

Exhibit 1

1 IN THE UNITED STATES DISTRICT COURT
2 SOUTHERN DISTRICT OF NEW YORK

3 -----x
4 SECURITIES AND EXCHANGE COMMISSION,

5 Plaintiff, Case No.
6 20-civ-10832(AT) (SN)

7 vs.

8 RIPPLE LABS, INC., BRADLEY GARLINGHOUSE,
9 and CHRISTIAN LARSEN,

10 Defendants.
11 -----x

12 ** CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER **
13
14

15 VIDEOTAPED DEPOSITION OF
16 DAVID SCHWARTZ
17

18 919 Third Avenue
19 New York, New York
20

21 May 26, 2021
22 9:17 a.m.
23

24 Reported b:
25 Cheryll Kerr, CSR
JOB No. 210526CK

1 IN THE UNITED STATES DISTRICT COURT
2 SOUTHERN DISTRICT OF NEW YORK

3 -----x
4 SECURITIES AND EXCHANGE COMMISSION,

5 Plaintiff, Case No.
6 20-civ-10832(AT) (SN)

7 vs.

8 RIPPLE LABS, INC., BRADLEY GARLINGHOUSE,
9 and CHRISTIAN LARSEN,

10 Defendants.
11 -----x

12 ** CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER **
13

14 VIDEOTAPED DEPOSITION OF DAVID SCHWARTZ, held
15 at the offices of Debevoise & Plimpton, LLP, located
16 at 919 Third Avenue, New York, New York, before
17 Cheryll Kerr, CSR, a Certified Shorthand Reporter
18 and notary public, on Wednesday, May 26th, 2021,
19 at 9:17 a.m.
20
21
22
23
24
25

1 COUNSEL FOR PLAINTIFF:

2 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
3 NEW YORK REGIONAL OFFICE

4 BY: JORGE G. TENREIRO, ESQ.

BY: DAPHNA A. WAXMAN, ESQ.

4 BY: JON A. DANIELS, ESQ.

200 Vesey Street, Suite 400

5 New York, NY 10281-1022

Phone: (212) 336-1060

6 E-mail: tenreiroj@sec.gov

E-mail: waxmand@sec.gov

7 E-mail: danielsj@sec.gov

8 COUNSEL FOR DEFENDANT RIPPLE LABS, INC.:

9 DEBEVOISE & PLIMPTON LLP

10 BY: ANDREW J. CERESNEY, ESQ.

BY: CHRISTOPHER S. FORD, ESQ.

11 919 Third Avenue

New York, NY 10022

12 Phone: (212) 909-6000

E-Mail: ajceresney@debevoise.com

13 E-mail: csford@debevoise.com

14 - and -

15
16 KELLOGG, HANSEN, TODD, FIGEL & FREDERICK, PLLC

BY: BETHAN JONES, ESQ. (via Zoom)

17 Sumner Square

1615 M Street, N.W.

18 Suite 400

Washington, D.C. 20036

19 Phone: (202) 326-7999

E-mail: bjones@kellogghansen.com

20

21

22

23

24

25

(Continued on the next page)

1 APPEARANCES: (Cont.)

2 COUNSEL FOR DEFENDANT BRADLEY GARLINGHOUSE:

3 CLEARY GOTTlieb STEEN & HAMILTON, LLP
4 BY: NOWELL D. BAMBERGER, ESQ. (via Zoom)
BY: SAMUEL LEVANDER, ESQ.
5 2112 Pennsylvania Avenue, N.W.
Washington, D.C. 20037
6 Phone: (202) 974-1500
E-mail: nbamberger@cgsh.com
7 E-mail: slevander@cgsh.com

8 COUNSEL FOR DEFENDANT CHRISTIAN A. LARSEN:

9 PAUL, WEISS, RIFKIND, WHARTON & GARRISON, LLP:
10 BY: MICHAEL E. GERTZMAN, ESQ. (via Zoom)
BY: CARLY M. LAGROTTERIA, ESQ. (via Zoom)
11 1285 Avenue of the Americas
New York, NY 10019-6064
12 Phone: (212) 373-3547
E-mail: mgertzman@paulweiss.com
13 E-mail: clagrotteria@paulweiss.com

14 Also Present:

15 David Shereck, Legal Videographer
16 Ladan F. Stewart, SEC (via Zoom)
Mark R. Sylvester, SEC (via Zoom)
17 Nicole Forbes, SEC (via Zoom)
Kyle Chernak, Debevoise & Plimpton (via Zoom)
18 Scott Caravello, Debevoise & Plimpton (via Zoom)
Lisa Zornberg, Debevoise & Plimpton (via Zoom);
19 Alex King, Kellogg, Hansen et al., LLP (via Zoom)

20 *** **

INDEX



WITNESS	PAGE
DAVID SCHWARTZ	
Direct examination by Mr. Tenreiro	16
Cross-examination by Mr. Ceresney	409

EXHIBITS

(Premarked on page 17)

DS FOR ID	DESCRIPTION	PAGE
Exhibit 2	Multi-page printout from Bitcoin Forum entitled "Latest Posts of JoelKatz" dated April 15, 2013	231
Exhibit 3	Multi-page printout from Bitcoin Forum entitled "Latest Posts of JoelKatz" dated April 17, 2013	226
Exhibit 5	Multi-page printout from Bitcoin Forum entitled "Latest Posts of JoelKatz" dated May 13, 2013	246
Exhibit 6	Multi-page printout from Bitcoin Forum entitled "Latest Posts of JoelKatz" dated May 20, 2013	107

(Continued on the next page)

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 7	One-page e-mail dated 6/10/2013	250
5		to from David Schwartz to	
6			
7	Exhibit 9	Two-page document entitled	120
8		"XRP Ledger Amendment"	
9	Exhibit 11	Two-page GitHub printout	174
10	Exhibit 13	Multi-page document entitled	196
11		"Validator Registry"	
12	Exhibit 14	Multi-page document entitled	179
13		"The Ripple Protocol Consensus	
14		Algorithm"	
15	Exhibit 15	Multi-page document entitled	181
16		"Analysis of the XRP Ledger	
17		Consensus Protocol" dated	
18		February 21, 2018	
19	Exhibit 18	Three-page e-mail dated	184
20		4/16/19 from David Schwartz	
21			
22	Exhibit 19	Document entitled "If Ripple	91
23		Failed, XRP died - General	
24		Discussion - Xrp Chat"	
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 20	Document entitled "Exchanges	270
5		with XRP autobridging? (Aka 'I'm not	
6		going to spill the beans just yet') -	
7		General Discussion - Xrp Chat)	
8	Exhibit 21	Four-page Twitter printout	256
9		dated 5/5/2017	
10	Exhibit 22	Multi-page document entitled	283
11		"Valuation Models - XRP The	
12		Digital Currency vs. Ripple	
13		the Company - XRP Trading	
14		and Price Speculation - Xrp	
15		Chat" dated 5/25/2017	
16	Exhibit 23	Multi-page document entitled	292
17		"For people asking about 'Coin	
18		vs Protocol'" dated "29 juin"	
19	Exhibit 25	Two-page Twitter printout	51
20		entitled "David 'JoelKatz'	
21		Schwartz on Twitter:	
22		'@bitcoinlobo @SASchofield52	
23		@Ripple I know it sounds	
24		ridiculous tod..." dated 1/8/19	
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 27	Five-page Insights article	198
5		entitled "How We Are Further	
6		Decentralizing the XRP Ledger	
7		to Bolster Robustness for	
8		Enterprise Use" dated 5/11/17	
9	Exhibit 30	31-page document entitled	66
10		"What Did Ripple Do Wrong? -	
11		Page 4 - General Discussion -	
12		Xrp Chat"	
13	Exhibit 31	E-mail dated 4/18/17 from	382
14		[REDACTED] to [REDACTED]	
15		[REDACTED]	
16		[REDACTED]	
17		[REDACTED]	
18	Exhibit 32	Nine-page printout from	260
19		Bitcoin Forum entitled	
20		"[XRP] Ripple Speculation"	
21			
22			
23			
24			
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 34	26-page printout entitled	310
5		"Ripple sold \$91.6 million	
6		of its digital currency XRP	
7		last quarter, as the price	
8		surged almost 30,000% -	
9		Press - Xrp Chat"	
10	Exhibit 35	10-page printout from Bitcoin	318
11		Forum entitled "Latest posts	
12		of JoelKatz" dated 5/30/17	
13	Exhibit 36	35-page printout entitled	80
14		Ripple: The Most Prestigious	
15		Team - General Discussion -	
16		Xrp Chat"	
17	Exhibit 37	33-page printout entitled	394
18		"Insiders Dumpling? - Page 6 -	
19		XRP Trading and Price	
20		Speculation - Xrp Chat"	
21			
22			
23			
24			
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 38	26-page printout entitled	272
5		"How do you like your	
6		misinformation? Please,	
7		feel free to correct him -	
8		Off-Topic - Xrp Chat"	
9	Exhibit 39	24-page document entitled	326
10		"Can the first usage of	
11		xRapid actually flood	
12		the market with XRP? -	
13		Page 3 - General	
14		Discussion - Xrp Chat"	
15	Exhibit 40	34-page document entitled	351
16		"Ripple: 'The fundamental	
17		Value of XRP' - Page 5 -	
18		Press - Xrp Chat"	
19	Exhibit 42	Eight-page e-mail dated 12/31/17	219
20		from [REDACTED]@ripple.com to	
21		[REDACTED]@ripple.com et al.	
22			
23			
24			
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 44	E-mail chain with the top	222
5		e-mail dated 11/13/18 from	
6		[REDACTED] to [REDACTED]	
7		[REDACTED] et al.	
8	Exhibit 46	23-page document entitled	190
9		"Can Ripple labs reverse a	
10		payment? - Page 2 -	
11		Technical Discussion -	
12		Xrp Chat"	
13	Exhibit 47	E-mail dated 2017-12-21	384
14		from [REDACTED] to	
15		David Schwartz et al.	
16	Exhibit 48	E-mail dated 2018-01-09	387
17		from [REDACTED] to	
18		David Schwartz et al.	
19	Exhibit 52	10-page document entitled	337
20		"I am David Schwartz,	
21		Chief Cryptographer at	
22		Ripple. AMA!"	
23			
24			
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit		
5	Exhibit 57	38-page document entitled	342
6		"Why the world needs Ripple	
7		XRP - Whitepaper" dated	
8		January 15, 2020	
9	Exhibit 58	Three-page document entitled	355
10		"Considering that the banks	
11		don't use XRP coins for their	
12		transactions, how can the XRP	
13		price go high even if the	
14		banks adopt the Ripple	
15		platform?" dated 11/12/17	
16	Exhibit 59	Ripple document entitled	357
17		"Where a community about	
18		your favorite things is	
19		waiting for you" submitted	
20		22 Jun 2017	
21	Exhibit 60	Two-page document entitled	86
22		"Issuing Gateway vs. Private	
23		Exchange - Gateways and	
24		Exchanges - Xrp Chat"	
25	(Continued on the next page)		

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 61	Four-page document entitled	360
5		"Forbes - The Bear Case for	
6		XRP - Page 3 - Press - Xrp	
7		Chat"	
8	Exhibit 63	E-mail chain with top e-mail	369
9		dated 7/13/18 from Brad	
10		Garlinghouse to [REDACTED]	
11		[REDACTED] et al., "Subject:	
12		Coinbase decision"	
13	Exhibit 64	E-mail chain with top e-mail	372
14		dated 7/14/18 from Brad	
15		Garlinghouse to Chris	
16		Larsen et al.	
17	Exhibit 66	E-mail dated 7/23/18 from	379
18		[REDACTED] to Brad	
19		Garlinghouse et al.	
20	Exhibit 68	E-mail chain with top e-mail	390
21		dated 7/18/19 from Brad	
22		Garlinghouse to David	
23		Schwartz	
24	(Continued on the next page)		
25			

1	EXHIBITS (Cont.)		
2	DS		
3	FOR ID	DESCRIPTION	PAGE
4	Exhibit 69	E-mail chain with top e-mail	393
5		dated 3/31/2020 from David	
6		Schwartz to Brad Garlinghouse	
7	Exhibit 70	E-mail chain with the top	213
8		e-mail dated 7/6/2020 from Brad	
9		Garlinghouse to David	
10		Schwartz et al.	
11	Exhibit 71	Eight-page document entitled	399
12		"David "JoelKatz" Schwartz	
13		(u/sjoelkatz) - Reddit"	
14		dated 7/3/18	
15	Exhibit 75	Nine-page document entitled	397
16		Opencoin Features Overview"	
17		bearing Bates Nos.	
18		DS_RPLI0002158 through	
19		DS_RPLI0002166	
20	Exhibit 76	Four-page Twitter printout	201
21		entitled "David 'JoelKatz'	
22		Schwartz on Twitter" dated	
23		December 1, 2020	
24	(Continued on the next page)		
25			

EXHIBITS (Cont.)

DS FOR ID	DESCRIPTION	PAGE
Exhibit 77	Document entitled "Technical FAQ - XRPL.org"	161
Exhibit 80	Two-page e-mail chain with top e-mail dated 6/20/18 from [REDACTED] to [REDACTED]@ripple.com	375
Exhibit 83	31-page document entitled "Master Press Q&A"	404
Exhibit 84	10-page entitled "Make XRP Great"	404

*** **

09:17 1 THE VIDEOGRAPHER: Okay. This is the
2 videotaped deposition of David Schwartz,
3 deponent, in the matter of SEC vs. Christian
4 A. Larsen, defendants. Case number is
09:17 5 20-civ-10832 and this deposition is being held
6 at Debevoise & Plimpton, at 919 Third Avenue,
7 New York, New York.

8 Today's date is Wednesday, May 26th, 2021
9 and the time is approximately 9:17 a.m. My
09:17 10 name is David Shereck, certified videographer
11 with Gradillas Court Reporters, located at 400
12 North Brand Boulevard in Glendale, California.

13 All appearances will be noted on the
14 stenographic record, and the court reporter
09:17 15 today is Cheryll Kerr, also with Gradillas,
16 and will you please swear in the deponent?

17 D A V I D S C H W A R T Z,
18 called as a witness, having been duly
19 sworn, was examined and testified
09:17 20 as follows:

21
22 DIRECT EXAMINATION
23 BY MR. TENREIRO:
24

09:17 25 (Continued on the next page)

09:17 1 (Thereupon, the following exhibits were
2 premarked for identification: DS Exhibit 2, 3,
3 5, 6, 7, 9, 11, 13, 14, 15, 18, 19, 20, 21, 22,
4 25, 27, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40,
09:17 5 42, 44, 46, 47, 48, 52, 57, 58, 59, 60, 61, 63,
6 64, 66, 68, 69, 70, 71, 75, 76, 77, 80, 83, and
7 84.)

8 BY MR. TENREIRO:

9 Q. Please state your name for the record.

09:17 10 A. David Schwartz.

11 Q. Mr. Schwartz, are you represented by counsel?

12 A. I am.

13 Q. Who is your counsel?

14 A. Debevoise.

09:17 15 Q. Okay. My name is Jorge Tenreiro. I'll be
16 asking questions today on behalf of SEC.

17 With me are my colleagues Daphna Waxman, Jon
18 Daniels, and other SEC staff members on the phone.

19 Mr. Schwartz, other than SEC testimony in this
09:17 20 case, have you ever given testimony under oath before?

21 A. I have been deposed before.

22 Q. In connection with what matter?

23 A. Well, previously with this matter, and once
24 with an IRS matter involving a former employer of mine.

09:18 25 MR. CERESNEY: Mr. Tenreiro, just before

09:18 1 we proceed any further, just two stipulations
2 on the record.

3 One is that any objection by defense
4 counsel will be imputed to the other
09:18 5 departments, so defendants Garlinghouse and
6 Larsen --

7 (Thereupon, an informal discussion was
8 held off the record with the shorthand
9 reporter.)

09:18 10 MR. CERESNEY: Any objection by one party
11 will be an objection by all parties. That's
12 one stipulation.

13 The other stipulation is that this
14 transcript will be marked confidential under
09:18 15 the protective order in this case. That's it.

16 (Thereupon, an informal discussion was
17 held off the record.)

18 THE VIDEOGRAPHER: Off the record at 9:18
19 a.m.

09:18 20 (Recess taken at 9:18 a.m.)

21 (Resumed at 9:24 a.m.)

22 THE VIDEOGRAPHER: Back on the record at
23 9:24.

24 BY MR. TENREIRO:
25

09:24 1 Q. Thank you. So, Mr. Schwartz, it sounds like
2 you've -- you know, you've given testimony or deposition
3 under oath. Just briefly, to remind you, it's important
4 that we don't talk over each other. If you wait for me
09:24 5 to complete my question before answering in order to
6 create a clear record, I'll try to do the same. Please
7 give verbal answers rather than shaking your head or
8 nodding, and don't tell me the substance of any advice
9 that your lawyers have given you throughout the course
09:24 10 of today's deposition.

11 I'll start by asking you if there's any reason why
12 you cannot testify truthfully or accurately today.

13 A. There is not.

14 Q. Okay. Mr. Schwartz, are you employed?

09:24 15 A. Yes.

16 Q. And where?

17 A. I am employed by Ripple.

18 Q. Since when?

19 A. Well, I started work on what eventually
09:24 20 became the company Ripple in November of 2011, and I was
21 employed by the company since it was formed.

22 Q. And what is your title today?

23 A. My entitled today is chief technology
24 officer.

09:24 25 Q. When did you get that title?

09:24 1 A. I believe it was sometime in 2018. I'm not
2 exactly sure.

3 Q. Who do you report to today?

4 A. I report to Brad Garlinghouse.

09:25 5 Q. Before 2018, did you report to -- did your
6 reporting structure change when your title changed?

7 A. It did. Prior to that, I reported to Chris
8 Larsen.

9 Q. Did you report to Mr. Larsen even when he was
09:25 10 no longer CEO of the company?

11 A. Yes.

12 Q. Okay. Why did you report to him?

13 A. A small number of employees, including
14 myself, remained in sort of the previous reporting
09:25 15 structure still reporting to Chris Larsen.

16 Q. Who else remained reporting to Mr. Larsen?

17 A. I know his executive assistant did, and I
18 believe [REDACTED] did.

19 (Thereupon, an informal discussion was
09:25 20 held off the record with the shorthand
21 reporter.)

22 THE WITNESS: [REDACTED], his
23 executive assistant, and [REDACTED],

24 [REDACTED]. Sorry. I sometimes forget.

09:25 25 THE SHORTHAND REPORTER: It's okay.

09:25 1 BY MR. TENREIRO:

2 Q. No problem. Why did your reporting structure
3 change sometime in 2018?

4 (Pause.)

09:26 5 THE WITNESS: Chris Larsen had been
6 reducing his day-to-day responsibilities with
7 the company over a period of time, and this
8 was just sort of a step in that process.

9 BY MR. TENREIRO:

09:26 10 Q. Okay. Does anyone report to you currently?

11 A. No.

12 Q. How is it you came to work for the company or
13 the project that became Ripple in November of 2011?

14 A. [REDACTED] had the original idea for what
09:26 15 eventually became the company, and he found me online.

16 Q. Where online?

17 A. I believe he was familiar with -- with who I
18 was and what I was doing at the time through my posts on
19 a Bitcoin forum, and then he posted a job offer on, um,
09:27 20 I think it was stack exchange careers, which was like an
21 experimental -- an experimental website at the time.

22 But -- and I think he had someone point me to it,
23 posted that job offer so I would specifically see it.

24 Q. And what did you work or what can do you
09:27 25 before you started working on this project in November

09:27 1 of 2011?

2 A. Prior to that, I worked for a software
3 company in San Jose called [REDACTED].

4 Q. What were you doing for them?

09:27 5 A. I was in charge of software development.

6 Q. Okay. Can you briefly describe your
7 educational background post-high school?

8 A. I studied electrical engineering at the
9 University of Houston.

09:27 10 Q. Anything else?

11 A. No.

12 Q. Okay, and what is your role at Ripple today?
13 What are your responsibilities?

14 A. Today, I -- I have -- I am responsible for
09:27 15 the security of the company's XRP holdings, and
16 generally the direction of development, strategic
17 direction, those kinds of things.

18 Q. What do you mean by "the security of the
19 company's XRP holdings"?

09:28 20 MR. TENREIRO: Actually, strike that.

21 BY MR. TENREIRO:

22 Q. Just for the record, what is XRP?

23 A. A digital asset that trades on the
24 decentralized public ledger.

09:28 25 Q. And what do you refer -- what do you refer to

09:28 1 that ledger as?

2 A. The XRP Ledger.

3 Q. Okay. Just so that we can use the same
4 language, what do you mean by you are "responsible for
09:28 5 the security of the company's XRP holdings"?

6 A. Digital assets like XRP can be stolen or
7 compromised in various ways, and one of my
8 responsibilities is to make sure that that does not
9 happen to the company's XRP holdings.

09:28 10 Q. How much -- what are the company's XRP
11 holdings today?

12 A. I would have to check to give you the exact
13 number, but roughly 50 billion XRP.

14 Q. Okay. Has that number changed over time?

09:28 15 A. It has decreased over time.

16 Q. Okay. We'll get back to that. So who -- who
17 wrote the code for what became the public version of the
18 XRP Ledger?

19 A. Several hundred people.

09:29 20 Q. What was your role in that?

21 A. I was probably one of the two major
22 developers in the early days, then gradually reducing
23 over time.

24 Q. In the very early days, 2011/2012 time
09:29 25 period?

09:29 1 A. Yes.

2 Q. Okay. At that point, who was writing code?
3 Was it several hundred people back then?

4 A. No.

09:29 5 Q. Okay, so who was writing back then?

6 A. The two primary developers were myself and
7 Arthur Britto.

8 Q. Did you copyright the code?

9 A. It's automatically copyrighted as soon as we
09:29 10 create it.

11 (Thereupon, an informal discussion was
12 held off the record with the shorthand
13 reporter.)

14 THE WITNESS: It's automatically
09:29 15 protected by copyright as soon as we write it.

16 BY MR. TENREIRO:

17 Q. What do you mean, "automatically protected by
18 copyright?

19 A. My understanding of the way copyright in the
09:30 20 United States is that nothing specific needs to be done
21 for a work to be copyrighted.

22 Q. Okay, and where did you derive that
23 understanding, without discussing the advice of counsel,
24 if you can answer that?

09:30 25 A. Just various intellectual property issues

09:30 1 that I've been involved with throughout my entire
2 career.

3 Q. Okay. When was the XRP Ledger deployed to
4 the public?

09:30 5 A. I would have to -- I would have to check the
6 exact dates, but I think it was either late 2012 or
7 early 2013.

8 Q. Okay, and did XRP -- was XRP in the genesis
9 block for the ledger?

09:30 10 A. Yes.

11 Q. Okay, and when was XRP created?

12 A. It's not really possible to answer that
13 question.

14 Q. Why is that?

09:31 15 A. Because the term XRP is not sufficiently
16 precisely defined to allow you to draw a bright line.

17 Q. What would you need to define it in order to
18 draw a bright line?

19 A. Some precise definition that was -- that will
09:31 20 enable you to say that on a particular date, what
21 existed was or was not XRP.

22 Q. Let me ask you this:

23 Is it fair to say that at some point, Mr. Britto
24 wrote code that would define how the initial

09:31 25 distribution of XRP would occur?

09:31 1 A. Yes, yes.

2 Q. Okay, and what would --

3 What did that code provide in terms of the
4 distribution?

09:31 5 A. That code placed 100 billion units, each
6 divisible into one million subunits, into the genesis
7 block.

8 Q. Okay, and is it fair to say the ledger that
9 you were working on as reset a number of times before it
09:31 10 was deployed publicly?

11 A. Yes.

12 Q. And each time it was reset, what --

13 Would that be a sort of -- new genesis block each
14 time it was reset?

09:32 15 A. Yes.

16 Q. Okay, and so there was a sort of new
17 iteration of XRP each time there was a reset?

18 A. I -- I hesitate to adopt that terminology,
19 again, because the term "XRP" --

09:32 20 It's a term that has a precise meaning today, but
21 it -- it can't necessarily draw that meaning back in
22 time.

23 Q. Okay. Fair enough.

24 (Pause.)

09:32 25 BY MR. TENREIRO:

09:32 1 Q. Who decided to deploy the XRP Ledger
2 publicly?

3 MR. GERTZMAN: Objection to the form.

4 (Thereupon, an informal discussion was
09:32 5 held off the record.)

6 BY MR. TENREIRO:

7 Q. Go ahead.

8 A. That was something that we had always planned
9 to do from the very, very beginning.

09:32 10 Q. At what point did Mr. Larsen get involved
11 with that project?

12 A. [REDACTED] brought Chris Larsen in to be
13 CEO. I couldn't place the time period exactly for you,
14 but prior to the formation of the company.

09:33 15 Q. Was the company formed prior to the public
16 launch of the ledger?

17 A. I'm not sure.

18 Q. Okay. Did Mr. Larsen have any role in
19 deciding to publicly launch the ledger?

09:33 20 A. He was CEO at the time and he was present at
21 conversations about the timing, but I -- I couldn't tell
22 you how much inputs he provided.

23 Q. Briefly, so that we're -- you know, I'm
24 trying to get on the same page, which is the XRP Ledger.
09:33 25 You already said something, but could you expand a

09:33 1 little bit?

2 A. Sure. The XRP Ledger is a public,
3 decentralized -- it is technically a blockchain that
4 stores and processes transactions to move XRP and other
09:34 5 digital assets.

6 Q. You say, "technically a blockchain." Why did
7 you say, "technically a blockchain"?

8 A. The term "blockchain" has evolved over time,
9 but as I understand the meaning of the term
09:34 10 "blockchain," it meets the criteria to be considered a
11 blockchain.

12 Q. What do you understand the meaning of the
13 term "blockchain" to be?

14 A. I understand the meaning of the term
09:34 15 "blockchain" to be literally a chain of blocks, and by
16 "blocks," I mean chunks of information that contain
17 transactions.

18 And by "chain," I mean each block, except the first
19 one has a cryptographically secure reference to the
09:34 20 prior block.

21 Q. And does the XRP Ledger --

22 Is the XRP Ledger a chain of blocks or is it a
23 chain of ledgers?

24 A. You could --

09:34 25 You could use either terminology. The way I use

09:34 1 the terms, a ledger is a block with some additional
2 information in it.

3 Q. And does every block in the XRP Ledger or
4 every ledger, as whatever term we're using, have a
09:34 5 cryptographically secure reference to the prior block?

6 A. Yes. Except the first, obviously.

7 Q. Except the first? Now, is it also fair to
8 say that -- let's talk about blockchains generally.

9 A distributed blockchain is -- is run over several
09:35 10 computers, a network of computers?

11 A. Yes.

12 MR. CERESNEY: Objection to form.

13 BY MR. TENREIRO:

14 Q. Is that also true for the XRP blockchain?

09:35 15 A. Yes.

16 Q. Sorry. XRP Ledger. Apologies.

17 Now, when the XRP Ledger was publicly launched, how
18 many nodes was the computer running -- was -- was the
19 network running on?

09:35 20 A. I know at that time, there were three
21 validators, but I couldn't tell you how many -- other
22 nodes. Let me rephrase a little more precisely.

23 There were three validators that were on what we
24 would call UNL. There may have been other validators
09:35 25 running or other servers. I couldn't tell you for sure.

09:35 1 Q. Let's take it one step at a time. What is a
2 validator in the context of the XRP Ledger?

3 A. In the context of the XRP Ledger, a validator
4 is a node that coordinates with other nodes in the
09:36 5 consensus process.

6 Q. And the consensus process achieves what
7 purpose?

8 A. The purpose of the consensus process is to
9 break ties in the ledger.

09:36 10 Q. Is one of the purposes to --
11 Well, is one of the purposes of the validators to
12 permit the ledger to continue moving forward?

13 MR. CERESNEY: Objecting to form. You
14 can answer.

09:36 15 THE WITNESS: One of the purposes of the
16 validators is to ensure a consistent view of
17 the ledger as it moves forward.

18 Otherwise, there could be equally good
19 ways the ledger could make forward progress.

09:36 20 (Thereupon, an informal discussion was
21 held off the record with the shorthand
22 reporter.)

23 BY MR. TENREIRO:

24 Q. So do the validators help the ledger make
09:36 25 forward progress?

09:37 1 A. They ensure there's a -- that it's possible
2 to have a single view on how the ledger makes forward
3 progress. It would make forward progress without them.

4 Q. How would it make forward progress without
09:37 5 them?

6 A. The way the software is designed, it's -- we
7 describe it as opportunistic. That is, it makes forward
8 progress unless it is impossible to make forward
9 progress, which it basically never is. The -- yeah, I
09:37 10 think I'll stop there.

11 Q. Well, without the validators ordering
12 transactions, would there be double spin?

13 A. What could happen is there could be
14 disagreement over -- over which ledger people wanted to
09:37 15 honor.

16 Q. So fork, in other words?

17 A. Yes, an unintentional fork.

18 Q. Has there ever been a fork on the company
19 ledger since inception?

09:37 20 A. There are forks of the type that you were
21 just talking about all the time. I guess you would call
22 them minor or small forks.

23 But if the network is operating normally, they
24 don't cause any -- they don't cause any problem. They
09:38 25 last -- you know, a couple of seconds.

09:38 1 Q. So just to make sure I understand the insert,
2 have there ever been any forks on the XRP Ledger since
3 inception, other than minor forks that have not lasted
4 more than a few seconds?

09:38 5 MR. CERESNEY: Objection to form.

6 THE WITNESS: Right. Other than those
7 minor things that are technically forks that
8 don't cause -- they're completely harmless and
9 you wouldn't even notice unless there were
09:38 10 specific -- there has not been a harmful
11 fork -- to my knowledge, at least -- since the
12 inception.

13 (Thereupon, an informal discussion was
14 held off the record with the shorthand
09:38 15 reporter.)

16 BY MR. TENREIRO:

17 Q. When was the last time the XRP Ledger was
18 reset?

19 A. I believe it was early -- late 2012, but I'm
09:39 20 not exactly sure.

21 Q. Was it around the time it was publicly
22 deployed?

23 A. I think it was within a couple months. I'm
24 not sure.

09:39 25 Q. And the 32,000 or so blocks that were lost

09:39 1 originally -- when was that, approximately?

2 MR. CERESNEY: Objection.

3 BY MR. TENREIRO:

4 Q. Were there -- has the XRP Ledger --

09:39 5 Are some of the original blocks or ledgers -- were
6 they lost?

7 A. Yes.

8 Q. Okay, and when was that, just in time?
9 Before or after the public launch?

09:39 10 A. I think it was after, but I'm not certain.

11 Q. Okay. Does it affect the functioning of the
12 ledger today in any way?

13 A. No.

14 Q. Why not?

09:39 15 A. The XRP Ledger is designed -- it doesn't
16 require you to have history in order to operate.

17 Q. Every new ledger -- every closed ledger has
18 all of the information, in other words?

19 A. Correct.

09:40 20 MR. GERTZMAN: Objection to form.

21 BY MR. TENREIRO:

22 Q. Okay. So is it fair to say that your
23 recollection is that when the ledger was launched, there
24 were three validators that were engaged in the consensus
09:40 25 process?

09:40 1 A. Yes.

2 Q. And who operated or ran those validators back
3 then?

4 A. My recollection is that until the incident
09:40 5 with the lost ledgers, [REDACTED] ran them exclusively.

6 Q. From his home?

7 A. Well, he operated them for wherever they
8 were. The validators themselves -- I believe they were
9 running on an Amazon infrastructure.

09:40 10 Q. And the loss of some of the -- the loss of
11 some of the blocks caused a change in that, I guess? Is
12 that what you're saying?

13 A. Yes.

14 Q. And what happened after that?

09:40 15 A. After the incident with the lost blocks -- at
16 first, we didn't know --

17 We didn't know what had happened, so [REDACTED] asked me
18 to investigate, and in order to do that, I needed access
19 to those validators.

09:41 20 Prior to that, I didn't have any role. I'm not
21 even positive I knew that there were three. I might
22 have. I might not have. At that point, it became
23 important that I look at the infrastructure.

24 Q. What had happened, just briefly?

09:41 25 A. All -- all three of the validators that Jed

09:41 1 was running at the time were built -- were built
2 substantially the same way. They were on the same
3 infrastructure and they all ran out of disk space at
4 roughly the same time of the.

09:41 5 The software, at that point, didn't have any
6 safeties to handle that in the same way, so there was a
7 data -- relationships between data was lost.

8 Q. Does the software have safeties to handle
9 that today?

09:41 10 A. Yes.

11 Q. Who programmed that into the software?

12 A. I believe either myself or [REDACTED] did
13 so immediately after that incident.

14 Q. What language is the software program in?

09:42 15 A. C++.

16 Q. What was the function of XRP at the time that
17 the ledger was launched publicly?

18 A. At that time the time, the primary function
19 of XRP was to sort of fund transactions pay for
09:42 20 transactions and prevent spam.

21 Q. So -- and how much did the transactions cost
22 at that time, approximately?

23 A. I don't remember exactly.

24 But it would have been much less than one XRP,
09:42 25 probably on the order of magnitude like a thousandth of

09:42 1 an XRP, possibly less. I don't exactly recall.

2 MR. GERTZMAN: Objection.

3 (Thereupon, an informal discussion was

4 held off the record with the shorthand

09:42 5 reporter.)

6 BY MR. TENREIRO:

7 Q. Did -- you said, "fund transactions."

8 Was someone receiving the XRP when they engaged in
9 a transaction, or what was happening to the XRP?

09:43 10 A. Transaction fees are destroyed.

11 Q. So the XRP that was, let's say, charged by
12 the ledger for a transaction just disappears?

13 A. Correct.

14 MR. CERESNEY: Objection to form. You've
09:43 15 got to wait.

16 THE WITNESS: Yes.

17 BY MR. TENREIRO:

18 Q. Is that still the case today?

19 A. Yes.

09:43 20 Q. And the cost of a transaction has changed
21 over time for this function only?

22 A. I think -- I think there was at least one
23 change, but I don't recall for sure.

24 Q. Who would have programmed that change?

09:43 25 A. There was a change to the fee structure that

09:43 1 I originally designed, and it was implemented by the
2 team -- the team at the time.

3 Q. The programmers?

4 A. Yes.

09:43 5 Q. When I asked you what the function of XRP was
6 at the time that the ledger was launched publicly, you
7 said at that time, the primary function was to sort --
8 sort the fund transactions.

9 A. Uh-huh.

09:44 10 Q. Was there any other function at that time?

11 A. Very close to that time, there was another
12 function.

13 Q. What was that?

14 A. That was as -- as a sort of intermediary
09:44 15 currency between other assets on the ledger.

16 Q. Is this in connection with the exchange that
17 Ripple constructed on the XRP Ledger?

18 A. It is in connection with the decentralized
19 exchange.

09:44 20 Q. Who created that exchange?

21 A. That was a very early design idea in very
22 early 2012, and that was primarily developed by [REDACTED]
23 [REDACTED].

24 Q. Does that function exist today?

09:44 25 A. Yes.

09:44 1 Q. Is it used today?

2 A. Yes.

3 Q. You know, how --

4 What's the order of magnitude of XRP used on that
09:44 5 today?

6 A. I could not tell you offhand the magnitude of
7 XRP that's used. I can tell you the value exchange is
8 on the order of \$10 million a day, some XRP, some not.
9 I suspect XRP is the dominant fraction of that.

09:45 10 Q. So it's other assets being exchanged for each
11 other?

12 A. Yes.

13 Q. What assets, for example?

14 A. There are assets denominated in U.S. dollars,
09:45 15 other cryptocurrencies are there, and then there are
16 assets that represent either commodities or intangible
17 items.

18 Q. Has Ripple ever sold XRP for use in this way
19 on this decentralized exchange on the ledger?

09:45 20 (Pause.)

21 THE WITNESS: Ripple has sold XRP at
22 times when XRP was being used on the
23 decentralized exchange.

24 BY MR. TENREIRO:

09:45 25 Q. But has Ripple ever sold it specifically for

09:45 1 that use, as far as you know?

2 A. It's hard to make sense of that question.
3 Generally, we didn't know what people were going to use
4 XRP for.

09:46 5 Q. Okay. At some point, did another use for XRP
6 develop?

7 So we talked about the use as you've described the
8 first user, the primary use as sort of avoiding spam
9 transactions.

09:46 10 A. Uh-huh.

11 Q. Is that a fair characterization of that use?

12 A. Yes.

13 Q. And then we talked about the exchange. At
14 some point, did other uses develop?

09:46 15 A. Yes.

16 Q. Okay, and let's start with when.

17 A. Roughly 2014, XRP started being used
18 essentially as a means of payment.

19 Q. And who developed that use?

09:46 20 A. I don't know.

21 Q. Was it someone at Ripple?

22 A. No.

23 Q. Did Ripple promote XRP as a means of payment?

24 MR. CERESNEY: Objection to form.

09:47 25 THE WITNESS: If you interpret "promote"

09:47 1 broadly enough, I believe, for example, we
2 circulated documents that mention that as a
3 use case.

4 BY MR. TENREIRO:

09:47 5 Q. Okay. All right. Just to be clear, no one
6 at Ripple developed that use case; is that fair?

7 A. I don't believe so.

8 Q. Okay, and at any point in time, did any other
9 uses develop?

09:47 10 A. I -- I think the -- I think there certainly
11 were others.

12 Q. Well, actually, let me take a step back.
13 Earlier, when I asked you whether Ripple had ever sold
14 XRP specifically for use on the decentralized exchange,
09:48 15 you said it's hard to make sense of that question.

16 Generally, we didn't know what people were going to use
17 XRP for.

18 Is that also true with respect to XRP's use as a
19 means of payment? Did Ripple ever sell it specifically
09:48 20 for that use, as far as you know?

21 MR. GERTZMAN: Objection to form.

22 THE WITNESS: Construing that broadly,
23 you could include some of our -- some of the
24 ODL uses.

09:48 25 BY MR. TENREIRO:

09:48 1 Q. Construing what broadly?

2 A. Means of payment? Yes.

3 Q. You could construe some of the ODL -- well,
4 did Ripple sell XRP in connection with ODL?

09:48 5 MR. GERTZMAN: Objection to the form.

6 (Pause.)

7 THE WITNESS: Yeah, it -- it's hard to
8 give a "yes" or "no" answer to that question.

9 BY MR. TENREIRO:

09:48 10 Q. Why is that?

11 A. Both -- well, first of all, because I don't
12 know exactly what -- what -- what the nature of the
13 transactions that the ODL team negotiated were, and I
14 hesitate to characterize them as "sales" without knowing
09:49 15 more details about the nature of those transactions.

16 Q. Okay. Other than construing broadly means of
17 payment to include ODL, as far as you know, did Ripple
18 sell XRP as a means of payments?

19 MR. CERESNEY: Objection to form.

09:49 20 THE WITNESS: I don't know.

21 BY MR. TENREIRO:

22 Q. Okay. At some point, were there discussions
23 at Ripple about trying to develop XRP for use for banks
24 to use as a bridge currency?

09:49 25 A. Yes.

09:49 1 Q. And did that use --

2 Did you have any involvement with -- any attempts
3 to develop that use?

4 A. Yes.

09:49 5 Q. When did that use case as a bridge currency
6 come into existence, if at all?

7 A. I think --

8 I think, as I said previously, the use as a sort of
9 intermediary asset on the ledger was a very early idea,
09:50 10 early 2013.

11 Q. Right. No, I understand the idea, but my
12 question was a little bit different, which is: When did
13 that idea actually come to fruition such that banks
14 might have used XRP as a bridge currency?

09:50 15 MR. CERESNEY: Objection to form.

16 THE WITNESS: To my knowledge, for banks
17 to be able to do that --

18 They wouldn't have been able to do it
19 without -- with the Ripple -- with something
09:50 20 made by Ripple until xRapid went live.

21 (Thereupon, an informal discussion was
22 held off the record with the shorthand
23 reporter.)

24 THE WITNESS: With a product that Ripple
09:51 25 provided until xRapid was launched.

09:51 1 MR. TENREIRO: xRapid.

2 THE SHORTHAND REPORTER: Thank you.

3 BY MR. TENREIRO:

4 Q. Which was when?

09:51 5 A. I don't recall exactly.

6 Q. Okay. We can get to that.

7 As far as you know, are banks using the xRapid
8 product today?

9 A. Today, the primary customers are not bank
09:51 10 financial institutions, payment -- payment providers.

11 Q. So did the --

12 This idea that banks might use XRP as a bridge
13 currency -- has that actually come to fruition, meaning
14 do banks actually use XRP as a bridge currency today, as
09:51 15 far as you know?

16 A. Not as far as I know.

17 Q. Okay. Is it fair to say that the people who
18 created the XRP Ledger are some of the people who
19 founded Ripple?

09:52 20 A. Yes.

21 Q. Is it fair to say that the people who created
22 XRP are some of the people who founded Ripple or created
23 Ripple?

24 A. Yes.

09:52 25 Q. Okay. And Mr. Schwartz, you have an online

09:52 1 pseudonym; is that right?

2 A. Yes.

3 Q. That's Joel Katz?

4 A. Yes.

09:52 5 Q. With a K?

6 A. Yes.

7 Q. We can get into -- we will get into the
8 specific forum, but is it your understanding that --

9 Well, when you post online as Joel Katz, do you
09:52 10 typically identify yourself as a Ripple employee?

11 A. Yes.

12 Q. Okay.

13 A. Yes.

14 Q. Do you have any understanding whether the
09:52 15 people who read posts by Joel Katz understand that these
16 are posts by Mr. Schwartz?

17 MR. CERESNEY: Objection form.

18 THE WITNESS: My understanding is that
19 I'm pretty clear when I'm speaking for the
09:53 20 company and when I'm speaking for myself.

