, is there, say, a psychological
25 tool for perhaps retrieving the accurate memory or not?

1 A. No, generally not. But there -- at least there's the tool of finding out what the
2 interpretation now is and, therefore, seeing if that may have influenced the memory.
3 Once a memory is changed it's changed. You can't, can't go back.

4 Q. Now, also at page 7 of your report, that's ERN 0227, and I'm going to quote the
5 passage here before I ask you my question:

6 "Generally, episodic memories decline in accuracy and detail with the passage of time.
7 This is particularly true when the to-be-remembered event is routine or normal in
8 nature. Memories may not show this decline when the event was traumatic in
9 nature. PTSD victims often experience repeated recall of the trauma. Repeated
10 recall enhances the persistence of the memory over time leading to better than normal
11 memory." End of quote.

12 So my first question in relation to this passage of your report that I just read out is:
13 Why can memories of a traumatic event not show the same decline as more, say,
14 routine or normal memories? Why is that?

15 A. The answer is in what you just quoted, and that is that the best predictor of
16 future memory is recall practice, if you like. If -- the more opportunity we have to
17 reconstruct a memory, the more vivid and detailed and available it will be to us.
18 And because traumatic memories often lead to reliving the event over and over again,
19 this has a very enhancing effect on memory.

20 Q. And is this the same as the hypermnnesia that you described before or is this
21 something slightly different?

22 A. No, that's what it is.

23 Q. Okay.

24 Now, in the following sentence actually from that same report, you stated that:

25 "If the PTSD victim experiences amnesia or avoidance of the memory the consequence

1 may be little or no memory for the trauma."

2 My first question is: How common is amnesia for victims of PTSD?

3 A. I'm pausing here because I'm not sure, are you asking how common is amnesia
4 a result of trauma or -- or PTSD?

5 Q. I'll rephrase my question. How common is the condition, say, of amnesia for
6 PTSD victims as a whole group, those who may be victims of PTSD, is this common
7 for PTSD victims, per se, to suffer from amnesia or not?

8 A. No, it does occur, there is no question that it does, but it's not common.

9 Q. And for the person who suffers from PTSD, and who also experiences, say,
10 amnesia or avoidance, is the memory lost entirely, or is there a way through, say,
11 psychological tools to retrieve those memories?

12 A. This is a very complex question. There can be recovery from amnesia.
13 Because it's not a common phenomenon and because it's very difficult to study, we
14 don't know enough about recovery from amnesia. All we can say is it does occur in
15 some people. Often it occurs when it does spontaneously. By that I mean a person
16 will be walking down the street, drying dishes, doing some trivial task, and they will
17 be suddenly flooded with this memory they have not had access to. Why this
18 happens, why it doesn't happen in others, we simply don't know at this point.

19 Q. And what about those who experience avoidance, the PTSD victims who suffer
20 from avoidance, is there a way of helping them to retrieve their memories?

21 A. Yes. That's an easier issue, because avoidance means that they know the
22 memory is there and they're just working at not allowing it to enter consciousness,
23 but if they are given techniques of relaxation and so on, they may be able to recall the
24 event. It may take some time, but yes, they can recall.

25 Q. And apart from victims of PTSD, just looking at trauma survivors as a group as

1 a whole, how common is amnesia for trauma survivors?

2 A. Again, it's not common. It occurs, but it's in a minority of victims.

3 Q. Now, turning to the other type of memory that you deal with in your report and
4 it's detailed also in the article you co-authored and annexed to your report, and that is
5 script memories, could you briefly describe in your opinion what is a script memory?

6 A. Yes. This is a very important concept. Whenever we experience the same
7 event or at least a very similar event repeatedly, instead of our brain retaining every
8 single episode, so let's say, for example, that someone is sexually assaulted by the
9 same perpetrator on many occasions; what will happen is their memory will not
10 retain every one of those sexual assaults. Instead the individual episodes will be
11 blended together and form what's called a script memory.

12 So a script memory is a generalised memory as a result of blending a number of
13 separate episodes. This blending is not conscious. This is an automatic
14 psychological process. It makes perfect sense because it gives the victim, if you like,
15 a template to anticipate what will happen in the future. Just as an aside, I might note
16 that offenders have the same, have script memories as well.

17 So if you have someone who has been repeatedly assaulted, the best memory they
18 will have is for the script. That is how did it usually happen? What form did it
19 usually take? And many of the episodes will be forgotten, unless there is an episode
20 that's a script violation. So if there is an episode in which the script didn't go
21 according to plan, didn't follow the usual pattern, that episode will be retained.