21 BY MR. TENREIRO:

22 Q. Right. Thank you, but my question is: Do
23 you --

24 Do you know whether people understand that Joel
09:53 25 Katz is David Schwartz? Separate from the company for a

09:53 1 second.

2 MR. CERESNEY: You're asking him to
3 speculate as to whether --

4 MR. TENREIRO: Really, to speculate.

09:53 5 BY MR. TENREIRO:

6 Q. I mean, you're online a lot; is that fair to
7 say?

8 A. Yes.

9 Q. You interact with people online; is that
09:53 10 fair.

11 A. Yes.

12 Q. Okay. So from your interactions, do you
13 think that these people know that Joel Katz is David
14 Schwartz?

09:53 15 A. I have said so several times, but I don't
16 know what -- whether -- I don't know that ... I -- I
17 would have to speculate. I would have to speculate.

18 Q. Okay. In terms of what you said a minute
19 ago, I think you said something along the lines of --
09:53 20 you made clear --

21 You said, "I'm pretty clear when I'm speaking for
22 the company and when I'm speaking for myself." What did
23 you mean by that?

24 A. I mean that I generally try to make clear
09:54 25 whether I'm speaking in my individual capacity or when

09:54 1 I'm making a statement for the company.

2 Q. How do you do that? How do you make that
3 distinction?

4 A. It varies. Sometimes by explicitly stating
09:54 5 it's not a position of the company, so sometimes by
6 explicitly stating that it is.

7 Q. If you don't explicitly state either, which
8 is it?

9 A. I think it's -- I think it's -- it would
09:54 10 generally be clear from context, but usually it's an
11 individual view.

12 Q. So sort of like on Twitter where people
13 say -- you know, "Views are my own, not my company's"?

14 A. Yes.

09:54 15 Q. That's the idea?

16 A. Yes.

17 MR. CERESNEY: Objection to form.

18 BY MR. TENREIRO:

19 Q. Okay. What would the -- well, let's look at
09:54 20 the context.

21 You said it would be clear from the context. What
22 context would I look for to know whether it's a company
23 view or an individual view?

24 A. The type of statement that it was.

09:54 25 Q. What do you mean, the type of statement?

09:54 1 A. If a statement is a clearly personal view,
2 then someone would understand it to be a personal view,
3 whereas if it's the type of statement that a future CTO
4 would -- would hold, then it would be a more official
09:55 5 view.

6 Q. A future CTO?

7 A. Right.

8 Q. What do you mean by that?

9 A. If it's -- if I'm speaking in my capacity as
09:55 10 CTO of Ripple, it would be a position that would be --
11 that any CTO could make. Even like a future CTO would
12 be bound to that position, because it was a -- had been
13 a statement from the office, if it's that type of
14 statement.

09:55 15 Q. Before CTO, what was your title?

16 A. Chief cryptographer.

17 Q. Chief cryptographer was your title for the
18 entire period before CTO?

19 A. I believe there was a brief period -- there
09:55 20 were --

21 There was a brief period, prior to the formation of
22 the company, where I either had no title or there might
23 have been an expectation that I might have the CTO title
24 at some point, but it was very quickly established it
09:56 25 would be CTO.

09:56 1 Q. Fair enough.

2 (Thereupon, an informal discussion was
3 held off the record.)

4 BY MR. TENREIRO:

09:56 5 Q. I just want to ask one question before we get
6 to the exhibits.

7 Are all the statements that you make online before
8 XRP on behalf of the company or on behalf of yourself?

9 A. Most of them are on behalf of myself.

09:56 10 Q. And all the statements that you make online
11 about Ripple -- are they on behalf of the company or
12 yourself?

13 A. Most of them are on my own behalf.

14 Q. Okay. Does the company -- has the company
09:56 15 ever tried to sort of restrict the statements that you
16 make on your own behalf with respect to XRP or Ripple?

17 A. Only with respect to pending litigation.

18 Q. Okay. Have you ever received direction from
19 the company about what you might post online?

09:57 20 MR. CERESNEY: Other than counsel?

21 BY MR. TENREIRO:

22 Q. Well, I don't want to get into the
23 conversations, but has counsel directed you to post
24 online?

09:57 25 MR. CERESNEY: I'm not going to allow him

09:57 1 to answer what counsel has directed him to do.

2 If the question is "Have there been
3 discussions with counsel about his posts,"
4 that's a fair question.

09:57 5 If the question is what he's been
6 directed to do, I'll instruct him not to
7 answer.

8 BY MR. TENREIRO:

9 Q. All right. Let's ask the first question.
09:57 10 Have there been discussions with counsel about your
11 posts online?

12 A. Yes.

13 Q. Which counsel?

14 A. Current counsel in -- current counsel in
09:57 15 the -- in this litigation.

16 Q. Any other counsel before?

17 A. Not that I recall.

18 Q. Did you discuss any of your public posts with
19 counsel at Perkins Coie -- or did you discuss the --
09:57 20 Just "yes" or "no." Did you discuss your public
21 posts with Perkins Coie counsel?

22 A. Yes.

23 Q. Okay. Let's look at --

24 A. No, I'm sorry.

09:58 25 I want to correct that answer. I believe Perkins

09:58 1 Coie -- no, I did not.

2 Q. Okay. What about Paul Hastings?

3 A. I don't believe so.

4 Q. And so your --

09:58 5 Your current recollection is that the only counsel
6 you've discussed the subject of your posts with is
7 Debevoise?

8 A. Yes, that's correct.

9 Q. What about others at the company?

09:58 10 Have you discussed with nonlawyers at the company
11 your posts?

12 A. Yes.

13 Q. Have they directed you with respect to your
14 posts online?

09:58 15 A. Yes.

16 Q. And generally, what have they told you?

17 MR. CERESNEY: I just -- just to be
18 clear, these are not lawyers?

19 THE WITNESS: Right.

09:58 20 MR. CERESNEY: Okay.

21 THE WITNESS: Only both not to discuss
22 pending litigation, and occasionally, they
23 recommended a particular tweet.

24 BY MR. TENREIRO:

25

09:58 1 Q. Have you followed those recommendations?

2 A. Generally, yes.

3 Q. Are those on behalf of the company or on
4 behalf of yourself?

09:59 5 A. It's not really possible to answer in
6 general.

7 Q. We would have to look at the specific ones?

8 A. Yes.

9 MR. TENREIRO: Okay. Now, Exhibit 25.
09:59 10 I'm going to pass around -- the exhibits have
11 been premarked. We e-mailed some to you.
12 There's a couple that have changed. I will
13 let you know on the record when that occurs.

14 I will also note for the record we
09:59 15 accidentally marked these with yesterday's date,
16 so -- you know, we're not intending to travel
17 back in time. It's today's date. This is
18 Exhibit 25, DS-25.

19 (Thereupon, a two-page Twitter printout
09:59 20 entitled "David 'JoelKatz' Schwartz on Twitter:
21 '@bitcoinlobo @SASchofield52 Ripple I know it
22 sounds ridiculous tod...' dated 1/8/19" was
23 introduced as DS Exhibit 25 for identification.)

24 MR. CERESNEY: Just for the record, do
09:59 25 you have a copy?

09:59 1 MR. TENREIRO: Yes.

2 MR. CERESNEY: Just for the record, I
3 understand that the exhibits will be e-mailed
4 to the folks on the zoom so they have it.

09:59 5 MR. TENREIRO: And we have the list of
6 e-mails?

7 MR. CERESNEY: Yes. Daphna has the list
8 of e-mails.

9 (Thereupon, an informal discussion was
09:59 10 held off the record.)

11 MR. CERESNEY: So if you want to ask
12 foundation questions --

13 MR. TENREIRO: Sure. Sam is here, right?
14 We just need to e-mail it to Larsen's counsel.

09:59 15 (Thereupon, an informal discussion was
16 held off the record.)

17 MR. TENREIRO: Okay. Great.

18 MR. CERESNEY: Nowell's on the Zoom as
19 well, so he deserves a copy as well.

10:00 20 MR. BAMBERGER: Thank you.

21 BY MR. TENREIRO:

22 Q. Mr. Schwartz, is this your Twitter account?

23 A. Yes.

24 Q. So -- sorry. @JoelKatz is your Twitter
10:00 25 account?

10:00 1 A. Yes.

2 Q. Okay. I'm referring you to a tweet towards
3 the middle of the page, where you say -- actually, it's
4 on the second page. Do you see a tweet where you say:

10:00 5 "It is misleading to say Ripple had nothing to do
6 with the creation of XRP. The people who created XRP
7 are pretty much the same as the people who created
8 Ripple, and they created Ripple originally to, among
9 other things, distribute XRP"?

10:00 10 Do you see that tweet?

11 A. Yes.

12 Q. Did you make that tweet?

13 A. Yes.

14 Q. Did the company direct you to make this
10:01 15 tweet?

16 A. No.

17 Q. Is this tweet on behalf of the company or
18 yourself?

19 (Pause.)

10:01 20 THE WITNESS: I -- I don't really know.

21 (Thereupon, an informal discussion was
22 held off the record.)

23 BY MR. TENREIRO:

24 Q. And if I'm reading the tweet, how could I
10:01 25 tell -- you know, this is David speaking or Mr. Schwartz

10:01 1 speaking or is this someone on behalf of the company?

2 What context here would I look to determine -- you
3 know, which of the two it was?

4 MR. CERESNEY: I'm just instructing the
10:01 5 witness to look at the whole chain just so he
6 can put it in context.

7 MR. GERTZMAN: I'm going to object to the
8 form.

9 THE WITNESS: I don't know what someone
10:01 10 else would look to, but I would look to the
11 conversational flow of the chain to see this
12 is an individual engaged in a conversation.

13 BY MR. TENREIRO:

14 Q. So looking at the conversational flow of the
10:02 15 chain, is this a tweet on behalf of Mr. Schwartz
16 individually or on behalf of the company?

17 A. I don't really have an answer. I don't know.

18 Q. Okay. Did anyone at the company ever ask you
19 to remove a post you've made online?

10:02 20 A. Not that I can think of. I don't believe so.

21 Q. Have any of your posts been removed by you?

22 A. There -- there are a couple cases.

23 Q. What are those cases?

24 A. One of them -- one -- one example would be
10:02 25 posts that like had a typo or some error, I just

10:02 1 removed. Twitter has that function, so I removed it to
2 correct fairly immediately.

3 Q. Any other examples that come to mind?

4 A. I don't believe I've ever removed a
10:02 5 substantive post significantly after making it.

6 Q. Was there something called --

7 A. Oh, let me just say one thing.

8 There was one tweet that I made that someone said
9 was causing them to get abusive comments, and so I
10:03 10 deleted that post at their request.

11 Q. Okay. Was there something called XRP Forum?

12 A. Yes.

13 Q. Does that still exist?

14 A. I think it may have changed its name. It at
10:03 15 one time was Xrp Chat, and I believe it still exists in
16 one or the other form.

17 Q. Who managed it?

18 A. I cannot remember the name.

19 Q. Was there something called XRP Wiki at some
10:03 20 point?

21 A. I don't recall that, but there might have
22 been.

23 Q. Okay. Going back to the exhibit, Exhibit 25,
24 which you have in front of you, and the tweet that I
10:03 25 read, what did you mean when you say here that "The

10:03 1 people who created XRP created Ripple originally to,
2 among other things, distribute XRP"?

3 What does "distribute XRP" mean here?

4 A. Give XRP to people so they could access the
10:04 5 ledger.

6 Q. Okay, and is -- why are you --

7 What do you mean by "It's misleading to say Ripple
8 had nothing to do with the creation of XRP"?

9 A. Precisely for the reason I state in the
10:04 10 second sentence, that the people who created XRP are the
11 same people that created Ripple, and one of their
12 objectives in creating Ripple was to give people XRP so
13 they could interact with the ledger.

14 Q. Did there come a time when it sort of became
10:04 15 a talking point of the company to state publicly that
16 XRP was created after the company -- sorry -- before the
17 company was founded?

18 MR. CERESNEY: Objection to form.

19 MR. GERTZMAN: Form.

10:04 20 THE WITNESS: To my knowledge, we stated
21 it and then it became -- it sort of morphed
22 into a talk point because other people stated
23 that it was not true.

24 BY MR. TENREIRO:

25

10:04 1 Q. Okay, and what -- what is -- what is your
2 understanding of the reason why people said it was not
3 true?

4 MR. CERESNEY: Objection to form.

10:05 5 BY MR. TENREIRO:

6 Q. If any?

7 MR. CERESNEY: If you know.

8 THE WITNESS: I don't really know.

9 BY MR. TENREIRO:

10:05 10 Q. Okay, and does -- why -- does Ripple -- does
11 Ripple --

12 Is Ripple's current sort of position to the public
13 that XRP was created before Ripple was created?

14 MR. CERESNEY: Objection to form.

10:05 15 MR. GERTZMAN: Objection to form.

16 THE WITNESS: We've always stated that.

17 MR. TENREIRO: Okay.

18 (Pause.)

19 BY MR. TENREIRO:

10:05 20 Q. Okay. We'll talk about the consensus
21 mechanism a little more, but I want to ask you in the
22 last --

23 In the last step of the consensus process for the
24 XRP Ledger, when the last known ledger closes -- is that
10:06 25 the last step of the consensus mechanism?

10:06 1 A. You can define the consensus -- so --
2 It's unfortunate that there's some confusion in
3 terminology.

4 Some people use the term "consensus" to mean
10:06 5 everything necessary to advance the ledger and have
6 ledgers that people rely on, and some people draw a
7 distinction between what's consensus and what's a
8 validation.

9 Q. How do you think about it?

10:06 10 A. Because I'm involved in the technical
11 process, I generally draw that distinction, but it's
12 generally less helpful to do that -- you know, in
13 conversation with people who are not technically
14 interested in it.

10:06 15 Q. I actually am technically interested in the
16 details, so the validation process -- please -- so we're
17 on the same page, where do you draw the distinction? So
18 let's start again.

19 There are some steps in this process where let's
10:06 20 say a node that's validating transactions puts out its
21 sort of idea of what the ledger should look like; is
22 that correct?

23 MR. CERESNEY: Objection to form.

24 THE WITNESS: That's what I describe as
10:07 25 the validation part of the process.

10:07 1 BY MR. TENREIRO:

2 Q. Okay.

3 A. As distinct from consensus.

4 Q. And consensus is what part of the process?

10:07 5 A. Consensus is the part of the process that
6 advances the ledger without necessarily establishing
7 finality.

8 Q. Well, why would it not establish finality?

9 A. That's validation's job. You do have
10:07 10 to finality in order to be -- in order for --

11 (Thereupon, an informal discussion was
12 held off the record with the shorthand
13 reporter.)

14 THE WITNESS: Sorry. In order for
10:07 15 advancing the ledger to be useful, at some
16 point, you have to establish finality. But
17 I -- I --

18 For technical precision, I prefer to
19 describe those as two separate processes:
10:07 20 Consensus, advance the ledger; validation,
21 establish finality.

22 BY MR. TENREIRO:

23 Q. Which occurs first?

24 A. Consensus.

10:07 25 Q. Okay, and validation -- is this the last step

10:07 1 in this entire process? Is that correct?

2 MR. CERESNEY: Objection to form.

3 THE WITNESS: Yes.

4 BY MR. TENREIRO:

10:08 5 Q. Okay. When --

6 So when validation occurs, is that the moment when
7 the last known ledger is closed?

8 A. No.

9 Q. That's the consensus part?

10:08 10 A. Yes.

11 Q. Okay. When validation occurs, the ledger
12 advances? The state of the ledger advances?

13 A. It depends on how you define "state of the
14 ledger".

10:08 15 Q. Well, how do you define it for purposes of
16 the moment when validation occurs?

17 A. So the state -- consensus is always advancing
18 the state of the ledger, but if you define state of the
19 ledger as the confirmed state, then validation advances
10:08 20 that state of the ledger.

21 Q. Okay, so let -- let's define it as the
22 confirmed state.

23 So validation advances the confirmed state of the
24 ledger?

10:08 25 A. Yes.

10:08 1 Q. That's something you want to occur?

2 A. That's the ultimate goal of this process.
3 These are all steps to achieve that end result.

4 Q. When validation advances the confirmed state
10:09 5 of the ledger, where does that occur physically?

6 A. In each individual node participating in or
7 moderating or participating in the process. That's an
8 individual decision that each server makes.

9 Q. So it occurs --

10:09 10 Just today, as an example, is it fair to say that
11 there are nodes engaging in this consensus validation
12 process all over the world?

13 A. Yes.

14 Q. Including the United States?

10:09 15 A. Yes.

16 Q. So is it your testimony that when the
17 validation advances --

18 When the validation process advances the confirmed
19 state of the ledger, this physically occurs in several
10:09 20 countries all over the world?

21 MR. CERESNEY: Objection. Are you asking
22 for a legal conclusion?

23 MR. TENREIRO: No. I'm asking him where
24 physically --

10:09 25 MR. CERESNEY: You're just asking where

10:09 1 the servers are that are the validators?

2 MR. TENREIRO: No. I'm not asking him
3 that.

4 BY MR. TENREIRO:

10:09 5 Q. When the validation advances -- when the
6 validation process advances the confirmed state of the
7 ledger, where is that physically occurring? If the
8 answer depends on where the servers are, you can explain
9 that.

10:10 10 A. Each server independently tracks the state --
11 what it considers the last validated ledger, and it
12 advances its own state.

13 Q. And so if a server is in the United States,
14 that is occurring in that server in the United States?

10:10 15 A. That server will advance its own state where
16 that server is for its own purposes.

17 Q. But you need -- you know, 80 percent of the
18 servers to advance sort of their agreed-upon state
19 ledger, right?

10:10 20 MR. CERESNEY: Objection to the form.

21 THE WITNESS: 80 percent of the servers
22 that particular server has chosen to listen
23 to.

24 BY MR. TENREIRO:

25

10:10 1 Q. Right. Okay, so from the perspective of the
2 server that has chosen a particular set is it fair to
3 say that this validation process that confirms the
4 closed state of the ledger currencies on all of the
10:10 5 servers, it's distributed across all of the servers?

6 A. Yes.

7 Q. Okay. All right. What percent --

8 Do you know what percentage of the validate --
9 ledger validating nodes today are run in the United
10:11 10 States?

11 A. I don't.

12 Q. How would I find that out?

13 A. I guess you could crawl the network. You
14 would have to do a three-step process.
10:11 15 You'd have to crawl the network to identify all the
16 nodes, then check each node to see which are validating,
17 and then you could -- you could infer the geographic
18 location from the IP address.

19 Q. All right.

10:11 20 A. It would not be a perfect process, but it
21 would be reasonably accurate.

22 Q. Do you know if any of the nodes use VPN to
23 mask their IP address?

24 (Thereupon, an informal discussion was
10:11 25 held off the record with the shorthand

10:11 1 reporter.)

2 THE WITNESS: I don't.

3 BY MR. TENREIRO:

4 Q. Okay.

10:11 5 A. I don't know why someone would other than to
6 maybe secure -- I think if they did, they would be more
7 likely to protect against being attacked than to mask
8 them.

9 Q. Right, and Ripple has nodes that are ledger
10:12 10 validating nodes today; is that fair?

11 A. Yes.

12 Q. And where are the servers for that located?

13 A. We've moved them several times. I'm not sure
14 precisely where they are today.

10:12 15 Q. Do you know what country they are in?

16 A. I don't.

17 Q. Who would know?

18 A. I'm sure someone in our office. I suspect
19 they are suspect they are geographically distributed for
10:12 20 fault tolerance, but I don't know for sure.

21 Q. Do you know if some of them are in the United
22 States?

23 A. I don't. I would have to guess.

24 Q. Okay. We'll get back to the ledger. Has --
10:12 25 did Ripple ever promote XRP as a virtual currency?

10:13 1 MR. CERESNEY: Objection to form.

2 THE WITNESS: I think Ripple described
3 XRP as a virtual currency.

4 BY MR. TENREIRO:

10:13 5 Q. To whom?

6 A. Every -- everyone. I think just in general.

7 Q. At what time?

8 A. I don't recall when we started using the term
9 "virtual." Do you mean like specifically the term

10:13 10 "virtual currency" or the concept?

11 Q. The term.

12 A. I don't know -- remember when we started
13 using it.

14 Q. So I understand that your testimony is that
10:13 15 Ripple described XRP as a virtual currency, but did
16 Ripple ever promote XRP as a virtual currency?

17 MR. CERESNEY: Objection to form.

18 THE WITNESS: I don't know the difference
19 between promoting ... yeah, I can't really
10:13 20 understand where the boundaries of "promote"
21 would be.

22 BY MR. TENREIRO:

23 Q. Okay. Let's take a look at Exhibit 30.

24 (Informal discussion was held off the
10:14 25 record.)

10:14 1 (Thereupon, a 31-page document entitled
2 "What Did Ripple Do Wrong? - Page 4 - General
3 Discussion - Xrp Chat" was introduced as DS
4 Exhibit 30 for identification.)

10:14 5 BY MR. TENREIRO:

6 Q. I'm handing you what was premarked DS-30.
7 It's a Reddit post, I believe. Sorry, Xrp Chat post.
8 There's a lot of pages. I'm just going ask you about a
9 post on page 22.

10:14 10 You can look at whatever you need. I apologize for
11 the way these print. I haven't figured out a better way
12 to do it. Perhaps afterward, you will tell me how.

13 A. I have the same problem.

14 Q. Yeah, so I'll just --

10:14 15 There's no Bates number, because this is just from
16 online -- you know, Xrp Chat.

17 A. There are small page numbers.

18 Q. Yeah, there's page numbers. I'm looking at
19 22, but there's no Bates number.

10:14 20 A. Oh, I got you.

21 Q. The post at issue, I believe, was posted on
22 April 2nd, 2017.

23 (Thereupon, an informal discussion was
24 held off the record.)

10:15 25 THE WITNESS: So what page did you want

10:15 1 to call my attention to?

2 MR. TENREIRO: 22. 22, please.

3 MR. CERESNEY: You will see that you're
4 responding to the -- lots of posts, so take
10:15 5 your time.

6 BY MR. TENREIRO:

7 Q. Yeah.

8 A. Difficult to tell who said what in some
9 places.

10:15 10 Q. Maybe -- maybe this will help. If you look
11 at the post, I believe -- but you can tell me if it's
12 wrong, That you're quoting certain posts and then
13 posting a response, as indicated by some of the
14 quotation marks.

10:16 15 There's something in quotation marks. Then there's
16 something else without quotation marks and so on a
17 number of times.

18 A. Yes.

19 Q. Is that -- first of all, what is Xrp Chat?

10:16 20 A. It's a -- a forum that was created in the
21 very early days to discuss XRP.

22 Q. Who created it?

23 A. I -- I knew, but I don't recall.

24 Q. Was it someone at Ripple?

10:16 25 A. No.

10:16 1 Q. And this -- this --
2 What appears to be this format where you have
3 something quotes and then something not in quotes -- is
4 that sort of familiar to you as a way that you might
10:16 5 have made a post?
6 A. Yes.
7 Q. Okay, and you see the title of the thread is
8 "What did Ripple do wrong?" Do you see that?
9 A. Yes.
10:16 10 Q. Do you recall this thread at all?
11 A. Not at all, no.
12 Q. Okay. So just looking at the post, there's a
13 part where it says "Failure to promote XRP's currency."
14 That's in quotation marks.
10:17 15 Do you see that part?
16 A. Yes.
17 Q. You say:
18 "We didn't think it made sense to take Bitcoin on
19 head on at its strength."
10:17 20 Do you see that?
21 A. Yes.
22 Q. What was Bitcoin's strength that you were
23 referring to here?
24 A. At that time, Bitcoin was being positioned as
10:17 25 peer-to-peer digital cash as a -- as a means of

10:17 1 peer-to-peer value exchange.

2 Q. So Ripple's strategy as a company was not to
3 pursue that? Why not? Why was that the strategy?

4 A. Two reasons. One is that anyone could do
10:17 5 that. There was no particular reason why Ripple would
6 do that. It was something anyone could do. It didn't
7 play to our strengths.

8 I think the other one was we kind of felt that
9 Ripple -- that Bitcoin kind of -- that was Bitcoin's
10:17 10 thing, so to go head to head against a market leader --
11 you know, you would constantly face "Why not just use
12 Bitcoin for that?"

13 Q. Right, and here you say --

14 Is this post on behalf of the company or on behalf
10:18 15 of yourself? To the extent you say, "we" does that give
16 context to the reader?

17 A. Yeah, I think that I -- I would agree.

18 Q. Do you agree that the word "we" gives context
19 to the reader?

10:18 20 A. Yes.

21 Q. Okay, and does that mean it's on behalf of
22 you or on behalf of the company?

23 A. I think someone would take this to be my view
24 of what the company was doing, and then -- and then with
10:18 25 me being an employee of the company, obviously, that has

10:18 1 more weight than a random person's view of why a company
2 does it.

3 Q. Sure. So is it fair to say that --

4 Is it fair to say that Ripple did not promote XRP
10:18 5 as a -- as a cash-to-cash exchange like Bitcoin was?

6 MR. CERESNEY: Objection. I don't think
7 that was the term he used.

8 BY MR. TENREIRO:

9 Q. Okay. Answer, please.

10:19 10 A. I'm sorry. Could you --

11 Q. Yes. Is it fair to say that Ripple did not
12 promote XRP as a digital currency, at least up until the
13 point of this post?

14 A. Ripple --

10:19 15 MR. GERTZMAN: Objection to form.

16 THE WITNESS: Ripple was not actively
17 pursuing that use case.

18 BY MR. TENREIRO:

19 Q. Okay. Is it pursuing that use case today?

10:19 20 (Pause.)

21 THE WITNESS: A little -- a little bit.

22 BY MR. TENREIRO:

23 Q. Please explain.

24 A. We have some strategies that could -- that
10:19 25 could facilitate those types of use cases.

10:19 1 Q. Which ones?

2 A. Well, for example, the xPring strategy.

3 (Thereupon, an informal discussion was

4 held off the record with the shorthand

10:19 5 reporter.)

6 BY MR. TENREIRO:

7 Q. In what way does the xPring strategy

8 potentially facilitate those types of use cases?

9 MR. CERESNEY: Objection.

10:20 10 THE WITNESS: At least two ways.

11 One would be some of the partners --

12 people -- companies that we were providing

13 investment or -- advice to or pursuing use

14 cases in that direction, and then some of the

10:20 15 software we were developing could be used by

16 those people who had those use cases in mind.

17 BY MR. TENREIRO:

18 Q. And do you have -- with respect to the part

19 of the strategy -- sorry. Some of the --

10:20 20 With respect to the companies that were pursuing

21 use cases in that direction, do you have knowledge as to

22 what the status of their pursuit is?

23 MR. CERESNEY: Objection. You used "that

24 direction." It's ambiguous, but --

10:20 25 MR. TENREIRO: Well, he said, "that

10:20 1 direction," and I was asking about the use
2 case as a Bitcoin-like currency.

3 So I'm assuming that's what he meant when
4 he said, "that direction," but if that's not
10:21 5 correct, let me know.

6 MR. CERESNEY: It should be clear in your
7 answer what you're talking about.

8 BY MR. TENREIRO:

9 Q. So let's take a step back.

10:21 10 I asked you in what way does the xPring strategy
11 potentially -- you know, further the use cases we were
12 discussion here, which is the -- you know, digital
13 currency use?

14 And I think you said two ways. One would be some
10:21 15 of the partners of companies we were providing advice to
16 are pursuing cases in that direction.

17 When you said that direction, did you mean the
18 discussion we're having now, the sort of medium of
19 exchange use cases?

10:21 20 MR. CERESNEY: I think you used a term
21 that hasn't come up until now, "medium
22 exchange."

23 MR. TENREIRO: Sorry. He said -- he
24 said, "medium of currency exchange" earlier.

10:21 25 (Pause.)

10:21 1 BY MR. TENREIRO:

2 Q. So let's start again. Has Ripple --

3 So does Ripple today promote XRP as a digital
4 currency, as this term is used in the exhibit?

10:22 5 MR. GERTZMAN: Objection to the form.

6 THE WITNESS: That's not a use case that
7 we are directly pursuing.

8 But we do assist other people who are
9 pursuing it, and we certainly do describe it
10:22 10 as having the use case.

11 BY MR. TENREIRO:

12 Q. The people who are pursuing it -- that
13 includes the Xpring companies, correct?

14 A. They are among -- they would be among that
10:22 15 group, yes.

16 Q. What is the status of their pursuit of that
17 use case, if you know?

18 A. I don't.

19 Q. Who knows?

10:22 20 A. Those individual companies.

21 Q. Does anyone at Ripple know?

22 A. I don't -- I don't know.

23 Q. Okay. Are you aware of a settlement between
24 Ripple and FinCEN in 2015?

10:22 25 A. Yes.

10:22 1 Q. What was the settlement about, in your own
2 terms? Not what counsel has told you. Just what's your
3 understanding?

4 A. My understanding is FinCEN alleged we didn't
10:22 5 comply with laws regarding enforcement of sanctions and
6 transmission of money.

7 Q. Did -- do you --

8 Are you aware of a settlement between Ripple and
9 the Department of Justice in 2015?

10:23 10 (Thereupon, an informal discussion was
11 held off the record with the shorthand
12 reporter.)

13 THE WITNESS: Yes, I am.

14 BY MR. TENREIRO:

10:23 15 Q. And your understanding -- layman's, no legal
16 advice -- what is that settlement?

17 A. My understanding of that settlement is that
18 Department of Justice and FinCEN agreed not to prosecute
19 Ripple for those violations in exchange for Ripple
10:23 20 agreeing to a series of stipulations.

21 Q. At that point in time, did you derive an
22 understanding -- and by "that point in time," I mean at
23 the time of the settlements, did you derive an
24 understanding as to whether XRP was a currency, based on
10:23 25 those statements -- based on those settlements?

10:23 1 A. That was a factor in my understanding of the
2 status of the XRP.

3 Q. Okay, and did you derive an understanding as
4 to whether the statements -- sorry. I keep saying, "the
10:24 5 statements."

6 Did you derive an understanding as to whether the
7 settlements sort of meant that Ripple did not have to
8 comply with other statutes with respect -- that might
9 govern XRP?

10:24 10 MR. CERESNEY: Objection, and also direct
11 you not to reveal any discussions you might
12 have had with counsel.

13 THE WITNESS: My layman's understanding
14 at the time was that that meant that the
10:24 15 position of the U.S. Attorney's office and
16 Department of Justice was that XRP would be
17 regulated and a form of -- as a form of --
18 something more currency or commodity-like.

19 BY MR. TENREIRO:

10:24 20 Q. Did you derive an understanding what the
21 SEC's position with regards to XRP would be based on
22 those settlements?

23 A. I did not.

24 Q. Do you know if others at Ripple derived an
10:24 25 understanding --

10:24 1 MR. CERESNEY: Again --

2 BY MR. TENREIRO:

3 Q. -- on what the SEC's position on what XRP
4 would be based on these settlements?

10:24 5 MR. CERESNEY: Again, I'll instruct you
6 not to -- not to discuss conversations with
7 counsel.

8 THE WITNESS: I didn't have any
9 conversations with employees about that, so I
10:25 10 couldn't -- I would have to speculate about
11 what conclusions they might have drawn.

12 BY MR. TENREIRO:

13 Q. Did the settlement --

14 Did these settlements change your understanding as
10:25 15 to whether XRP was, in fact, a digital currency as the
16 term is used in the exhibit we're looking at?

17 A. I don't think it significantly exchanged
18 my -- it was consistent with what I already expected.

19 Q. What do you mean, what you had "already
10:25 20 expected"?

21 A. My expectation -- again, I'm not in
22 compliance and this isn't my field expertise, but my
23 expectation was the government would treat XRP as akin
24 to a commodity.

10:25 25 Q. Let me -- I'm trying to understand, now,

10:25 1 you -- in Exhibit 30, you say -- you know.

2 You respond to this point that says "failed to
3 promote XRP as a digital currency" by saying, "We didn't
4 think it make sense to take on Bitcoin head-on as its
10:26 5 strength."

6 A. Uh-huh.

7 Q. Did the FinCEN settlement sort of change your
8 understanding about whether XRP was a digital currency
9 or not?

10:26 10 MR. CERESNEY: I'm going to object,
11 because you're using this document to say
12 something about the definition of the -- of
13 XRP as a currency versus the use case that
14 Ripple was promoting.

10:26 15 But you can answer the question, if you
16 can.

17 (Pause.)

18 THE WITNESS: So I'm responding here
19 to -- in -- in the statement "failed to
10:26 20 promote XRP as a digital currency."

21 What I understand that to mean is that
22 Ripple did not pursue a use case similar to
23 Bitcoin's use case, and I testified previously
24 to the reasons why we didn't do that.

10:26 25 I don't see a connection between that and

10:26 1 the FinCEN statement and my -- my
2 understanding as a result of the FinCEN
3 settlement.

4 But that didn't significantly change my
10:27 5 understanding. It was roughly consistent with
6 what I had expected at the time.

7 BY MR. TENREIRO:

8 Q. Do you have an understanding as to why if
9 Ripple did not pursue a use case similar to Bitcoin's
10:27 10 use case -- you know, you had to enter into a settlement
11 with FinCEN at all?

12 A. I don't know if this -- this particular
13 statement was before or after the settlement with
14 FinCEN.

10:27 15 Prior to the settlement with FinCEN, my view would
16 have been that there was no particular reason why Ripple
17 would pursue that use case, but we could have, and it
18 might have been successful. It just might not have been
19 the best use of resources. After that, my view was more
10:27 20 that it wasn't tenable for Ripple to pursue that use
21 case.

22 Q. Not tenable for what reason?

23 A. Because we had agreed with FinCEN on things
24 that would make -- basically make it impractical to be
10:27 25 compatible with Bitcoin if -- at that time.

10:27 1 Q. This includes the stipulations you mentioned
2 earlier?

3 A. Yes.

4 (Pause.)

10:28 5 BY MR. TENREIRO:

6 Q. I want to show you another exhibit which
7 relates to this, which is 36.

8 Actually, before we do that, do you know if others
9 at Ripple agree that it wasn't tenable or -- sorry --
10:28 10 practical -- practicable to pursue the use case we've
11 been discussing after the FinCEN settlement?

12 A. My recollection is that we had discussions.
13 I don't recall specifically who, and that that was the
14 predominant view. That's my recollection.

10:28 15 We weren't planning to pursue it anyway, so it
16 wasn't -- it wasn't a couldn't controversial issue,
17 because it wasn't something that was our strategy
18 anymore.

19 Q. Did the discussions include Mr. Larsen?

10:28 20 A. I don't believe so.

21 Q. Did they include Mr. Garlinghouse?

22 A. I don't know for sure.

23 MR. TENREIRO: Do you want a break,
24 Andrew?

10:29 25 MR. CERESNEY: Yes.

10:30 1 MR. TENREIRO: Let's go off the record.

2 THE VIDEOGRAPHER: Going off the record
3 at 10:30.

4 (Recess taken at 10:30 a.m.)

10:44 5 (Resumed at 10:44 a.m.)

6 THE VIDEOGRAPHER: Back on the record at
7 10:44.

8 (Thereupon, a 35-page printout entitled
9 "Ripple: The Most Prestigious Team - General"
10:44 10 was introduced as DS Exhibit 36 for
11 identification.)

12 BY MR. TENREIRO:

13 Q. Okay. Mr. Schwartz, we handed you what was
14 premarked as Exhibit 36. It's another Xrp Chat
10:44 15 printout. I'm going to look -- this one has 35 pages.

16 My focus is on page 15, which appears to be a post
17 on May 5th -- May 21st, 2017. The prior exhibit, as I
18 think we discussed, was in April of 2017.

19 A. Uh-huh. Yes.

10:44 20 Q. Here, if you take a moment to read, it seems
21 like you're responding to someone who posted with a lot
22 of all caps.

23 You say, "This is a good argument that it doesn't
24 make sense for ordinary people to hold cryptocurrencies
10:44 25 yet. This is one of the reasons Ripple didn't pursue a

10:44 1 retail use case like Bitcoin did."

2 Can you please explain what you mean by "retail use
3 case"?

4 A. I mean a use case where people hold
10:44 5 cryptocurrencies and use them as money.

6 Q. And is this -- is it fair to say this was
7 your view in 2017?

8 A. Yes.

9 Q. Is that still your view today?

10:44 10 A. Yes.

11 Q. Okay. Does Ripple today sell XRP for people
12 to hold and use XRP as money?

13 A. Ripple sells XRP and some people do use it as
14 money.

10:44 15 Q. Does Ripple, when it sells XRP, look for
16 people that are going to hold and use it as money as the
17 buyers?

18 A. I don't --

19 If you're talking about programmatic sales, Ripple
10:44 20 doesn't choose the buyers.

21 Q. Yeah, so I'm talking about any sales. So
22 let -- we can talk about programmatic sales. Who
23 chooses the buyers?

24 A. They're chosen by the exchange.

10:45 25 Q. Does the exchange choose them or is it more

10:45 1 the buyers sort of choosing themselves by introducing
2 the transaction?

3 MR. CERESNEY: Objection to form.

4 THE WITNESS: You could describe it
10:45 5 either way.

6 BY MR. TENREIRO:

7 Q. Does Ripple provide the exchanges any
8 instructions that they -- you know, should choose the
9 buyers based on whether they're going to hold and use
10:45 10 XRP as money?

11 A. I can't imagine that they would be receptive
12 to that type of advice.

13 Q. Why?

14 A. Because they -- they operate algorithmically.

10:45 15 Q. You mean the exchanges?

16 A. Yes.

17 Q. By the way, the exchanges --
18 What interaction do they have with the XRP Ledger
19 for the purpose of selling the XRP to the buyers we were
10:45 20 discussing?

21 MR. CERESNEY: Objection to form.

22 THE WITNESS: My understanding is that
23 they receive XRP from people who wish to sell
24 it, then they send out XRP to people who have
10:45 25 purchased it and those transactions take place

10:45 1 on the XRP Ledger.

2 BY MR. TENREIRO:

3 Q. And just to be clear, when they receive XRP
4 from people who wish to sell it, does that include
10:46 5 Ripple's programmatic exchanges, programmatic sales?

6 A. I believe so.

7 Q. Okay. You referred to programmatic sales.
8 Are there any other type of XRP sales that Ripple
9 engages in?

10:46 10 A. Over-the-counter sales.

11 Q. With respect to the over-the-counter sales,
12 does Ripple sell XRP to people who would use -- hold and
13 use XRP as money?

14 MR. CERESNEY: Objection.

10:46 15 MR. GERTZMAN: Objection to form.

16 MR. CERESNEY: You used the present
17 tense. Is that what your intention --

18 MR. TENREIRO: Yes.

19 BY MR. TENREIRO:

10:46 20 Q. With respect to the counter sales, does
21 Ripple sell XRP to persons who would hold and use XRP as
22 money?

23 A. I don't --

24 MR. GERTZMAN: Objection to form.

10:46 25 THE WITNESS: I don't know the criteria

10:46 1 for our current over-the-counter sales.

2 BY MR. TENREIRO:

3 Q. And what about historically? Were there --

4 Were there criteria for the over-the-counter sales
10:47 5 related to whether people would hold and use XRP as
6 money?

7 MR. CERESNEY: Objection.

8 (Pause.)

9 THE WITNESS: I don't know.

10:47 10 BY MR. TENREIRO:

11 Q. Okay. Who would know?

12 A. I'm not sure who was in charge of
13 over-the-counter sales. Yeah, I'm not sure.

14 Q. So the person in charge of the
10:47 15 over-the-counter sales might know?

16 A. Well, they might not have chosen the
17 criteria, but I presume they would know what the
18 criteria were.

19 Q. Okay.

10:47 20 (Thereupon, an informal discussion was
21 held off the record.)

22 BY MR. TENREIRO:

23 Q. Mr. Schwartz, do you recall at times
24 referring to Ripple's gateway strategy with respect to
10:48 25 XRP?

10:48 1 A. Yes.

2 Q. Could you just for the record what you mean
3 by "gateway strategy"?

4 A. Yes. That was one of Ripple's first
10:48 5 strategies that deserves to be called a strategy. The
6 gateway strategy is that people would use the XRP Ledger
7 as a multi-asset ledger to transact largely in the
8 assets that they were traditionally comfortable, with
9 like dollars.

10:48 10 If they wanted cryptocurrencies, they could, and
11 the ledger would sort of act as a giant decentralized
12 exchange with XRP as the transaction fee currency and as
13 an intermediary asset.

14 Q. And is that --

10:48 15 Is that strategy different from what we discussed
16 earlier this morning, that you described generally as an
17 exchange on the ledger where there's a 10 million a day
18 volume?

19 A. Those are substantially the same thing.

10:48 20 Q. Those are substantially the same?

21 A. Yes. The gateway strategy and current
22 operation of the decentralized exchange are
23 substantially the same end result.

24 (Thereupon, a two-page document entitled
10:48 25 "Issuing Gateway vs. Private Exchange - Gateways

10:48 1 and Exchanges - Xrp Chat" was introduced as DS
2 Exhibit 60 for identification.)

3 BY MR. TENREIRO:

4 Q. Okay. Let's look at Exhibit 60, please.

10:49 5 A. Okay.

6 Q. This is an excerpt from Xrp Chat. I don't
7 know how this printed so neatly compared to the other
8 ones.

9 It's two pages, and it appears to be a post on
10:49 10 January 24th. I'm not sure what the year is. I believe
11 it's 2018, but I can't represent that to you.

12 A. Yes, I see that.

13 Q. Just by reading it, could you tell us what
14 year it was?

10:49 15 A. Well, since I did say we did pursue a gateway
16 strategy for several years, we began that strategy in
17 2014.

18 Q. Can I direct you to the bottom of the first
19 page where you say, "xRapid is our first big push to
10:50 20 connect payments to XRP settlement"?