22 Of course, it's also possible to have more than one script. If someone is assaulted
23 let's say in a sex slave context, somebody is assaulted by person A and also by person
24 B, there may be a script for person A and a different script for person B.

25 Q. And in your experience, do all victims or witnesses of repeated traumatic events

1 develop a script memory?

2 A. Yes.

3 Q. And if someone does develop a script memory, what are the implications for
4 their ability to remember what happened to them?

5 A. Well, they're good with respect to the script. If an interviewer is aware of this,
6 the interviewer will first try to get the script from the victim. Obviously also
7 recalling the script is a little bit easier than recalling a specific episode. So there is
8 some real advantages of that. Also once the script is recalled, then a good
9 interviewer can say, "Was there a time it happened in a different way?" because as I
10 just alluded to, the episodes that are remembered are the ones that are different,
11 where the script wasn't followed, something happened in a different way, something
12 happened in a different place.

13 Q. And in your opinion, how accurate is the script memory?

14 A. It's as accurate as any other eyewitness memory. On the average, if a witness
15 is trying to tell the truth and is properly interviewed, eyewitness accounts will be 80
16 to 85 percent accurate. That's just as true of script as it is of episodes.

17 Q. And you've given an explanation already as to what the implications of the
18 script memory can be in terms of recalling or narrating, narrating events. Quite
19 apart from recalling the script, can there be any other implications in terms of this
20 person with a script memory's ability to narrate or recall what happened to them,
21 other than what you've already described?

22 A. No.

23 Q. Now, turning to the article that you co-authored, there is a section in that article
24 that refers to remarkable memories. Can you just briefly explain what remarkable
25 memories are and what factors lead to a person having a remarkable memory or

1 memories?

2 A. We've really dealt with this already in a way. A remarkable memory is simply
3 an episodic or autobiographical memory that is remarkable in at least two senses of
4 that word. Remarkable in the sense that it is unusual, different, outstanding in the
5 person's life; and also remarkable in the sense that the person tends to talk about it, to
6 think about it over time.

7 For example, the very first study we ever did of real witnesses were a group of people
8 who witness a gun store robbery and then a shootout between the store owner and
9 the thief in a street. And we interviewed these people about six months later after
10 the event. The thief was shot dead at the scene.

11 For all of these people, this was one of the most remarkable events in their life, seeing
12 a shootout on a street. This was in Canada, by the way, this is a pretty rare event.
13 And of course, they would tell anyone they met about this as soon as they met them.
14 This was such a special event in their lives.

15 So a remarkable memory is not unlike what we've been talking about, for example,
16 traumatic memories being repeatedly relived, except that a remarkable memory isn't
17 necessarily traumatic.

18 Q. And if you have a remarkable memory for a traumatic event, is that similar to
19 the hypermnesia that you described earlier or is this something different?

20 A. No. It's exactly what it is.

21 Q. And what does a remarkable memory of a traumatic event or hypermnesia,
22 what does that mean in terms of the ability for the person to recall or narrate what
23 happened?

24 A. It typically means being able to provide a detailed account of what the person
25 paid attention to in the event.

1 Q. Okay. Just changing topics somewhat. Now, in your expert opinion, when
2 we store a traumatic experience in our mind, is it purely cognitive or is it also sensory?
3 How does it work?

4 A. It is not purely cognitive. It can be of course, but generally, it has major
5 sensory components and emotion as well.

6 Q. Could you give an example just to explain what you mean by this, the sensory,
7 cognitive and emotional components?

8 A. Well, one of the things about memory, the reconstructive nature of memory is
9 how cue dependent it is. That is, a memory -- the ability to reconstruct a memory
10 often depends on having the right cue. One of the strongest cues for us is smell,
11 maybe an aftershave or perfume or the smell of cut grass or something that was
12 associated with the crime can be enormously helpful in providing a cue to the person
13 reconstructing the event. And so clearly that's one sensory aspect. But all the other
14 senses are important too in assisting reconstruction.

15 Q. Now, just turning to the article that you co-authored, it's at two parts, it's at
16 page 2 or ERN 0104 and at page 17, 0119, the article describes how different witnesses
17 to the same criminal event can have variable memory patterns. And in the article an
18 example given is, and I quote, "A victim of sexual assault may have dissociative
19 amnesia for the sexual component of his/her experience but demonstrate a
20 remarkable memory for the events that led up to the attack" end of quote.

21 Now, my question is this: Why is it that the victim in this example can have
22 dissociative amnesia say for the sexual component, say a rape, but then a remarkable
23 memory for the events leading up to the rape? Why is that?