21 And my only question is if that sort of clues you
22 in as to more or less when this post was made.

23 A. Well, it would have had to have been after we
24 used the term xRapid as well.

10:50 25 Q. Okay, so that's -- that's fine. So first,

10:50 1 you say, "Ripple is not targeting XRP at retail use"
2 and the word "retail" is in quotation marks.

3 Now, did you have the same meaning there as you did
4 in Exhibit 36 we saw a minute ago, when you say, "retail
10:50 5 use"?

6 (Pause.)

7 THE WITNESS: I think so.

8 BY MR. TENREIRO:

9 Q. And just for the record, does that mean --
10:50 10 does that mean hold and use XRP as money?

11 A. That means people holding and using XRP as a
12 means of payment beyond the decentralized exchange and
13 transaction fees.

14 Q. Okay. By the way, on the second page, it
10:51 15 appears that your response is in 2018. If you take a
16 look, there's an actual year marker there. Thank you.

17 A. I see that, yeah.

18 Q. Is that consistent with sort of your
19 recollection when this post might be?

10:51 20 A. That's certainly reasonable.

21 Q. Yeah. When you say, "There are a variety of
22 reasons for this, including the regulatory challenge,"
23 what -- what regulatory challenge -- is that the FinCEN
24 issue?

10:51 25 A. I believe it must have been, yeah.

10:51 1 Q. You say, "It's also because we -- at least
2 some of us -- don't think any cryptocurrencies are quite
3 ready for mass adoption through this route yet."

4 Is that a similar sentiment as what we saw in
10:51 5 Exhibit 36, your view that -- you know, cryptocurrencies
6 aren't ready to be used as cash?

7 A. Well, not -- not mass adoption.

8 Q. As opposed to some people might do it, but
9 not mass adoption?

10:52 10 A. Exactly. People who are specifically
11 interested might do so, but it wouldn't be ready from
12 like a mass retail use case.

13 Q. And here -- then, you say, "We did pursue a
14 Gateway strategy for several years."

10:52 15 So is that gateway strategy the exchange on the XRP
16 Ledger of assets for each other --

17 A. Uh-huh.

18 Q. -- that we were talking about?

19 A. Yes.

10:52 20 Q. Why did you say "did pursue" in the past
21 tense, if you're still pursuing it here?

22 A. This probably was after we stopped pursuing
23 that strategy.

24 Q. Oh.

10:52 25 A. Well, let me rephrase. It's not clear from

10:52 1 this that I necessarily mean that we weren't still --
2 and without -- without --

3 I would have to check the timeline for precisely to
4 know for sure. This is consistent with either us still
10:52 5 pursuing it or us having pursued it.

6 Q. The next sentence says:

7 "We had a very hard time on boarded gateways. An
8 unreliable gateway is probably worse than no gateway.
9 Gateways face challenges with regulatory compliance,
10:53 10 customer service, and finding a good revenue model,"
11 etc.

12 A. Uh-huh.

13 Q. Does that refresh your recollection as to
14 whether you were still pursuing -- as to whether Ripple
10:53 15 was still pursuing the gateway strategy at this point?
16 And.

17 Then I'll just note for you the next paragraph says
18 "So we pivoted to a strategy," etc.

19 A. Yeah, that's consistent with my understanding
10:53 20 of the time. But I hesitate to say that we completely
21 abandoned the gateway strategy.

22 Q. So is it your testimony that today, Ripple
23 has not completely abandoned the gateway strategy?

24 A. I am not saying that we -- I'm saying that I
10:53 25 can't conclude that we did completely abandon the

10:53 1 gateway strategy at that time.

2 Q. Has it abandoned it today?

3 A. No.

4 Q. Okay. It hasn't completely abandoned it, but
10:53 5 it has abandoned it somewhat? I'm trying to understand
6 what Ripple's current position is with respect to the
7 gateway strategy.

8 MR. CERESNEY: Objection to form.

9 THE WITNESS: I would say Ripple's --

10:53 10 Ripple's commitment to the gateway
11 strategy or focus on it has changed over time.

12 It first didn't exist, was very high,
13 dropped for a while in preference to the
14 RippleNet strategy, then came up again.

10:54 15 BY MR. TENREIRO:

16 Q. In preference to RippleNet strategy?

17 A. Yes.

18 Q. Is that the same as xRapid?

19 A. XRapid's a subset of the RippleNet strategy.

10:54 20 Q. Then you say, "came up again." The gateway
21 strategy came up again?

22 A. Yes.

23 Q. When was that?

24 A. I would say probably -- I mean it did a
10:54 25 little bit over a long periods of time, but I think

10:54 1 around the time we noticed that the gateway strategy --
2 the decentralized exchange was thriving despite our lack
3 of focus on it.

4 Q. Okay. Let's take a look, now, at a different
10:54 5 exhibit, which will be Exhibit 19.

6 (Thereupon, a document entitled "If Ripple
7 failed, XRP died - General Discussion - Xrp
8 Chat" was introduced as Exhibit 19 for
9 identification.)

10:54 10 BY MR. TENREIRO:

11 Q. This is an Xrp Chat and this is 28 pages. My
12 question is on page 12.

13 It appears to be posted June 3rd, 2016. The title
14 of the thread is "If Ripple failed, XRP died." You do
10:55 15 call them "threads," right, for Xrp Chat?

16 A. Yes.

17 Q. And do you call this -- let me --

18 When you're finished reading this part, my question
19 is if you recall this thread.

10:55 20 A. I don't specifically recall writing this.

21 Q. Okay. Have you had a chance to read your
22 post there?

23 A. Let me just -- let me just --

24 I've looked at the context. Let me just read my
10:55 25 particular post in its entirety. One second.

10:56 1 (Pause.)

2 THE WITNESS: Yes.

3 BY MR. TENREIRO:

4 Q. Okay. Let's start with "I don't think it's
10:56 5 likely XRP would succeed without us, though it is
6 possible."

7 What did you mean by that? How would it be
8 possible for XRP to succeed without Ripple?

9 MR. CERESNEY: Objection to form.

10:56 10 THE WITNESS: Today, I find it --

11 MR. CERESNEY: Do you want him to
12 answer -- you asked two questions, "What did
13 you mean by that?" and then the subsequent
14 question. Which one do you want him to
10:56 15 answer?

16 BY MR. TENREIRO:

17 Q. No, I'm asking back then. How -- how would
18 XRP subject succeed without Ripple in 2016?

19 A. Looking at this today, I'm surprised that I
10:56 20 would have said that in 2016. I believe in 2016 the
21 decentralized exchange was already in significant,
22 active use. Many exchanges were trading XRP. I --

23 Honestly, I'm -- I'm -- honestly, I'm very
24 surprised it's as late as 2016. That certainly isn't my
10:57 25 view today of what I would -- what I would have

10:57 1 thought -- what I think I would have thought today in
2 2016.

3 Q. Okay. But you did make this post, as far as
4 you know?

10:57 5 A. I did, as far as I know.

6 Q. Later, you say:

7 "I do think it's possible for us to succeed without
8 XRP succeeding as we do have other sources of revenue."

9 Is it fair to say that in 2016, XRP was one of
10:57 10 Ripple's -- selling XRP was one of Ripple's sources of
11 revenue?

12 A. I believe it was by 2016. I'm not sure.

13 Q. And -- okay. Then, you say:

14 "That said, our XRP is a significant asset." What
10:57 15 does it mean there -- what do you mean, "a significant
16 asset"?

17 A. I meant that Ripple held a significant amount
18 of XRP.

19 Q. Was it worth a significant amount in 2016?

10:58 20 A. I don't -- I don't recall. I suspect -- I
21 don't recall the price then.

22 Q. Okay. Did you monitor the price of XRP back
23 in 2016?

24 MR. CERESNEY: Objection to form.

10:58 25 MR. TENREIRO: What's the objection?

10:58 1 MR. CERESNEY: What the term "monitor"
2 means.
3 BY MR. TENREIRO:
4 Q. Did you look at the price of XRP online?
10:58 5 A. I believe I did check the price at the time,
6 from as soon as it was possible to do that to the
7 present.
8 Q. You still do that today?
9 A. Yes.
10:58 10 Q. Why?
11 A. Just to understand the sentiment in the
12 market.
13 Q. The sentiment as to what, as to XRP?
14 A. Well, as to the entire cryptocurrency space.
10:58 15 Q. Okay. What other digital asset prices do you
16 look up online from time to time?
17 A. Primarily, Bitcoin, Ethereum, and XRP. I
18 think those are the three that I would look at most.
19 Q. And do you hold XRP today?
10:59 20 A. Yes, I do.
21 Q. How much?
22 A. I believe approximately [REDACTED].
23 Q. And over the course of your employment --
24 over the course of your life, how much XRP had you sold?
10:59 25 A. Probably about [REDACTED].

10:59 1 Q. [REDACTED] XRP?

2 A. It's probably a little more than that. Maybe
3 [REDACTED].

4 Q. And in exchange for what did you sell that
10:59 5 XRP?

6 A. Either Bitcoin or U.S. dollars.

7 Q. How much in U.S. dollars?

8 A. I think about [REDACTED].

9 Q. And how much in Bitcoin?

10:59 10 A. That I don't know, but much less.

11 Q. Much less in the equivalent of dollars to
12 Bitcoin?

13 A. Yes, yes. It's -- it's just challenging
14 because the price of Bitcoin is also variable.

10:59 15 Q. Yeah?

16 A. So it's hard -- it's less in terms of the
17 magnitude of value.

18 Q. Okay. Where did you sell -- how -- how did
19 you sell your XRP?

11:00 20 A. Either on exchanges or on the decentralized
21 exchange.

22 Q. If you used exchanges, which ones did you
23 use?

24 A. I believe I predominantly used Bitstamp and
11:00 25 Coinbase Pro, Kraken probably third.

11:00 1 Q. Back to the exhibit. You say:
2 "Our XRP strategy is based on promoting it as a
3 bridging currency." Do you see that part? It's the
4 second paragraph, third sentence?

11:00 5 A. Yes.

6 Q. What do you mean by "our XRP strategy"?
7 Whose?

8 A. Ripple's.

9 Q. Okay. Here you're talking on behalf of
11:00 10 Ripple or on behalf of yourself?

11 A. I think here I think I'm describing what
12 Ripple's strategy is, which is -- I hesitate to put it
13 in one of two buckets, but I am an employee of Ripple,
14 describing what my view of what Ripple's strategy is.

11:00 15 Q. Right. At this point, had Ripple achieved
16 adoption of XRP as a bridging currency?

17 I understand you're talking about --

18 MR. CERESNEY: Objection.

19 BY MR. TENREIRO:

11:01 20 Q. -- promoting it.

21 MR. TENREIRO: Sorry.

22 MR. CERESNEY: Objection to form.

23 BY MR. TENREIRO:

24 Q. I understand that you're talking here about
11:01 25 promoting it as a bridging currency. You talk about

11:01 1 significant technical obstacles and other ways in which
2 the strategy might work.

3 My question is: At this point, had Ripple actually
4 achieved adoption of XRP as a bridging currency?

11:01 5 MR. CERESNEY: Objection to form.

6 THE WITNESS: Yes and no. "Yes," to the
7 extent that people were using it as a bridging
8 currency.

9 "No," to the extent that Ripple didn't
11:01 10 have a product that would allow people to do
11 that at that time. At least, I don't believe
12 we did in 2016.

13 BY MR. TENREIRO:

14 Q. Is that yes to the part that's on the
11:01 15 exchange we were talking about?

16 A. Yes. It would be the part on the
17 decentralized exchange.

18 And possibly people doing it other ways, too, but I
19 wouldn't want to say -- I wouldn't know, but I know
11:02 20 people were doing it on the decentralized exchange.

21 Q. Did Ripple -- you know, develop that
22 decentralized exchange?

23 A. We developed the decentralized -- well, the
24 decentralized exchange was developed by myself and
11:02 25 [REDACTED] who subsequently became Ripple employees,

11:02 1 but we didn't -- we didn't -- but I believe this --
2 well, this is 2016. Sorry. I lost my train of thought.
3 Can you --

4 Q. Yeah, yeah, yeah, so -- you know.
11:02 5 I had asked you if Ripple at this point had
6 achieved adoption of XRP's bridging currency. You said,
7 "Yes, to the extent that people were using it as a
8 bridging currency; no, to the extent Ripple didn't have
9 a product."

11:02 10 That confused me a little bit, because I thought
11 the exchange itself was one of Ripple's products.

12 A. The decentralized exchange?

13 Q. Yeah.

14 A. Not really, because that predates the
11:02 15 company. That was developed largely by myself and
16 [REDACTED] in early 2013.

17 And then adoption occurred initially with Ripple
18 suggesting the adoption and then with Ripple pivoting to
19 RippleNet strategy, but then adoption continued despite
11:03 20 Ripple's lack of effort.

21 Q. Okay. Understood.

22 A. So if you want to attribute that success to
23 Ripple or not, it is what it is.

24 Q. Yeah, I understand.

11:03 25 Does Ripple earn revenue from that decentralized

11:03 1 exchange from people using it?

2 A. No.

3 Q. Has it ever, as far as you know, earned
4 revenue from people using the decentralized exchange?

11:03 5 A. Not to my knowledge.

6 Q. Did there come a point in time where Ripple
7 earned revenue from people using XRP as a bridging
8 currency?

9 A. Yes.

11:03 10 Q. And when was that?

11 A. Once xRapid was live.

12 Q. What was the source of revenue through
13 xRapid?

14 A. It would have initially been things like
11:03 15 licensing fees and there may have been per transaction
16 fees.

17 Q. Order of magnitude, do you know how much
18 revenue Ripple has earned through xRapid?

19 A. No, I would have to guess.

11:04 20 Q. Towards the end of the post, you say -- I
21 guess towards the bottom of the page -- "We do not plan
22 to encourage use of XRP as an alternative to Bitcoin or
23 as a direct payment method at this time."

24 Was that statement true in 2016?

11:04 25 A. I believe so, yes.

11:04 1 Q. Okay. Let's move on. Well, let me ask you
2 this:

3 Why are you publicly talking about the strategy
4 that Ripple has?

11:04 5 MR. CERESNEY: Hold on. I just took --

6 MR. TENREIRO: Yeah, sorry.

7 (Thereupon, an informal discussion was
8 held off the record.)

9 BY MR. TENREIRO:

11:04 10 Q. Yeah, page 12. You say:

11 "Our XRP strategy is based on promoting it as a
12 bridging currency."

13 Why are you even talking publicly about the
14 strategy Ripple has at this time?

11:05 15 A. When people say something that I know the
16 truth on that's not correct, I have an uncontrollable
17 instinct to correct them.

18 I call it "Code Red." Someone's wrong on the
19 Internet. I know it's a thankless and eternal task, but
11:05 20 I literally cannot help it.

21 Q. I will save my comments for off the record on
22 that.

23 Is there any other reason why you publicly explain
24 Ripple's plans from time to time?

11:05 25 A. I do feel like it's within -- I do feel like

11:05 1 it's something that I should do as a -- you know, as a
2 well known employee of the company.

3 Q. Why? Why should -- I mean, why do you feel
4 that?

11:05 5 A. I don't really know.

6 Q. Well -- okay. Why -- and do you have a view
7 as to whether -- sort of its a good idea to have
8 accurate information about the company -- you know, out
9 in public?

11:06 10 A. Yeah. Yes, I do think people should have
11 accurate information rather than inaccurate information.

12 Q. Okay, so would you say -- I'm going to switch
13 gears for a second.

14 MR. CERESNEY: Are you done with this
11:06 15 exhibit?

16 MR. TENREIRO: I think so.

17 BY MR. TENREIRO:

18 Q. Would you say that when the ledger -- the XRP
19 Ledger -- was launched, the public -- would you
11:06 20 describe -- would you describe it as a centralized
21 ledger or decentralized?

22 A. At the time, I would have described it as
23 centralized. Today, I would describe it as
24 decentralized.

11:06 25 Q. You would describe it as decentralized

11:06 1 whether it was launched?

2 A. Soon as the source code was generally
3 available outside the company.

4 Q. That's the moment you describe it as
11:06 5 decentralized?

6 A. It is hard -- I will concede it's challenging
7 to draw a bright line, but if you want to draw a bright
8 line, that's where I would draw it.

9 Q. Okay, I could ask for a bright line, but
11:07 10 that's fine. My question is -- let's do this:

11 Is it fair to say that at times, people will say
12 that whether something is centralized or decentralized
13 is suggestive?

14 A. Yes.

11:07 15 Q. And whether I say people, I mean people --
16 you know, in the academic literature, for example?
17 People say that -- whether something is centralized or
18 decentralized is subjective?

19 A. There is no one consistent definition of
11:07 20 centralized and decentralized that everybody means every
21 time they use those terms.

22 Q. And when the ledger was launched, why would
23 you describe it as centralized back then? Even though I
24 understand that today, you don't have that view.

11:07 25 A. Back then, I would have described it as

11:07 1 centralized, because the notion of centralization of
2 decentralization wasn't very -- wasn't very precisely
3 defined.

4 Q. But there was enough -- there must have been
11:07 5 some definition such that you would have taken your view
6 though to be centralized?

7 A. That's correct.

8 Q. What about your view back then about these
9 concepts made you think back then that it was a
11:08 10 centralized ledger?

11 A. The primary one would be that had Ripple
12 stopped existing, gone away, disappeared, it's unlikely
13 that anyone else would have continued the project.

14 Q. Why?

11:08 15 A. They would have had no reason to. They just
16 wouldn't have been interested in doing so.

17 Q. Was one of the reasons because the XRP Ledger
18 wasn't doing much back then?

19 MR. CERESNEY: Objection to form.

11:08 20 BY MR. TENREIRO:

21 Q. What are the reasons people would have had no
22 interest?

23 A. I think it's fair to say that a person would
24 have interest if they were using it for something that
11:08 25 was important to them, and if they weren't using it for

11:08 1 something that was important to them, just out of sheer
2 interest in the technology or -- they could if they
3 wanted to, but it's simply unlikely that they would
4 have.

11:08 5 Q. At what point did your understanding of the
6 concepts of centralization and decentralization change
7 such that your view of what the ledger was originally
8 also changed?

9 A. I think they continuously evolved throughout
11:09 10 the entire time period, and it's hard for me to place --
11 And that's reflected in many of my posts, where I
12 think you'll find later on I talk more about "Well, if
13 by 'decentralization' you mean this, then this means
14 something else."

11:09 15 I understood that it was more nuanced and there
16 were different notions of centralization and
17 decentralization.

18 Q. This -- this sort of evolving
19 understanding -- did you derive it from sort of --
11:09 20 where, again, reading academic literature, conversations
21 with fellow computer programmers? How is it that it
22 changed?

23 A. Right, from -- from all of those things.
24 I think the biggest one was just thinking about why
11:09 25 does it matter is something is decentralized, what does

11:09 1 a person actually care about, then that should inform --
2 the definition should be a thing that you actually care
3 about.

4 Q. Okay, and is it -- does Ripple care about
11:09 5 whether the public perceives the XRP Ledger as
6 centralized or decentralized?

7 MR. CERESNEY: Objection, form. He asked
8 you whether Ripple cared.

9 THE WITNESS: I believe that -- that
11:10 10 people at Ripple, including myself, care that
11 people have an accurate understanding of the
12 status of the ledger. If somebody wants to
13 take the trouble to make a false statement,
14 then we'll correct that false statement.

11:10 15 BY MR. TENREIRO:

16 Q. Separate from caring about accurate
17 understandings, my question is:

18 Do people at Ripple, such as yourself, care about
19 whether the public perceives the XRP Ledger is
11:10 20 centralized or decentralized?

21 MR. CERESNEY: Objection.

22 MR. GERTZMAN: Objection.

23 MR. CERESNEY: You're asking people at
24 Ripple such as himself. Are you just asking
11:10 25 him?

11:10 1 MR. TENREIRO: No, I'm asking him about
2 Ripple, because he could have had
3 conversations with other people where they
4 might have said, "Hey -- you know. My name is
11:10 5 [REDACTED]. I really want there to be this
6 perception in the public."

7 MR. CERESNEY: If you can, answer the
8 question.

9 MR. GERTZMAN: Just note my objection to
11:10 10 the form.

11 MR. CERESNEY: Yeah. I objected, Mike.

12 THE WITNESS: I mean, I can --

13 I can say specifically that there were
14 Ripple efforts to communicate the status of
11:11 15 the ledger -- to accurately communicate the
16 status of the ledger centralization or
17 decentralization at various times.

18 BY MR. TENREIRO:

19 Q. And why did Ripple make those efforts?

11:11 20 A. I think largely to combat the false narrative
21 that it was centralized.

22 Q. And were there other reasons? Not largely,
23 but something else?

24 A. I don't -- I don't believe so.

11:11 25 Q. Okay. Do you know whether Ripple made

11:11 1 efforts to communicate the status of the ledger,
2 centralization or decentralization, in order to promote
3 a litigation strategy?

4 MR. CERESNEY: Objection.

11:11 5 You should not reveal any discussions
6 with counsel.

7 THE WITNESS: I do not believe we did
8 that.

9 (Pause.)

11:12 10 (Thereupon, a printout from Bitcoin Forum
11 entitled "Latest Posts of JoelKatz" dated May
12 20, 2013" was introduced as Exhibit 6 for
13 identification.)

14 BY MR. TENREIRO:

11:12 15 Q. Let's look at Exhibit 6, please. This is
16 from the Bitcoin forum, "Latest posts of JoelKatz," and
17 these are a series of posts in May 2013.

18 There's eight pages to the exhibit. I am going to
19 ask you about something on page 3.

11:12 20 (Pause.)

21 BY MR. TENREIRO:

22 Q. Also on page 6. We can start with three, if
23 that's okay.

24 A. Okay.

11:13 25 Q. Is it fair to say the way this is

11:13 1 presented -- it's sort of you responding to something
2 someone else said?

3 A. Yes.

4 Q. Okay, so on the top of page 3, you say --
11:13 5 (Thereupon, an informal discussion was
6 held off the record.)

7 MR. TENREIRO: Oh, I'm sorry. Yes. For
8 the SEC person displaying them, it's six,
9 please.

11:14 10 My understanding of how this works is you
11 could -- maybe Mr. Schwartz has a different
12 understanding.

13 But my understanding is you can select a
14 user and you can sort of concatenate their
11:14 15 posts, and it's not the threads. You'd have
16 to click on the actual title of threads to see
17 the whole thread. This is just their post on
18 various threads.

19 (Thereupon, an informal discussion was
11:14 20 held off the record.)

21 BY MR. TENREIRO:

22 Q. It shows what -- it says:

23 "Larsen can't have it both ways," and then, he
24 says, "You're assuming OpenCoin will be a Ripple central
11:14 25 authority forever."

11:14 1 So we can go to page 3 of this exhibit, please,
2 towards the top.

3 A. Yes.

4 Q. There we go.

11:14 5 When you say, "You are assuming OpenCoin will be a
6 Ripple central authority forever," do you see that?

7 A. Yes.

8 Q. OpenCoin was that the name for Ripple before
9 it was called Ripple?

11:15 10 A. Yes.

11 Q. Okay. What do you mean by "central
12 authority"?

13 (Pause.)

14 THE WITNESS: I'm really not precisely
11:15 15 sure. Yeah, I'm really not. I'm not sure.

16 BY MR. TENREIRO:

17 Q. You're not sure what you mean by "central
18 authority," sitting here today?

19 A. Yeah, let me read what I am responding to,
11:15 20 again.

21 MR. CERESNEY: Take your time.

22 (Pause.)

23 THE WITNESS: I think I meant the most
24 interested party, the party participating the
11:15 25 most in development.

11:15 1 But I'm not really sure today what I
2 meant by that at that time.

3 BY MR. TENREIRO:

4 Q. Here, does the word "ripple" refer to XRP?

11:16 5 A. "Ripple" refers to the XRP Ledger.

6 Q. The XRP Ledger?

7 A. I think so.

8 Q. There was a moment in time when XRP was
9 referred to as "ripples"?

11:16 10 A. People have referred to them that way, yes.
11 Ripple credits or -- yeah, the name's changed a number
12 of times.

13 Q. Did Ripple have any role in sort of ensuring
14 that the public did not use the word "ripples" or
11:16 15 "ripple credits" instead of XRP?

16 MR. CERESNEY: Objection to the form.

17 MR. GERTZMAN: Objection to the form.

18 THE WITNESS: My recollection is there
19 came a time when we -- when we treated
11:16 20 "Ripple" as a company trademark.

21 BY MR. TENREIRO:

22 Q. Okay. When you say, "That is absolutely not
23 our plan," who is "our" referring to?

24 A. This is early 2013, so I'm not -- I can tell
11:17 25 you -- I don't know if it was -- well, I'm referring to

110

11:17 1 OpenCoin, so I must have meant OpenCoin.

2 Q. Okay, and what do you mean by "That is
3 absolutely not our plan"?

4 A. OpenCoin's intention was always -- was always
11:17 5 to -- to reduce its own role.

6 Q. With respect to what?

7 A. Well, in the early days, OpenCoin's role
8 was -- primary role was to distribute XRP, so as that
9 job wound to a close, OpenCoin wouldn't have anything
11:17 10 left to do.

11 Q. Has that job wound to a close today?

12 A. No.

13 Q. When -- when is it going to?

14 A. It's impossible to say.

11:17 15 Q. Okay. Would you say it's going to be in the
16 next few years?

17 MR. CERESNEY: Objection.

18 THE WITNESS: Very hard -- very hard to
19 say.

11:17 20 BY MR. TENREIRO:

21 Q. Okay. Page 6, please. This response is to a
22 quote on May 16th. The quote says:

23 "Thanks for the clear responses." Your response
24 says:

11:18 25 "We will do what we can to drive adoption."

111

11:18 1 A. Yes.

2 Q. Then you say -- I'm skipping a sentence.

3 You say, "We plan to develop client and server
4 software for as long as necessary." Who is the "we"
11:18 5 there?

6 A. I suspect I'm speak on behalf of OpenCoin.

7 Q. "Server software"? Does that refer to the
8 XRP Ledger?

9 A. At least that, yeah.

11:18 10 Q. I'm sorry? At least?

11 A. At least that, yeah. Could include other
12 software, but yes.

13 Q. Is this still the plan that Ripple has today,
14 to continue to develop server software, client and
11:18 15 server software for the XRP Ledger?

16 A. Yes.

17 Q. It says "for as long as necessary"?

18 A. Yes.

19 Q. What does that mean? Who determines -- who
11:19 20 determines whether it's still necessary?

21 MR. CERESNEY: Objection to form.

22 MR. TENREIRO: Actually, let me strike
23 that.

24 BY MR. TENREIRO:

11:19 25 Q. How do you determine if it's still necessary

112

11:19 1 for Ripple to do these things?

2 MR. CERESNEY: Objection.

3 THE WITNESS: Yeah, I don't -- I -- I --

4 I don't really know.

11:19 5 BY MR. TENREIRO:

6 Q. And do you know who determines it, whether
7 it's still necessary or not?

8 A. Well, if -- well, OpenCoin, now Ripple, would
9 determine its own plan, so that would be the term nation
11:19 10 we would make, whether we felt we needed to do that
11 authority.

12 Q. Further down, Post 696, you say, "The price
13 of XRP is just a matter of supply and demand." Do you
14 see that?

11:19 15 A. Yes.

16 Q. What -- what does that in layman's terms? Is
17 it just Adam Smith?

18 A. Yeah.

19 Q. Supply and demand determine the price of an
11:19 20 asset?

21 A. Yes.

22 Q. Okay. Typically, under this sort of theory,
23 if demand goes up what happens to the price and
24 everything else stays equal?

11:20 25 A. If everything else stays equal, an increase

113

11:20 1 in demand would translate to an increase in price --
2 again, if everything else stays equal.

3 Q. You say, we believe that broad adoption of
4 Ripple as a payment platform will drive demand.

11:20 5 What does Ripple refer to there? Is that the
6 ledger or XRP?

7 A. The ledger.

8 (Thereupon, an informal discussion was
9 held off the record with the shorthand
11:20 10 reporter.)

11 BY MR. TENREIRO:

12 Q. And will drive demand for what?

13 A. I don't say here.

14 Q. Can you tell me from context what you meant?

11:20 15 A. I don't -- I don't recall.

16 Q. Okay. I understand you don't recall, but
17 does the context clue you in as to what you meant or
18 not?

19 A. I mean, you could draw the conclusion as
11:20 20 easily as I can. I don't what I -- what I meant by
21 that.

22 Q. Okay. Is it still true today that the price
23 of XRP is just a matter of supply and demand?

24 A. I hesitate to use the word "just." Supply
11:21 25 and demand are factors that influence price, but I think

11:21 1 the world is not as simple as a quote from Adam Smith.

2 Q. Is it fair to say the price of XRP today is
3 in part a matter of supply and demand?

4 MR. CERESNEY: Objection to form.

11:21 5 BY MR. TENREIRO:

6 Q. As far as you understand?

7 A. I believe those are factors that affect the
8 price.

9 Q. What other factors do you believe affect the
11:21 10 price today?

11 A. Well, it's extremely complicated because if
12 you look at the prices of digital assets, they don't --
13 they seem to move despite what don't look like changes
14 and the supply or demand for those particular assets.

11:21 15 There are a lot of specific examples where there
16 were drastic changes in the supply or demand of digital
17 assets and then there was no change in the price, so
18 something else is going on.

19 Q. Fair enough. Was Ripple a central authority
11:21 20 with respect to the XRP Ledger at this point in time?

21 MR. CERESNEY: Objection.

22 BY MR. TENREIRO:

23 Q. As far as you used those terms, "central
24 authority"? We're going back to page 3.

11:22 25 A. I think there was a sense --

11:22 1 I think there's some sense in which you could make
2 that term meaningful and other senses which you could
3 not.

4 Q. What are those senses?

11:22 5 A. In which you could or...

6 Q. Could not.

7 A. Well, for example, as I understand
8 decentralization today, if Ripple went away, other
9 people could have continued the ledger, had they wished
11:22 10 to do so.

11 For example, had Ripple made a rules change, people
12 could have resisted that change. They wouldn't have had
13 to do what Ripple wanted them to do. So in that sense,
14 we were not a central authority.

11:22 15 Q. Were there other nodes validating ledger
16 transactions at that time?

17 MR. CERESNEY: "Other nodes"? Other
18 than?

19 MR. TENREIRO: Yeah, other than the ones
11:22 20 Ripple was using -- running.

21 THE WITNESS: I know there was at least
22 one for sure. There might have been others.

23 BY MR. TENREIRO:

24 Q. How many were there?

11:22 25 A. I don't know.

11:22 1 Q. All right.

2 Let's talk about the consensus mechanism for a
3 minute. Could you describe it in your own terms,
4 please? What's the consensus mechanism for the XRP
11:23 5 Ledger?

6 A. The consensus mechanism for the XRP Ledger --
7 It's very hard to describe it -- to describe
8 something shortly, but it's the method by which the XRP
9 Ledger reaches -- advances -- advances itself and
11:23 10 reaches new confirmed ledgers that people can rely on.

11 Q. I'm sorry. Reaches new ...

12 MR. CERESNEY: You have to speak a little
13 louder and --

14 BY MR. TENREIRO:

11:23 15 Q. That last part.

16 A. Confirmed ledgers that people can rely on.

17 Q. What method of reaching consensus does the
18 XRP Ledger utilize?

19 A. The method is sometimes described as
11:23 20 "Federated Byzantine Agreement."

21 (Thereupon, an informal discussion was
22 held off the record with the shorthand
23 reporter.)

24 THE WITNESS: What that means is -- what
11:23 25 that means is there's sort of a continuous --

117

11:23 1 It's very analogous to a discussion with
2 human beings where they would actually agree
3 on something. They would literally come to an
4 agreement on it.

11:24 5 BY MR. TENREIRO:

6 Q. The Byzantines didn't seem to agree on much,
7 though, did they?

8 A. Sorry. That describes the challenge, not so
9 much the solution.

11:24 10 Q. Does Ripple --
11 Does the Ripple Ledger use Proof of Work to
12 establish consensus?

13 A. No.

14 Q. Why not?

11:24 15 Whose idea was it for -- to use the consensus
16 mechanism it does use?

17 A. [REDACTED] had the original idea to
18 replace -- to take something Bitcoin-like and replace
19 Proof of Work with some sort of distributed agreement
11:24 20 algorithm.

21 Q. Does he use Proof of Stake?

22 A. No.

23 Q. Why not?

24 A. For one thing, Proof of Stake didn't exist at
11:24 25 the time.

11:24 1 Q. That's a good answer. But today, why doesn't
2 it?

3 A. Because Proof of Stake makes the stakeholders
4 the people who hold the digital asset rather than the
11:24 5 people who use the system.

6 Q. And why would one want to make the
7 stakeholders those who use the system as opposed to
8 those who hold the asset?

9 A. It's my belief that it produces a better
11:25 10 system when the people who use the system and get value
11 out of it are the primary stakeholders as opposed to
12 those who just hold an asset.

13 Q. Is it fair to say that to run a node of any
14 type on the ledger today you don't have to hold XRP?

11:25 15 A. Correct.

16 Q. And now there's -- how many nodes are on the
17 ledger today?

18 A. Last I checked, there was something like 15
19 hundred, but I couldn't tell you for you are sure what
11:25 20 it is today.

21 Q. How many of those nodes are actually
22 validating ledger transactions?

23 A. Last I checked, it was about 160 or so.

24 Q. What are the other nodes doing?

11:25 25 A. Let me back up a little bit. They are all

11:25 1 validating in the sense that they are checking whether
2 the transactions are valid.

3 But whether or not they are validators -- there's
4 only about 170 of them.

11:25 5 Q. And the distinction being what?

6 A. Every node checks whether every transaction
7 is valid, and a node will not take another node's word
8 whether a transaction is valid or not.

9 But the validators participate in coming to a
11:26 10 consensus to break ties, so the double spin comment.

11 Q. And how many of the hundred or so -- did you
12 say 150?

13 A. I think it's about 170.

14 Q. Okay. How many of the 170 of these nodes are
11:26 15 actually confirming transactions?

16 A. All -- all validators are confirming
17 transactions.

18 Q. Okay. Let's look at Exhibit 9.

19 (Thereupon, a two-page document entitled
11:26 20 "XRP Ledger Amendment" was introduced as DS
21 Exhibit 9 for identification.)

22 BY MR. TENREIRO:

23 Q. Exhibit 9, please.

24 A. I see that.

11:27 25 Q. What's XRP scanned?

11:27 1 A. I can tell you what it appears to be from
2 this document. I don't have any independent knowledge.

3 Q. Okay. What does it appear to be?

4 A. It appears to be a tool that at least among
11:27 5 other things can report on the status of proposed
6 changes to the XRP Ledger.

7 Q. Does Ripple have any such tool?

8 A. I'm not sure. I think we do.

9 Q. Is that fair --

11:27 10 From that, may I infer fairly that you have not
11 participated in the creation of such a tool?

12 A. That is correct.

13 Q. Okay. What is --

14 Just from looking at this document, what does this
11:27 15 appear to represent to you?

16 A. This appears to represent the -- the sum
17 subset of the validators appearing on the XRP Ledger and
18 whether -- whether or not they support or oppose a
19 proposed change to the software's operation.

11:27 20 Q. Okay. There's 28 yeas and nine nays. Do you
21 see that?

22 A. On mine, I see 19 yeas.

23 Q. If you turn the page?

24 A. Oh, I see. Yes, there's 28 yeas and nine
11:28 25 nays.

11:28 1 Q. So do you know what the subset of 37
2 validators are?

3 A. Given the -- I don't independently know, but
4 I suspect, given the context, someone's recommended UNL.

11:28 5 Q. Do you know if Ripple recommended UNL?

6 A. I don't know for sure.

7 Ripple's UNL has changed over time. It's similar
8 to many other recommended UNLs, so it's hard for me to
9 know whether this was specific. It certainly could have
11:28 10 been.

11 Q. How many validators are in Ripple's UNL
12 today?

13 A. My last recollection was that it was 35. It
14 may have changed. That may not be exactly correct at
11:28 15 this moment.

16 Q. If the 35 nodes on that list all have the
17 same UNL list, which is the 35 of them, what function is
18 left for the other validators in that 150 or so group to
19 do with respect to validating the transactions on the
11:29 20 XRP Ledger?

21 A. Based on --

22 MR. CERESNEY: Hold on. 170?

23 THE WITNESS: However --

24 BY MR. TENREIRO:

11:29 25 Q. However many?

11:29 1 A. Yeah.

2 Q. We don't have to determine the exact amount.

3 A. They still determine whether every
4 transaction is valid or not for their own purposes.

11:29 5 Q. Other than that, what role do they play?

6 A. That would be the only role.

7 Q. If they determine it's not valid for their
8 own purposes, what would they do?

9 A. They would ignore it.

11:29 10 Q. And for -- and enter -- you know, believe a
11 different state of the ledger?

12 A. Depending on how they are configured, the
13 ledger has significant protection against an accidental
14 fork.

11:29 15 So unless they intended to fork, they would -- they
16 would simply report that something was wrong, and they
17 would --

18 Q. To whom?

19 A. To their operators, and they would cease
11:29 20 operation.

21 Q. Okay. Reading the list here today, do you --
22 Do you know if some of these validators are on
23 Ripple's UNL today?

24 MR. CERESNEY: Jorge, what is the date of
11:30 25 this document?

11:30 1 MR. TENREIRO: I printed this on the 23rd
2 of May.

3 MR. CERESNEY: But it summarizes some
4 amendments. Do we know when that was
11:30 5 introduced and when the nodes were?

6 MR. TENREIRO: I think it's ongoing.

7 THE WITNESS: Yeah, this could -- this
8 probably was the statement at the time we
9 printed it. That's what it looks like. It's
11:30 10 hard to say for sure.

11 MR. CERESNEY: It was still an ongoing
12 process?

13 MR. TENREIRO: It was ongoing on the
14 23rd. I know there's a two-week thing, but --

11:30 15 THE WITNESS: There is.

16 MR. CERESNEY: Do you know what this
17 amendment is?

18 THE WITNESS: I'm not certain.

19 MR. CERESNEY: It's just I --

11:30 20 MR. TENREIRO: Do you know --

21 Well, I'm not asking about the amendment.
22 I'm asking about the validators. So if he
23 recognize these names as validators, it might
24 be on Ripple's UNL.

11:30 25 MR. CERESNEY: You're asking whether any

11:30 1 of these validators are on Ripple's UNL?

2 MR. TENREIRO: Yeah.

3 MR. CERESNEY: Okay.

4 THE WITNESS: I know some of them have
11:31 5 been on our UNL at times, and there are
6 several that I believe are still on our UNL.

7 BY MR. TENREIRO:

8 Q. Well, let's do this. Let's just set this
9 aside for a second. What is the UNL list, for the
11:31 10 record?

11 A. The -- a node to a UNL list is the list of
12 validators that it has chosen to listen to break ties on
13 the double spin problem, so ...

14 Q. And does Ripple publish a UNL list?

11:31 15 A. Yes.

16 Q. Is that referred to as the "dUNL" list?

17 A. Some people refer to it as that.

18 Q. Lower case D?

19 A. Yes.

11:31 20 Q. Why do people call it that?

21 A. Because there were times when it was the
22 UNL -- it may still be true, where it's the UNL list you
23 get if you don't choose one.

24 Q. So the default --

11:31 25 A. Yes.

11:31 1 (Inaudible crosstalk.)

2 BY MR. TENREIRO:

3 Q. Why does Ripple publish this list?

4 A. Just to simplify administration of the XRP
11:31 5 Ledger software.

6 Q. Okay. Does Ripple use the XRP Ledger
7 software?

8 A. Yes.

9 Q. Is it fair to say Ripple has a stake in the
11:31 10 XRP Ledger?

11 MR. CERESNEY: Objection to form.

12 THE WITNESS: I would say any -- I
13 would -- I have said at times that every XRP
14 holder has a stake in the ledger.

11:32 15 BY MR. TENREIRO:

16 Q. That includes Ripple?

17 A. Certainly, that would include Ripple.

18 Q. Does Ripple have a financial interest in the
19 ledger?

11:32 20 MR. CERESNEY: Objection to form.

21 THE WITNESS: I mean, it's kind of a
22 vague term, but I ...

23 BY MR. TENREIRO:

24 Q. Does it have a financial interest in the
11:32 25 ledger operating/functioning correctly?

11:32 1 A. I think so.

2 Q. Does it have a reputational interest in the
3 ledger functioning correctly?

4 MR. CERESNEY: Objection to form.

11:32 5 THE WITNESS: I think so.

6 BY MR. TENREIRO:

7 Q. From your conversations at the company, do
8 you have any idea whether --

9 MR. TENREIRO: Well, let me strike that.

11:32 10 BY MR. TENREIRO:

11 Q. Let's go back to my question. Who else is
12 publishing UNL lists today?

13 A. I -- I don't necessarily know if everybody
14 could be publishing the UNL list. I know COIL publishes
11:33 15 one, and I know the XRP Ledger Foundation publishes one.

16 Q. What is COIL?

17 A. COIL is a company that uses [REDACTED].

18 Q. What is [REDACTED]?

19 A. [REDACTED] is a payment protocol that
11:33 20 allows -- that doesn't use a ledger.

21 Q. Does not use a blockchain?

22 A. It can use assets that trade on a block
23 change but doesn't itself.

24 Q. Is that the xCurrent software platform?

11:33 25 A. There are historical ties between them, but

11:33 1 they have gone their separate ways since then.