24 A. First of all, the rape is presumably or sexual assault is a major life event for this
25 person. It's changed their life in substantial ways. And events leading up to and

1 following are very important to them. As you know, victims will sometimes blame
2 themselves. You know, I shouldn't have gone down that street or I shouldn't have
3 gone out with that guy and so on. So there can be repeated reliving of the events
4 leading up to and following.

5 When there is dissociative amnesia, when it actually does occur, it's usually quite
6 narrow in time, that is, it just covers the most traumatic, most difficult part of the
7 event.

8 I interviewed a woman who had been sexually assaulted. She remembered in detail
9 every event, this happened in an alley outside a bar, she remembered everything that
10 had happened until he pushed her down on the alley and began to sexually assault
11 her. Then she had no memory until some strangers came walking up the alley and
12 chased her assailant away and then she had detailed memory after that.

13 This is a very common pattern that we see when there is dissociative amnesia, that it
14 is only the most difficult, most traumatic part for which amnesia exists.

15 Q. And the phenomenon dissociative amnesia, how common is that, say, amongst
16 trauma survivors? How common is that in itself?

17 A. Now, just to make it clear that you asked me this same question earlier, except
18 you just used the term "amnesia." And dissociative amnesia is simply the technical
19 term. Personally I don't like it, but it's the technical term in my profession for
20 amnesia. It simply means that the memory is dissociated from other memories and
21 the person cannot get access to it. So the answer to your question now is exactly the
22 same, dissociative amnesia is relatively uncommon.

23 Q. And moving to a different question, in your expert opinion, what happens if
24 one individual experiences many different types of trauma? How are the memories
25 of the different types of trauma stored? That's the first question.

1 A. As far as we know, as I mentioned to you earlier, traumatic memories are stored
2 in fragmented fashion at first and then integrated over time. And that would be true
3 for someone experiencing different types of trauma. There is no -- there is nothing
4 that we know about at present that suggests that one kind of trauma leads to different
5 memory formation than another.

6 Q. And still remaining with the same example of the person who faces different
7 types of trauma, what can be the implications for their recall? Can they recall the
8 different types of trauma differently?

9 A. Yes.

10 Q. Can you explain why that is?

11 A. Well, it would depend on how they had coped with or coded or responded to
12 each type of trauma. If they responded in exactly the same way to every trauma
13 regardless of its nature, then the answer would be no, the pattern of recall would be
14 the same. However, if one type of trauma has had a more devastating effect, greater
15 feeling of helplessness or, you know, some other kind of impact, then the recall of that
16 trauma may be different from another trauma the same person has experienced.

17 Q. And following on from that, can there therefore be a difference in the way the
18 different types of trauma are narrated as well?

19 A. Yes.

20 Q. And why is that?

21 A. For many of the reasons we've already discussed. For example, a person may
22 have integrated one trauma and be able to provide a fairly full narrative of it, while
23 another trauma they experienced is still fragmented, or perhaps for another they have
24 amnesia and can't recall anything at all.

25 Q. Now, changing topic, at page 7 of your report, you state that, and I quote,

1 "Reconstructed memories are monitored by two cognitive processes, an original
2 monitor and an accuracy monitor," end of quote.

3 Could you please briefly explain what these two different cognitive processes are, the
4 original monitor and accuracy monitor? What does that mean?

5 A. I hope it says "origin monitor," but --

6 Q. It may be a typo I have here.

7 A. Okay.

8 Q. I apologise. It's origin monitor then and accuracy.

9 A. The origin monitor is just that, it maintains information about the origin of the
10 information. So, for example, an example of origin monitoring failure, you may be
11 talking to a friend and you may say, "I don't remember whether I saw this on TV or
12 read it in a newspaper, but did you hear about such and such?" So you're
13 acknowledging that you have information, but your origin monitor has failed you, if
14 you like, in this particular case.

15 And the accuracy monitor is just that, it's the subjective impression of how accurate
16 the information is. We can all make ratings of our memories and the parts of our
17 memories of how accurate or how much we're just guessing.

18 Q. Where you state further on page 7, and I quote, "A failure of the source
19 monitoring process can result in the accuracy monitor incorrectly concluding that that
20 aspect of the memory is accurate." Could you explain further what you mean by that?

21 A. To go to the bank robbery example again, let's say that a person witnessed a
22 bank robbery. It was traumatic for them. They're waiting to be interviewed by the
23 police. Another witness says to them, "Did you notice the moustache on the robber?"
24 Then the witness is interviewed, reports a moustache, which they didn't actually
25 notice to begin with, but now the origin of that information is erroneously thought to

1 be in their experience as opposed to from this outside source.

2 Q. And when you say "erroneously thought to be" part of the experience, do you
3 mean erroneous assumption on the part of the person interviewing?

4 A. No. Erroneous assumption on the interviewee. Of course, the information
5 could be accurate. Maybe the guy did have a moustache. But the point is that the
6 person is not reporting their experience. They're reporting information they got
7 from another source.

8 Q. And just following on from that, because you have dealt in some detail
9 previously about the issues of suggestion and reinterpretation of events, for example,
10 you gave an example about suggestion and the police officers. Does this mean that
11 there will always be a failure of the source monitoring process? In the example that
12 you gave of the person is, you know, told, "Oh, yes, there was -- the robber had a
13 moustache," will every individual react in the same way?

14 A. No.

15 Q. And can you explain why?

16 A. Yes. Some people are, if you like, stronger willed and less susceptible to
17 suggestion. There is even a test out there to measure susceptibility to suggestion.
18 Certainly people who score higher on the test are more likely to make these kinds of
19 errors than people who are -- who show resistance.

20 Q. Now, changing topic, I'm going to refer to a part of your report at page 7 still of
21 your report at ERN 0227, where you were asked, "What are the consequences of
22 trauma on memory and recall?"

23 And I quote, "Data on completeness of memory for trauma suggest a bimodal
24 distribution, with a larger sample who always remember the trauma, often vividly
25 and accompanied by intrusive re-experiencing symptoms, and a smaller sample who

1 are amnestic for the trauma for some period of their lives and may or may not later
2 recover the memory," end of quote.

3 My first question is what does "bimodal distribution" mean? What do you mean by
4 that?

5 A. It just means, you know, a double -- two hills, if you like, on a graph. And the
6 larger hill indicates the much more frequent reality in traumatic memories, and that is
7 hypermnesia. In fact, many of these victims will complain about not being able to
8 stop remembering, you know, that it's negatively impacting their life. And then you
9 get a much smaller hill which represents the minority who will suffer from amnesia.

10 Q. Now, moving to a different subject, when a person with PTSD is questioned
11 about a traumatic event and they're asked to, they're asked to narrate what happened
12 to them, what can be the potential reactions this person has when they try to recall
13 their traumatic memory?

14 A. It depends where they are in the process of having dealt with the trauma. For
15 some, telling their story and being listened to can be therapeutic, can be cathartic, can
16 be helpful in their process of recovering from the trauma. Alternatively, a person
17 who has not dealt with this yet may start to relive the negative emotions, the impact
18 of the event and may stop responding.

19 I interviewed recently a child who was present in the room when her father killed her
20 mother. We had a great conversation until we got to the murder. And at that point
21 the child curled up on the floor and was gone and wasn't talking to me anymore.
22 And she had not dealt with this terrible tragedy in her life, and she was not ready at
23 all to provide a narrative about it whatsoever.

24 Q. And when you have a person who has suffered from a traumatic event, they've
25 either experienced it, they've witnessed it, what can be the potential range of physical

1 or emotional effects that they are experiencing, say, or even showing whilst they
2 recall their traumatic memories?

3 A. Well, the range as I've suggested can be considerable, all the way from no
4 apparent physical or emotional impact to the person being quite traumatised by the
5 interview process itself and everything in between.

6 Q. All right. Now I'm going to go back to the topic of dissociation and you've
7 spoken a couple of times now about this in your testimony. Now, in your opinion, if
8 a person does dissociate, are they able to recall what happened, and if so, in an
9 accurate manner?

10 A. So just to clarify, dissociation refers to a psychological response that the person
11 makes at the time of the trauma. And as I mentioned, this comes in various forms.

12 And so the answer to your question is depends on the form of dissociation.

13 If it's a derealisation, so the person is experiencing the event like it's not really
14 happening, they'll be able to give a detailed account of what happened. It will have
15 some qualities to it that seem a little bit unusual because they experienced it as if it
16 wasn't real.

17 If it's a depersonalisation, if they leave their body during the event, again, they can
18 provide detail, but it will have the unusual feature that they're describing the event as
19 if it's happening to someone other than themselves because they experienced that as if
20 they were outside their body.

21 There is a form of dissociation in which the person just mentally leaves the event.

22 They're simply not there. This is the most extreme form. It's not very common.

23 That person will have no memory for the event.

24 Q. Now, if you have a witness who is testifying and they are narrating what they
25 experienced to be a traumatic event, if that person was to start to dissociate, what

1 might be the signs that an external observer might see, or would it just not be possible
2 to tell if the person is dissociating?