2 Q. Historical ties between xCurrent and the
3 software or platform that COIL uses?

4 A. [REDACTED], yes. Severed all ties between
11:33 5 them.

6 Q. What commercial relationship, if any, does
7 COIL have with Ripple?

8 MR. CERESNEY: Objection.

9 THE WITNESS: I believe Ripple has
11:33 10 invested in COIL.

11 BY MR. TENREIRO:

12 Q. What about -- what commercial relationship,
13 if any, does Ripple have with the XRP Ledger Foundation?

14 MR. CERESNEY: Objection to form.

11:34 15 THE WITNESS: Ripple has donated -- I
16 believe Ripple has donated to the XRP Ledger
17 Foundation.

18 BY MR. TENREIRO:

19 Q. How much?

11:34 20 A. I recall seeing the figure \$1.2 million, but
21 I don't know if that was a proposed donation. I don't
22 know.

23 Q. How much has Ripple invested in COIL?

24 A. I knew at one time. I don't recall, though.

11:34 25 Q. Do you know if COIL's UNL list is identical

11:34 1 to the XRP Ledger Foundation?

2 A. I have not compared them.

3 Q. Do you know what overlap between COIL's an
4 Ripple's UNL lists?

11:34 5 A. I have not compared them.

6 Q. How many of the validators on Ripple's
7 proposed UNL list are on the lists of the other nodes?

8 MR. CERESNEY: When you say, "the other
9 nodes" --

11:34 10 MR. TENREIRO: 150 or 170 or so.

11 THE WITNESS: I believe the three
12 published UNL lists I've talked about are at
13 least substantially identical. I don't
14 believe that they are identical. I don't know
11:35 15 more detail than that.

16 BY MR. TENREIRO:

17 Q. They have to be substantially identical for
18 the ledger to move forward, right?

19 A. Not unless -- assuming there's no -- assuming
11:35 20 there's no intent to disagree.

21 Q. And it's --

22 Is it fair to say that Ripple employees have
23 reached the conclusion the overlap has to be about 90
24 percent?

11:35 25 A. Between 80 and 90 percent. Again, unless

11:35 1 there's a decision to deliberately disagree.

2 Q. Set that aside for now.

3 Do you know how many of the validators, of the 150
4 or 170, use Ripple's dUNL?

11:35 5 A. I have no idea.

6 Q. Is it still the default list?

7 A. I believe so.

8 Q. Why?

9 A. Because Ripple -- Ripple -- I mean, there has
11:35 10 to be some default.

11 Q. That's true. Is there an infrastructure
12 currently in place to manage validator lists?

13 A. Yes.

14 Q. What is it?

11:36 15 A. Everybody who publishes in UNL has some
16 mechanism to keep track of which validators they keep on
17 their list and why, and to actually --

18 The UNL itself has to be produced in a certain
19 digital format in order to be accepted so they have the
11:36 20 infrastructure to produce it in that format.

21 Q. The digital format is what, a JSON file?

22 A. My recollection --

23 It's been a while, is that the human input would
24 typically be a JSON file, and there's a cryptographic
11:36 25 process that converts it into a digital format and signs

11:36 1 it, but underneath it is a JSON file.

2 (Thereupon, an informal discussion was
3 held off the record.)

4 BY MR. TENREIRO:

11:36 5 Q. How many of the current nodes on Ripple's UNL
6 list are operated by Ripple itself?

7 A. I -- one second. I think between three and
8 five.

9 Q. Of the 35 or so?

11:37 10 A. Or so, yes. I know -- I know it dropped
11 below 20 percent fairly recently.

12 Q. Right. Was it after this litigation began?

13 A. I don't know. I don't think so, but I don't
14 know.

11:37 15 Q. And how many --

16 How many of the nodes on Ripple's dUNL are operated
17 by entities with whom Ripple has a commercial
18 relationship, such as COIL?

19 A. I don't know.

11:37 20 Q. Who decides --

21 How does Ripple decide what validators it should
22 put on its dUNL list?

23 A. We look at things like history of reliable
24 operation, jurisdiction, some sort of commitment. We
11:37 25 don't want them to just disappear. Those are the

11:37 1 factors that go into our decision.

2 Q. How do you gauge commitment?

3 A. Depends on -- if it's --

4 If it's an institution, like if it's a university,
11:38 5 some sort of commitment from that institution as opposed
6 to just someone there who's like, "I want to run a
7 validator."

8 Q. Commitment to whom or to what?

9 A. Commitment to the validator -- to operating
11:38 10 the validator.

11 Q. How could you -- how could you know --

12 How could Ripple know if they are committed to
13 that?

14 A. We would ask them.

11:38 15 Q. Okay. Who at Ripple asks them?

16 A. I think at --

17 I think, at times, it's been [REDACTED]. His last
18 name's escaping me at the moment. More recently,
19 [REDACTED].

11:38 20 Q. Do they -- does Ripple enter into any sort of
21 commercial agreement with these -- the universities to
22 make sure that the commitment is true, or is it informal
23 conversations, as far as you know?

24 A. As far as I know, it's informal. It's
11:38 25 informal.

11:38 1 Q. Does the amount of holding of XRP -- of any
2 of the person or institution or validator weigh into the
3 decision as to whether they might go on Ripple's dUNL
4 list?

11:39 5 A. We don't weigh that factor.

6 Q. Who -- you don't? Meaning you, Ripple,
7 don't?

8 A. Right.

9 Q. Who does?

11:39 10 A. It becomes a factor indirectly, because one
11 of the reasons a person might want to run a validator is
12 because they are interested in the performance of the
13 XRP Ledger.

14 Q. Just to be clear, you don't have to have XRP
11:39 15 to run a validator, right?

16 A. Correct.

17 Q. Do you have any knowledge as to whether the
18 validators on Ripple's dUNL list actually have XRP,
19 nodes?

11:39 20 A. I don't.

21 Q. The universities that run validator nodes
22 that are on Ripple's dUNL list --

23 Have they received XRP from Ripple directly or
24 indirectly, as far as you know?

11:39 25 A. As far as I know, no. Obviously, Ripple

11:39 1 holds XRP. COIL, I believe, holds XRP. And some of
2 these are businesses that probably -- probably hold it.
3 I don't -- I don't know.

4 Q. Is Bitso on the Ripple dUNL list?

11:40 5 A. I believe so.

6 Q. And does Ripple have a commercial
7 relationship with Bitso?

8 A. Yes.

9 Q. Is there a process for someone to come ask to
11:40 10 be put on your list?

11 A. I don't know that there's a formal process.
12 I know people have asked us.

13 Q. Again -- I'm sorry. Who -- maybe I asked
14 you. Maybe I didn't.

11:40 15 Who at Ripple ultimately decides who goes on the
16 dUNL list?

17 A. I don't really know the process that we go
18 through.

19 Q. It's not part of your responsibilities as
11:40 20 CTO?

21 A. No.

22 Q. Does Mr. Garlinghouse have a role in that
23 process?

24 A. Well -- I mean, theoretically,
11:40 25 Mr. Garlinghouse as CEO could control any process that

11:40 1 he wants, but my knowledge of that process is that
2 either [REDACTED] -- whose last name I forgot -- or [REDACTED]
3 [REDACTED] would make a recommendation.

4 And then generally, the recommendation would
11:41 5 generally -- would -- generally, there wouldn't be
6 pushback on a -- on the recommendation. There would be
7 no reason.

8 Q. Recommendation to whom?

9 A. You know, I don't -- I don't really know.

11:41 10 Q. Okay. Before Ripple put someone on the dUNL,
11 does someone at Ripple talk to the person that's -- you
12 know, running the institution or -- or the entity that's
13 going to run this node?

14 A. I -- I -- I assume that would happen in most
11:41 15 cases.

16 Q. Why do you assume that?

17 A. Just seems odd for us to add them randomly
18 without coordinating with them at all.

19 Q. And I think you said part of your role today
11:41 20 is to make sure that -- you know, Ripple's XRP
21 doesn't -- I'm going to paraphrase, because I don't
22 think you used this word, but -- you know, doesn't get
23 stolen or sort of --

24 A. Yes.

11:41 25 Q. Okay, and why does Ripple care about that?

11:42 1 MR. CERESNEY: Objection to form.

2 THE WITNESS: So it depends on the scope
3 of the type of incident you're talking about.
4 For a small incident, reputational risk.
11:42 5 Obviously, for a large --

6 For a large incident -- I mean, no
7 company would want to have a significant theft
8 of that company's assets.

9 BY MR. TENREIRO:

11:42 10 Q. With Ripple -- with Ripple running fewer than
11 20 percent of the validators on its own dUNL list, could
12 the --

13 Could, in theory, the other non-Ripple validators
14 on your list -- you know, let's say "burn" your stash --
11:42 15 Ripple's stash -- of XRP against Ripple's will?

16 A. No.

17 Q. Why not?

18 A. Because there's no code that allows them to
19 do that.

11:42 20 Q. Couldn't they add it and make it into an
21 amendment first?

22 A. Sure.

23 Q. Theoretically, they could add it?

24 A. Right, they could add it, but then they would
11:42 25 have to convince other people to add it as well.

11:42 1 Q. Right. Ripple would not be able to stop
2 that?

3 A. We might try.

4 We may or may not be able to stop it. It's --
11:43 5 there's no way to know what the result of that would be.
6 You know, just speculation. It's just speculation.

7 Q. Right.

8 A. They may or may not be successful in that
9 attempt. There may be pushback. There may not be.

11:43 10 Q. But they have the votes to do it?

11 A. But if you don't need the votes -- the votes
12 don't help, right? The votes don't help to change the
13 rules.

14 Changing the rules requires making a change in the
11:43 15 software and then convincing exchanges and other people
16 to run that changed software. They may or may not be
17 successful in that effort, just as Ripple may or may not
18 be successful in that effort.

19 Q. But if they have 80 percent of the votes that
11:43 20 you trust, that Ripple trusts, can't they put in the
21 change in the software?

22 A. But that doesn't mean other people put the
23 change in the software.

24 Q. So they would fork the ledger?

11:43 25 A. They would fork themselves, yes.

11:43 1 Q. Those 80 percent would fork themselves?

2 A. Exactly.

3 Q. What steps, if any, does Ripple take to
4 prevent that from happening?

11:43 5 MR. CERESNEY: Objection to form.

6 THE WITNESS: If you hypothesize a change
7 that the other validators wanted to make that
8 Ripple did not want to make, and you --

9 I mean, hypothetically, Ripple could take
11:44 10 a number of steps from advocating against the
11 process -- I know theoretically even to try
12 legal action against them, I suppose.

13 There's a variety of things that Ripple
14 could attempt to stop them.

11:44 15 BY MR. TENREIRO:

16 Q. Could the 80 percent of validators on your
17 list modify the rules that currently apply to Ripple's
18 time release of XRP?

19 MR. CERESNEY: Objection.

11:44 20 BY MR. TENREIRO:

21 Q. Colloquially known as the "escrow," but --

22 A. They could propose modification.

23 Again, if they actually activated the modification,
24 then anybody who didn't modify their own code would

11:44 25 fork. That would -- that would cause a fork.

11:44 1 Q. You mentioned the exchanges would have to
2 implement that software change. The exchanges are
3 running -- you mean the ones running validator nodes?

4 A. No.

11:44 5 Q. Why would the exchanges have to implement
6 that software change?

7 A. They currently have no code to allow you to
8 burn Ripple's XRP or change the escrow, so they wouldn't
9 understand that change.

11:45 10 They would just disagree with those validators, and
11 if they disagree with -- we presume they run the default
12 UNL, so now you have a server that disagrees with 80
13 percent of its validators.

14 (Thereupon, an informal discussion was
11:45 15 held off the record with the shorthand
16 reporter.)

17 THE WITNESS: You have a server that
18 disagrees with 80 percent of its validators.

19 It needs to agree with 80 percent of its
11:45 20 validators to make forward progress, so it's
21 halted permanently until there's some external
22 given resolution. Sorry. I apologize.

23 (Thereupon, an informal discussion was
24 held off the record with the shorthand
11:45 25 reporter.)

11:45 1 BY MR. TENREIRO:

2 Q. I just -- I understand all that.

3 What I don't understand is what role do the
4 exchanges play if they are not running validator nodes?

11:45 5 A. If it -- so imagine -- let's walk through
6 your hypothetical. So somebody proposes this change
7 that Ripple objects to. They make the change to the
8 software.

9 The exchanges don't accept the change to the
11:45 10 software. Eighty percent of the validators activate the
11 change. All of the exchanges halt. That's the end
12 result.

13 Q. Yeah.

14 A. That hasn't successfully made the change.
11:45 15 That's just successfully halted the network. Now
16 they have to convince the validators to make that
17 change.

18 Q. And the exchanges have to run the updated
19 software to interact with the XRP Ledger, in other
11:46 20 words?

21 A. To continue, yes. That's right.

22 Q. Even though they're not --

23 Even though they are not running validators, they
24 still need to have the most -- they still need to have
11:46 25 the same software that everyone else is using to

11:46 1 continue operating on that ledger?

2 A. They have to understand the system's rules.
3 If there's a rule change that they -- they don't know
4 what that rule change -- they literally just say, "I
11:46 5 don't know what rules are," and so they can't --

6 They can't even understand -- the rule change could
7 be anything, and so they don't know what it is, and so
8 there's simply no way they could make any progress.

9 MR. CERESNEY: You have to slow down for
11:46 10 the court reporter.

11 THE WITNESS: Sorry.

12 (Thereupon, an informal discussion was
13 held off the record.)

14 BY MR. TENREIRO:

11:46 15 Q. Let's talk about my hypothetical, and the
16 rule change in my hypothetical is something that would
17 permit 80 percent to burn and destroy Ripple's XRP
18 holdings.

19 A. Right.

11:46 20 Q. Do you have -- as part of your --

21 As a part of your function to protect Ripple's XRP
22 holdings, have you developed any theories as to whether
23 the changes would accept any such amendment to the code?

24 MR. CERESNEY: Objection to form.

25

11:47 1 BY MR. TENREIRO:

2 Q. I'm asking you for your own theories, not
3 what other people think.

4 A. My expectation would be that they would not.

11:47 5 Q. Why?

6 A. Because radical changes that upset settled
7 expectations are generally considered undesirable, but
8 you would have to flush out the hypothetical. Like if
9 you flush out the hypothetical in which that would
11:47 10 happen, it's possible that would change, if it just came
11 up out of the blue today.

12 I would expect everybody in the community would
13 push back against any radical change without any sort of
14 justification. There's a huge bias against change.

11:47 15 Q. So is it fair to say that it's a settled
16 expectation that Ripple has the XRP that it has today?
17 That's a settled expectation in the community?

18 MR. CERESNEY: Objection, form and
19 speculation.

11:48 20 MR. TENREIRO: No, his understanding. No
21 speculation.

22 MR. CERESNEY: You're asking him what the
23 community thinks.

24 BY MR. TENREIRO:

11:48 25 Q. You're part of the XRP Ledger community,

142

11:48 1 right?

2 A. I don't think people would expect that to
3 change.

4 Q. Okay, and --

11:48 5 Okay. Is Ripple still the largest single holder of
6 XRP?

7 A. Yes.

8 Q. What is the financial incentive for someone
9 to run a validator?

11:48 10 A. Generally, people would run a validator
11 because they needed to run an XRP Ledger node anyway,
12 like it was part of their business or part of what they
13 were doing. The additional cost to run a validator is
14 essentially zero.

11:48 15 Q. So, for example, an exchange might run a
16 validator for that reason?

17 A. Right. They'd be running a server anyway in
18 order to process transactions, and the additional cost
19 to make it a validator is essentially zero. It's almost
11:48 20 literally just you enter one command.

21 Q. Do you have to run a server -- do you have to
22 run a validator? Does an exchange have to run a
23 validator?

24 A. No.

11:48 25 Q. Okay. I'm sorry if I'm asking again. Why

11:49 1 are you -- I know it didn't exist back then. Why don't
2 you just use Proof of State today for the consensus
3 mechanism?

4 (Inaudible.)

11:49 5 THE SHORTHAND REPORTER: Was that an
6 objection?

7 MR. CERESNEY: Yes, objection to form.

8 MR. TENREIRO: We can take the exhibit
9 down, by the way. Thank you.

11:49 10 THE WITNESS: Again, it didn't exist at
11 the time, but Proof of Stake makes the
12 stakeholders the people who hold the asset.

13 MR. CERESNEY: We've been going more than
14 an hour. Is it a ripe, opportune moment?

11:49 15 MR. TENREIRO: Yeah. I'm almost done
16 here.

17 BY MR. TENREIRO:

18 Q. All right. We talked about that.

19 Why do people use Ripple's UNL instead of somebody
11:49 20 else's, to the extent that they do, and other than the
21 default?

22 MR. CERESNEY: Objection to form. Are
23 you asking him to speculate or his view?

24 MR. TENREIRO: His understanding.

11:49 25 I assume he interacts with people that

11:49 1 are running validators or that are in the
2 community. If that's not true, he'll let me
3 know.

4 THE WITNESS: My understanding would be
11:50 5 that unless they had some reason to change it,
6 it's just easier not to change a default.

7 BY MR. TENREIRO:

8 Q. Does Ripple strongly recommend using its own
9 dUNL?

11:50 10 MR. CERESNEY: Objection to form.

11 THE WITNESS: I don't think so.

12 BY MR. TENREIRO:

13 Q. Does Ripple recommend that people use its
14 dUNL?

11:50 15 MR. CERESNEY: Objection to form.

16 THE WITNESS: It is our recommended -- we
17 call it the "recommended dUNL" or the "default
18 dUNL".

19 BY MR. TENREIRO:

11:50 20 Q. Why?

21 A. Because if you use that UNL, then you don't
22 have to go through any additional steps. It just
23 simplifies your decision-making.

24 Q. What do you think would happen if Ripple
11:50 25 stopped publishing the dUNL?

11:50 1 MR. CERESNEY: Objection.

2 BY MR. TENREIRO:

3 Q. In terms of the functionality of the
4 blockchain?

11:50 5 MR. CERESNEY: Objection to the form.

6 THE WITNESS: I -- I think people who --
7 people who used COIL's UNL or the XRP Ledger
8 Foundation's UNL wouldn't even notice.

9 People who already had a fallback UNL
11:50 10 configured would fall back to that fallback.
11 People who only use the default UNL would then
12 have to make a decision as to which UNL to
13 switch to.

14 BY MR. TENREIRO:

11:51 15 Q. Why doesn't Ripple just stop publishing a
16 dUNL?

17 MR. GERTZMAN: Objection to form.

18 THE WITNESS: I wouldn't advocate for us
19 to stop publishing a dUNL, because it saves --
11:51 20 it saves developer -- it saves users the
21 necessity of going through steps, but we could
22 switch the default to COIL's UNL or the XRP
23 foundation's UNL. There's no reason
24 particularly to do.

25

11:51 1 BY MR. TENREIRO:

2 Q. If another organization published a UNL that
3 was used by the majority of the validators instead of
4 the dUNL, what would be the impact on the network's
11:51 5 consensus?

6 MR. GERTZMAN: Objection to form.

7 THE WITNESS: It would either be nothing,
8 depending on exactly how you envision the
9 scenario.

11:51 10 It would either be nothing or you could
11 reach a situation where the unintentional fork
12 protections kicked in, and then some servers
13 would perceive the network to have halted,
14 because they wouldn't see sufficient
11:52 15 agreement.

16 BY MR. TENREIRO:

17 Q. Who put in the unintentional fork
18 protections?

19 A. I believe I did.

11:52 20 Q. Right.

21 A. So they have evolved over time. I believe
22 the first iteration of them went in at the same time the
23 amendment process was created, but I can't place it in
24 time better than that.

11:52 25 Q. Was it in the beginning, 2011/2012?

147

11:52 1 A. I think they were -- I think there were, but
2 they were significantly less than they were -- than they
3 were now. I believe that the behavior of those
4 protections would have been more inconsistent.

11:52 5 So, for example, you might have gotten a warning,
6 but the server might have continued operating. They
7 were not as robust.

8 Q. Is there any way for this distributed
9 consensus that Ripple has described for its ledger to
11:52 10 work without relying on someone to publish the common
11 UNL list or having -- you know, ledger forks constantly?

12 MR. CERESNEY: Objection to form.

13 THE WITNESS: There has to be some
14 mechanism for people to roughly agree on who
11:53 15 the validators are.

16 BY MR. TENREIRO:

17 Q. Don't they have to agree on who they trust to
18 agreement? Isn't that what they have to agree on first?

19 MR. CERESNEY: Objection to form.

11:53 20 BY MR. TENREIRO:

21 Q. At least 80 to 90 percent agreement on that?

22 A. I'm not -- not quite sure I follow.

23 Q. Well, there has to be a mechanism for people
24 to agree on who the validators are? That's referring to
11:53 25 the UNL list?

11:53 1 A. There has to be substantial agreement on the
2 UNL. Ideally, 90 percent. 80 percent is sufficient in
3 most practical scenarios, but 90 percent is safe.

4 Q. So how do you get to the point where people
11:53 5 roughly agree on who the validators are? How do you
6 achieve that?

7 A. There's two ways. The earliest way and the
8 simplest way is just to literally directly come to that
9 agreement. Like everybody can literally have a
11:54 10 conversation and come up with an agreement. The problem
11 is that it's static. It's at one point in time.

12 The better method is to agree on some number of
13 people who will make that decision, and then, of course,
14 you can always revise that if you're unhappy with the
11:54 15 decision they made.

16 Q. What role does Ripple play today in ensuring
17 that there's substantial agreement on who the validators
18 are?

19 A. Today, Ripple publishes a UNL.
11:54 20 And obviously, if everybody used that UNL exactly,
21 there would be complete agreement.

22 Q. But they only need to use the 80 or 90
23 percent?

24 A. Or they could opt to intentionally fork or
11:54 25 they could risk an unintentional fork.

11:54 1 Obviously, you wouldn't want to risk -- generally,
2 you wouldn't -- obviously, the word "unintentional"
3 generally means you don't want it. But, of course, if
4 they wished to intentionally fork, then they would
11:54 5 deliberately not follow it.

6 Q. Have there been forks of the Bitcoin Ledger?

7 A. Yes.

8 Q. And the Ethereum Ledger?

9 A. Yes.

11:54 10 Q. But not of the XRP Ledger?

11 A. Not unless you count Stellar, but I generally
12 wouldn't.

13 Q. Right. Let's not count Stellar, unless you
14 do, but my question is generally, would not --

11:55 15 A. I generally would not.

16 So as a "yes" or "no" answer, but answer would be
17 "Not to my knowledge."

18 Q. And do you know why there's been forks of
19 those ledgers but not this one? What's the difference
11:55 20 or what would you attribute the difference to?

21 A. It's -- well, so one thing that I would say
22 is the forks that we have had are Bitcoin and the
23 Ethereum blockchain were connected to specific events
24 that occurred, and no such event has occurred in the XRP
11:55 25 Ledger ecosystem.

11:55 1 There's no -- there's no real reason to fork unless
2 there is some sort of event that triggers some sort of
3 disagreement.

4 Q. What was the event in the Bitcoin blockchain?

11:55 5 A. The event in the Bitcoin blockchain was the
6 dispute over the evolution of Bitcoin, whether bigger
7 blocks were the step forward or whether they threatened
8 decentralization and a segregated witness was the better
9 path.

11:55 10 Q. And no such dispute has arisen with this
11 blockchain?

12 A. Not that anyone has been willing to fork
13 over, to my knowledge, and I would probably know if it
14 happens.

11:56 15 Q. So like the Checks Amendment?

16 A. Right. There was a dispute, but -- Ripple
17 didn't get its way, but we said whatever.

18 Q. That's an amendment Ripple wanted at first,
19 right?

11:56 20 A. It's an unusual thing. We proposed it. We
21 developed it, and then we later opposed it and it was
22 accepted anyway.

23 MR. TENREIRO: Okay. Let's stop here,
24 because Andrew asked for a break.

11:56 25 THE VIDEOGRAPHER: Okay. Going off the

11:56 1 record at 11:56.

2 (Recess taken at 11:56 a.m.)

3 (Resumed at 12:10 p.m.)

4 THE VIDEOGRAPHER: Back on at 12:10.

12:10 5 BY MR. TENREIRO:

6 Q. Mr. Schwartz, have you ever met Jay Clayton?

7 A. Yes.

8 Q. When?

9 A. I met him twice. Once at a meeting, and once

12:10 10 I passed him in a hallway at the SEC.

11 Q. Have you ever met any other SEC commissioner?

12 A. At the time I -- I passed him in a hallway,
13 he was with Hester Peirce.

14 Q. Did you meet her or just see her?

12:10 15 A. I said, "Hello" to Clayton, because I'd met
16 him before. I just saw her.

17 Q. Have you ever met any other SEC
18 commissioners?

19 A. No.

12:11 20 Q. When was the meeting with Clayton?

21 A. I don't recall the date.

22 Q. Who was there?

23 A. It's hard for me to remember, because I had
24 two meetings with the SEC that were a couple of weeks

12:11 25 apart, and it's hard for me to separate what happened --

12:11 1 who was at the first meeting, who was at the second
2 meeting. I know Clayton was there.

3 I know John Roscoe, from the Office of Presidential
4 Personnel, was there. Brad Garlinghouse, I believe, was
12:11 5 there, and I know there were several other people from
6 the SEC, but I couldn't tell you more detail than that.

7 Q. Anyone else from Ripple?

8 A. I -- I don't believe so.

9 Q. Lawyers from Ripple?

12:11 10 A. My recollection, which is not precise, is
11 that we did not have counsel at that first meeting, but
12 I'm not sure.

13 Q. The other meeting you're recalling at the
14 SEC -- was that with staff that was conducting the
12:12 15 investigation?

16 A. I believe -- I believe most of the people who
17 were there were from Corp Fin, but that's the extent of
18 my recollection.

19 Q. Were Ripple's lawyers there?

12:12 20 A. I believe we did have counsel at that
21 meeting.

22 Q. Why did you meet with Clayton?

23 A. From my point of view, the purpose of the
24 meeting and the reason that Brad wanted me at that
12:12 25 meeting rather than something else was to cover

12:12 1 technical aspect of the function of the XRP Ledger.

2 Q. Why did you want to give that presentation to
3 Clayton? And I -- maybe I should say, "Chair Clayton"
4 every time. Faster.

12:12 5 Why did you want to give Chair Clayton a technical
6 presentation of the XRP Ledger?

7 A. My understanding at the -- I'm trying to
8 remember what time period --

9 MR. CERESNEY: Actually, if you had
12:12 10 discussions with counsel, obviously you
11 shouldn't reveal that about the meeting. In
12 other words, it sounds like counsel wasn't at
13 the meeting.

14 But if you had discussions with counsel
12:13 15 in advance of the meeting and that's the basis
16 for the meeting, you shouldn't answer that.
17 If there's other discussions, obviously you
18 should go there.

19 THE WITNESS: My recollection, and I
12:13 20 could be confusing the meeting with other
21 meetings, but my recollection is that this was
22 around the time that other SEC commissioners
23 had made statements about -- about
24 cryptocurrencies.

25

12:13 1 BY MR. TENREIRO:

2 Q. Are you talking about the Hinman speech?

3 A. I think -- I think there was one other. I
4 don't remember exactly.

12:13 5 Q. Are you aware whether Hinman was a
6 commissioner or just a division director? Do you know
7 the difference?

8 A. I don't know the difference.

9 Q. Why was John Roscoe at the meeting? What
12:13 10 role did he have in procuring it?

11 A. I don't know.

12 Q. Do you know why he was there?

13 A. I don't.

14 Q. Did you take notes at the meeting?

12:14 15 A. I did not.

16 Q. Did Mr. Garlinghouse?

17 A. I don't recall.

18 Q. Did you observe anyone taking notes?

19 A. Not that I recall.

12:14 20 Q. The time of the meeting were you aware SEC
21 staff was investigating XRP's status under the security
22 laws?

23 A. I was either aware at that time or shortly
24 thereafter. I am not positive.

12:14 25 Q. Was the meeting with Chair Clayton relating

12:14 1 to this?

2 MR. CERESNEY: Relating to what.

3 BY MR. TENREIRO:

4 Q. The SEC staff's investigation as to XRP's
12:14 5 status under the securities laws.

6 A. Again, because I can't separate the two meet
7 beings, I can't say for sure. I know that was discussed
8 at one of those two meetings, but I'm pretty sure that
9 was the second one.

12:14 10 Which doesn't necessarily mean it wasn't discussed
11 at the first one, but I can't -- I can't recall.

12 Q. Okay. Second meeting, just to be clear, is
13 the Corp Fin meeting?

14 A. Yes.

12:14 15 Q. What did you say at the meeting with Chair
16 Clayton?

17 A. My recollection is that I discussed the role
18 of the validators, the status of the XRP Ledger network,
19 some of the history of the company, and that's all I
12:15 20 recall.

21 Q. What did Mr. Garlinghouse say at the meeting?

22 A. I don't recall.

23 Q. Did Mr. Clayton speak at the meeting? Chair
24 Clayton?

12:15 25 A. My recollection is that he spoke very little,

12:15 1 but that he did speak occasionally.

2 Q. Who else spoke that was not Chair Clayton,
3 Garlinghouse, and yourself?

4 A. I don't have any specific recollection of who
12:15 5 else spoke at that meeting. Again, it's hard for me,
6 because I can't separate whether recollections I have of
7 people speaking were from the first or the second
8 meeting.

9 Q. But just to be clear, you don't recall Chair
12:15 10 Clayton being at the second meeting?

11 A. I don't believe he was.

12 Q. And no -- and Commissioner Peirce was not at
13 the second meeting?

14 A. No.

12:15 15 Q. Not at the first meeting either?

16 A. No.

17 Q. Have you heard of Commissioner Roisman?

18 A. I believe have heard that name.

19 Q. Does that you haven't met him?

12:16 20 A. I don't believe so.

21 Q. Have you ever spoken to him?

22 A. No.

23 Q. At the meeting with Chair Clayton, did he
24 comment on the status of the SEC's investigation into
12:16 25 Ripple's conduct?

12:16 1 A. Not that I recall.

2 Q. Did you discuss legal issues at that meeting?

3 A. I know we discussed them at the second
4 meeting. I don't recall discussing them at the first
12:16 5 meeting.

6 Q. You don't recall discussing them at the first
7 meeting, but it's possible you did, or your recollection
8 is that you did not discuss them at the first meeting?

9 A. It's possible that we did. I just don't
12:16 10 specifically recall.

11 Q. Did Chair Clayton comment on the legal status
12 of XRP under the securities laws at that meeting?

13 A. I don't specifically recall him commenting.

14 Q. Did he convey any of the other commissioners'
12:16 15 views as to the status of XRP under securities laws?

16 (Thereupon, an informal discussion was
17 held off the record with the shorthand
18 reporter.)

19 BY MR. TENREIRO:

12:16 20 Q. Did he convey to you any of the other
21 commissioners' views as to the status of XRP under the
22 securities laws?

23 A. Not that I recall.

24 Q. Did he convey to you any SEC staff members'
12:17 25 views as to the status of XRP under the securities laws?

12:17 1 A. Not that I recall.

2 Q. Did Chair Clayton offer you assurances that
3 he had concluded that XRP was not a security?

4 A. Not that I recall.

12:17 5 Q. Would you recall something like that?

6 A. That I think I would recall.

7 Q. I'm asking you again:

8 Did he offer you assurances that he had concluded
9 that XRP was not a security?

12:17 10 MR. CERESNEY: Objection, asked and
11 answered.

12 THE WITNESS: I don't recall one.

13 And I think if he did, I would have
14 recalled it, but I don't recall.

12:17 15 BY MR. TENREIRO:

16 Q. Did he ask any questions? Did he ask you any
17 questions?

18 A. I believe he did participate in some of the
19 technical questions that were asked.

12:17 20 Q. Do you remember the questions?

21 A. I remember the scope was -- involved things
22 like the volume of validators, the status of the XRP
23 Ledger, the history of the company. I don't recall any
24 more details than that.

12:17 25 Q. Did he ask Mr. Garlinghouse questions?

12:17 1 A. I'm sure he must have, but I don't recall
2 any.

3 Q. Did you arrive --
4 Did the meeting commence when you and
12:18 5 Mr. Garlinghouse were both already there?

6 (Pause.)

7 THE WITNESS: I think so, but I'm not
8 sure.

9 BY MR. TENREIRO:

12:18 10 Q. Did you both leave together, Mr. Garlinghouse
11 and you?

12 A. Yes.

13 Q. Is there a document that would refresh your
14 memory as to what was said at the meeting?

12:18 15 A. Not that I know of.

16 Q. Did you have notes in advance of the meeting?

17 A. I did not.

18 Q. Did you have talking points?

19 A. Not that I recall.

12:18 20 Q. Did you have anyone prepare talking points
21 for you?

22 A. I don't recall having any specific talking
23 points that were communicated to me prior to that
24 meeting by anyone.

12:18 25 Q. Okay. Who had the idea for the meeting?

12:18 1 MR. CERESNEY: Again, if you had
2 discussions with counsel, obviously don't
3 reveal that.

4 THE WITNESS: My understanding at the
12:18 5 time, and I don't recall what it was based on,
6 was that Brad Garlinghouse wanted me at the
7 meeting to answer questions about the early
8 history of the company and the technical
9 status of the XRP Ledger and the network, but
12:19 10 I don't know other than that.

11 BY MR. TENREIRO:

12 Q. Well, in the context of Mr. Garlinghouse
13 expressing to you that he wanted you at the meeting to
14 answer questions, technical questions, did express to
12:19 15 you why he wanted -- why he wanted to have that meeting?

16 A. I don't recall him specifically mentioning
17 some objective for that meeting.

18 Q. All right. Now, let's go back to the
19 technical stuff. Exhibit 77.

12:19 20 (Thereupon, a document entitled "Technical
21 FAQ - XRPL.org" was introduced as DS Exhibit 77
22 for identification.)

23 BY MR. TENREIRO:

24 Q. Exhibit 77. Oh, yeah. Did you debrief with
12:19 25 other people at Ripple after the meeting about what had

12:19 1 happened at the meeting?

2 A. I believe Brad made a brief summary to
3 staff -- staff meeting, his direct reports.

4 Q. That included you at that time, already?

12:20 5 A. I think at that time, it didn't. I think
6 that was in that window where I was still reporting
7 to -- you know, I'm -- no, I think I did report to Brad.

8 Otherwise, I wouldn't -- I probably wouldn't have
9 remembered that because I wouldn't have been in the
12:20 10 meeting, so prob- -- I have to infer based on fragmented
11 recollection, but I believe he made a report to staff
12 just summarizing the meeting.

13 Q. What did he say in the summary?

14 (Pause.)

12:20 15 BY MR. TENREIRO:

16 Q. Was it written or verbal?

17 A. Verbal.

18 Q. Okay. Do you recall what he said?

19 A. I recall the gist of what he said was that he
12:20 20 stated that the meeting had taken place, identified who
21 went to the meeting and -- you know, stated that he was
22 satisfied.

23 You know, he thought the meeting went well. Just
24 general words to that effect. I don't recall any
12:20 25 specific comments about the details of the meeting.

12:20 1 Q. Did he make any comments about his expected
2 outcome of the SEC's investigation based upon the
3 conversation that occurred at the meeting?

4 A. I don't remember anyone discussing an
12:21 5 expectation of any specific results of that particular
6 meeting.

7 Q. Okay. Exhibit 77.

8 (Thereupon, an informal discussion was
9 held off the record.)

12:21 10 BY MR. TENREIRO:

11 Q. First, I wanted to ask you if XRPL.org is a
12 Ripple website.

13 A. I believe it originally was, and I think now
14 it's joint -- it's -- I think now the XRPL Foundation
12:21 15 has some level of control over it. I don't know where
16 it is now.

17 Q. When did that change?

18 A. Within the past couple months.

19 Q. Last couple of months?

12:22 20 A. I think. I'm not exactly sure.

21 Q. So it's not years?

22 A. No, I don't believe so.

23 Q. Okay. Do you have any input into the content
24 of this technical FAQ?

12:22 25 A. Yes.

12:22 1 Q. What is your input?

2 A. I didn't write it, but I reviewed and
3 discussed its content with other people.

4 Q. And is it fair to say that the language in
12:22 5 the technical FAQ has changed over the years?

6 A. I suspect so.

7 Q. Okay. This is --
8 I printed this last night, in fact, so it's perhaps
9 the most current one. The question that says "Which UNL
12:22 10 should I select?" -- one of the things that it says
11 there is:

12 "Currently, Ripple provides a default and
13 recommended list which we expand based on watching the
14 history of validators run by Ripple and third parties."

12:22 15 MR. CERESNEY: You skipped the first
16 sentence, didn't you?

17 MR. TENREIRO: Yes, I did. I was just
18 focusing on that second sentence.

19 BY MR. TENREIRO:

12:23 20 Q. Are there other criteria that Ripple utilizes
21 other than the history of validators to recommend?

22 A. I believe the other -- there are other
23 criteria that we use, yes.

24 Q. What are they?

12:23 25 A. Some sort of institutional commitment to

12:23 1 running the validator. There was one other -- it's
2 slipping any mind right now, but I mentioned it earlier.

3 Q. Okay. That's fine. If you recall, just let
4 me know.

12:23 5 A. Yeah.

6 Q. I know you mentioned something else earlier.

7 A. Yeah.

8 Q. I also can't remember.

9 "What is the validator incentive structure for
12:23 10 validators not run by Ripple?" Do you see that
11 question?

12 A. Yes.

13 Q. It says:

14 "The primary incentive to run a validator is to
12:23 15 preserve and protect the stable and sensible evolution
16 of the network."

17 A. Uh-huh.

18 MR. CERESNEY: "Stable operation."

19 MR. TENREIRO: Huh?

12:24 20 MR. CERESNEY: You skipped the word
21 "operation," but go ahead.

22 BY MR. TENREIRO:

23 Q. Okay. "The stable operation and sensible and
24 evolution of the network." I guess I don't understand
12:24 25 what that means.

12:24 1 Why would someone care about protecting the stable
2 operation and sensible evolution of the network?

3 A. Well, one example would be if they're an
4 exchange and they make revenue of XRP.

12:24 5 (Thereupon, an informal discussion was
6 held off the record with the shorthand
7 reporter.)

8 THE WITNESS: If they run an exchange,
9 their revenue depends on the stable operation
12:24 10 of the ledger.

11 BY MR. TENREIRO:

12 Q. Maybe I should have just continued reading,
13 where you say:

14 "It is the validators who decide the evolution of
12:24 15 the XRP Ledger, so any business that uses or depends on
16 the XRP Ledger has an inherent incentive to assure the
17 reliability and stability of the network."

18 Is that what you mean, for example, the exchanges?

19 A. Yes.

12:24 20 Q. So what businesses might depend on the XRP
21 Ledger?

22 A. Well, exchange is obviously anyone else who
23 uses the XRP Ledger, people who use the decentralized
24 exchange.

12:25 25 Q. Well, I -- is "in use" and "depending" two

12:25 1 different things, though?

2 Like the exchanges don't -- they depend on the XRP
3 Ledger for their XRP-related revenue, correct, but they
4 can presumably --

12:25 5 A. Find other revenue.

6 Q. So wouldn't you say --

7 Isn't it fair to say the exchanges use the ledger
8 as opposed to depend on the ledger?

9 A. I would say their XRP revenue depends on the
12:25 10 ledger.

11 Q. Okay. Are there entities that depend on the
12 XRP other than the exchanges?

13 A. There are -- there are companies that are
14 built around the utility of the XRP Ledger while a
12:25 15 provider's -- uh, gateways -- those types of businesses
16 are exclusively focused or at least primarily or
17 significantly focused on the XRP Ledger, so I don't
18 think you could argue that they are not depending on
19 them.

12:25 20 Q. No. Sure. I didn't mean to. I'm trying to
21 get an example.

22 So right now, I've heard businesses that depend on
23 the revenue --

24 A. Right.

12:26 25 Q. -- from dealing with the XRP Ledger. Is

12:26 1 there any other type of entity that might be
2 incentivized or is it always a monetary incentive?

3 A. I think there are definitely individuals or
4 enthusiasts, power users who run validators just because
12:26 5 they find it interesting technically.

6 It may be connected with things they are doing
7 professionally or it may not, and they definitely have
8 run validators.

9 Q. Yeah, but my question is:
12:26 10 Are they incentivized to ensure that the network --
11 you know, continues to function?

12 A. I think you can argue if a person does
13 something, they are necessarily incentivized to some
14 extent; maybe their intellectual curiosity or maybe that
12:26 15 it facilitates some other project they are doing. Hard
16 to know what might incentivize other people.

17 Q. Are any of those people on Ripple's dUNL
18 list?

19 A. I believe there is at least one or two.

12:26 20 Q. Who are they?

21 A. I would have to see the list to tell you, but
22 I'm trying to remember the name of the company.

23 (Thereupon, an informal discussion was
24 held off the record.)

12:27 25 THE VIDEOGRAPHER: Going off at 12:27.

12:27 1 (Recess taken at 12:27 p.m.)

2 (Resumed at 12:31 p.m.)

3 THE VIDEOGRAPHER: Back on at 12:31.

4 BY MR. TENREIRO:

12:32 5 Q. Right. So the recollection is not refreshed
6 from looking at the list?

7 A. No. Thought it would be, but no.

8 Q. Okay. Ripple's -- so here, we were talking
9 about the incentives that people might have to preserve
12:32 10 and protect the stable operation and sensible evolution
11 of the network.

12 What are Ripple's incentives? Does Ripple have
13 incentive to do that, preserve and protect, etc.?

14 A. Yes.

12:32 15 Q. And what are the nature of the incentives?

16 A. The nature of the incentive is that Ripple
17 holds a lot of XRP.

18 Q. What about reputational incentives?

19 A. Yeah, there are reputational incentives as
12:32 20 well.

21 Q. If the network -- you know.

22 Presumably, if the network performed poorly --
23 however you define that -- that wouldn't look good for
24 the company; fair to say?

12:32 25 MR. CERESNEY: Objection to form.

12:32 1 MR. TENREIRO: Sorry, Daphna.

2 THE WITNESS: I think people would --
3 whether they should or shouldn't, I think
4 people would perceive that as at least
12:32 5 dishonest and a failing on Ripple's part.

6 BY MR. TENREIRO:

7 Q. And there's been occasions when the network
8 has stalled and people have called on Ripple to sort of
9 fix it, right?

12:33 10 MR. CERESNEY: Objection to form.

11 THE WITNESS: Not really. I don't think
12 so.

13 BY MR. TENREIRO:

14 Q. Have there been occasions where exchanges --
12:33 15 you know, come to Ripple for issues they are having
16 with -- interact with the ledger?

17 A. With their own interactions with the ledger,
18 yes.

19 Q. Why do they come to Ripple?

12:33 20 MR. CERESNEY: Objection. Objection to
21 form.

22 THE WITNESS: We provide -- we provided a
23 pathway for them to easily contact -- you
24 know, employees that we have who have
12:33 25 expertise.

12:33 1 BY MR. TENREIRO:

2 Q. Does anyone else provide that pathway or
3 platform?

4 A. I believe so.

12:33 5 Q. Who?

6 A. I believe there are two companies, whose
7 names -- same companies, I'm trying -- I was trying to
8 recall well. I think is [REDACTED], and the
9 other --

12:33 10 (Thereupon, an informal discussion was
11 held off the record with the shorthand
12 reporter.)

13 THE WITNESS: [REDACTED]. I could be
14 wrong, and the other one is -- what's the name
12:34 15 of the company? I can't remember the -- the
16 name of the company, but I know one of their
17 products is called [REDACTED], and they
18 also provide that type of expertise.

19 BY MR. TENREIRO:

12:34 20 Q. And do you --

21 Tell me the names of the individuals who have your
22 level of expertise on the XRP Ledger.

23 A. Put a small number of people. [REDACTED],
24 [REDACTED].

12:34 25 (Thereupon, an informal discussion was

12:34 1 held off the record.)
2 THE WITNESS: [REDACTED].
3 BY MR. TENREIRO:
4 Q. [REDACTED] work at Ripple?
12:34 5 A. Yes, [REDACTED] works at Ripple.
6 Q. Who was the next one?
7 A. [REDACTED].
8 Q. Another Ripple employee? Oh, [REDACTED].
9 A. No, his -- he has -- the company's name, I
12:34 10 can't remember. There are at least three other people
11 who I know whose names I can't recall.
12 Q. They are not Ripple employees?
13 A. Non-Ripple, yeah.
14 Q. It's your belief that they have the same
12:35 15 level of technical expertise over the ledger that you
16 do?
17 A. It gets tricky because I have more knowledge
18 in some areas and less knowledge in other areas, but I
19 would say they -- they have -- they -- without trying to
12:35 20 directly compare them to me or saying greater or less
21 than, they certainly have enough knowledge to do any --
22 anything you needed them to do on the XRP Ledger.
23 Q. Going back to the exhibit, you say -- I'm
24 still on the question about what is the validator
12:35 25 incentive structure. You say:

12:35 1 "Ripple avoids paying XRP as a reward for operating
2 the validator so that such incentives do not warp the
3 behavior of validators."

4 A. Yes.

12:35 5 Q. How -- in paying them XRP as a reward, would
6 that be a financial payment or incentive?

7 A. It could be. If they -- if they could sell
8 it, it would be a financial incentive.

9 Q. XRP has a market price today, right?

12:36 10 A. Yes, at this time, yes.

11 Q. Why would rewarding them with financial
12 compensation warp their behavior?

13 A. Because they would be incentivized to
14 continue to act to continue to receive that compensation
12:36 15 rather than follow their own -- their own incentives or
16 interests.

17 Q. So Ripple wants to reward -- wants to
18 encourage them to follow their own incentives or
19 interests?

12:36 20 A. Yes.

21 Q. Doesn't Ripple have financial relationships
22 with some of the validators on their UNL list such as
23 COIL?

24 A. Some of them, yes.

12:36 25 Q. How many of them?

12:36 1 A. I don't know.

2 Q. It more than half?

3 A. I think so, but I don't know.

4 MR. CERESNEY: Objection to form.

12:36 5 BY MR. TENREIRO:

6 Q. On the next page, it says "Role of XRP. Why
7 does Ripple use XRP holdings?"

8 A. Yes.

9 Q. "Ripple's XRP holdings incentivize the
12:37 10 company to make the XRP Ledger as useful as possible."

11 Is that referring to what we discussed a second ago
12 about the nature of Ripple's incentives?

13 A. I'm not really sure.

14 Q. So what does it refer to?

12:37 15 A. Again, I'm not really sure.

16 Q. Okay.

17 (Pause.)

18 (Thereupon, a two-page GitHub printout was
19 introduced as DS Exhibit 11 for identification.)

12:37 20 BY MR. TENREIRO:

21 Q. Let's look at Exhibit 11, please. This is a
22 GitHub format, and Ripple's source code for the ledger
23 is on GitHub, right?

24 A. Yes.

12:38 25 (Thereupon, an informal discussion was

12:38 1 held off the record with the shorthand
2 reporter.)
3 BY MR. TENREIRO:
4 Q. The question is: Do you recognize this text
12:38 5 file?
6 A. Yes.
7 Q. What is it?
8 A. This is the text file that selects the --
9 that will select the UNL and this is the default version
12:38 10 of that file.
11 Q. The part of the text -- sorry, the part of
12 the file that selects the UNL is line 55 through 59?
13 A. That's correct.
14 Q. The rest is just commentary?
12:38 15 A. Yes.
16 Q. Who wrote the commentary?
17 A. I would have to check the GitHub history to
18 tell you for sure, but -- yeah, I don't know.
19 Q. At the bottom, on line 27 through line 31 --
12:39 20 A. Uh-huh.
21 Q. -- it says "List of URIs serving list for
22 recommended validators."
23 A. Uh-huh.
24 Q. Then it has examples: "Ripple, COIL," and
12:39 25 then two -- what are the other two? Are those just

12:39 1 local --

2 A. Yeah. The two are examples of how the person
3 who fill out that field if they wanted to do it to
4 provide their own UNL rather than pull it from somebody
12:39 5 else.

6 Q. Why does Ripple provide its examples from
7 Ripple and COIL'S recommended lists?

8 A. Probably because those were the two that we
9 were specifically aware of at that time.

12:39 10 Q. Okay. On lines 49 to 53, there's a warning
11 that says:

12 "Changing these values could cause your rippled
13 instances to see a validated ledger that contradicts
14 other rippled instances validated ledgers."

12:39 15 I'm going to stop there. What does "rippled
16 instance" mean?

17 A. That means a node on the XRP Ledger.

18 Q. And then continuing:

19 "a/k/a a ledger fork, if your validator lists do
12:39 20 not sufficiently overlap with the lists used by others."
21 Do you see that?

22 A. Yes.

23 Q. Is this what you were referring to about the
24 need to have 80 to 90 percent overlap?

12:40 25 A. Yes.

12:40 1 Q. At first, you concluded it was about 20
2 percent, right?

3 A. Depends on the scenario you're trying to
4 prevent. If you're trying to prevent non-operation or
12:40 5 if you're trying to prevent a full unintentional fork.

6 (Thereupon, an informal discussion was
7 held off the record.)

8 BY MR. TENREIRO:

9 Q. If you're trying to prevent non-operation,
12:40 10 what overlap do you need?

11 A. You need more than 20 percent.

12 Q. If you were trying to prevent an
13 unintentional fork?

14 A. I'm sorry. I got it backward.

12:40 15 Q. Yeah.

16 A. If you're trying do prevent non-operation,
17 you need for practical purposes you need the a lease 80
18 percent. You can argue 90.

19 To prevent non-operation, you want more than 20
12:40 20 percent.

21 Q. Ripple wants to prevent non-operation,
22 correct?

23 A. We -- we don't want people to get
24 non-operation unless -- under circumstances in which
12:40 25 they haven't specifically chosen not to operate.

12:41 1 We do want people to get non-operation if the
2 software is operating in ways they don't want did to
3 operate. That's a critical system safety.

4 Q. That's fair. Your conclusion about the 20
12:41 5 percent overlap was in the whitepaper for the ledger, is
6 that correct?

7 A. I believe so. That paper is more concerned
8 with avoiding an unintentional fork than it is with
9 preventing non-operation, but I believe it does discuss
12:41 10 both scenarios.

11 Q. The whitepaper now has a disclaimer on it
12 that it's essentially outdated?

13 A. Yes.

14 Q. Why was that disclaimer put on it?

12:41 15 A. After the paper was -- well, so our
16 understanding in the space has been constantly evolving.
17 This is brand-new technology.

18 [REDACTED] found some defects in the analysis
19 in that paper, and so we revised the analysis.

12:41 20 Q. Does that defect have to do with the
21 percentage of overlap?

22 A. It does.

23 Q. Was [REDACTED] also involved in finding that
24 defect?

12:41 25 A. Yes, yes.

12:41 1 (Thereupon, a multi-page document entitled
2 "The Ripple Protocol Consensus Algorithm" was
3 introduced as DS Exhibit 14 for identification.)

4 BY MR. TENREIRO:

12:41 5 Q. Let's look at Exhibit 14. I just want you to
6 tell me if this is the whitepaper we've been discussing.

7 A. This is the original whitepaper.

8 Q. With the disclaimer, right?

9 A. Yes.

12:42 10 Q. That's the first page?

11 A. Yes.

12 (Thereupon, an informal discussion was
13 held off the record.)

14 BY MR. TENREIRO:

12:42 15 Q. So Mr. Schwartz, this is the whitepaper we've
16 been discussing?

17 A. Yes.

18 Q. You are one of the authors?

19 A. Yes.

12:42 20 Q. Where was this published?

21 A. I believe it was published to arXiv.

22 A-R-X-I-V.

23 Q. Was it published before or after the XRP
24 Ledger was deployed publicly?

12:43 25 A. I think after, but I'm not certain.

12:43 1 Q. Do you know how much after?

2 A. I don't.

3 Q. Okay. "Section 3.3, Agreement."

4 Is that the section that discusses your proof or
12:43 5 your, I guess, theory as to how much overlap is
6 required?

7 A. Yes.

8 Q. And you're saying this is with respect to
9 unintentional forks?

12:43 10 A. This is with respect to unintentional forks,
11 correct.

12 Q. Okay, and your analysis was not -- you know,
13 probability-based? It was not probabilistic?

14 A. Right.

12:43 15 Q. Okay, and [REDACTED] was?

16 A. We -- we connected two analyses. This one
17 was not intended to be probabilistic. The next one --
18 the subsequent one had both the probabilistic and the
19 non-probabilistic anal- -- as -- as -- as I understand
12:43 20 it.

21 I'd have to look it to be sure, but I believe the
22 subsequent one had both probabilistic and
23 non-probabilistic analyses.

24 Q. You still concluded it was only 20 percent?

12:43 25 A. Twenty percent is enough to -- you know what?

12:43 1 I'm not sure. I'm not sure.

2 Q. Did you publish another whitepaper?

3 Is that what you mean, or are you referring to the
4 [REDACTED] paper?

12:44 5 A. I am referring to the [REDACTED]
6 paper --

7 Q. Let's look at that.

8 A. -- but I don't recall.

9 (Thereupon, a multi-page document entitled
12:44 10 "Analysis of the XRP Ledger Consensus Protocol"
11 dated February 21, 2018" was introduced as DS
12 Exhibit 15 for identification.)

13 BY MR. TENREIRO:

14 Q. Let's just look at 15, please. Exhibit 15.

12:44 15 The summary probably has what you're looking for --

16 A. Yeah.

17 Q. -- and so does Theorem 8, on page 18.

18 A. Yeah.

19 Q. What role, if any, did you play with respect
12:44 20 to putting together this paper?

21 A. Almost none.

22 Q. Okay. They discussed it with you, though?

23 A. Yes.

24 Q. Okay. Were you surprised to find they
12:45 25 concluded, contrary to your conclusion, that they needed

12:45 1 over 90 percent?

2 A. Yes, I was.

3 Q. Do you agree with them?

4 A. Yes.

12:45 5 Q. Okay, and so --

6 Is it fair to say that you remain as probabilistic,
7 by looking at it?

8 A. Yeah. Let me -- let me -- let me be precise.

9 Q. Yes.

12:45 10 A. I still believe that sort of for practical
11 purposes, 20 percent and 80 percent is sufficient,
12 but -- but there are --

13 You can carefully construct scenarios in which that
14 fails, and obviously, you would prefer a

12:45 15 non-probabilistic guarantee. An absolute, rigid,
16 mathematical proof would be better than a probabilistic
17 guarantee.

18 Q. But with a large number of nodes, that
19 becomes hard, right?

12:45 20 A. The probabilistic proof -- the probabilistic
21 proofs become more valid.

22 Q. Right. It's harder to have a
23 non-probabilistic --

24 A. Right.

12:45 25 Q. -- with -- with more nodes?

12:45 1 A. Exactly.

2 Q. So the probabilistic ones become,
3 essentially, more reliable?

4 A. Yes.

12:45 5 Q. Okay, and just to take it back there again,
6 is it fair to say Ripple wants there to be -- you know,
7 continuous operation of the network?

8 MR. CERESNEY: Objection to form.

9 THE WITNESS: Yes.

12:46 10 BY MR. TENREIRO:

11 Q. And not --

12 And Ripple wants to prevent -- you know,
13 undesirable -- the term you used was "unintentional
14 forks"?

12:46 15 A. Yes.

16 Q. Okay, so is it fair to say that it is
17 Ripple's desire that for this ledger to operate, there
18 be somewhere between 80 and 90 percent of overlap
19 between the nodes on the UNL list that people are using?

12:46 20 A. For those people who wish to continue to
21 transact on that ledger stream, yes.

22 Q. On the ledger stream that Ripple wants to
23 continue to transact in, right?

24 A. Yes.

12:46 25 Q. That includes the exchanges, presumably?

12:46 1 A. Yes.

2 Q. Okay. Did you ever -- did you ever --

3 Has the ledger moved to an alternative consensus
4 algorithm called Cobalt?

12:46 5 A. No.

6 Q. Why not?

7 A. Part of -- well, there are a couple reasons.
8 One of them is it's a complex algorithm. It's just
9 a -- it's just a complex and dangerous transition.

12:47 10 Q. Okay. Don't make it harder for me. Let's
11 leave it at that. Let's move on.

12 (Thereupon, a three-page e-mail dated
13 4/16/19 from David Schwartz to [REDACTED]
14 was introduced as DS Exhibit 18 for
12:47 15 identification.)

16 BY MR. TENREIRO:

17 Q. Let's take a look at Exhibit 18, please.

18 So Exhibit 18 is an e-mail chain where you appear
19 to be answering questions by [REDACTED]. Is that the

12:48 20 [REDACTED] you mentioned earlier?

21 A. I think the questions came from [REDACTED]
22 at Coinbase --

23 Q. Sorry.

24 A. -- but I'm not sure.

12:48 25 Q. Fair enough. The e-mail chain is between you

12:48 1 and [REDACTED]?

2 A. Yes, that's correct.

3 Q. Here, you say toward the bottom:

4 "Ripple's recommended UNL has been changing every
12:48 5 three weeks or so."

6 A. Yes.

7 Q. Why was it changing so often?

8 A. Well, when you publish a UNL, you have to set
9 an expiration date. You don't want to set an expiration
12:48 10 date that's too long, because if something goes wrong,
11 you can't change it.

12 And you don't want it to short in case somebody has
13 a connectivity issue, so three weeks was sort of the
14 compromised case.

12:49 15 Q. But does that change who's actually on the
16 list every two weeks?

17 A. Not necessarily.

18 Q. Okay. Understood. On the next page, there's
19 a question, apparently from Coinbase, as you say:

12:49 20 "What happens when validators start misbehaving?"
21 Can you please just read your answer to yourself?

22 (Pause.)

23 BY MR. TENREIRO:

24 Q. Towards the middle, you say:

12:49 25 "We have had incidents where some validators

12:49 1 diverge from the majority of validators, resulting in
2 the inability to form an 80 percent majority."

3 A. Yes.

4 Q. "The code to handle this (called the
12:49 5 'preferred ledger' by branch code) has been improved to
6 prevent this."

7 Do you see that?

8 A. Yes.

9 Q. Improved by whom?

12:49 10 A. I don't recall who made those specific
11 improvements.

12 Q. Was it Ripple employees?

13 A. I don't -- I don't recall.

14 Q. Okay. Later, you say:

12:49 15 "Of course, there's a near certainty that there are
16 still bugs in the code and when misbehavior appears, we
17 try to find the cause and fix it."

18 Who is the "we" in that sentence?

19 A. I don't know who I was referring to, but
12:50 20 anyone who notices them.

21 Q. Okay. Does Ripple pay bounties to people who
22 find bugs in the code?

23 A. We do.

24 Q. Why?

12:50 25 A. Mostly just to disincentive them from using

12:50 1 those bugs to steal the funds from people.

2 Q. Okay. Any other reason?

3 A. The only reason I know of is to incentivize
4 responsible disclosure.

12:50 5 Q. Incentivize them to tell you that they find
6 the bug?

7 A. Rather than to try to steal money from people
8 or try to do something terrible to people.

9 Q. Does anyone else pay bounties for identifying
12:50 10 bugs with respect to the XRP Ledger code?

11 A. I don't -- I don't know.

12 Q. Okay. Have you ever --

13 Have you ever heard of that? You know, like in
14 time online or anything like that?

12:51 15 A. No.

16 Q. Further down, you talk about the fork
17 situation. In answer to the next question, the
18 paragraph begins "For example" -- you know, please read
19 it to yourself. I'm sort of focused on the end, where
12:51 20 it says:

21 "At that point, the network would fork with those
22 running Ripple code and UNL or close to it, not having
23 the feature and those running this group's code and
24 recommending UNL are close to it, having the feature."

12:51 25 A. Yes.

12:51 1 Q. Is this sort of the situation we've been
2 describing as to how a fork could occur?

3 A. This is the intentional fork situation.

4 Q. Where people simply do not agree with each
12:51 5 other and have different nodes on their trust list?

6 A. Well, more likely they would agree over
7 system rules.

8 Q. Over?

9 A. System rules.

12:51 10 But the same thing could in theory happen. It just
11 seems unlikely that people would want to fork over
12 tie-breaking, essentially.

13 Q. Sure, sure. So let's say --

14 So in other words, 80 percent of nodes agree on a
12:52 15 system rule, but the 20 percent that don't -- they just
16 don't want to adopt and fork intentionally?

17 A. Right.

18 Q. That's the scenario?

19 A. They have either option, either go along with
12:52 20 the majority or fork.

21 Q. Is a major fork in Ripple's interest?

22 A. I could imagine scenarios where it is and
23 isn't.

24 Q. Right now, is it?

12:52 25 A. Again, I can imagine scenarios where it is

12:52 1 and isn't.

2 Q. Where are the scenarios where it is?

3 A. Well, suppose somebody wants to mate the XRP
4 Ledger with the DeFi ledger, and they add DeFi features
12:52 5 to it.

6 (Thereupon, an informal discussion was
7 held off the record with the shorthand
8 reporter.)

9 THE WITNESS: If somebody wanted to add
12:52 10 DeFi features to the XRP Ledger, there would
11 be some resistance because it increases the
12 complexity.

13 But if they fork the ledger, Ripple would
14 have no reason to object to that fork. There
12:53 15 would just be more activity.

16 BY MR. TENREIRO:

17 Q. Why hasn't that happened? Not DeFi
18 specifically, but why hasn't it happened that someone
19 comes in to propose something?

12:53 20 MR. CERESNEY: Objection to form.

21 THE WITNESS: I don't think there has --
22 I don't think there has been. There just
23 hasn't been that type of disagreement.

24 MR. TENREIRO:
25

12:53 1 BY MR. CERESNEY:

2 Q. Okay. At what point did Ripple have -- so at
3 this point, Ripple has fewer than 20 percent of
4 validators of the 150 you mentioned?

12:53 5 A. Yes.

6 Q. Okay, and what percentage of Ripple's
7 validators are on Ripple's dUNL list?

8 A. Did you mean to ask what percentage of the
9 validators on the list are Ripple's?

12:53 10 Q. Yes.

11 A. I know it's less than 20 percent, but I don't
12 recall the exact number.

13 Q. When did it go below 20?

14 A. I -- I don't recall.

12:54 15 Q. Was it in the last year or two years?

16 A. I think it was -- I think it probably wasn't
17 within the last year, but probably was within the last
18 two years.

19 Q. When did it go below 50 percent?

12:54 20 A. Again, I don't -- I don't recall.

21 (Thereupon, a 23-page document entitled
22 "Can Ripple labs reverse a payment? - Page 2 -
23 Technical Discussion - Xrp Chat" was introduced
24 as DS Exhibit 46 for identification.)

12:54 25 BY MR. TENREIRO:

12:54 1 Q. Okay. Let's look at Exhibit 46. This is an
2 excerpt from Chat. My question is going to be on page
3 8. Do you know who "mDuo13" is?

4 A. I think I do. I'm just trying to remember
12:55 5 his name. It is -- it is someone I know.

6 Q. Who is it?

7 A. I'm trying to remember his name. [REDACTED]
8 [REDACTED], I believe.

9 Q. Is he a Ripple employee?

12:55 10 A. He was, at times.

11 (Thereupon, an informal discussion was
12 held off the record with the shorthand
13 reporter.)

14 BY MR. TENREIRO:

12:55 15 Q. I'm going to go back to this point, but on
16 page 13, there's a post by you from January 8th, 2018.
17 In the first paragraph, it says:

18 "While I'd like to be quite confident that this
19 will happen and I think our 2018 decentralization
12:55 20 roadmap will get us to that point..."

21 My question is: What is your -- what was Ripple's
22 2018 decentralization roadmap?

23 A. To continue reducing the number of
24 Ripple-operated validators on the UNL and increase the
12:56 25 number of nonRipple-operated validators.

12:56 1 Q. Going back to -- I'm not going to say his
2 name correctly, but to -- mDuo's post on page 8, it
3 says:

4 "Ripple currently recommends that you trust only
12:56 5 the five validators that Ripple runs."

6 Was that statement correct as of that time at that
7 time?

8 A. It -- it could have been. There certainly
9 were times when that was correct. I --

12:56 10 Q. Later -- go ahead. Sorry.

11 A. So I -- so I can't be absolutely sure that
12 January 20th -- but that's reasonable.

13 Q. Okay. Further down, he says:

14 "As long as most users of the XRP Ledger continue
12:56 15 to trust only the five validators that Ripple
16 recommends, then Ripple controls the network."

17 Do you agree with that statement?

18 A. I agree with that statement as it refers to
19 short-term decentralization.

12:57 20 Q. And not as refers to what?

21 A. Well, if you read what he continues to say,
22 "As soon as users decide to trust a different set of
23 validators, Ripple no longer controls those users'
24 networks and those users can make that decision at any
12:57 25 time."

12:57 1 It's strange to describe something as controlled --
2 it's strange to describe me as controlling something
3 when somebody else can eliminate that control at any
4 moment they choose to do so.

12:57 5 Q. And no one has chosen -- sorry.
6 Most users of the network have not chosen to do so,
7 right?

8 A. Yes, to my knowledge.

9 Q. Further down, the third bullet point says, in
12:57 10 a parenthetical:

11 "To some extent, the value of XRP also hinges on
12 Ripple's good stewardship of the XRP Ledger." Do you
13 agree with that statement?

14 A. I don't today.

12:57 15 Q. Back in 2018?

16 A. I might -- I might have then.

17 Q. You don't agree today?

18 A. I don't.

19 Q. Why not?

12:58 20 A. Because -- well, two reasons. One is that
21 the term "value" is -- is -- is an ambiguous term that
22 means -- it can mean a number of different things.

23 But if you want to determine it strictly as -- as
24 price, then the evidence seems to show that the price of
12:58 25 XRP moves with the cryptocurrency market generally and

12:58 1 it doesn't hinge on anything going on inside the XRP
2 ecosystem.

3 Q. Right, and so I'm not -- you know, you can
4 interpret "value" as you like. It doesn't have to be
12:58 5 price.

6 Sitting here today, does the value of XRP also
7 hinge on Ripple's good stewardship of the XRP Ledger?

8 A. I -- I don't think so. I don't know.

9 Q. Would you have any hypothesis as to what
12:58 10 happened -- what would happen to the value of XRP today
11 if Ripple walked away from the XRP Ledger?

12 A. My hypothesis is that there would probably be
13 a short-term drop just because expectations would be
14 shaken, and then it would probably recover.

12:59 15 Q. What expectations?

16 A. People have an expectation that things
17 won't -- that the status -- generally, people expect the
18 status quo not to change, and any change from the status
19 quo is generally bad.

12:59 20 Q. When you say, "people," who are these people?

21 A. Just anyone who's been following the space.

22 Q. Why would -- well, how would their
23 expectations change and cause a drop in price?

24 A. Because generally, any change in expectations
12:59 25 causes a change in price, unless -- unless it's

12:59 1 obviously good. It's just --

2 It's just a market fact that when there's something
3 that sort of disrupts people's expectations, it causes a
4 short-term drop.

12:59 5 Q. And so Ripple walking away from the XRP
6 Ledger is not obviously good?

7 A. Right, and unexpected, and so it would create
8 a -- probably a short-term drop.

9 Q. Why is it unexpected?

12:59 10 A. It's just not something Ripple's ever done
11 before.

12 Q. But Ripple has said that it hopes to one day
13 sort of walk away?

14 A. Yes.

12:59 15 Q. But why isn't it expected?

16 MR. CERESNEY: Objection. You've got to
17 let us object.

18 THE WITNESS: Sorry.

19 (Thereupon, an informal discussion was
12:59 20 held off the record.)

21 BY MR. CERESNEY:

22 Q. My question was: Why is it expected --

23 Why isn't it expected if Ripple has stated that
24 it's going to walk away?

01:00 25 MR. CERESNEY: And objection to form.

01:00 1 THE WITNESS: I guess I was envisioning a
2 hypothetical where Ripple abruptly just sort
3 of stopped, and I don't think people expected
4 that's what would happen.

01:00 5 BY MR. TENREIRO:

6 Q. I see.

7 A. If you envision a more gradual reduction,
8 that might be in accord with people's expectation. It
9 might even be positively received.

01:00 10 Q. All right. Let's look at Exhibit 13.

11 (Thereupon, an informal discussion was
12 held off the record.)

13 MR. CERESNEY: Why don't we stop?

14 MR. TENREIRO: Yeah, let's stop.

01:00 15 THE VIDEOGRAPHER: Going off the record
16 at 1:00.

17 (Recess taken at 1:00 p.m.)

18 (Resumed at 1:49 p.m.)

19 THE VIDEOGRAPHER: We're back on the
01:49 20 record at 1:49.

21 (Thereupon, a multi-page document entitled
22 Validator Registry" was introduced as DS Exhibit
23 13 for identification.)

24 BY MR. TENREIRO:

01:49 25 Q. Good afternoon, Mr. Schwartz.

01:48 1 Can we take a look at Exhibit 13, please? Do you
2 have it?

3 A. Not yet.

4 Q. That's another document from
01:48 5 xrpcharts.ripple.com, and the path is "validators."

6 A. Yes, I see this document.

7 Q. What is this?

8 A. It appears to be -- it appears to be a list
9 of validators along with their affiliations and public
01:49 10 keys.

11 Q. The public key is the column on the right?

12 A. Yes.

13 Q. That's sort of how you identify a validator?

14 A. Yes.

01:49 15 Q. The messages from those validators are signed
16 by their public key?

17 A. Yes.

18 Q. Okay. This is a list of -- of validators or
19 of validators on the UNL, or -- or what do you mean by
01:49 20 the "list of validators"?

21 A. I don't really know.

22 It looks like a list of validators that were live
23 on the network at some particular time, but I'm not
24 sure.

01:50 25 Q. Do you know why some say "yes" and some say

01:50 1 "no"?

2 A. I don't know for sure. There's no column
3 heading.

4 Q. Do you know if the ones that say "yes" are
01:50 5 ripples to UNL validators?

6 A. I don't know for sure. I suspect that's what
7 it means, but I don't know.

8 (Thereupon, an informal discussion was
9 held off the record.)

01:50 10 BY MR. TENREIRO:

11 Q. Okay. Again, if I wanted to know which of
12 these -- to the extent --

13 To the extent they are on the dUNL, if I wanted to
14 know which of them Ripple has or has had a commercial
01:50 15 relationship with, who would I ask?

16 A. I don't know.

17 Q. Not you?

18 A. No.

19 Q. You're not the one who knows that?

01:51 20 A. I wouldn't know. Certainly not for all of
21 them.

22 (Pause.)

23 (Thereupon, a five-page Insights article
24 entitled "How We Are Further Decentralizing the
01:51 25 XRP Ledger to Bolster Robustness for Enterprise

01:51 1 Use" dated 5/11/17 was introduced as DS Exhibit
2 27 for identification.)

3 BY MR. TENREIRO:

4 Q. Let me just show you Exhibit 27. This is an
01:51 5 article that I believe was supposed was posted to
6 Ripple's website by Team Ripple.

7 My question is whether you know if it's true that
8 in May of 2017, the XRP Ledger had 25 validator nodes
9 running and that there's a reference to that at the top
01:51 10 of the second page.

11 A. I'm sure there must have been more than 25
12 validator nodes running at that time.

13 Q. Is there a distinction -- so this article is
14 incorrect?

01:52 15 A. I think it's -- I would say --

16 Yeah, I think it's being imprecise. I would
17 assume -- I suspect they're referring to validators on
18 the UNL, but I don't know.

19 Q. How many did Ripple run at that time?

01:52 20 (Pause.)

21 THE WITNESS: Yeah, I don't -- I don't
22 know.

23 BY MR. TENREIRO:

24 Q. Okay, and again, is it fair to say that if
01:52 25 there's 25 validators on the dUNL and all 25 adopt the

01:52 1 same dUNL as each other, they can move the network along
2 and anybody else does not matter? For their reality, at
3 least?

4 A. Yes.

01:52 5 Q. Okay. If there are --

6 If there comes a point where there would be zero
7 Ripple nodes on the --

8 MR. TENREIRO: Sorry. Let's start again.

9 BY MR. TENREIRO:

01:53 10 Q. Presently, does Ripple intend to get to a
11 point where it will have zero validator nodes?

12 A. I think we've stated that that's a goal. I
13 don't think that it makes --

14 I don't think there's any significant difference
01:53 15 between zero or one, or one or two, but in the general
16 direction, it is to reduce the number.

17 Q. If you get to zero or one or two, would the
18 dUNL list still be curated by Ripple?

19 A. We could still recommend the list if we
01:53 20 wanted to, regardless of how many validators we operated
21 that were on that list.

22 Q. You can still put a default list into the
23 program as well, right?

24 A. Yes.

01:53 25 Q. Okay. Exhibit 76, please.

01:53 1 (An informal discussion was held off the
2 record.)

3 (Thereupon, a four-page Twitter printout
4 entitled "David 'JoelKatz' Schwartz on Twitter"
01:54 5 dated December 1, 2020 was introduced as DS
6 Exhibit 76 for identification.)

7 BY MR. TENREIRO:

8 Q. This is a recent tweet. Seems to be December
9 2nd, 2020. Somebody says:

01:54 10 "Unrelated question: If nodes, validators, and the
11 community at large got together and we agree that it's
12 better for the community to burn the 50 billion XRP
13 Ripple has in escrows, would that be possible?"

14 You say:

01:54 15 "Yes. There would be nothing Ripple could do to
16 stop that from happening. Public blockchains are very
17 democratic. If the majority wants a rules change, there
18 is nothing the minority can do to stop them."

19 Do you see that?

01:55 20 A. Yes.

21 Q. Is Ripple taking any steps to prevent the
22 community from burning its 50 billion XRP?

23 A. No.

24 Q. How much is it worth today?

01:55 25 A. Last I checked the price, it was roughly a

01:55 1 dollar, so -- I mean, if you used the method of just
2 multiplying the last price by the quantity, 50 billion
3 XRP at roughly a dollar is worth approximately 50
4 billion dollars.

01:55 5 Q. Opposed to what method?

6 A. Well, the -- another method that you might
7 use is how much money you could actually materialize for
8 it.

9 Q. Right.

01:55 10 A. It would have to take place over time.

11 Q. Sure. Fair enough.

12 So Ripple is taking no steps, as we sit here today,
13 to make sure that the community does not decide that
14 it's better for them to burn your XRP?

01:55 15 MR. CERESNEY: Objection to form.

16 THE WITNESS: There are no steps we're
17 taking with the -- with the -- for the purpose
18 of achieving that outcome.

19 BY MR. TENREIRO:

01:55 20 Q. Well, what steps is Ripple taking to protect
21 its stash of XRP from such an outcome?

22 A. No steps specifically to prevent that
23 outcome.

24 Q. What steps is Ripple taking that could help
01:56 25 it prevent that outcome?

01:56 1 A. I mean, for example, just defending our
2 reputation -- you know, just avoiding reputational harm,
3 for example.

4 Q. How about exerting influence over the
01:56 5 validators?

6 A. That would not be effective.

7 Q. Why not?

8 MR. CERESNEY: Objection. Objection. Go
9 ahead.

01:56 10 THE WITNESS: Anyone who is proposing to
11 burn Ripple's escrow would have to make
12 software changes in order to accomplish that.

13 Those software changes could also change
14 the default UNL, change the role of the UNL.
01:56 15 There's no additional -- there's no additional
16 step required.

17 It would -- it would still be the same
18 process either way.

19 BY MR. TENREIRO:

01:56 20 Q. Does Ripple engage in current efforts to
21 persuade validators not to do those steps?

22 A. I don't believe that's ever come up.

23 Q. Why hasn't it occurred, in your estimation,
24 that the community decides it's better to burn Ripple's
01:56 25 50 billion XRP?

01:57 1 MR. CERESNEY: Objection to form.

2 THE WITNESS: If -- it just hasn't. It's
3 an extreme, outrageous thing that they
4 don't -- it doesn't need a reason not to
01:57 5 happen.

6 BY MR. TENREIRO:

7 Q. What about burning some?

8 A. I think it would be -- I think it would be
9 odd -- it's just a hard thing to propose like -- to
01:57 10 propose a sort of irregular trans -- it's just difficult
11 to do that.

12 Q. Over the years, there's been concern -- at
13 least expressed online -- about Ripple's potential
14 dumping of XRP into the market, right?

01:57 15 MR. CERESNEY: Objection.

16 BY MR. TENREIRO:

17 Q. That you're aware of?

18 MR. CERESNEY: Objection to form.

19 THE WITNESS: I have heard people express
01:57 20 that concern.

21 BY MR. TENREIRO:

22 Q. There's also been concern expressed about
23 overhang on XRP because Ripple holds a lot of it?

24 A. I've heard those concerns.

01:57 25 Q. And, in fact, one of the reasons Ripple

01:57 1 established the time release was to address some of
2 those concerns, correct?

3 A. Yes.

4 Q. Okay, and isn't it also true that under
01:57 5 demand and supply dictating price, Ripple's stash of XRP
6 disappeared, that may be good for the other holders of
7 XRP?

8 MR. CERESNEY: Objection to form.

9 THE WITNESS: Could be either good, bad,
01:58 10 or have no effect. There's no way I could
11 predict what the effect would be.

12 BY MR. TENREIRO:

13 Q. What do you think the effect would be?

14 MR. CERESNEY: Objection to form.

01:58 15 THE WITNESS: I can -- I can make a
16 strong argument for all three scenarios.

17 BY MR. TENREIRO:

18 Q. Okay, so sitting here today, given -- you
19 know, concerns expressed at times about Ripple's
01:58 20 overhang or Ripple potentially dumping XRP, do you have
21 any belief as to why the community hasn't gotten
22 together and just described to burn your 50 billion?

23 MR. CERESNEY: Objection to form.

24 THE WITNESS: I don't think they have had
01:58 25 any reason to do anything that drastic.

01:58 1 BY MR. TENREIRO:

2 Q. In other words, Ripple hasn't done anything
3 that would make them want to do that? Is that what you
4 mean by "any reason"?

01:58 5 MR. GERTZMAN: Objection to form.

6 THE WITNESS: I think that's part of what
7 I meant, but I would go broad -- more broadly
8 and say nothing's happened -- that nothing
9 else has happened.

01:59 10 One could imagine external factors.

11 There just -- it just -- there's just never
12 been a circumstance where that seemed like an
13 appropriate remedy.

14 BY MR. TENREIRO:

01:59 15 Q. In terms of non-external Ripple factors,
16 would you say Ripple's been a good steward for XRP over
17 the years?

18 MR. CERESNEY: Objection.

19 THE WITNESS: In terms of external,
01:59 20 non-Ripple factors?

21 BY MR. TENREIRO:

22 Q. Taking out --

23 A. Oh.

24 Q. Excluding -- excluding.

01:59 25 Excluding external, would you say Ripple's been a

01:59 1 good steward for XRP over the years?

2 MR. CERESNEY: Objection to form.

3 THE WITNESS: I guess that depends what
4 you mean by "steward."

01:59 5 BY MR. TENREIRO:

6 Q. Well, to the extent that --

7 I guess what's not clear about that word, to the
8 extent it's used?

9 MR. CERESNEY: Objection.

01:59 10 THE WITNESS: I understand what
11 stewardship means with respect to the XRP
12 Ripple holds.

13 It's hard to understand how that concept
14 would apply broadly to an ecosystem or an
02:00 15 asset.

16 BY MR. TENREIRO:

17 Q. Well, let's talk about the stewardship with
18 respect to the XRP that Ripple holds.

19 A. Right.

02:00 20 Q. Would you say over the years, Ripple has been
21 a good steward of that XRP?

22 A. I think Ripple has used its XRP responsibly.

23 Q. Okay. Do you think that's benefited XRP
24 holders at large?

02:00 25 A. I think it hasn't harmed then.

02:00 1 (Thereupon, an informal discussion was
2 held off the record.)

3 MR. TENREIRO: Let's look at Exhibit 82,
4 please.

02:01 5 MR. CERESNEY: Hold on.

6 Before you question on this, Jorge, can
7 you move to a different exhibit so we can come
8 back to this?

9 I want to spend a few minutes with the
02:02 10 witness on this regarding a privilege issue.

11 MR. TENREIRO: Sure.

12 BY MR. TENREIRO:

13 Q. All right. Does Ripple make decisions on
14 inclusion on the dUNL list based on amendment voting
02:02 15 history or expected future voting history?

16 A. I believe we --

17 Not on amendment history, but we have on
18 expectation of involvement in the voting process.

19 Q. The expectation being that they will be
02:02 20 involved?

21 A. We would prefer validators that were not
22 indifferent to the voting process.

23 Q. Why?

24 A. Because if validators don't think about their
02:02 25 votes, then the voting process doesn't accomplish

02:02 1 anything, doesn't measure sentiment.

2 Q. How do you ensure that there's commitment to
3 the voting process?

4 A. I don't know specifically.

02:03 5 Q. What involvement do you have in that process?

6 A. I was involved in discussing those criteria
7 and my recollection from those discussions was that we
8 would communicate with whoever at the institution or
9 entity was responsible for maintaining the validator to
02:03 10 judge whether they had an interest in following the
11 amendment process.

12 Q. When you say, "we," you mean someone at
13 Ripple?

14 A. Yes.

02:03 15 Q. Has Ripple ever communicated with validators
16 about voting strategies?

17 A. I wouldn't characterize any of those
18 communications as a voting strategy. We communicated
19 with individual voters.

02:03 20 Q. Okay. Why?

21 A. Sometimes we think amendments are a good
22 idea. Sometimes we don't, and we communicate our views
23 both publicly and to validator operators.

24 Q. To validator operators privately?

02:04 25 A. Not to my knowledge.

02:04 1 Q. Well, so you mentioned publicly, and you
2 mentioned to validator operators. So how do you -- is
3 it just always public?

4 A. I believe it's always public.

02:04 5 Q. Do you know if Ripple's ever communicated
6 with individual nodes to suggest or encourage a
7 particular voting stance?

8 A. The only incident I know of involved us
9 influencing validators to vote "no" on an amendment
02:04 10 until such time as it had sufficient time for other
11 people to form a view.

12 Q. Which was that?

13 A. I don't remember which amendment.

14 I'm trying to remember. I don't remember. I don't
02:05 15 remember which it was, but -- yeah, I don't recall
16 precisely.

17 Q. Okay. You said Ripple had proposed the
18 Checks Amendment --

19 A. Yes.

02:05 20 Q. -- at some point.

21 Why did Ripple change its mind about its stance on
22 the Checks Amendment?

23 A. The amendment turned out to be more
24 complicated and risky than we thought was reasonable for
02:05 25 the functionality that it provided, which we didn't

02:05 1 think was all that important.

2 Q. Based on what?

3 A. Based on the internal viewpoint of the
4 team -- members of the team who had worked on the
02:05 5 amendment.

6 Q. Okay, and when did that view develop first
7 the amendment did not pass?

8 A. Right.

9 Q. And does it stay on or -- if it's not passed
02:05 10 or does it expire after two weeks?

11 A. It doesn't expire unless people actually
12 choose to actively renew.

13 Q. And Ripple did not renew?

14 A. No, we didn't.

02:05 15 Q. At some point, the vote started switching to
16 "yes"?

17 A. Yes.

18 Q. Did Ripple have any role in switching some of
19 those votes to "yes"?

02:05 20 A. My recollection is that our position at the
21 time was that -- that the amendment had not had
22 sufficient testing and that there were serious questions
23 about whether its usefulness exceeded its risk and that
24 we were advising against the amendment.

02:06 25 Q. Right, but my question was --

02:06 1 Maybe the answer's in there, but I missed it. My
2 question was: Did Ripple have any role in securing
3 "yes" votes for the amendment?