3 A. You're asking about now whether they dissociate at the time of the interview?

4 Q. No. Say that, well, at the time that they are recalling and/or narrating what
5 happened to them, if there is any part during, you know, if there is any aspect, at any
6 point in time where because of the traumatic event say, you've described what can
7 happen, if there is any kind of dissociation, is it possible to tell or see when that's
8 happening?

9 A. Yes. Usually the strongest indicator is a change in affect. There may be a
10 flattening of the affect, for example. The person may not be engaging in the same
11 way that they were before this occurred.

12 Q. Just changing topics and referring to page 3 of your report. That's at ERN
13 0223.

14 PRESIDING JUDGE FREMR: Ms Luping, sorry to interrupt you. Do you think
15 you'll be able to conclude by 8 o'clock or not? If not, because otherwise I would
16 maybe break now because I would like to also deal with some procedural issues.

17 MS LUPING: Unfortunately, Mr President, I think there will be need for me to
18 continue my questions. I don't think I'll need a considerable amount of additional
19 time, but it will certainly be more, unfortunately, than the next 4 minutes or so.

20 PRESIDING JUDGE FREMR: Okay. That's fine.

21 So sorry, we will have to interrupt you now, so sorry.

22 First of all, at this moment I would like to thank Professor Yuille for his contribution.
23 Thank you very much, Professor, that you patiently responded to all questions put to
24 you. We really appreciate your presence with us.

25 As you might know, we because of some technical reasons will be able to continue

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 with your testimony on Thursday, unfortunately. I'm sorry for that, we'll have to
2 start 30 minutes earlier than today. So sorry for that.

3 Anyway, I at least believe that you can take some rest in the meantime, and we will
4 really looking forward to seeing you again on Thursday. So thank you very much.
5 Now we can even disconnect the video link and then in the rest of the time I will just
6 comment some procedural issues.

7 So thank you very much and see you on Thursday.

8 THE WITNESS: Thank you, your Honour.

9 (Video link disconnected)

10 PRESIDING JUDGE FREMR: So we will continue on Thursday with this testimony.
11 I appreciate that Ms Luping did her best.

12 You said how much time you envisage you will still need? Just roughly, an
13 estimation.

14 MS LUPING: Possibly another 20 minutes.

15 PRESIDING JUDGE FREMR: So it will probably premature to ask LRVs to what
16 extent they insist on their request, so I will repeat this question after the end of Ms
17 Luping's examination.

18 Even if this is a premature question to Defence, do you envisage cross-examination
19 the same time amount like Prosecution or rather shorter?

20 MR GOSNELL: Mr President, you'll recall that our estimate for this witness was 3
21 and a half hours, and I am of course new to this courtroom, but I do know, I'm
22 familiar with the protocols about the amount of time. We requested 3 and a half
23 hours on the basis that this was in effect a 68(3) witness. I can say it will probably
24 not be 3 and a half hours. It could be considerably shorter, but I'll have to look
25 carefully at my notes between now and Thursday in order to really come back with a

Trial Hearing
WITNESS: DRC-OTP-P-0933

(Open Session)

ICC-01/04-02/06

1 proper estimate, Mr President.

2 PRESIDING JUDGE FREMR: Yes, you are right, Mr Gosnell, you are new, but I
3 would just like to emphasise that our general rule that the use of time should be
4 generally equal. If there are some extraordinary reasons, then we are even ready to
5 be more generous, but we will decide after the end of Prosecution examination, after
6 questions, if any, put by the Legal Representatives.

7 And that's it for the moment. The only issue, tomorrow we will start again with the
8 previous witness. And again, don't forget, we have to start at 9 o'clock.

9 Ms Luping.

10 MS LUPING: I apologise, Mr President and your Honours. It's been a long day,
11 but I just wanted to seek some clarity. I don't know if there is any confusion here,
12 but there's been a reference to Rule 68(3) in relation to this witness. I am not sure
13 why there is a reference to that because 68(3) is with reference to a witness with
14 previously recorded testimony.

15 PRESIDING JUDGE FREMR: It was a report. So it was misunderstanding.

16 MS LUPING: Yes, I'm just trying to clarify that.

17 PRESIDING JUDGE FREMR: I have correct that. Okay.

18 MS LUPING: Thank you.

19 PRESIDING JUDGE FREMR: So that's it. See you tomorrow, 9 o'clock.

20 THE COURT USHER: All rise.

21 (The hearing ends in open session at 8.01 p.m.)