4 A. No. We were trying to secure "no" votes at
02:06 5 the time.

6 Q. When you proposed it, did you try secure
7 "yes" votes?

8 A. I don't think we ever got to the point where
9 we were advising validators to vote "yes" on it.

02:06 10 My recollection is that our position switched to a
11 "no" stance before it got to the stage where external
12 validators would have been voting on it.

13 MR. TENREIRO: Okay. Do you want to take
14 a break to discuss that exhibit? Because I'm
02:06 15 going to move on.

16 MR. CERESNEY: I think we're ...

17 I think we need some time on our end to
18 make inquiries and then talk with the witness
19 about it.

02:07 20 MR. TENREIRO: More than just --

21 MR. CERESNEY: Yeah. If you move on, we
22 will come back to it.

23 MR. TENREIRO: Okay. Exhibit 70, please.
24 Let's go off the record for one minute. My
02:07 25 laptop is not working.

02:07 1 (Thereupon, an informal discussion was
2 held off the record.)
3 THE VIDEOGRAPHER: Going off at 2:07.
4 (Recess taken at 2:07 p.m.)
02:09 5 (Resumed at 2:09 p.m.)
6 THE VIDEOGRAPHER: Back on at 2:09.
7 (Thereupon, an e-mail chain with the top
8 e-mail dated 7/6/2020 from Brad Garlinghouse to
9 David Schwartz et al. was introduced as DS
02:09 10 Exhibit 70 for identification.)

11 BY MR. TENREIRO:

12 Q. All right. So Exhibit 70 is an e-mail
13 from -- well, the bottom part of it --

14 The principal part is from you to somebody on July
02:10 15 6, 2020. It appears that Mr. Garlinghouse is one of the
16 recipients of your e-mail.

17 A. Yes.

18 (Pause.)

19 BY MR. TENREIRO:

02:10 20 Q. Sorry. At the bottom -- towards the bottom,
21 you say:

22 "These two events dramatically demonstrate that
23 Ripple's control over the XRP Ledger consists of
24 persuasion and influence and not any ability to
02:10 25 unilaterally make arbitrary changes."

02:10 1 Do you see that?

2 A. Yes.

3 Q. What did you mean by that, "persuasion and
4 influence," here?

02:10 5 A. I meant our ability to make changes over the
6 XRP Ledger consisted of convincing other people that
7 those changes were good ideas, just as anyone else's
8 would be.

9 Q. And does Ripple engage in those efforts
02:11 10 today?

11 A. Yeah.

12 Q. Is it known to the public that Ripple engages
13 in those efforts?

14 MR. CERESNEY: Objection --

02:11 15 MR. GERTZMAN: Objection to the form.

16 MR. CERESNEY: Yeah, form.

17 THE WITNESS: I believe it's known to the
18 public that Ripple participates in the
19 development process, that some amendments are
02:11 20 authored by people who work at Ripple, and
21 Ripple sometimes advises voting "yes" or "no"
22 on those amendments.

23 BY MR. TENREIRO:

24 Q. At the top, it says "As you know, one of the
02:11 25 most common objections to the use of XRP and the XRP

02:11 1 Ledger is the perceived centralization or control over
2 the ledger by Ripple."

3 Do you see that?

4 A. Yes.

02:11 5 Q. Why does Ripple care to respond to these
6 common objections to the use of XRP and the XRP Ledger?

7 MR. CERESNEY: Objection to form.

8 THE WITNESS: We wouldn't want people not
9 to use XRP or the XRP Ledger for reasons that
02:12 10 are not factual.

11 BY MR. TENREIRO:

12 Q. Does Ripple want people to use XRP and the
13 XRP Ledger?

14 MR. CERESNEY: Objection to form.

02:12 15 THE WITNESS: I would say Ripple wants
16 people to use the XRP Ledger.

17 BY MR. TENREIRO:

18 Q. Not XRP?

19 A. Not necessarily.

02:12 20 Q. From your perspective, Ripple's indifferent
21 as to whether people use XRP?

22 MR. CERESNEY: Objection to form.

23 THE WITNESS: It's an extremely nuances
24 point that's hard to put into a "yes" or "no"
02:12 25 answer to that question.

02:12 1 BY MR. TENREIRO:

2 Q. Well, we can expand. It doesn't have to be
3 "yes" or "no."

4 A. Ripple wants people who use blockchain
02:12 5 technologies to get best experiences. Otherwise, there
6 won't exist a market. We wouldn't have customers. We
7 wouldn't have a business.

8 If that means them using XRP, then we would like
9 them to be able to. If that means other assets are
02:12 10 better, we would like them to use that.

11 Q. With respect to Ripple's product -- products,
12 whatever they may be, does Ripple care whether there
13 exists a market for XRP?

14 MR. CERESNEY: Objection to form.

02:13 15 THE WITNESS: Yes.

16 BY MR. TENREIRO:

17 Q. So Ripple does care?

18 MR. GERTZMAN: Objection to form.

19 THE WITNESS: Sorry. Could you back up?

02:13 20 BY MR. TENREIRO:

21 Q. Does Ripple --

22 I asked you whether Ripple cares, but my question
23 now is: Does it care?

24 A. Yes.

02:13 25 MR. CERESNEY: Objection to form.

02:13 1 BY MR. TENREIRO:

2 Q. Okay, and why does Ripple care for there to
3 be a market for XRP?

4 A. Because ODL works best with XRP because of
02:13 5 the lower fees and higher speeds of the XRP Ledger than
6 ODL's.

7 Q. And has Ripple taken steps to make sure that
8 that market, in fact, exists?

9 MR. CERESNEY: Objection to form.

02:13 10 THE WITNESS: In ODL corridors.

11 BY MR. TENREIRO:

12 Q. So I'm talking more generally about the XRP
13 markets. Has Ripple taken steps, for example, to be
14 market makers to make a market for XRP?

02:13 15 A. To my knowledge, exclusively in corridors
16 that specifically needed that liquidity for a deal.

17 Q. Otherwise, Ripple has engaged market makers
18 to sell its own XRP?

19 A. I believe so.

02:14 20 Q. And that's --

21 That wasn't in connection with creating corridor
22 liquidity? Is that your testimony?

23 A. My understanding was that those market makers
24 sold XRP by market making with a bias in favor of
02:14 25 selling, and so it does as well -- it does in addition

217

02:14 1 improve liquidity.

2 Q. That wasn't the purpose?

3 A. I -- I couldn't tell you which of those two
4 purposes was dominant or how -- how they connected.

02:14 5 Q. At some point, one of the purposes of
6 Ripple's XRP sales was to simply raise revenue; is that
7 right?

8 A. I -- I think so.

9 Q. Just to sort of -- let's look at Exhibit 42,
02:15 10 please.

11 (Pause.)

12 MS. FORBES: Would you please repeat the
13 exhibit number?

14 MR. TENREIRO: Exhibit 42. Before we
02:15 15 move on, your request that we move on from
16 that exhibit for a moment reminded me that, as
17 I told you before we went on the record this
18 morning -- you know.

19 We're just preserving on the record an
02:15 20 objection or rather a reservation of rights to
21 call the witness back to the extent that
22 there's a dispute over the proper assertion of
23 privilege over some documents that we e-mailed
24 last night in addition to our general concerns
02:15 25 stated in e-mails back and forth before about

02:15 1 the timing and production of documents and the
2 productions that have occurred.

3 MR. CERESNEY: Yeah, and I would say on
4 the record that we would object to any attempt
02:15 5 to call Mr. Schwartz back, and we believe our
6 productions have been more than prompt and, in
7 fact, responsive to your requests, and we
8 believe there's a proper privilege assertion
9 over the documents we talked about we e-mailed
02:16 10 last night.

11 MR. TENREIRO: Okay, thanks.
12 (Thereupon, an eight-page e-mail dated
13 12/31/17 from [REDACTED]@ripple.com to
14 [REDACTED]@ripple.com et al. was introduced as DS
02:16 15 Exhibit 42 for identification.)

16 BY MR. TENREIRO:
17 Q. So on Exhibit 42, just take a moment to look
18 at it. It's an eight-page document that sort of seems
19 to include a Slack -- sort of a printout of a Slack
02:16 20 channel?

21 A. Yes.

22 Q. Towards the top, [REDACTED]@Ripple says:
23 "Set the channel's purpose: Discuss the XRP Ledger
24 issue of Binance on December 30th, 2017."
02:16 25 Do you see that?

02:16 1 A. Yes.

2 Q. What was the issue?

3 (Pause.)

4 THE WITNESS: One second.

02:16 5 MR. CERESNEY: Take your time.

6 THE WITNESS: It looks like there was
7 some --

8 There was some issue with their -- their
9 integration that is the way Binance was using
02:17 10 the ledger software.

11 BY MR. TENREIRO:

12 Q. Why was Binance calling you about this?

13 A. Probably because we had provided them contact
14 information.

02:17 15 Q. Is there anyone else that provides this type
16 of service route changes when they have an issue with
17 the software they are using to interact with the XRP
18 Ledger?

19 MR. CERESNEY: Objection, asked and
02:17 20 answered this morning.

21 THE WITNESS: I believe there are.

22 BY MR. TENREIRO:

23 Q. Who?

24 A. The two companies I mentioned earlier, [REDACTED]
02:17 25 [REDACTED] and -- [REDACTED].

02:18 1 Q. Do you know how often they answered or
2 fielded these sort of questions?

3 A. No, I don't.

4 Q. Well, just in case you ever talked to them?

02:18 5 A. I haven't, but they -- they provide this type
6 of support as a business.

7 Q. What relationship, if any, do they have to
8 Ripple?

9 A. I -- I believe the only relationship [REDACTED]
02:18 10 [REDACTED] has is their validator's on our dUNL. I
11 believe we've given -- we have given some funding to the
12 other company, whose name I can't recall.

13 Q. Okay. On the next page, [REDACTED]@Ripple -- is
14 that you?

02:18 15 A. Yes.

16 Q. So page 2, actually. Let's skip ahead.
17 Towards the top, you say:

18 "Also, we need to make charts more reliable. I got
19 about a dozen 'can't find TX on charts' messages during
02:18 20 this rally."

21 Do you see that?

22 A. Yes.

23 Q. What is that about? First of all, what does
24 "rally" mean?

02:18 25 A. "Rally" means a period of increased

02:19 1 transaction volume in the digital currency space,
2 generally.

3 Q. And it doesn't include price increase?

4 A. Can include price increase.

02:19 5 Q. What does it mean here?

6 A. I think here, it means increase in volume.

7 Q. Why?

8 A. Because that's when people --

9 Because when the prices are moving up or down or
02:19 10 there's volume for any reason, they all result in
11 increased load on infrastructure, and this is from the
12 standpoint of maintaining infrastructure.

13 Q. So making the charts more reliable?

14 A. Yes, exactly.

02:19 15 Q. Is that something that still -- that Ripple
16 still endeavors to do today?

17 A. We are one of the providers of those types of
18 charts and, of course, we try to make them as reliable
19 as we can.

02:19 20 (Thereupon, an e-mail chain with the top
21 e-mail dated 11/13/18 from [REDACTED] to [REDACTED]
22 [REDACTED] et al. was introduced as DS
23 Exhibit 44 for identification.)

24 BY MR. TENREIRO:

02:19 25 Q. Okay. Let's look at Exhibit 44, please. So

02:20 1 this is a two-page email, in part to you.

2 A. Uh-huh.

3 Q. Who is [REDACTED]?

4 A. [REDACTED] was the product manager
02:20 5 who worked with the XRP Ledger at the team at Ripple
6 working on the XRP Ledger.

7 Q. Okay. Do you recall this incident from
8 November 2018, where it says:

9 "The XRP Ledger encountered a critical issue an
02:20 10 hour ago, when one of the recommended lists (UNL)
11 expired and a new list was published."

12 Whose UNL expired?

13 A. I don't specifically recall.

14 Q. It was -- would it have been Ripple's?

02:21 15 A. This was 2018, and I believe we had the only
16 list that I knew of at that time, so I must have -- I
17 would assume it would be ours.

18 Q. So you say:

19 "Unfortunately, this caused several of the
02:21 20 validators on the network to desync and stop validating
21 transactions, which has stalled the XRP Ledger from
22 making forward progress.

23 "Keep in mind, this occurs as a safety measure to
24 prevent the network from forking."

02:21 25 Do you see that?

02:21 1 A. Yes.

2 Q. Is that a feature that Ripple had put into
3 the ledger?

4 A. I think that's a safety feature that predates
02:21 5 Ripple's existence.

6 Q. Is that a safety feature that you put into
7 the ledger?

8 A. I believe so.

9 Q. [REDACTED] responds. Who is [REDACTED]?

02:21 10 A. She probably was head of communications at
11 the time.

12 Q. She says, in part, "Also, please do not reply
13 to other Tweets or other social media posts on the topic
14 right now." Do you see that?

02:22 15 A. Yes.

16 Q. Why not? Did you ask her?

17 A. I didn't.

18 Q. Do you know why?

19 A. Only the rationale that she explains in this
02:22 20 paragraph.

21 Q. Which is that you just might want it to fly
22 under the radar?

23 A. I think it was more she was working on a
24 statement.

02:22 25 Q. I guess my question is earlier, you had

02:22 1 said -- you know, Ripple had an interest in there being
2 accurate information in the market; is that right?

3 A. Yes.

4 Q. And what about information that was accurate
02:22 5 but Ripple did not like for some reason? What was
6 Ripple's stance with respect to that information?

7 MR. CERESNEY: Objection to form, also
8 misstates this exhibit. That's the
9 implication.

02:22 10 THE WITNESS: I -- I don't accept the
11 general statement that anything that's
12 necessarily negative we would not want to have
13 exposure.

14 BY MR. TENREIRO:

02:22 15 Q. No, I'm not saying that. I'm asking you if
16 there was something negative.

17 What was Ripple's stance with respect to something
18 negative, if there is not a general answer?

19 A. There is not a general answer.

02:22 20 Q. Okay. Well --

21 A. We try to be honest about failings where we
22 think that's the appropriate response.

23 Q. Okay, but this --

24 Is this one where Ripple decided not to call
02:23 25 attention to the issue?

02:23 1 MR. CERESNEY: Objection to form.

2 THE WITNESS: I think [REDACTED] statement
3 here speaks for itself. She wanted to prepare
4 a response.

02:23 5 BY MR. TENREIRO:

6 Q. Did Ripple issue a response to the stalling
7 of the network in 2018, November?

8 A. I don't know.

9 Q. Why would Ripple want to prepare a response?

02:23 10 MR. CERESNEY: Objection.

11 MR. GERTZMAN: Objection to form.

12 THE WITNESS: If -- if incorrect
13 information circulated, we would want to be
14 ready with accurate information.

02:23 15 BY MR. TENREIRO:

16 Q. Okay. Let's set this aside and look at
17 Exhibit -- one second.

18 (Pause.)

19 (Thereupon, a multi-page printout from
02:23 20 Bitcoin Forum entitled "Latest Posts of
21 JoelKatz" dated April 17, 2013 was introduced as
22 DS Exhibit 3 for identification.)

23 BY MR. TENREIRO:

24 Q. Let's look at Exhibit 3, please.

02:24 25 A. Is there a particular page?

02:24 1 Q. Yes. One second.

2 (Pause.)

3 BY MR. TENREIRO:

4 Q. Exhibit 3, page 5. So these are posts of
02:25 5 Joel Katz on Bitcoin Forum. The quote is on page 4. It
6 says:

7 "Is the only reason for it not working as well with
8 BTC is that OpenCoin wouldn't have a stock of XRP to
9 hang out to promote the system if that's the only case?"

02:25 10 MR. CERESNEY: Hold on. I don't think
11 he's --

12 THE WITNESS: I don't see it.

13 MR. CERESNEY: It's at the bottom of page
14 4.

02:25 15 BY MR. TENREIRO:

16 Q. The very bottom.

17 A. I see it.

18 Q. The quote is at the very bottom.

19 (Pause.)

02:25 20 THE WITNESS: Yes.

21 BY MR. TENREIRO:

22 Q. Your response concludes by saying:

23 "XRP funds the development and ensures there's a
24 healthy company standing behind the network."

02:25 25 What do you mean by that, "healthy company standing

227

02:25 1 behind the network"?

2 A. I meant at that time --

3 I meant at that time that I hoped that the XRP
4 would allow -- would allow the company at that time,
02:26 5 OpenCoin, to continue operating.

6 Q. How would it do that?

7 A. Any -- any number of ways, from -- from --
8 well --

9 Q. What does "funds the development" mean?

02:26 10 (Pause.)

11 THE WITNESS: It's hard for me to say
12 today what I would have meant -- you know,
13 nine years ago.

14 BY MR. TENREIRO:

02:26 15 Q. As you read it today, what does it mean to
16 you?

17 MR. CERESNEY: Objection.

18 THE WITNESS: I'll -- I'll do that, but I
19 just want to note that these terms have
02:27 20 changed meaning so many times and that we know
21 so much information that we know now that we
22 didn't know then. Trying to say -- tell what
23 it means now doesn't bear any relationship to
24 what someone at that time would have
02:27 25 understood it or what I intended it to mean.

02:27 1 But today, knowing that Ripple has sold
2 XRP, you would think that's what I was
3 referring to today, only because we know that
4 that happened, but nobody at that time would
02:27 5 have known that that happened.

6 BY MR. TENREIRO:

7 Q. How else would XRP fund the development of a
8 healthy company rather than by being sold?

9 A. There was no plausible way at that time.

02:27 10 Q. Including the selling?

11 A. Yes.

12 Q. What -- what way other than selling would XRP
13 be able to fund the development and assure there's a
14 healthy company?

02:27 15 A. I can't tell you today what I meant in 2013.

16 Q. No, I'm not asking about what you meant. I'm
17 asking you back in 2013 -- I understand there was no
18 plausible way.

19 Selling would be one potential way back then. What
02:28 20 other potential ways existed back then for XRP to fund
21 the development of the company?

22 MR. CERESNEY: Objection to the
23 characterization, because "I understand there
24 was no plausible way. Selling would be one
02:28 25 way," but I thought he was saying there was no

02:28 1 plausible way for selling to actually be in
2 the way at the time.

3 MR. TENREIRO: Right. I think he was
4 saying there was no plausible way at that
02:28 5 time, no plausible way at all.

6 MR. CERESNEY: Okay.

7 MR. TENREIRO: Correct me if I'm wrong.

8 BY MR. TENREIRO:

9 Q. The selling was something that could you
02:28 10 imagine occurring at some point, even though it wasn't
11 plausible at that time; is that fair to say?

12 A. Yes.

13 Q. Even in 2013, you could imagine perhaps one
14 way you might sell?

02:28 15 A. Right.

16 Q. What else in 2013 -- you can set aside the
17 document or you can refer to it, if you would like.

18 What else in 2013 would you imagine -- did you
19 imagine -- in what other way did you imagine in 2013
02:29 20 that XRP could found the development of the company
21 other than by being sold.

22 A. XRP could be part of the use cases that --
23 that the company would promote to venture capitalists to
24 get venture capital for the company, which was our
02:29 25 funding -- our actual funding source at that time.

02:29 1 BY MR. TENREIRO:

2 Q. Why would the venture capitalists care about
3 the use cases?

4 A. Because the use cases could potentially
02:29 5 deliver revenue from things like marketing fees and
6 transaction fees, and so you don't always have to be a
7 clear model or use case.

8 Q. Let's look at Exhibit 2, real quick.

9 (Pause.)

02:29 10 MR. GERTZMAN: Which exhibit?

11 MR. TENREIRO: Two.

12 MR. GERTZMAN: Thank you.

13 (Thereupon, a multi-page printout from
14 Bitcoin Forum entitled "Latest Posts of
02:29 15 JoelKatz" dated April 15, 2013 was introduced as
16 DS Exhibit 2 for identification.)

17 BY MR. TENREIRO:

18 Q. This is the first page. This is April 15th,
19 2013?

02:30 20 A. Yes.

21 Q. Towards the middle, you say -- first, second,
22 and then you say:

23 "In truth, the rhetoric is actually more believable
24 with OpenCoin having a profit motive. For example, if
02:30 25 we had no profit motive to do so, why should people be

02:30 1 confident we are actually going to decentralize the
2 system?

3 "Why should they be confident that we'll work as
4 hard as we can to drive adoption so they could feel
02:30 5 comfortable putting their own resources into Ripple?
6 Because we have a big stake, there's no reason not to
7 believe us when we say we'll work to make that stake
8 worth more."

9 What is -- what do you mean there, because we --
02:30 10 who's "we"?

11 A. That -- the "we" here is OpenCoin.

12 Q. And what -- big stake in what?

13 A. The XRP Ledger.

14 Q. And do you have a --

02:30 15 Did you have a big stake in XRP itself at that
16 point?

17 A. I don't believe we did in April 2013.

18 Q. In April of 2013, OpenCoin did not have a big
19 stake in XRP?

02:31 20 A. I would have to be check to be sure, but I
21 believe XRP did not have an established value at that
22 time.

23 Q. At the beginning of the response, you talk
24 about "100 billion XRP is all that there will ever be."

02:31 25 Do you see that?

02:31 1 A. Yes.

2 Q. But your testimony is that when you refer to
3 the "big stake" here, you're not talking about XRP?

4 (Pause.)

02:31 5 THE WITNESS: I -- it's not --

6 I don't recall exactly what I meant in
7 2013, but it's not clear to me today that that
8 was what I was referring to.

9 BY MR. TENREIRO:

02:31 10 Q. Does Ripple still have a big stake in the XRP
11 Ledger today?

12 A. I think you could -- I think we have a big
13 stake in the XRP Ledger --

14 MR. CERESNEY: Objection to form,
02:32 15 actually.

16 THE WITNESS: Yeah, it's ... I could
17 think of ways to understand that where the
18 answer would be "yes" and ways where it would
19 be "no."

02:32 20 BY MR. TENREIRO:

21 Q. What are the ways where the answer's "yes"?

22 A. Well, if you think that Ripple's ownership of
23 XRP constitutes a stake in the XRP Ledger, which I
24 don't, but -- otherwise, I don't think -- I think stakes
02:32 25 in the XRP Ledger --

233

02:32 1 As I use the term "a stake in the XRP Ledger," I
2 mean the people who use it, who use it for transactions,
3 and Ripple does not do that all that much.

4 Q. Ripple has a high stake in XRP today, right?
02:32 5 We've talked about that.

6 A. Ripple's ownership --
7 Ripple has significant holdings with significant
8 notional value.

9 Q. And if the notional value drops, that's bad
02:32 10 for Ripple; is that fair?

11 A. Not really.

12 Q. Why not?

13 A. The notional value doesn't really impact
14 Ripple in any way.

02:32 15 Q. Does it impact Ripple's ability to monetize
16 its holdings for XRP for more money?

17 A. It could, in the short term.

18 Q. Okay. So you're saying Ripple today does not
19 care if the price of XRP goes down; is that your
02:33 20 testimony?

21 A. My testimony is that Ripple is not
22 particularly concerned with the short-term pricing.

23 Q. It's concerned with the long-term price?

24 A. I think there is concern with the long-term
02:33 25 price.

02:33 1 Q. And Ripple would prefer the long-term price
2 of XRP to go up or go down?

3 A. I mean, if Ripple had a choice, Ripple would
4 prefer the long-term price to go up.

02:33 5 Q. With a stake in the XRP Ledger, does Ripple
6 have a large stake in the XRP Ledger today?

7 MR. GERTZMAN: Objection to form.

8 THE WITNESS: Yeah, my -- if -- I
9 hesitate to give a "yes" or "no" answer, and I
02:33 10 don't want to just repeat what I said.

11 I would argue the stake and the XRP
12 Ledger comes from the people who use it to
13 transact and Ripple doesn't do that.

14 BY MR. TENREIRO:

02:33 15 Q. Ripple -- if it did not have its XRP, what
16 source of revenue would it have?

17 MR. CERESNEY: Objection, form.

18 THE WITNESS: Well, the same sources of
19 revenue it has with -- with its the stake --
02:34 20 with its XRP, except the ability to sell the
21 XRP or use the XRP to incentivize partners.

22 BY MR. TENREIRO:

23 Q. So the better question would have been what
24 other non-XRP revenue sources does Ripple have today?

02:34 25 A. Things like licensing fees, transaction fees,

02:34 1 and mostly others -- many speculative ones that we have
2 not explored yet.

3 Q. Let's not speculate now, but just --
4 The ones you have today are licensing fees, you
02:34 5 said?

6 A. Yes.

7 Q. And that's -- that's over software?

8 A. Yes.

9 Q. Software that runs using the XRP Ledger?

02:34 10 A. Well, could -- could either or not be.
11 RippleNet software, for example, doesn't use the XRP
12 Ledger.

13 Q. What is Ripple's revenue from licensing fees
14 of that software today?

02:34 15 A. One of the actual revenue numbers? I don't
16 know those.

17 Q. How significant are they compared to -- you
18 know, Ripple's XRP sales revenue?

19 A. They are significantly smaller.

02:34 20 Q. Okay. So if Ripple doesn't have XRP and
21 doesn't have -- you know, any software that operates on
22 the XRP Ledger, what will be left of Ripple today, no
23 hypothetical?

24 MR. CERESNEY: Objection, form.

02:35 25 THE WITNESS: The RippleNet business,

02:35 1 Ripple's stake in MoneyGram, Ripple's
2 investment in other cryptocurrency companies,
3 and so on.

4 BY MR. TENREIRO:

02:35 5 Q. So the RippleNet is its currency?

6 A. Well, if you imagine that we didn't have the
7 XRP, we could -- xRapid could end up using -- could
8 attempt to make xRapid work using other cryptocurrencies
9 or moving different directions.

02:35 10 Q. So in terms of revenues that would come in
11 the door tomorrow, how much would you estimate would
12 come in?

13 MR. CERESNEY: Objection.

14 THE WITNESS: It would be small. We have
02:35 15 not built the company that way.

16 BY MR. TENREIRO:

17 Q. So the company's being built around the
18 revenues from XRP sales, in part; is that correct?

19 MR. CERESNEY: Objection to form.

02:35 20 THE WITNESS: I would say the company's
21 been built around future revenue sources that
22 we have not discovered yet.

23 But the sales of XRP has been a funding
24 source to permit us to pursue those future
02:36 25 models.

02:36 1 BY MR. TENREIRO:

2 Q. Right, and so -- but the -- you know.

3 You haven't discovered some things, but so today,
4 the company's ability to keep the lights on, what
02:36 5 revenues from XRP sales is one source, correct?

6 A. Yes.

7 Q. And some licensing fees from some software
8 that operates with a ledger such as ODL, right?

9 A. Uh-huh, yes.

02:36 10 Q. And some licensing fees with respect to
11 perhaps other software that does not operate on the XRP
12 Ledger?

13 A. Yes.

14 Q. So if I remove the XRP and the ones that
02:36 15 operate on the XRP Ledger, what revenue is left for
16 Ripple today?

17 A. Venture capital investments and then there's
18 RippleNet revenues that are not connected to the XRP
19 Ledger.

02:36 20 Q. How much is that number again?

21 A. I don't know, but it's -- I don't know.

22 Q. Is it in the hundreds of millions?

23 A. No.

24 Q. Okay. The exhibit -- the next page says --
02:37 25 you're answering some other post, and you say:

02:37 1 "I hope not. We don't want that kind of control.
2 It doesn't benefit us in any way, and it will decrease
3 adoption.

4 "Our financial interest is in seeing the value of
02:37 5 XRP go up and the primary way for us to achieve that is
6 broad adoption of Ripple as a payment system." Do you
7 see that?

8 A. I actually don't see that. Is that page 2?

9 Q. Yes, at the top.

02:37 10 MR. CERESNEY: It starts with "I hope
11 not."

12 THE WITNESS: Oh, I see it now. Can you
13 give me just one second to review what I am
14 responding to?

02:37 15 MR. TENREIRO: Yes.

16 (Pause.)

17 THE WITNESS: Yes.

18 BY MR. TENREIRO:

19 Q. So there, is it fair to say you are tying
02:37 20 Ripple's financial interest to the value of XRP going
21 up?

22 A. Yes.

23 Q. Does "value" refer to anything other than
24 price there?

02:38 25 A. I believe it does.

02:38 1 Q. What does it refer to?

2 A. Utility.

3 Q. Does it refer to both utility and price or
4 just utility?

02:38 5 A. It's not -- it's not clear from context. It
6 could refer to either or both of those things.

7 Q. So your -- your statement --

8 Your testimony is that your statement here can be
9 read as "Our financial interest is that the utility of
02:38 10 XRP go up, and the primary way for us to achieve that is
11 broad adoption of Ripple as a payment system"?

12 A. Yes.

13 (Pause.)

14 BY MR. TENREIRO:

02:38 15 Q. Okay. So it's not clear to you today whether
16 you referred to utility and price or which combination;
17 is that right?

18 A. It's very hard for me today to think back to
19 what my focus would have been at a particular date in
02:39 20 2013, responding to a particular question.

21 Q. Okay.

22 (Pause.)

23 BY MR. TENREIRO:

24 Q. All right. Let's move on from this one.
02:39 25 Let's look at Exhibit 5, please.

02:39 1 Actually, before you look at one, just real quick,
2 if you can just look at that page on Exhibit 2 again --

3 A. Uh-huh.

4 Q. -- where you say that "Ripple's incentive" --
02:39 5 it's Exhibit 2, page 2. "Ripple's incentive" -- sorry.

6 "Ripple's financial interest is in seeing the value
7 of XRP go up, and the primary way for us to achieve that
8 is broad adoption of Ripple as a payment system."

9 Is it still true today that its relationship's
02:39 10 financial interest is in seeing the value of XRP go up?

11 A. I am less confident in that today than I
12 was -- than I believe I was back then.

13 Q. And why is that?

14 A. Because there's -- because there's less of a
02:40 15 demonstrated connection between the utility of XRP and
16 Ripple's financial interest.

17 Q. How so?

18 A. I would have expected back in 2013 to see
19 those things move in tandem, and I have not.

02:40 20 Q. You're talking about the price, now?

21 A. I am talking about movement between Ripple's
22 financial interest and the value of the XRP.

23 Q. So it's not necessarily clear to you that
24 it's in Ripple's financial interest for Ripple to
02:40 25 achieve broad adoption of the Ripple Ledger as a payment

02:40 1 system?

2 A. Yes.

3 Q. So why is Ripple -- is Ripple making efforts
4 to achieve that adoption today?

02:40 5 MR. CERESNEY: Objection.

6 THE WITNESS: Minimally. I can't say no,
7 but it's not a primary objective.

8 BY MR. TENREIRO:

9 Q. What is the primary objective of Ripple
02:41 10 today?

11 A. A build-out of RippleNet.

12 Q. Meaning xCurrent?

13 A. Yes.

14 Q. Are you talking about xCurrent or xRapid?

02:41 15 A. Both, but -- currently, the focus has been on
16 xRapid, but xRapid -- you know, doesn't work without
17 xCurrent.

18 Q. Okay. Fair enough, and xRapid in part relies
19 on XRP as a bridge for the transactions, right?

02:41 20 A. Right, but it doesn't rely on the XRP
21 Ledger's functionality other than the movement in the
22 XRP, which it already had. You can't really improve
23 that.

24 Q. You mean the XRP Ledger already had the
02:41 25 movement of the XRP as the functionality?

02:41 1 A. Right.

2 Q. So Ripple's focus today is not with respect
3 to the XRP Ledger? It's with respect to the market for
4 XRP?

02:41 5 A. I would say the majority of Ripple's focus
6 today is with respect to the xRapid product which
7 requires liquidity, and it requires the XRP Ledger to
8 move XRP, but it doesn't require utility beyond that.

9 Q. So liquidity and the XRP market vis-a-vis the
02:42 10 tranches on the corridors?

11 A. Correct, yes.

12 Q. So Mexican peso, XRP, U.S. dollar, XRP, for
13 example?

14 A. The product won't work.

02:42 15 Q. Sorry?

16 A. The product won't work without that
17 liquidity.

18 Q. So your testimony is that Ripple's efforts
19 today are focusing on ensuring liquidity on the tranches
02:42 20 of ODL corridors, essentially?

21 A. I would say that's a big -- that's a major
22 focus.

23 Q. Is it the major focus?

24 A. No, I would characterize the major focus as
02:42 25 growing RippleNet, which means xCurrent and today mostly

02:42 1 around xRapid.

2 Q. Okay. What other things does Ripple do today
3 to ensure that the ODL product grows?

4 A. We look for partners. ODL partners use
02:42 5 [inaudible] directly. Companies will make the last mile
6 in the payments, develop the software, and so on.

7 Q. Companies that make the last mile on the
8 payments, like market makers?

9 A. No. The "last mile" is the delivery of the
02:43 10 fiat to the final recipient.

11 Q. So what types of companies are those?

12 A. Either exchanges or payment providers.

13 Q. And does -- what is the licensing fee for the
14 xRapid software?

02:43 15 A. I don't know.

16 Q. Is it monthly or is it one time?

17 A. I don't -- I don't know.

18 Q. And how --

19 Again, what's the order of magnitude of revenue
02:43 20 that Ripple's derived from that?

21 A. I don't know.

22 Q. Does Ripple charge -- let's say MoneyGram --
23 MoneyGram's not using it right now; fair?

24 A. Yes.

02:43 25 Q. When they were, did Ripple charge MoneyGram

02:43 1 like a per-transaction fee or ...

2 A. I don't know the commercial details of that
3 particular arrangement.

4 Q. Does Ripple charge any customer that's on the
02:43 5 xRapid platform for transaction fees?

6 A. I don't know.

7 Q. Ripple, in fact, pays some of these
8 incentives to use the xRapid platform, right?

9 A. I know customers who receive a variety of
02:44 10 different incentives.

11 Q. So I am trying to understand what benefits
12 come from Ripple. Does Ripple make money -- you know.

13 When you add and subtract payments that it makes
14 and fees licensing fees it might receive or other per
02:44 15 transaction fees to the extent they exist, does Ripple
16 make money from that product?

17 A. I don't know what that final number would be.

18 Q. And who would know?

19 A. It would be on our financial statements and
02:44 20 people who prepare those statements would know.

21 Q. Okay. Ripple --

22 In the ODL sort of flow, there's a purchase -- one
23 of the steps is there's a purchase of XRP for U.S.
24 dollars and then there's a sale of XRP for Mexican
02:44 25 pesos; is that right?

02:44 1 A. In the USD, that makes sense. Yes.

2 Q. And other than perhaps changes in the
3 changing rates and changes in the amount of time it
4 takes, it's about the same amount of XRP that comes in
02:45 5 and out of the system, right?

6 A. Typically, yes.

7 Q. Does Ripple sell its XRP for the purpose of
8 the ODL platform?

9 A. I'm not sure.

02:45 10 Q. Okay. So now we have Exhibit -- which one
11 did I say, Exhibit 5? Or four? Exhibit 5?

12

13 (Thereupon, a multi-page printout from

14 Bitcoin Forum entitled "Latest Posts of

02:45 15 JoelKatz" dated May 13, 2013 was introduced as
16 DS Exhibit 5 for identification.)

17 BY MR. TENREIRO:

18 Q. All right. These are posts -- we'll still
19 back in 2013 at the bottom of page 3, please.

02:45 20 (Pause.)

21 THE WITNESS: Yes.

22 BY MR. TENREIRO:

23 Q. It says:

24 "As a corporation, we are legally obligated to
02:45 25 maximize shareholder value." Do you see that?

02:45 1 A. Yes.

2 Q. What shareholders are you referring to?

3 A. Ripple's shareholders.

4 Q. Who are they back then?

02:46 5 A. In 2013? Myself, Chris Larsen, [REDACTED]
6 [REDACTED], some of the early investors. I don't know if
7 there would be C firms at that time.

8 Q. I'm sorry, who?

9 A. I don't know if there would be C firms that
02:46 10 invested. I think by 2013, I think at least [inaudible]
11 [REDACTED] and [REDACTED] had invested, but I
12 couldn't -- I can't confirm the exact timeline.

13 Q. Is Ripple still legally obligated to maximize
14 shareholder value today?

02:46 15 A. Yes.

16 Q. Then you say:

17 "With our current business model, that means acting
18 to increase the value and liquidity of XRP."

19 What was the current business model?

02:46 20 A. At 2013, there really wasn't one. The --
21 I mean, I guess it was directly to increase the
22 value and liquidity of XRP.

23 Q. But not necessarily how?

24 A. Yeah, I hate to call it a business model.

02:46 25 Q. You wanted that to happen, not sure exactly

02:47 1 how it was going to happen?

2 A. Right.

3 Q. And when you say, "value and liquidity,"
4 "value" refers to price or something else?

02:47 5 A. I think -- well, you can't increase the value
6 when there is no value. It refers here to utility.

7 Q. Okay. The next sentence says:

8 "We believe this will happen if the Ripple network
9 is widely adopted as a payment system. We are pursuing
02:47 10 multiple avenues at once. One would expect increased
11 demand to increase price."

12 Are you referring there to the idea that if there's
13 increased utility, there might be increased demand,
14 therefore an increase in price?

02:47 15 A. Well, I just have to clarify that there was
16 no price, so here increase price goes from not having a
17 price to having a price.

18 Q. But does increase price mean anything other
19 than increase in price from zero to --

02:47 20 A. It means from there not being a price to
21 there being a price.

22 Q. That's still an increase?

23 A. Yeah, from not having a number to having a
24 number is not necessarily an increase, but that's why I
02:47 25 hesitate to characterize that -- but I did use that word

02:48 1 at the time.

2 Q. And does Ripple's current business model
3 still include Ripple acting to increase the value of
4 liquidity of XRP?

02:48 5 A. I think Ripple still acts to increase the
6 you'll of XRP and we act to increase the liquidity in
7 ODL corridors, so to that extent this is still true, but
8 obviously, Ripple's pursuing other models in addition to
9 that now, and that's not primary as we discussed before.

02:48 10 Q. The primary model remains active to increase
11 value and liquidity of XRP? And now, you're saying but
12 the liquidity only in the ODL corridors?

13 A. Right, and I would say increasing the value
14 of XRP isn't really a Ripple business model.

02:48 15 It's still something we're doing, but I hesitate to
16 describe it as a "business model," because it hasn't
17 demonstrated an ability to produce revenue.

18 Q. Do you have an understanding as to why?

19 A. I'm not an economist, but I know from
02:49 20 observation that cryptocurrency prices seem to track
21 each other. They don't seem to correlate as you might
22 expect them to, even with supply and demand for a
23 particular cryptocurrency or the utility or the projects
24 going on. The correlation just doesn't appear to be
02:49 25 there.

02:49 1 Q. But this is just from your own sort of lay
2 observation?

3 A. Well, I know that other people have made
4 those same observations as well.

02:49 5 Q. What people?

6 A. I mean, I've seen that -- that viewpoint
7 expressed -- you know, in the literature.

8 Q. In the economic literature?

9 A. No, in the cryptocurrency space.

02:49 10 Q. Got it. Okay. Let's look at Exhibit 7.

11 (Thereupon, an informal discussion was
12 held off the record.)

13 THE VIDEOGRAPHER: Going off the record
14 at 2:50.

02:50 15 (Recess taken at 2:50 p.m.)

16 (Resumed at 3:06 p.m.)

17 THE VIDEOGRAPHER: Back on the record at
18 3:06.

19 MR. TENREIRO: Okay.

03:06 20 (Thereupon, a one-page e-mail dated
21 6/10/2013 from David Schwartz to [REDACTED]
22 was introduced as DS Exhibit 7 for
23 identification.)

24 BY MR. TENREIRO:

03:05 25 Q. Mr. Schwartz, before we went off the

03:05 1 record -- you know, you mentioned your observation as a
2 layperson and also reading in literature that there
3 doesn't seem to be a correlation, as one might expect,
4 even with supply and demand for cryptocurrency based on
03:06 5 the utility of the projects going on.

6 Do you recall generally this conversation we just
7 had a minute ago?

8 A. Yes.

9 Q. Okay. At what point in time did you come to
03:06 10 that conclusion or that belief, at least?

11 A. I don't think there was a particular time
12 where there was a dramatic shift. I think it was a
13 gradual shift over time.

14 Q. Could you pinpoint when it began?

03:06 15 A. I would say probably late 2014.

16 Q. In late 2014, you began to believe that there
17 might be or you might maybe have begun to wonder whether
18 there was any correlation between utility and demand?

19 A. Between utility and price?

03:06 20 Q. Between utility and price, right; and is that
21 the same time that Ripple came to develop that view or
22 is that just you --

23 A. I don't know that Ripple had that view.

24 Q. Does Ripple have that view today, as far as
03:06 25 you know?

03:06 1 MR. CERESNEY: Objection to form, using
2 the term "Ripple."

3 BY MR. TENREIRO:

4 Q. Ripple the company, just to be clear?

03:07 5 MR. CERESNEY: I don't know who that is,
6 but okay.

7 THE WITNESS: Yeah, there are people at
8 the company who have expressed that view.

9 BY MR. TENREIRO:

03:07 10 Q. Like who?

11 A. I can't recall specific conversations with
12 specific people, but we have discussed -- you know,
13 whether there was evidence for that kind of correlation.

14 Q. Do you know whether Ripple buys XRP in the
03:07 15 market or has bought XRP in the market?

16 A. I -- I believe there are two incidents where
17 we did.

18 Q. And for what purpose?

19 A. One incident was involving a family member of
03:07 20 [REDACTED] who had sold XRP in violation of an agreement, and
21 my understanding was that we bought that XRP back to
22 sort of undo that, and I think there was one connection
23 where we -- where we bought XRP because an ODL tran- --
24 because an ODL flow resulted in a net sale.

03:08 25 Q. In a net sale?

03:08 1 A. Yes.

2 Q. Why would you want to buy the XRP that
3 resulted in a net sale?

4 A. Again, to cancel that transaction out from
03:08 5 the market.

6 Q. Why?

7 A. So that we would not have an undue impact on
8 the market.

9 Q. Undue impact in what direction?

03:08 10 A. In any direction.

11 Q. And was that a concern -- the undue impact in
12 any direction also a concern with regard to Ripple's
13 programmatic sales?

14 MR. GERTZMAN: Objection to the form.

03:08 15 THE WITNESS: I'm not sure.

16 MR. TENREIRO: Okay. Did I give him
17 seven? Seven was what we were about to do?
18 Okay. Let's do Exhibit 7.

19 (Pause.)

03:09 20 BY MR. TENREIRO:

21 Q. So this is an e-mail to you June of 2013 --

22 A. Uh-huh, yes.

23 Q. -- and you're looking for an economist here?

24 A. Yes.

03:09 25 Q. And why were you looking for an economist?

03:09 1 Can you explain in your own words?

2 A. Yes. I believe that some of the principles
3 of economics and the types of reasoning that would be
4 familiar to economists might have some relevance to the
03:09 5 distribution and use of a digital asset.

6 Q. And are you talking here about the
7 distribution and use of XRP?

8 A. Yes.

9 Q. Then you say, at the bottom:
03:09 10 "A big issue we have is that we basically need to
11 set monetary policy and the way we give away and sell
12 XRP."

13 Do you see that?

14 A. Yes.

03:09 15 Q. What do you mean by "monetary policy"?

16 A. I put it in quotes because I didn't mean the
17 exact sort of "central bank" understanding of monetary
18 policy.

19 What I meant was something that might have some of
03:10 20 the same economic principles as monetary -- someone who
21 was familiar with monetary policy might be able to
22 translate those skills to this particular problem.

23 Q. Which principles of monetary policy?

24 A. I don't know what the principles of monetary
03:10 25 policy are.

03:10 1 Q. Well, which ones did you mean when you wrote
2 that? There are like controlling inflation or ...

3 A. I think -- I think what I was thinking about
4 is the rate at which XRP is introduced into circulation.

03:10 5 Q. And why were you thinking about that?

6 A. Because we didn't know -- we didn't know how
7 to do that. That was a problem we faced that we didn't
8 have a solution at that time.

9 Q. Who did you hire as a result of this, if
03:10 10 anyone?

11 A. No one.

12 Q. You never hired an economist?

13 A. Not until very recently.

14 Q. So this didn't lead to a lead or anything?

03:10 15 A. No, it did not.

16 Q. Okay. Currently -- do you currently have a
17 plan in terms of how Ripple handles giving away and/or
18 selling XRP?

19 MR. GERTZMAN: Objection to the form.

03:11 20 THE WITNESS: Ripple has a strategy to
21 put its XRP in circulation that it's executed
22 over time and the policy's changed.

23 BY MR. TENREIRO:

24 Q. What is it now?

03:11 25 MR. CERESNEY: Objection to form.

03:11 1 THE WITNESS: Now, it's programmatic
2 sales, sales to ODL partners, used for
3 investment, incentivizing partners, those
4 strategies.

03:11 5 BY MR. TENREIRO:

6 Q. Is Ripple still engaging in pragmatic sales
7 today?

8 A. I don't know.

9 Q. Let's look at Exhibit 21.

03:12 10 (An informal discussion was held off the
11 record.)

12 (Thereupon, a four-page Twitter printout
13 dated 5/5/2017 was introduced as DS Exhibit 21
14 for identification.)

03:12 15 THE WITNESS: Thank you.

16 BY MR. TENREIRO:

17 Q. Before we look at this one, when you were --
18 when we were discussing earlier your view about Ripple's
19 legal obligation to increase shareholder value, when you
03:12 20 were using the word "value" there, were you meaning
21 utility, price, or something else?

22 MR. CERESNEY: I'm going to object.
23 Form.

24 MR. TENREIRO: Okay.

03:12 25 THE WITNESS: I think when I speak about

03:12 1 shareholder value, mine the value that
2 shareholders get from their ownership in
3 Ripple, which is predominantly the actual
4 value they can get from their shares, but also
03:13 5 includes things like advancing technology
6 generally, their interests in things like a
7 better planet and so on.

8 BY MR. TENREIRO:

9 Q. So they are sort of personal returns, if you
03:13 10 will?

11 A. Yes, exactly. How their advances -- how
12 their ownership in Ripple advances their interests.

13 Q. Some sort of ...

14 Okay, but -- some sort of like happiness index, I
03:13 15 guess?

16 A. Yeah, yeah.

17 Q. Personal satisfaction?

18 A. Yeah.

19 Q. Primarily the actual value that they could
03:13 20 get, meaning what they can -- how much money they could
21 get from their interests or their shares, rather?

22 A. There's definitely a financial component.

23 Q. Okay.

24 A. I just don't want to imply that Ripple is
03:13 25 obligated to do anything that makes the shareholders

03:13 1 money.

2 Q. Fair enough. Is Ripple's legal obligation to
3 maximize -- where does Ripple's --

4 I know you're not a lawyer, but to the extent you
03:13 5 talk about -- you know, "As a corporation, we're legally
6 obligated to maximize shareholder value," from what
7 principle of law does Ripple's obligation to maximize
8 someone's happiness index arise?

9 MR. GERTZMAN: Objection to form.

03:14 10 MR. CERESNEY: Objection.

11 THE WITNESS: I'm not a lawyer, but my
12 understanding is a company has an obligation
13 like a fiduciary obligation to maximize the
14 value that shareholders get from their
03:14 15 ownership.

16 But that doesn't translate necessarily
17 having to produce them as many dollars as
18 possible.

19 (Thereupon, an informal discussion was
03:14 20 held off the record.)

21 BY MR. TENREIRO:

22 Q. All right. The tweet, May 5th, 2017, "XRP
23 hits 10 cents." You had some champagne ready for that?

24 A. Yes.

03:14 25 Q. Why?

03:14 1 A. Much as people celebrate birthdays and round
2 numbers, people in the cryptocurrency community
3 frequently celebrate round number prices.

4 Q. And which others did you celebrate?

03:14 5 A. I celebrated Bitcoin hitting \$100. I
6 celebrated Bitcoin hitting a thousand dollars. I
7 celebrated Bitcoin hitting \$2500, hitting \$10,000, I
8 celebrated XRP hitting 25 cents. I celebrated Ethereum
9 hitting a dollar, and I'm probably missing a few.

03:15 10 Q. Were those always champagne bottles?

11 A. Some of them were with huge parties. Some of
12 them were just with Champagne bottles.

13 Q. So for XRP it was 10 cents and 25 cents?

14 A. Yes.

03:15 15 Q. Not others?

16 A. No.

17 Q. Why do people in the crypto space celebrate
18 these milestones?

19 MR. GERTZMAN: Objection.

03:15 20 BY MR. TENREIRO:

21 Q. Why did you. Let's just say, "Why you?"

22 A. Because they seemed so impossible at the
23 time -- at -- at previous times.

24 Q. Did you hold XRP at the time when it hit 10
03:15 25 cents?

03:15 1 A. Yes.

2 Q. Did you sell any after?

3 MR. CERESNEY: Objection to timing.

4 MR. CERESNEY: Objection to timing?

03:15 5 MR. CERESNEY: When you say, "After" --

6 BY MR. TENREIRO:

7 Q. Any time after?

8 A. Yes, certainly.

9 Q. Any time within the next -- you know, say few
03:15 10 weeks after May 2017?

11 A. I'm not really sure.

12 Q. Did you believe at this time that the efforts
13 of Ripple's team had had anything to do with the price
14 of XRP going up?

03:16 15 A. I don't know whether I did at that time.

16 Q. Let's look at Exhibit 32.

17 (Thereupon, a nine-page printout from
18 Bitcoin Forum entitled XRP] Ripple Speculation"
19 was introduced as DS Exhibit 32 for
03:16 20 identification.)

21 BY MR. TENREIRO:

22 Q. Bitcoin Forum, nine pages, May 2017, so the
23 same month as the tweets. I'm going to ask about the
24 first page only.

03:16 25 There appears to be a "Joel Katz" at the bottom.

03:16 1 Who designs these avatars for you, by the way?

2 A. This particular avatar came from an article I
3 wrote for the very first Bitcoin magazine called Bitcoin
4 Magazine, and they produced one of these for every
03:17 5 contributor.

6 Q. Okay, so this -- this post says -- I don't
7 want to read all of it into the record. There's some --
8 some personal matters here. You conclude by saying:

9 "Well, I can see I can't prove that this increase
03:17 10 in price isn't a bubble or isn't the result of some pump
11 and dump attempt. To me, it feels like recognition for
12 the efforts the team has put in all these years."

13 Do you see that?

14 A. Yes.

03:17 15 Q. Does that refresh your memory that at the
16 time of the celebration for the 10 cents you felt like
17 the increase of the price to 10 cents had been, at least
18 in part, as a recognition for the effort that your team
19 had put into Ripple or XRP overall those years?

03:17 20 A. I think I --

21 MR. GERTZMAN: Objection.

22 THE WITNESS: I think I felt that to some
23 extent.

24 BY MR. TENREIRO:

03:17 25 Q. Okay, and you are saying today you don't feel

03:17 1 that anymore?

2 A. Yeah, I -- I think it's harder -- it's harder
3 to -- like even as I sit here, I can't prove it.

4 I think it's harder to defend it today, given the
03:17 5 subsequent motions of the price and their lack of
6 correlation to anything going on to anything in the
7 individual product.

8 Q. And I think you've talked about the
9 correlation to cryptocurrencies generally?

03:18 10 A. Yes.

11 Q. Does the correlation, in your mind --

12 In your mind -- this is just your understanding. I
13 know you're not an economist.

14 Does the correlation between the price of XRP and
03:18 15 the price of other cryptocurrencies preclude there being
16 sort of an effect on XRP's price based on efforts of
17 Ripple?

18 A. The correlation alone is not sufficient to
19 demonstrate that there are no effects.

03:18 20 Q. What else would you need?

21 A. Well, the correlation demonstrates that it's
22 not the dominant effect, but in order to rule out
23 smaller facts, you would have to analyze events --

24 Well, you would have to analyze specifically the
03:18 25 time of specific events and the time of specific price

03:18 1 changes to see if you could correlate those smaller
2 changes.

3 Q. Wouldn't you also have to analyze whether the
4 event is actually meaningful?

03:18 5 MR. CERESNEY: Objection.

6 MR. GERTZMAN: Objection.

7 THE WITNESS: You would only want to look
8 at events that you would at least expect to
9 have some impact.

03:19 10 BY MR. TENREIRO:

11 Q. Right.

12 A. If your theory was that there was a causative
13 effect, take the facts you think there would be an
14 effect on and see if you could find anything.

03:19 15 Q. Okay. Let's look at 33. I'm going back in
16 time just a little bit, a month. This is an April 2017
17 e-mail chain. All of them appear to be from
18 Mr. Garlinghouse.

19 You're copied and, I think, referred to as a board
03:19 20 member, so my first question is: You were a board
21 member of Ripple, correct?

22 A. Yes.

23 Q. And why did you cease being a board member?

24 A. We had added several new investors and we
03:19 25 didn't want --

03:19 1 They wanted board representation and we didn't want
2 to increase the size of the board further, and so I
3 agreed to resign to allow one of those new board members
4 to take that place.

03:20 5 Q. Were you okay with that?

6 A. Yeah.

7 Q. Okay, so the first page --

8 On the first page, the e-mail on Sunday, April 9th,
9 Mr. Garlinghouse says:

03:20 10 "Before I dive into some highlights and lowlights,
11 I think we will all agree that the most significant Q1
12 development came at the end of the quarter in the form
13 of a dramatic spike in XRP price and market activity."

14 Then, he concludes by saying:

03:20 15 "It's a game-changer for us on a bunch of levels."

16 Do you understand what he meant by that? Why was
17 it a game-changer with a dramatic spike in XRP price and
18 market activity?

19 A. I don't know what specifically he was
03:20 20 referring to, but I can reason out why he would have
21 thought that that was significant.

22 Q. Go ahead.

23 A. The price and market activity of XRP affects
24 people's ability to use it for ODL as an intermediary
03:21 25 asset and so on.

03:21 1 Q. Well, you didn't have ODL in 2017, right.

2 A. I -- in 2017? Well, we -- we always imagined
3 that the goal of RippleNet would be to allow XRP
4 settlement. We didn't have a way to do it at the time,
03:21 5 and in fact, one of the things I think would have been a
6 significant thing here would have allowed that corner to
7 be turned.

8 Q. Right. So in other words, up until the
9 moment where you turned the corner, Ripple always wanted
03:21 10 there to be an increase in price to market activity for
11 XRP so that this product could exist?

12 A. Well, it's --
13 MR. CERESNEY: Objection to form.
14 THE WITNESS: It's liquidity that's
03:21 15 critical.

16 BY MR. TENREIRO:

17 Q. Are you talking about where it says
18 "speculative and market traded volume builds up
19 liquidity? Or what do you mean by the "liquidity"?

03:21 20 A. I --
21 MR. GERTZMAN: Objection to form.
22 THE WITNESS: Yeah, he does say that
23 speculative and market traded volume builds up
24 liquidity.
25

03:21 1 BY MR. TENREIRO:

2 Q. Okay, so the liquidity is what's critical for
3 ODL to function?

4 A. Yeah, that's what I believe he's talking
03:22 5 about here, to the extent I can tell just from what he
6 wrote what he meant.

7 Q. Well, first, he talks about the spike in XRP
8 price and says, "It's a game-changer for us."

9 A. Right.

03:22 10 Q. Then he says, "On an operating level, for XRP
11 to serve the purpose of lowering liquidity cost for
12 payments, it needs to keep liquidity across fiat
13 currency pairs."

14 Do you see that?

03:22 15 A. Yes.

16 Q. So it appears to be a separate point?

17 A. I think that's -- as I read it, the next two
18 paragraphs are two of the ways in which he thinks it's a
19 game-changer.

03:22 20 Q. Okay.

21 A. But again, that's just how I read it.

22 I can't tell you what Garlinghouse meant, but as I
23 read this, he says it's a game-changer and then he
24 explains how it's a game-changer on two different
03:22 25 levels.

03:22 1 Q. Right. One is an operating level? The other
2 is a more strategic level?

3 A. Yes. Right.

4 Q. Sorry.

03:22 5 A. Sorry.

6 Q. Do you agree that speculative and market
7 traded volume builds the liquidity of the XRP market?

8 A. Yes.

9 Q. Is that true today?

03:22 10 A. Yes.

11 Q. Okay. If there's more speculative trading on
12 the XRP/MXN pair, is that good for Ripple's -- for
13 Ripple's desires with respect to ODL?

14 A. That's good for ODL, because that generally
03:23 15 would be expected, there to be more liquidity.

16 Q. So is that good for Ripple, though, to the
17 extent Ripple cares about ODL?

18 A. Yes.

19 Q. If there was more speculative trading on the
03:23 20 dollar cross, I think is the expression, does that
21 increase the liquidity of that cross as well?

22 A. Not in a way that's relevant for ODL.

23 Q. Because?

24 A. There's always sufficient liquidity in that
03:23 25 corridor.

03:23 1 Q. Okay. Below, you say -- well, he says, not
2 you:

3 "On a more strategic level, holding two billion of
4 XRP, based upon today's price, presents opportunities
03:23 5 for things strategically about our capital structure and
6 funding strategy."

7 A. Yeah.

8 Q. "We will spend more time on this at our next
9 boards meeting."

03:23 10 Do you see that?

11 A. Yes.

12 Q. Did you spend more time on it?

13 A. I believe so.

14 Q. Okay, and what did you discuss?

03:24 15 A. I think it's hard for me to know exactly
16 which board meeting came after this exact message and
17 what specifically he was referring to.

18 But at that time, there was concern by the board
19 that -- that Ripple's revenue was coming from a source
03:24 20 outside its control.

21 Q. Which was what?

22 A. Programmatic sales of XRP or other -- other
23 types of monetization based on XRP being -- you know,
24 the company disposing of the XRP at a price.

03:24 25 Q. So the part that was out of the control of

03:24 1 the company was a price at which XRP was disposed, not
2 the fact of the sale, right?

3 A. Right. The company could control the rate at
4 which XRP was sold but couldn't control the price.

03:24 5 Q. So it couldn't control how much revenue it
6 would get because it was uncertain what the price would
7 be tomorrow?

8 MR. CERESNEY: Objection.

9 THE WITNESS: I'll phrase the concern the
03:25 10 way I would phrase it.

11 When your revenue is dependent on
12 something you can't control, that's a concern
13 for a business.

14 BY MR. TENREIRO:

03:25 15 Q. Well, I understand that, but what I am trying
16 to understand is what's the part they can't control?
17 Can't the company say today I wake up in the morning and
18 I do sell XRP or I don't sell it?

19 Can't the company control that part?

03:25 20 A. Yes, but that -- that -- the cost of that
21 would be -- we wouldn't be distributing XRP.

22 Q. Right, so what is the part that the company
23 cannot control? Is that the price?

24 A. Well, it's both. It's both the price and the
03:25 25 ability to distribute. The --

03:25 1 We can sell or not sell XRP, but if we don't sell
2 XRP, we aren't distributing XRP. So we can't distribute
3 XRP without selling XRP, which is at the price we can't
4 control. So there are sort of two knobs we can't
03:25 5 control and one we can.

6 Q. Right, and so -- okay.

7 Did the company make efforts to sort of try to
8 bring those knobs within its control?

9 MR. CERESNEY: Objection.

03:26 10 THE WITNESS: No.

11 BY MR. TENREIRO:

12 Q. Okay. I think we can move on, and let's go
13 to Exhibit 20.

14 (Thereupon, a document entitled "Exchanges
03:26 15 with XRP autobridging? (Aka 'I'm not going to
16 spill the beans just yet') - General Discussion
17 - Xrp Chat)" was introduced as DS Exhibit 20 for
18 identification.)

19 BY MR. TENREIRO:

03:26 20 Q. Back to Xrp Chat. Here, I'm going to ask you
21 for page 20. At page 20, I'm going to have some
22 questions there.

23 A. Just one second.

24 Q. Take your time.

03:26 25 MR. CERESNEY: Yes, take your time.

03:26 1 (Pause.)

2 THE WITNESS: Yes.

3 BY MR. TENREIRO:

4 Q. Is it true you that in 2017, Ripple was
03:27 5 heavily focused on promoting XRP to build an awesome
6 payment infrastructure?

7 A. Yeah, I think at the time Ripple was in 2017,
8 Ripple was positioning XRP as reuse and an awesome
9 payments infrastructure, in my words.

03:28 10 Q. But -- okay. You say:

11 "One big advantage we have is we control a lot of
12 XRP and we are heavily focused on promoting it in this
13 way. Nobody has this kind of focus on promoting Bitcoin
14 in this way."

03:28 15 Do you see that?

16 A. Yes.

17 Q. Your you making that contrast?

18 A. Because we were working on -- we were working
19 on building a payment system around XRP and nobody
03:28 20 was -- nobody was currently doing that for Bitcoin.

21 Q. Is anyone currently doing that for Bitcoin?

22 A. Not this type of payment system.

23 Q. You also say, "We control a lot of XRP."

24 Does that also make it different from Bitcoin at this
03:28 25 time?

03:28 1 A. Well, the distribution of Bitcoin was very,
2 very hard to know at that time. So Toshi, the original
3 creator, probably held an enormous amount of XRP at that
4 time.

03:29 5 Q. 2017?

6 A. I think so. It's hard for me to say, like to
7 compare them at that point in time.

8 Q. Well, let's try Exhibit 38.

9 (Thereupon, a 26-page printout entitled
03:29 10 "How do you like your misinformation? Please,
11 feel free to correct him - Off-Topic - Xrp Chat"
12 was introduced as DS Exhibit 38 for
13 identification.)

14 BY MR. TENREIRO:

03:29 15 Q. This is another July -- this is July 2017. I
16 think the last one I showed you was January. This is
17 from Xrp Chat, 26 pages.

18 Please go to page 10, and I think this one is
19 called, sardonically enough, "How do you like your
03:29 20 misinformation? Please feel free to correct it."

21 A. Oh, great.

22 Q. I'm focused on the one that says "There's a
23 huge advantage to having one entity that holds a
24 fraction of an asset."

03:30 25 A. I see that.

03:30 1 Q. Are you referring here to Ripple holding a
2 significant -- sorry, a significant fraction, I misread
3 that, a significant fraction, are you focusing on
4 Ripple's significant holding of XRP?

03:30 5 A. Yes.

6 Q. You say:
7 "Ripple could spend a hundred million on something
8 that has no conventional way of creating revenue, but if
9 it pushed the price of XRP up by one penny over the long
03:30 10 term, Ripple would massively profit."

11 Do you see that?

12 A. Yes.

13 Q. How would Ripple significantly profit in that
14 scenario [inaudible]?

03:30 15 A. There would be several ways. The obvious way
16 would be the money Ripple could get from the sales of
17 the XRP, but it also could increase the use of the XRP
18 Ledger in other ways as well.

19 Q. And Ripple could profit if the price of the
03:30 20 XRP goes up how?

21 A. Over the long term.

22 Q. I am just trying to understand. If the price
23 of XRP goes up one penny, how does Ripple -- so Ripple
24 could profit from sales, that conventional way?

03:31 25 A. Right.

03:31 1 Q. How could Ripple profit from the price going
2 up one cent by increase but it could also increase the
3 XRP Ledger? I don't understand.

4 A. Well, Ripple's strategy at the time was
03:31 5 about -- was about monetiz- -- was about -- let me stop
6 for a second.

7 Ripple was using XRP both for ODL and for -- and
8 incentivizing partners and selling it.

9 Q. Ripple was using -- was selling -- sorry.
03:31 10 Ripple was using XRP for ODL at this point in time?

11 A. I think -- I think we were -- at this time,
12 we weren't actually using it but envisioning using it.
13 That would include both what Ripple was doing at that
14 time and what Ripple could do in the future.

03:32 15 Q. So if the --

16 If Ripple spent \$100,000,000 in pushing the price
17 up by one penny, that could lead to massive profits in
18 the ODL business?

19 A. That could lead to increase in Ripple's
03:32 20 profits, both from sales and from other means of using
21 XRP on its balance sheet.

22 Q. Okay, and ODL sales, right? I thought we
23 talked about how the profits from the ODL --

24 A. Well, you have to --

03:32 25 This is speculating in the future over the long

03:32 1 term. Because it's mostly sales today doesn't mean it
2 will be mostly sales in the future.

3 Q. But at that point, what would it be? At that
4 point in time, not in the future.

03:32 5 A. At that point in time, it was sales instead
6 of incentivizing partners.

7 Q. Okay, and later on, you say:

8 "Nobody has that kind of concentrated interest in
9 any coin distributed primarily by mining."

03:32 10 What are you referring to there?

11 A. I explain in the next sentence what I am
12 referring to here, that if some company tried to build a
13 similar business around, say, Bitcoin, they would have
14 to mine that Bitcoin, which means they would start out
03:33 15 with a large disadvantage compared to Ripple, because
16 that would be costly.

17 Q. So Ripple's advantage was it created the
18 XRP -- either created or got the XRP for nothing?

19 A. Ripple's advantage is that it was gifted the
03:33 20 XRP and didn't have to spend capital or other types of
21 funds in order to acquire it.

22 Q. Is it also fair to say that -- what you are
23 saying here is you have an incentive because you hold
24 that asset that significant fraction of the asset to
03:33 25 make these efforts to potentially increase the price by

03:33 1 one penny that nobody else has with respect to a
2 cryptocurrency or a coin distributed primarily by
3 mining?

4 MR. CERESNEY: Objection to form.

03:33 5 THE WITNESS: I don't know that I'm
6 saying we have that incentive here.

7 BY MR. TENREIRO:

8 Q. Well, further down, you say:

9 "Let me give you a stark example. The Bitcoin
03:33 10 Foundation has been trying to raise funds to combat New
11 York BitLicense regulation," etc.

12 A. Right.

13 Q. "But nobody has a concentrated enough
14 interest to pay the bulk of the funds."

03:34 15 So is that example conveying to the reader that
16 Ripple has an incentive to do things with respect to XRP
17 because of the significant fraction that it has?

18 A. I'm saying that Ripple has more of -- would
19 be better able to do that, not that Ripple has more
03:34 20 incentive.

21 The Bitcoin Foundation would love to have combat
22 the New York BitLicense regulation as we would in a
23 similar situation. It's just that we had more resources
24 to do so because we didn't have to expend those
03:34 25 resources to get our XRP as people with Bitcoin would

03:34 1 have had to expend the resources to get that Bitcoin.

2 Q. I understand your point about the ability to
3 do it, but your very next sentence says "This is a clear
4 example of a public good freerider problem."

03:34 5 A. Right.

6 Q. The "freerider problem" has to do with
7 incentives, right? People's incentives right to ask in
8 their self-interest?

9 MR. CERESNEY: Objection to form.

03:35 10 THE WITNESS: What I'm saying here is
11 they value -- they all have an incentive to
12 accomplish a result. They just have an
13 organizational problem.

14 BY MR. TENREIRO:

03:35 15 Q. You say:

16 "Nobody has a strong, individual incentive to
17 contribute."

18 A. Nobody has a strong, individual incentive to
19 contribute, right, unless everyone else does.

03:35 20 Everyone wants to be the only one who doesn't
21 contribute. You want everybody else to so you don't
22 have to.

23 Q. Right.

24 A. It's an organizational problem. Everybody is
03:35 25 equally incentivized. It's just there's no way for them

03:35 1 to organize to act on it.

2 Q. Whereas, in the case of Ripple, because of
3 its significant holding of XRP, that organization
4 happens naturally, right? Isn't that what you're saying
03:35 5 in the sum and substance of the post?

6 A. I think I'm saying we didn't have to expend
7 depend the funds to get that cryptocurrency. It's more
8 that we would be in a better position to do that,
9 because we would have the funds as opposed to someone --

03:35 10 If you imagine a similar entity that used -- you
11 know, that had to spend the funds, they just wouldn't be
12 in as good position. Despite still having incentive,
13 they would still have that same organizational problem.

14 Q. Later, you say:

03:36 15 "How much do you think Ripple can and does spend on
16 regulatory issues critical to using cap XRP for its use
17 case? The reason is obvious.

18 "Keeping the regulatory clear for XRP's use for
19 settlement makes a huge difference to Ripple, the
03:36 20 company, specifically."

21 Do you see that part?

22 A. Yes.

23 Q. Is that not describing Ripple's -- not just
24 the fact that Ripple started off well ahead of someone
03:36 25 who had to mine Bitcoin but actually has an incentive to

03:36 1 make efforts, given its significant fraction of XRP
2 holdings?

3 MR. CERESNEY: Objection to form.

4 THE WITNESS: I don't -- I don't really
03:36 5 think so, because I say on regulatory issues
6 critical to using XRP for its use case.

7 Every business has the same incentive to
8 resolve regulatory issues critical to their
9 use case. It's just whether they have the
03:36 10 means to do it.

11 BY MR. TENREIRO:

12 Q. Okay. So XRP had the incentive, because its
13 business depended on XRP; is that what you're saying?

14 MR. CERESNEY: Do you mean Ripple?

03:36 15 MR. TENREIRO: Sorry.

16 BY MR. TENREIRO:

17 Q. Ripple had the incentive, yes.

18 A. Yes. To the extent Ripple's business depends
19 on, for example, what eventually became ODL while that
03:37 20 wasn't active at the time, we certainly saw that use
21 case. We were working on regulatory issues deploying
22 that, and we were not only incentivized to do that
23 because that's what we wanted to build our business
24 around, we also had the resources to do it.

25

03:37 1 Q. Did you have an understanding at this point
2 in time, 2017, that the XRP was a security under the --
3 under U.S. law that would -- you know, what consequences
4 that would have for Ripple?

03:37 5 MR. CERESNEY: Objection.

6 THE WITNESS: I'm not sure I did at that
7 time.

8 BY MR. TENREIRO:

9 Q. Did there come a time you did develop
03:37 10 knowledge of what consequences could flow?

11 MR. CERESNEY: That's a "yes" or "no"
12 question.

13 THE WITNESS: Yes.

14 BY MR. TENREIRO:

03:37 15 Q. And what time was that?

16 A. I think that was probably more like 2019, but
17 I can't tell you for sure. I believe it was
18 significantly later than this.

19 Q. Okay, and did you come to --

03:37 20 Did there come a point in time where you derived an
21 understanding as to what consequences would [inaudible]
22 retail holders of XRP if XRP was a secured entity under
23 U.S. law?

24 MR. CERESNEY: That's a "yes" or "no"
03:38 25 question.

03:38 1 THE WITNESS: I have formed several
2 different understandings of that at different
3 times.

4 BY MR. TENREIRO:

03:38 5 Q. Don't tell me any understandings that you
6 might have formed from your conversations with lawyers.
7 If you had others that were not formed on that, I would
8 like to know about those.

9 A. There were times when I believed it would
03:38 10 make it impossible for individuals in the United States
11 to transact with XRP and there were times when I
12 believed it wouldn't have a significant impact.

13 Q. What's your belief today? Don't tell me what
14 the lawyers --

03:38 15 MR. CERESNEY: Well, hold on.

16 To the extent that your belief today
17 could be divided from what you learned from
18 counsel versus things you didn't learn from
19 counsel.

03:38 20 BY MR. TENREIRO:

21 Q. Yes.

22 A. Well, I haven't learned anything from counsel
23 on this, and I really don't know. I have not had
24 conversations with counsel about that.

03:38 25 Q. So what's your belief today as to whether you

03:39 1 would have -- say XRP is a security under U.S. law.
2 What consequences would that have for retail holders?
3 A. My understanding is that it turns on issues
4 of law that I don't understand.

03:39 5 Q. Okay.

6 A. My understanding is that I don't have an
7 understanding.

8 Q. Okay. That's fine. So let's go to Exhibit
9 22. Actually, wait a second. Is it still true --

03:39 10 So when we were looking at this exhibit and you
11 were sort of describing -- I'm going to paraphrase you,
12 not -- not meaning to exactly repeat what you said, but
13 paraphrasing:

14 Ripple started with an advantage, because it had
03:39 15 the XRP that was gifted and didn't have to spend the
16 resources to mine it? That's what's sort of going on
17 here, at least in part?

18 A. Yes.

19 Q. Does that advantage hold true today? Has
03:39 20 that changed?

21 A. I think it's still true today. Probably less
22 significant than it was.

23 Q. Why is it less significant today?

24 A. I think it's easier to get capital in the
03:40 25 space now than it was then.

03:40 1 Q. Between 2017 and today, as far as you know,
2 has any entity acquired sort of a gift of large amounts
3 of Bitcoin?

4 A. Not to my knowledge.

03:40 5 Q. What about of Ether? Ethereum?

6 A. The Ethereum Foundation, yeah, a huge amount
7 it was able to distribute to investors and so on.

8 Q. So between 2017 and today, did the Ethereum
9 Foundation gather a huge amount of Ether?

03:40 10 A. Not that I know of.

11 Q. Okay. Now let's go to Exhibit -- what did I
12 say? Exhibit 22.

13 (Thereupon, a multi-page document entitled
14 "Valuation Models - XRP The Digital Currency vs.
03:40 15 Ripple the Company - XRP Trading and Price
16 Speculation - Xrp Chat" dated 5/25/2017 was
17 introduced as DS Exhibit 22 for identification.)

18 BY MR. TENREIRO:

19 Q. This is an Xrp Chat.

03:40 20 This one's called "Valuation Models - XRP The
21 Digital Currency Vs. Ripple the Company - XRP Trading
22 and Price Speculation," and this is still 2017.

23 A. Are you looking at page 13?

24 Q. 13, yes.

03:41 25 A. Yes.

03:41 1 Q. Okay. So first, you talk about "There's a
2 business that Ripple has providing transaction
3 processing software to banks." Maybe there's -- "has
4 been," perhaps, is what you meant?

03:41 5 A. I realize there's a business that Ripple has,
6 providing transaction processing software to banks.

7 Q. Okay. Providing transaction process software
8 to banks. "It could work without XRP and without any
9 blockchain tech." Do you see that?

03:41 10 A. Yes.

11 Q. What business is this referring to?

12 A. xCurrent.

13 Q. Okay, and that's still the function of
14 xCurrent today?

03:41 15 A. Yes, although it's used more broadly than
16 just banks.

17 Q. And then, you say the -- this is No. 3.

18 "It's everything else. It's governance,
19 compliance." I don't need to read all of it, I don't
03:42 20 think.

21 But does this part reflect that Ripple had some
22 challenges in -- you know, getting banks to adopt
23 blockchain technology?

24 A. Not really. It's more about that banks would
03:42 25 face those challenges if they were attempting to do it.

03:42 1 Q. Did Ripple obtain any significant traction on
2 its xCurrent product in 2017?

3 A. I would have to check the timeline, but I
4 think -- I think we had -- I think we had established a
03:42 5 growth pattern by that time.

6 Q. But again, that product did not use XRP or
7 blockchain tech?

8 A. No.

9 Q. Okay.

03:42 10 A. It didn't use XRP. It used some Bit-Tech
11 that you could consider blockchain, but it didn't use
12 any public blockchain.

13 Q. Later, you say -- you know -- I mean, you --
14 you should read this yourself, four, five, six and
03:43 15 seven, and then you conclude by saying:

16 "If that succeeds, it would increase their price of
17 XRP." So I'm trying to figure out what the "that" is
18 there.

19 A. That is referring to a payment system with
03:43 20 XRP as an intermediary asset.

21 Q. And why would that increase the price of XRP?

22 A. The thesis that I'm saying here is that that
23 would create an increase in demand, which could increase
24 the price.

03:43 25 Q. Okay, and then you say, "Ripple holds a huge

03:43 1 pile of XRP and will be the dominant XRP holder for the
2 foreseeable future."

3 What did you mean there?

4 A. I think it's self-explanatory.

03:43 5 Ripple holds an enormous amount of XRP more, than
6 anyone else and there was no way for Ripple to reduce
7 that rapidly.

8 Q. Is that still true today, both of those
9 statements?

03:44 10 A. Yes.

11 Q. Then you say:

12 "We are primarily VC finance and we get revenue
13 from selling software to banks. We don't use our XRP as
14 a bank account, but as a strategic weapon."

03:44 15 Can you explain what you mean there by "as a
16 strategic weapon"?

17 A. I mean we use it to incentivize partners.

18 Q. Can you explain a little more?

19 A. Sure. This -- this model relies on using XRP
03:44 20 as an intermediary asset. It relies on things like
21 market makers, and by having XRP, we can do things like
22 lease it to market makers so that they don't have to
23 front their own capital, which is not using XRP as a
24 bank account but as a tool.

03:44 25 Q. So the bank account example is to spend it --

03:44 1 to sell it and to spend it. This example is to provide
2 capital to people that might not have capital?

3 A. Right.

4 Q. Okay. Then you say:

03:45 5 "Though we do sell for some revenue, we just don't
6 need to for salaries or to keep the lights on."

7 A. Yes.

8 Q. Do you see that? Is that still true today?

9 A. I would have to work out the math to tell you
03:45 10 precisely whether it is or isn't.

11 Q. Right. Is it fair to say that at some
12 point -- do you know whether at some point Ripple used
13 XRP as a bank account?

14 MR. CERESNEY: Objection.

03:45 15 THE WITNESS: Over -- over time, our XRP
16 sales became a more significant source of
17 revenue.

18 BY MR. TENREIRO:

19 Q. Did that correlate with when the price of XRP
03:45 20 went up?

21 A. I think it correlates with both the price and
22 the volume.

23 Q. Then you say:

24 "Anyone who gets XRP from us as part of some deal
03:45 25 with a lockup has their incentives aligned with ours."

03:45 1 Just explain: Why does a lockup align -- first of
2 all, "ours" means Ripple?

3 A. Yes.

4 Q. Okay. Please explain why the lockup aligns
03:45 5 the incentives of Ripple with "someone who gets XRP from
6 us as part of some deal."

7 A. If you have XRP and you're not subject to any
8 sort of agreement that prevents you from selling it, you
9 don't care about the long-term price. You just care
03:46 10 about the short-term price. The price goes up to your
11 target and you sell, and you don't care what happens a
12 year later.

13 If you are guaranteed to hold an asset over a
14 period of time, the long-term price becomes more
03:46 15 interesting to you than the short-term price.

16 Q. By "interesting," you mean more desirable?

17 A. It's more important to you. You would be
18 more concerned with the long-term price than the
19 short-term price.

03:46 20 Q. Then you say, "They want the long-term price
21 of XRP to go up, too."

22 Are you saying Ripple wants the price of XRP long
23 term to go up, just like the people who are in the
24 lockup agreements?

03:46 25 A. Yes.

03:46 1 Q. Okay. Is this a recognition of what we
2 discussed earlier, that in the long term, Ripple wants
3 the price of XRP to go up at least as of 2017?

4 MR. GERTZMAN: Objection to the form.

03:47 5 THE WITNESS: Ripple benefits from an
6 increase in the long-term price of XRP.

7 BY MR. TENREIRO:

8 Q. Is that still true today?

9 A. Yes.

03:47 10 Q. And to the extent that there are -- you know,
11 I'm just going to use your words.

12 To the extent there are -- anyone who gets XRP from
13 Ripple is part of some deal with a lockup, are their
14 interests still aligned with Ripple's today in the price
03:47 15 going up?

16 A. They share the interest in the long-term
17 price.

18 Q. Long term?

19 A. At least over the duration of their lockup
03:47 20 agreement.

21 Q. And the price going up?

22 A. Yes.

23 Q. Okay. To the extent that Ripple's interest
24 in the long-term price of XRP is for the price to go up,
03:47 25 is that -- you know, from your understanding of this

03:47 1 space, the same as the interest of someone who doesn't
2 have a lockup but may be holding XRP as a long -- for
3 the long term?

4 A. No.

03:48 5 Q. Why not?

6 A. Because someone is holding for the long term
7 can sell at any time their sentiments change.

8 Q. What they care about is for the price to go
9 up between when they buy it and sell it in the long

03:48 10 term; is that what you mean?

11 A. Right, they would prefer a short term
12 increase over -- they would prefer a short-term increase
13 even if it's followed by a long-term drop.

14 Q. They don't care after they sell, essentially?

03:48 15 A. Which could be whatever time they decide they
16 want to leave.

17 Q. Between the time when they buy and when they
18 decide to leave, are their interests aligned with
19 Ripple's?

03:48 20 A. No.

21 Q. Why?

22 A. Because Ripple's interested in the long-term
23 price and they are not.

24 Q. Okay, so Ripple --

03:48 25 Are you saying Ripple does not have any interest in

03:48 1 the price going up in the short term, as long as it
2 still goes up in the long-term?

3 A. I'm saying Ripple would not prefer a
4 short-term rise in price if there's other compensating
03:48 5 factors that make that worse.

6 We would prefer it in the absence of -- in the
7 absence of any other [inaudible] with just a short-term
8 price nothing else happened. There's no reason we
9 wouldn't prefer that.

03:49 10 Q. I understand there could be worse things that
11 make it worse, but everything else being equal -- you
12 know, Ripple's interested in the long-term increase in
13 the price.

14 Does that mean it's not interested in the long --
03:49 15 in the short-term interest -- in those -- short-term
16 rise in the price?

17 A. I don't believe there exist scenarios where
18 all other things are equal. So when you construct this
19 scenario, you say, "All things being equal, Ripple would
03:49 20 prefer this," I don't think there's any realistic
21 scenario where all other things are equal.

22 There are always other facts that could be averse
23 to Ripple's interests. For example, a long-term drop in
24 price.

03:49 25 Q. So a long-term --

03:49 1 A short-term increase could lead to a long-term
2 drop in price?

3 A. Absolutely, yes.

4 Q. Any other example of something that might
03:49 5 have adverse consequences to Ripple following a
6 short-term increase in price?

7 A. I mean, I can construct a number of
8 hypotheticals where that could happen.

9 Q. Okay. One second.

03:50 10 (Pause.)

11 MR. TENREIRO: Let's look at Exhibit 23.

12 And for Madam Court Reporter, we will
13 have to e-mail that one to you. It's
14 different from the one we e-mailed to you, so
03:50 15 let's make a note, please.

16 (Thereupon, a multi-page document entitled
17 "For people asking about 'Coin vs Protocol'"
18 dated "29 juin" was introduced as DS Exhibit 23
19 for identification.)

03:50 20 BY MR. TENREIRO:

21 Q. Pages 4 and 5 of 13. This appears to be a
22 Reddit thread. Four and five.

23 A. Oh, yeah. I don't see -- oh, at the top.
24 Are you talking about the top of page 5?

03:50 25 Q. Yes. So at bottom, there is an "@JoelKatz."

03:51 1 A. That is me.

2 Q. And then it continues on page 5. So you say
3 ... just read what you're responding to, the last
4 sentence of the comment you responded to.

03:51 5 "I mean, the whole reason most speculators are
6 buying XRP is due to a perception that it will be
7 permanently tied to the success of Ripple."

8 Do you see that part?

9 A. I see that.

03:51 10 Q. Is it fair to say that you had an
11 understanding -- this post appears to be from -- I think
12 it's 2017. Yeah. In the front page, it's in French,
13 but I'm sure you can read it. It's June of 2017.

14 A. Yes.

03:51 15 Q. All right. So is it fair to say that in June
16 of 2017, you, Mr. Schwartz, had an understanding that
17 some speculators were buying XRP?

18 A. I did believe at the time that some
19 purchasers purchased for speculative purposes.

03:52 20 Q. I'm sorry, that some purchasers what?

21 A. Purchased for speculative reasons.

22 Q. Are you aware of any efforts that Ripple made
23 at that time to stop people from purchase for
24 speculative reasons?

03:52 25 A. I'm not aware of any that had that as a

03:52 1 specific objective.

2 Q. As opposed to a general objective or what do
3 you mean?

4 A. Well, for example, if someone was going to
03:52 5 speculate because of some false information and we were
6 countering that narrative, that might dissuade them from
7 speculating.

8 Q. All right, and when you were -- when Ripple
9 was ... when -- when Ripple was sort of responding to
03:52 10 what it considered to be actually inaccurate accurate
11 narratives, was it doing that with the purpose for
12 dissuading people from speculating?

13 A. If they would have speculated on the base of
14 a false narrative, absolutely.

03:53 15 Q. Ripple wanted to dissuade people from
16 speculating on the basis of a false narrative?

17 A. Yes.

18 Q. What steps did Ripple take, if any, to stop
19 people from purchasing XRP for speculative reasons?

03:53 20 A. I am not aware of any.

21 (Thereupon, an informal discussion was
22 held off the record.)

23 BY MR. TENREIRO:

24 Q. Okay. You say --

03:53 25 "I wouldn't say permanently" is your first

03:53 1 response?

2 A. Yes.

3 Q. So does that mean that you agreed that --
4 that some -- speculators or most speculators were buying
03:53 5 XRP due to a perception that XRP will be tied to the
6 success of Ripple, at least for some time?

7 A. No.

8 Q. What does it mean?

9 A. It means that I -- I -- that I am choosing to
03:54 10 respond to his -- I -- I'm choosing to argue that if
11 such a thing exists, it would be expected to be reduced
12 over time.

13 Q. Okay. If such a thing exists?

14 A. Yes.

03:54 15 Q. Okay. Later, you say:

16 "There's no player that plays Ripple's role in XRP
17 for Bitcoin or Ether."

18 Do you see that?

19 A. Yes.

03:54 20 Q. What does that mean?

21 A. That means there's no party that we know of
22 that holds -- that both holds that larger fraction of
23 the native asset and is sort of a participant.

24 Q. Does that remain true today?

03:54 25 A. I don't know.

03:54 1 Q. Okay. Did it remain true last year?

2 A. I would have thought so at the time, but I
3 don't know.

4 Q. On the next page, you say:

03:54 5 "For at least the near future, there seems to be
6 pretty good alignment of incentives between Ripple and
7 XRP holders. Ripple is the largest XRP holder today.

8 "Ripple will almost certainly hold the significant
9 share of XRP for years, and XRP is likely to remain
03:55 10 Ripple's largest asset for years."

11 Can you explain what that meant in 2017?

12 A. Yeah. What that meant is that there is some
13 alignment of incentives between Ripple and other XRP
14 holders.

03:55 15 Q. And to the extent Ripple's -- so okay. Which
16 incentives are aligned?

17 A. They would both want the utility of the
18 ledger. They would both want more liquidity for XRP.

19 They would have different interests in price,
03:55 20 Ripple in the long-term price and holders in the
21 short-term price, but they would have interests in
22 price.

23 Q. Well -- I'm sorry. How do you know that the
24 holders have a short-term interest and not long-term?

03:55 25 A. I am assuming these are holders that aren't

03:55 1 subject to any sort of lockup that will prevent them
2 from selling their XRP.

3 Q. Does this sort of statement that for at least
4 the near future -- well, how -- sorry.

03:56 5 The statement "Ripple will almost certainly hold a
6 significant share of XRP for years" -- does that
7 statement still hold true today?

8 A. Yes.

9 Q. "XRP is likely to remain Ripple's largest
03:56 10 asset for years." Still true today?

11 A. Yes.

12 Q. "For at least the near future, there seems to
13 be pretty good alignment of incentive between Ripple and
14 XRP holders."

03:56 15 To the extent that -- you know, your answer was
16 about the incentives with respect to liquidity and
17 utility, are those still -- still aligned today?

18 A. I'm -- I'm not as convinced today as I was at
19 that time.

03:56 20 Q. Why?

21 A. Because it doesn't seem necessarily the case
22 that someone who holds XRP, even if they were interested
23 in the short-term price, would necessarily care about
24 things like the utility and liquidity if they don't
03:56 25 necessarily correlate to short-term price. So they

03:57 1 might be interested. They might not. But I can't -- I
2 don't believe today that I can draw a line as brightly
3 as I thought I could at that time.

4 Q. But I think you said earlier if Ripple sort
03:57 5 of walked away from XRP, you believe -- you believe
6 there might be a short-term decrease in price because of
7 unsettling expectations?

8 A. There could be.

9 Q. So the expectation, as you understand it
03:57 10 today, is that people -- that Ripple will not walk away
11 from XRP?

12 A. Right. Just as people don't expect the
13 Bitcoin Foundation to abandon Bitcoin or the Ethereum
14 foundation to abandon Ethereum.

03:57 15 Q. And the expectation is that Ripple would not
16 abandon the XRP Ledger? Not just the XRP, but the XRP
17 Ledger; is that fair?

18 A. At least not -- not suddenly, or not for no
19 rational reason.

03:57 20 Q. Okay. Why is it -- I'm sorry.

21 We talked about this already. Let's move to 24,
22 which I am also going to have to e-mail to Ms. Kerr,
23 because it's different from what I sent you.

24 (Thereupon, an informal discussion was
03:58 25 held off the record.)

03:58 1 BY MR. TENREIRO:

2 Q. It's another Reddit thread. This also
3 appears to be from -- actually, Jon probably is going to
4 identify the year, but I can't tell you -- I think it's
03:58 5 2017 or 2018.

6 (Thereupon, an informal discussion was
7 held off the record.)

8 BY MR. TENREIRO:

9 Q. November 2017? Okay. This one is called
03:58 10 "XRP will go to zero, because..."

11 Do you see that?

12 A. Yes.

13 Q. Do you understand this is a reference to the
14 price of XRP going to zero?

03:59 15 A. I don't think there's a distinction between
16 the price going to zero and the -- you know, the value
17 of the ledger or it not having any value, not being
18 transactable.

19 Q. Okay.

03:59 20 A. Those are all liquidities.

21 Q. This is a short-term reference to the number
22 zero. Does that reasonably indicate that's a reference
23 to the price?

24 A. I don't think -- I think in context, nobody
03:59 25 meant the price might go to zero and then recover. They

03:59 1 meant like it would die.

2 Q. You're saying both of --

3 Well, the value of the ledger not having any value
4 would be -- you're saying there's no distinction between
03:59 5 that and the price of XRP going to zero; is that right?

6 A. I am saying there's no distinction between
7 the price of XRP going to zero and essentially a failure
8 of the XRP Ledger system such that you couldn't transact
9 in XRP, so it wouldn't happen at full price. Again,
03:59 10 that's a difference between zero and no number.

11 Q. Okay, so then you say:

12 "I will tell you what I think the biggest risks
13 are. One, someone else does almost exactly the same
14 thing Ripple does, but does it better.

04:00 15 "This is mitigated by the fact that Ripple has such
16 talented people and has a lead, but you never know."
17 What did "the lead" mean there? What lead?

18 A. This was 2017?

19 Q. Uh-huh.

04:00 20 A. It's actually hard for me to say today.

21 Because that was a transition period between a
22 couple different strategies that it's hard for me to say
23 today what I meant, but I did believe we were better at
24 something.

04:00 25 Q. Do you still believe that today? It's true

04:00 1 today?

2 A. I think that's true with respect to RippleNet
3 and -- and financial institutions to use digital ledger
4 technologies. I wouldn't say that's true for
04:01 5 technologies like the XRP Ledger.

6 Q. And why would -- why would the fact that you
7 were better at something, whatever that something was,
8 mitigate against the risk that XRP will go to zero?

9 (Pause.)

04:01 10 THE WITNESS: I -- I -- it looks like in
11 this post here --

12 Rather than responding to the title of
13 the thread of why XRP would go to zero, it
14 looks like I'm more talking about risks to
04:01 15 Ripple and Ripple's business model, and I'm
16 not really sure why I'm doing that.

17 I may have answered the question that I
18 wish was asked rather than the question that
19 was asked. Oh, I see. Because in the
04:01 20 question, it says things like "What mistakes
21 would the Ripple management have to make?"
22 What --

23 BY MR. TENREIRO:

24 Q. For it to crash?

04:02 25 A. I don't know if that's what I responded to.

301

04:02 1 It does look like I more responded to the question I
2 wish was asked than the question that was actually
3 asked.

4 Q. What is the question you wish was asked?

04:02 5 A. What the risks were to Ripple or to Ripple's
6 business model or -- or so on.

7 Q. Why did you wish that question were asked?

8 A. I think that's a question I'm very well
9 positioned to answer as opposed to opining on the XRP
04:02 10 ecosystem generally.

11 Q. Let's look at the question. "XRP will go to
12 zero because ... I read a fair amount of XRP in the past
13 few months and the overwhelming majority of the
14 sentiments seem to be positive. While it is easy to see
04:02 15 why people want to speculate a price of 20 or 30 in the
16 next year, there has somebody some downside risk
17 associated with the currency.

18 "To be clear, I'm bullish on XRP, but I would like
19 to at least have a handle on what the risks are and what
04:02 20 could cause it to significantly drop in price in the
21 coming months/years. What mistakes would the Ripple
22 management team have to make for it to crash?

23 "What obstacles if not cleared would stop XRP dead
24 in its tracks? Sorry to take away from the clearly
04:03 25 positive post, but I feel a clear-headed look at the

04:03 1 actual risk would do some good."

2 Do you see that?

3 A. Yes.

4 Q. Is it fair to say, just reading this today,
04:03 5 this entire post was speculating on the price of XRP?

6 A. The question, yes.

7 Q. And is it fair to say --

8 I -- I understand that maybe you were -- so for
9 in -- for this post, you remember that three years ago
04:03 10 you were trying to answer a different question than the
11 one that was asked?

12 A. I don't remember reading the question. I may
13 not have read the question at this time.

14 I definitely would have read the prior comment,
04:03 15 assuming that their in the same -- but they are not even
16 necessarily in the same order now as they were then,
17 because they are sorted by -- I believe not necessarily
18 by time.

19 I don't know whether I was responding to the
04:03 20 question or sub-question, but reading this today, this
21 more look like what I would have written as a list of
22 risks to Ripple, but I can't --

23 I -- I really -- I write hundreds and hundreds of
24 posts. Sometimes I carefully study the thing I'm
04:04 25 responding to, and sometimes I have a particular point

04:04 1 that I want to make and I just take advantage of any
2 opportunity to make the point I wanted to make. This
3 doesn't read like what I would have said are the biggest
4 risks to XRP at the time.

04:04 5 Q. What were the biggest risks to XRP at the
6 time?

7 A. 2012?

8 Q. Uh-huh. We're talking about the price,
9 because -- I mean, what were the biggest risks to the
04:04 10 price, as the question posed?

11 A. I think regulatory risk. There was a concern
12 at the time of whether people trying to use
13 cryptocurrencies would be money transmitters. I think
14 that was the dominant concern at that time.

04:04 15 I think there was a concern that -- that crypto --
16 that the whole cryptocurrency ecosystem could be
17 abandoned or -- or not used and people just wouldn't be
18 interested in it or would discover -- you know, some
19 other system that would work better. I think --

04:05 20 I think a technical problem with the XRP Ledger
21 that made it unable to move XRP, like at that -- that --
22 that was so early that we were still worried that
23 perhaps there might be an actual fundamental problem.
24 Any technology that's new like this, you worry someone
04:05 25 might find some fundamental flaw and then, basically,

04:05 1 the whole sector gets abandoned.

2 Q. So is it fair, though, someone reading this
3 answer might reasonably assume it relates to speculating
4 on the price?

04:05 5 MR. CERESNEY: Objection.

6 THE WITNESS: I don't know what context
7 this answer would have been presented in these
8 years ago. Like I said, I believe the order
9 of these responses are changed, so I can't --

04:05 10 I can't tell what you context someone
11 three years ago would have read this in and
12 what conclusions they would have drawn on this
13 one post in isolation.

14 BY MR. TENREIRO:

04:05 15 Q. So is it fair to say you are referring to
16 risks not just to Ripple, but to XRP itself in your
17 answer? For example, where you say, "Perhaps some
18 regulators deem XRP to be a security."

19 A. I actually said that here?

04:06 20 Q. No. 2.

21 A. Oh, I give that as an example, yeah. Sales
22 to sophisticated investors. Sorry. What was the
23 question, again?

24 Q. Is it fair to say that you --

04:06 25 While I understand your testimony that you believe

04:06 1 you're answering a question about risks to Ripple, you
2 are, in fact, giving examples of risks to XRP? Such as,
3 for example, the regulatory risk that it might be deemed
4 to be a security?

04:06 5 A. Well, I say -- I say that regulatory
6 changes --

7 (Thereupon, an informal discussion was
8 held off the record with the shorthand
9 reporter.)

04:06 10 THE WITNESS: In two, I say, "those
11 regulatory changes that might make Ripple's
12 business model impractical."

13 BY MR. TENREIRO:

14 Q. So there's a tie there between Ripple's
04:06 15 business model and XRP; fair?

16 A. No, I don't think that's what's happening.
17 What I'm saying is if there was some regulatory change
18 that made Ripple's business model impractical, that
19 would be bad for Ripple. But Ripple could mitigate that
04:07 20 by targeting friendlier jurisdictions.

21 Q. One of the risks would be with respect to
22 regulatory risk over XRP; is that what you're saying?

23 A. If it made Ripple's business model
24 impractical.

04:07 25 Q. Wouldn't it, at that time?

04:07 1 A. There could have been regulatory changes that
2 could have made Ripple's regulatory model impractical.

3 Q. Was XRP being deemed a security one of them?

4 A. I used that as an example here, probably
04:07 5 because I thought it was implausible.

6 Q. Why did you think it was implausible?

7 MR. CERESNEY: Objection. Only answer if
8 you can answer that without discussing
9 discussions with counsel.

04:07 10 THE WITNESS: Well, I hadn't had any
11 discussions with counsel at that time but it's
12 hard for me to place in time, but I think
13 three -- I don't recall whether three years
14 ago that would have been something I would
04:07 15 have considered a significant regulatory risk
16 or not.

17 There was a time I didn't and then there
18 was a time when I did, and I suspect I was
19 using this as an example because -- probably
04:08 20 because I didn't think it was plausible. But
21 again, there were times I didn't think it was
22 plausible and times when I did.

23 BY MR. TENREIRO:

24 Q. When were the times you did think it was
04:08 25 plausible?

04:08 1 A. More recently.

2 Q. In No. 5, you say:

3 "Someone comes up with a better way to bridge
4 international payments than using a digital asset and
04:08 5 Ripple is unable to position XRP."

6 What did you mean by that? How is that a risk to
7 Ripple?

8 A. It's a risk to Ripple because Ripple wouldn't
9 have the strategic advantage as it has with XRP, having
04:08 10 a significant amount that it didn't have to expend
11 resources to get with any other resource.

12 Q. How -- but -- okay.

13 Now, you preface this by saying that you are
14 telling someone what you think the biggest risks are,
04:08 15 right?

16 A. Yes.

17 Q. Why -- why would you list an implausible
18 example when you're listing the biggest risks?

19 MR. CERESNEY: Objection.

04:09 20 THE WITNESS: Because I didn't think that
21 that was a significant risk and so I wanted to
22 use a sort of --

23 There's two aspects to how big a risk is.
24 There's how probable it is it will occur and
04:09 25 how much damage it does if it does occur.

04:09 1 And I listed two -- well, because other
2 people were talking about it and because it
3 could cause a significant amount of damage if
4 it materializes and because there were a
04:09 5 number of different regulatory changes that
6 people envisioned at the time.

7 BY MR. TENREIRO:

8 Q. So you -- you understood however improbable
9 you believed it to be that it would cause a significant
04:09 10 amount of damage if XRP was deemed a security under U.S.
11 law?

12 A. That's not what I'm saying.

13 What I'm saying is that's one example of a set of
14 potential regulatory risks which in aggregate pose a
04:09 15 significant risk.

16 Q. In aggregate, the regulatory risks together?

17 A. Yes, and that's why I placed them on this
18 list, not because there's any one particular risk that I
19 was specifically concerned about.

04:09 20 Q. Well, you only placed one on the list, right?
21 You said, "unfavorable regulatory changes," and then you
22 gave one example?

23 A. Right, perhaps.

24 Q. Okay.

04:10 25 (Pause.)

04:10 1 BY MR. TENREIRO:

2 Q. How would "a horrible personal business
3 scandal affecting key Ripple people" affect XRP?

4 A. There could be reputational damage. People
04:10 5 could infer -- people could -- people could conclude
6 that that was like some sort of a stain on XRP itself.
7 I also point out the risk of the company becoming
8 toxic for financial institutions to do business with,
9 meaning the company would also.

04:10 10 Q. Let's move on.

11 (Thereupon, an informal discussion was
12 held off the record.)

13 MR. TENREIRO: Break time?

14 MR. CERESNEY: Yeah, we've been going for
04:10 15 more than an hour.

16 MR. TENREIRO: Okay. Let's -- break
17 time.

18 THE VIDEOGRAPHER: Off the record at
19 4:10.

04:10 20 (Recess taken at 4:10 p.m.)

21 (Resumed at 4:34 p.m.)

22 THE VIDEOGRAPHER: Back on the record at
23 4:34.

24 (Thereupon, a 26-page printout entitled
04:34 25 "Ripple sold \$91.6 million of its digital

310

04:34 1 currency XRP last quarter, as the price surged
2 almost 30,000% - Press - Xrp Chat" was
3 introduced as DS Exhibit 34 for identification.)

4 BY MR. TENREIRO:

04:34 5 Q. Thank you. Mr. Schwartz, I think we've
6 handed you Exhibit 34, another chat thread. This one
7 has 26 pages and I'm going to focus you on page 17, now
8 we're up to January of 2018. Please take a look --

9 Well, my question is: Is there any other Ripple
04:34 10 employee or person associated with Ripple that is as
11 prolific on social media channels as you, as far as you
12 know?

13 A. I doubt it.

14 Q. Okay. What about Mr. Garlinghouse?

04:34 15 A. He's probably a little less prolific in
16 total. He's active on Twitter.

17 Q. He's also been around fewer years than you;
18 is that fair?

19 A. Yes.

04:35 20 Q. All right. Here, you say:

21 "Programmatic literally means they are made by a
22 program." Are you referring to programmatic sales by
23 Ripple there?

24 A. Yes.

04:35 25 Q. What knowledge did you have, as time went on,

04:35 1 about programmatic sales generally? And we can atomize
2 this, if you like, but timing, price, generally.

3 A. My understanding is programmatic sales are
4 sales made by market makers who facilitate trades in
04:35 5 both direction, both buying and selling, that have a net
6 preference for -- for reducing the amount of XRP they
7 hold and increasing the amount of fiat that they hold.

8 Q. That's very helpful.

9 As time went on, though, were you being kept
04:35 10 abreast of -- you know, the parameters of the
11 programmatic sales at all?

12 A. I believe some summaries or presentations
13 were made on a dashboard that was available to all his
14 direct reports. I had access to them. They put up them
04:35 15 on screens, but I wasn't specifically following them.

16 Q. Have you ever had a decision-making role with
17 respect to any parameters involving programmatic sales?
18 Again, being timing, amount, pricing, anything like
19 that?

04:36 20 A. No.

21 Q. Does Mr. Garlinghouse have any such
22 decision-making role, as far as you know?

23 A. I don't know.

24 Q. Okay. Do you know who has decision-making
04:36 25 power over programmatic sales?

04:36 1 A. My understanding is that the XRP markets team
2 makes suggestions and then those suggestions would be
3 circulated to staff and they are generally followed.

4 Q. And is that [REDACTED], now?

04:36 5 A. I don't think so.

6 Q. Who is it?

7 A. I'm not sure. I would have to look at the
8 organizational chart to tell you for sure.

9 Q. Let's move on and back to the exhibit.

04:36 10 "Ripple employees, third-party market makers
11 execute these excerpted sales to ensure that we can't
12 control the timing or the volume to manipulate the
13 markets for benefit from insider information and to also
14 ensure that Ripple insiders, including me, can't use
04:37 15 intimate knowledge of the sales strategy to their own
16 advantage." Do you see that?

17 A. Yes.

18 Q. How could an insider use intimate knowledge
19 of the sales strategy to their own advantage?

04:37 20 MR. CERESNEY: Objection to form.

21 THE WITNESS: If you knew precisely how
22 those trades were being made -- the
23 information that the market makers would have
24 like the actual algorithms they used to trade
04:37 25 those trades -- you could trade against them.

04:37 1 BY MR. TENREIRO:

2 Q. You could hedge, essentially? You could
3 arbitrage, rather?

4 A. That would be -- that would be probably the
04:37 5 most significant. You could arbitrage against them for
6 personal profit.

7 Q. Why doesn't Ripple want that?

8 MR. CERESNEY: Objection to form.

9 BY MR. TENREIRO:

04:37 10 Q. To the extent that's what you're saying here,
11 that you have programs to do it -- is that what you're
12 suggesting, that Ripple does not want that to happen?

13 A. Ripple wouldn't want its own employees like
14 independently profiting from knowledge that they have
04:38 15 from their employment.

16 Q. Do you know why not?

17 (Pause.)

18 THE WITNESS: I can't really enumerate it
19 any more specifically than that.

04:38 20 BY MR. TENREIRO:

21 Q. Well, how about -- I mean, if XRP holders in
22 the market found out that was happening, would that look
23 bad for Ripple, do you think?

24 MR. CERESNEY: Objection.

04:38 25 THE WITNESS: I could argue it either

04:38 1 way.

2 BY MR. TENREIRO:

3 Q. Well, again, from your participation in
4 social media and things like that, do you have any view
04:38 5 as to whether if the market understood that Ripple
6 employees were -- you know, using intimate knowledge of
7 the sales to their own financial advantage, whether that
8 would -- you know, be perceived positive or negative?

9 A. I think it would cause reputational harm,
04:38 10 probably not directly financial harm.

11 Q. Just reputational harm?

12 A. I think that would cause reputational harm to
13 Ripple.

14 Q. Then, you say:

04:39 15 "These are professional market makers who
16 understand we don't want to kill rallies." What are you
17 referring to by "kill rallies"?

18 A. We didn't want to have an impact on the price
19 of XRP by ourselves.

04:39 20 Q. Then, you say:

21 "or engineered the price but want to sell with
22 minimal impact."

23 A. Yes.

24 Q. So is it fair to say Ripple didn't want -- to
04:39 25 rally is a price increase, right?

04:39 1 A. Right.

2 Q. So Ripple does not -- did not want to sell
3 into a rally such that it would kill the rally?

4 A. Right.

04:39 5 Q. Is that fair?

6 A. We did not want to have a negative price from
7 our sales.

8 Q. Why?

9 A. Because we ... I think at that time, our
04:39 10 concern was that there was -- that there was a dramatic
11 correlation between those types of actions and price,
12 and so the price would track our actions.

13 Q. There was a concern?

14 A. Yeah.

04:40 15 Q. By whom or who had that concern?

16 A. I -- I know I did, from the fact that I wrote
17 this. I don't know that that concern was -- you know,
18 specifically that it was shared.

19 Q. In this post, are you talking on your behalf
04:40 20 or are you talking on behalf of the company? You used
21 the word "we" a number of times.

22 A. Yeah, this is my own, personal -- this is my
23 own personal view that I'm stating here.

24 I don't know that it was shared by other people at
04:40 25 the company.

04:40 1 Q. Now, is it true that Ripple did not have a
2 decision-making authority over timing or volume of
3 programmatic sales?

4 A. My understanding at the time was that we did
04:40 5 not have short-term control over timing or volume.

6 Q. Has your understanding changed since?

7 A. No.

8 Q. Have you since come to understand that Ripple
9 did, in fact, sell into or related to information that
04:41 10 was being released into the market about XRP?

11 A. I'm sorry. Could you repeat that?

12 Q. Have you --

13 Since the date of this post, have you come to
14 understand whether Ripple has in fact sold into the
04:41 15 release of information about XRP? Sold XRP?

16 A. Into the release of -- sorry. I don't
17 understand the question.

18 Q. Yeah, so -- it's poorly worded. Have you --

19 Since the date of this post, have you come to
04:41 20 understand whether Ripple has, in fact, sold XRP in
21 conjunction with its release of information about XRP?

22 A. No.

23 Q. If that were true, would you consider that
24 manipulating the market, as you used the terms here?

04:41 25 MR. CERESNEY: Objection.

04:41 1 THE WITNESS: I would have to look at the
2 facts and circumstances of the particular
3 situation.

4 BY MR. TENREIRO:

04:41 5 Q. What do you mean by "manipulate the markets"
6 in this post?

7 A. What I mean is that Ripple would -- would be
8 using programmatic sales to engineer some particular
9 price.

04:42 10 Q. That would be manipulating the market?

11 A. I believe at the time that that would be,
12 yes.

13 Q. Has that believe changed today?

14 A. I still believe that if Ripple -- if Ripple
04:42 15 sold with the goal of producing particular pricing
16 changes, that that -- I would consider that market
17 manipulation.

18 Q. Let's go to Exhibit 35.

19 (Thereupon, a 10-page printout from
04:42 20 Bitcoin Forum entitled "Latest posts of
21 JoelKatz" dated 5/30/17 was introduced as DS
22 Exhibit 35 for identification.)

23 BY MR. TENREIRO:

24 Q. Let's see if we can get to the end. This is
04:42 25 going to be a Bitcoin Forum. By the way, before you

318

04:42 1 look at it, have I -- is there any forum I haven't
2 covered?

3 So I've covered Reddit, Bitcoin Forum, Xrp Chat,
4 Twitter. Am I missing one?

04:42 5 A. There's a Bitcoin Stack Exchange Forum.

6 But most of those posts are about Bitcoin. They're
7 not as interesting. That would have Ripple-related
8 posts relating to Ripple or XRP?

9 Q. By you.

04:43 10 A. By me? You certainly got the biggest ones.
11 I -- I can't think of any others.

12 MR. TENREIRO: Okay. Good job, guys.

13 THE WITNESS: You got Quora? Quora was
14 on that list, right?

04:43 15 BY MR. TENREIRO:

16 Q. I didn't see it. Quora? Okay.

17 A. If Quora was not on that list, there would
18 probably be quite a bit on Quora.

19 Q. Okay. All right. So now back to this one.

04:43 20 On page 6, there appears to be a response to you on May
21 27, 2017 about -- you know, "FUD."

22 So let's just start -- we've had it at another
23 deposition, but for the record, this one -- what does
24 "FUD" mean?

04:43 25 A. "FUD" is fear, uncertainty, and doubt.

04:43 1 Q. And that's a -- sort of a [inaudible]
2 community term?

3 A. Yes.

4 Q. Something bad, generally speaking?

04:43 5 A. Yes.

6 Q. And bad, because it affects the -- it could
7 potentially could affect the price of an asset?

8 A. Some people might be concerned for that
9 reason.

04:43 10 Q. Why was Ripple concerned? Was Ripple
11 concerned about FUD about XRP?

12 A. Yes.

13 Q. Why?

14 A. Ripple was concerned that people having
04:44 15 misinformation about XRP or Ripple or Ripple's products
16 might discourage them using XRP or Ripple's products,
17 even where that was the best solution to the products
18 they had.

19 Q. So is it fair to say that Ripple undertook
04:44 20 efforts to combat FUD with respect to Ripple or XRP?

21 MR. CERESNEY: Objection.

22 THE WITNESS: I would say I certainly
23 responded to FUD when I saw it and some other
24 people at the company did.
25

04:44 1 BY MR. TENREIRO:

2 Q. Who?

3 A. I know [REDACTED] did at the time. I
4 think Brad did.

04:44 5 Q. Isn't it fair to say that at times, Ripple's
6 communications department instructed you or suggested to
7 you that you might combat FUD by making certain Tweets?

8 A. I think there probably were fewer than a
9 dozen times where Tweets were suggested, and some of
04:44 10 those -- I mean, I can't say right now whether any of
11 those were aimed at combating FUD.

12 Q. Okay, so let me try my question again. Is it
13 fair to say that Ripple undertook efforts, as far as you
14 know, to combat FUD with respect to Ripple or XRP?

04:45 15 A. Ripple employees responded to FUD on social
16 media forums.

17 Q. Okay. Here, you say:

18 "Correct. Ripple has consistently defended the XRP
19 market from dumping by insiders." What do you mean by
04:45 20 "dumping by insiders"?

21 A. By "dumping by insiders," I mean people who
22 received large amounts of XRP either from Ripple or from
23 the creation of the XRP Ledger in the early days selling
24 large amounts.

04:45 25 Q. And what do you mean, "defend the XRP

04:45 1 market"?

2 A. What I mean is that --

3 What I mean is that dumping by insiders could
4 produce people who had very large amounts of XRP that
04:45 5 they didn't have to spend resources to get, and they
6 could use that, for example, to spam the XRP Ledger with
7 large numbers of transactions or other nefarious
8 purposes.

9 Q. You say:

04:46 10 "We've gone to court to do it, and we've negotiated
11 the agreements to do it." Do you see that?

12 A. Yes.

13 Q. Has Ripple gone to court to stop people from
14 spamming the XRP Ledger with transactions?

04:46 15 A. No.

16 Q. Has Ripple gone to court to stop people from
17 selling XRP?

18 A. Yes.

19 Q. That's [REDACTED]?

04:46 20 A. Yes.

21 Q. Okay. Why is that, defending the XRP market,
22 stopping [REDACTED] from selling XRP?

23 A. If someone received a large amount of XRP at
24 a very, very low price, they could use that to spam the
04:46 25 XRP Ledger.

04:46 1 Q. How would -- I'm sorry. Was [REDACTED]
2 spamming the XRP market?

3 A. The concern wasn't that he would. The
4 concern was that someone who bought the XRP from him
04:46 5 could.

6 Q. That they could buy it at a very low price?

7 A. Right, and therefore they would -- the cost
8 to attack the ledger would go down.

9 Q. What was the -- at this time, what was the
04:46 10 cost per transaction?

11 A. At this time -- this was 2017? I believe at
12 this time, the -- there was 20 XRP reserve per account,
13 and the cost per transaction was very, very small, like
14 a hundred-thousandth of an XRP.

04:47 15 Q. A hundred-thousandth? And the smallest unit
16 did you say was one one-millionth?

17 A. Correct.

18 Q. So one one-hundred thousandths of an XRP is
19 called a "drop"?

04:47 20 A. A drop is one one-millionth. A transaction
21 fee was 10 drops, and I think at that time, it was 10
22 drops.

23 Q. At some point, it was 20?

24 A. I don't -- I don't really remember. I
04:47 25 believe it did drop over time, but I can't recall right

04:47 1 now.

2 Q. Okay, so the concern was --

3 Well, the concern with [REDACTED] selling his XRP
4 was that someone could acquire it to spam the XRP
04:47 5 Ledger?

6 A. That someone could acquire it at a very low
7 price, and therefore, the cost to attack the XRP Ledger
8 would go down.

9 Q. Was he selling it at a very low price?

04:47 10 A. I don't know.

11 Q. And how does that defend the XRP market?

12 A. At the time -- at the time -- actually ...

13 There were times when I believed that failures of
14 the underlying ledger technology would affect the
04:48 15 markets for assets, and I either believed that at the
16 time or was expressing that concern here.

17 Q. And were you expressing here that the market
18 should expect Ripple to stand up to stop any such
19 potential attacks on the XRP market?

04:48 20 A. I would hope that someone wouldn't draw that
21 conclusion from this, and what I hoped that they would
22 conclude --

23 And because I said, "by insiders," what I meant was
24 we would take care to ensure we didn't cause those types
04:48 25 of problems; not necessarily we would protect from

324

04:48 1 all -- that we wouldn't be a bad actor, not necessarily
2 that we would affirmatively be some sort of defender.

3 Q. Okay. You wouldn't be a bad actor, because
4 you would be the largest holder of XRP for many, many
04:49 5 years?

6 A. Yes.

7 Q. Okay, and you're still the largest holder of
8 XRP today?

9 A. Yes.

04:49 10 Q. And you expect that to continue for many,
11 many years?

12 A. Yes.

13 Q. Okay, and is there an entity sort of that you
14 know of that does engage in this sort of effort with
04:49 15 respect to Bitcoin?

16 So, for example -- you know, going to court to stop
17 dumping by insiders?

18 MR. CERESNEY: Objection.

19 BY MR. TENREIRO:

04:49 20 Q. Just that you know of.

21 A. Not that I know of.

22 Q. And what about for Ethereum?

23 A. I don't know the role that the various
24 institutions inside the system play.

04:49 25 Q. Okay. Let's look at Exhibit 39, please.

04:50 1 (Thereupon, a 24-page document entitled
2 "Can the first usage of xRapid actually flood
3 the market with XRP? - Page 3 - General
4 Discussion - Xrp Chat" was introduced as DS
04:50 5 Exhibit 39 for identification.)
6 BY MR. TENREIRO:
7 Q. Back to Xrp Chat. This is 2017 -- November
8 of 2017, page 16.
9 (Pause.)
04:50 10 THE WITNESS: Yes.
11 BY MR. TENREIRO:
12 Q. Okay, so you're talking about designing
13 programmatic sales again?
14 A. Yes.
04:51 15 Q. You say:
16 "I admit that I find it" --
17 "I admit that I do find it somewhat difficult to
18 believe that the effect on price is negligible." Are
19 you talking there about programmatic sales?
04:51 20 A. Yes.
21 Q. So is it fair to say that at least in 2017,
22 it is your intuition that Ripple's programmatic sales,
23 despite being -- you know, channeled through experts,
24 had some downward effect on the price of XRP?
04:51 25 A. Yes.

04:51 1 Q. Have you exchanged your mind since then?

2 A. I'm -- I'm less certain now than I was then.
3 It still doesn't seem intuitively right to me.

4 Q. Okay. Why?

04:51 5 A. Just doing back-of-the-envelope math, just
6 calculating the -- the -- just from basically just
7 looking at the percentage of sales of Ripple and trying
8 to forecast without them there.

9 Q. And then, you say, "My own
04:51 10 back-of-the-envelope math suggests that the price is
11 probably about one cent lower now than it would have
12 been if Ripple stopped its programmatic sales one year
13 ago."

14 So just in other words, if Ripple had stopped
04:52 15 selling a year before, perhaps the price of XRP would be
16 one cent higher than it was at the time?

17 A. Yes, and I explained the methodology here,
18 which is reconfiguring the market cap with or without.

19 Q. Then, you say:
04:52 20 "It ignores two ways Ripple sales can put upward
21 pressure on the price." Do you see that?

22 A. Yes.

23 Q. "One is when Ripple releases XRP, the
24 overhang of Ripple" -- sorry -- "the overhang of XRP
04:52 25 Ripple can release in the future is reduced." Do you

04:52 1 see that?

2 A. Yes.

3 Q. Explain, please, what you mean by the
4 "overhang of XRP."

04:52 5 A. By the "overhang" here, I mean the risk that
6 Ripple would sell a large amount of XRP in a short
7 period of time and reduce the short-term price.

8 Q. So as Ripple has less XRP to sell, the risk
9 that Ripple will sell a lot of XRP goes down?

04:52 10 A. Right.

11 Q. And that, you believe, might increase the
12 price of XRP?

13 A. If that overhang is priced in, having a
14 downward effect, then the absence of that overhang could
04:53 15 eliminate that downward effect.

16 Q. Was the escrow, in part, designed to
17 eliminate that overhang effect?

18 A. I think there was a belief that the escrow
19 could reduce that overhang effect.

04:53 20 Q. And do you -- okay. Then, you say:

21 "The second part is when Ripple gets cash for XRP,
22 that increases Ripple's ability to executes on its plans
23 for XRP. If the probability of Ripple's successful
24 execution of its XRP strategy is part of the price of
04:53 25 XRP, then growth in Ripple's reward chat should put

04:53 1 upward pressure on the price."

2 So let me see if I can unpack this part. Are you
3 saying here that to the extent that part of the price of
4 XRP is Ripple's chances of successful execution than if
04:53 5 Ripple has more money to successfully execute a
6 strategy, that could put upward pressure?

7 Is that what you're saying?

8 A. To that extent, yes.

9 Q. Is the probability of Ripple's successful
04:54 10 execution of its XRP strategy part of the price of XRP?

11 A. I have not seen evidence that that is the
12 case.

13 Q. Have you seen evidence that it's not the
14 case?

04:54 15 A. Yes.

16 Q. What evidence?

17 A. Lack of correlation between news that would
18 impact Ripple's successful execution of the strategy not
19 correlating to changes in the price.

04:54 20 Q. And since when did you see that evidence? Is
21 it after this point?

22 A. It was not -- it was not one particular point
23 where that evidence -- it's just a gradual accumulation
24 of evidence that gradually changes my view.

04:54 25 Q. And how --

04:54 1 When you were doing that analysis, did you
2 determine -- you know, which news you would expect to
3 have a price effect that you did not see a price effect?

4 A. We looked at news that we thought would
04:54 5 impact Ripple's perceived probability of success.

6 Q. Who is "we"?

7 A. Myself and other people at Ripple.

8 Q. Be more specific, please.

9 A. I don't recall who the analysis was done by.

04:55 10 Q. Did it -- did the conversations include
11 Mr. Garlinghouse?

12 A. I don't believe Mr. Garlinghouse was involved
13 in the preparation of that information.

14 Q. But the receipt of it? The review of the
04:55 15 final analysis?

16 A. I believe he would have seen it.

17 Q. What about Mr. Larsen?

18 A. I think it's less likely that he would have
19 seen it. He was not as actively involved in the company
04:55 20 at that time.

21 Q. Okay, and we looked at news --

22 I think I'm quoting your answer. "We looked at
23 news that we thought would impact Ripple's perceived
24 probability of success." Why Ripple's as opposed to
04:55 25 XRP's?

04:55 1 A. Well, the question here is whether -- the
2 question you asked about is whether the probability
3 of -- whether changes in the probability of Ripple's
4 successful execution of its XRP strategy is part of the
04:55 5 price of XRP.

6 So for that analysis, you would look at news events
7 that impact the perception of Ripple's successful
8 execution of its XRP strategy.

9 Q. Is it fair to say that sometimes Ripple made
04:56 10 announcements of business activities that did not have
11 to do with XRP?

12 A. Yes.

13 Q. And did you --

14 When you analyzed the effect or lack of effect, did
04:56 15 you consider those news events as moments when you
16 analyzed whether there was a correlation?

17 A. We looked at both of those as two hypotheses.
18 One, that people -- that Ripple's probability of success
19 generally was a factor in the price of XRP and one that
04:56 20 the success of Ripple's XRP strategy affected the
21 price -- was a factor in the price of XRP.

22 So those are two separate hypotheses. One is sort
23 of a subset of other.

24 Q. Yeah, and you've concluded there's no
04:56 25 correlation with respect to both the hypotheses?

04:56 1 A. We were unable to find any consistent
2 correlation. There were one or two incidents where
3 there -- there did seem to be correlation in time and
4 very short-term spikes in price, but not enough to draw
04:56 5 a conclusion.

6 Q. What were those?

7 A. I -- I cannot remember. I -- I know -- I
8 know the instances that we looked at included things
9 like -- things like the MoneyGram partnership
04:57 10 announcement, but I --

11 I don't recall which were the two -- there were two
12 cases where there was a correlation in time. I don't
13 remember what those two incidents were.

14 Q. Was one of them the escrow announcement?

04:57 15 A. I'm sure that's one of the ones we looked at.
16 I don't remember whether that's one of the ones where we
17 did see a short-term increase or not.

18 Q. Who would have the sort of results of this
19 analysis or where is it?

04:57 20 A. I don't know.

21 Q. Does the company have it?

22 A. Yeah, I would assume so, but I don't know for
23 sure.

24 Q. Was listing on the exchanges one of the
04:57 25 events you looked at?

04:57 1 A. We did look at listing on -- listings on
2 exchanges to see if we saw a correlation in price.

3 Q. Do you recall reaching a conclusion?

4 A. My recollection was there was in the early
04:57 5 days, particularly when one listing was -- if
6 cryptocurrency has only two listings, the third listing
7 could be significant, and there were these short-term
8 spikes in price, and then over time, the market didn't
9 seem to care anymore. Even for cryptocurrencies that
04:58 10 had very few listings in the market. The one exception
11 was a cryptocurrency's very first listing.

12 Q. Okay.

13 A. Because there kind of wasn't a price before
14 that, so you almost can't even make a comparison.

04:58 15 Q. What was your first listing?

16 MR. CERESNEY: "Yours" meaning?

17 BY MR. TENREIRO:

18 Q. XRP's.

19 A. XRP's? This is going way back. I think it
04:58 20 might have been a company called [REDACTED], which doesn't
21 exist anymore.

22 Obviously, that was a very significant listing, but
23 there were no significant exchanges at that point at
24 that time.

25

04:58 1 Q. Yeah. The point you're making here, about
2 "When Ripple releases XRP, the overhang of XRP Ripple
3 can release in the future is reduced" --

4 Is that point still true today to the extent that
04:58 5 overhang is priced in Ripple reducing the amount of XRP
6 it holds might have upward pressure on the price?

7 A. To the extent that's produced in, it would
8 have -- it could have some upward pressure.

9 Q. Do you have any views what that's priced in
04:59 10 today?

11 A. It should be, but it's not.

12 Q. What about the second point, the probability
13 of Ripple's successful execution of its XRP strategy? I
14 understand your correlation point.

04:59 15 A. Yeah.

16 Q. Do you have an understanding whether that's
17 priced into the price of XRP?

18 A. I don't think so, because you would expect
19 there to be more of -- if it was priced in, a change in
04:59 20 it should change the extent to what it's priced in, and
21 we haven't seen that.

22 So I think while those are reasonable things to
23 expect, the evidence, surprisingly, doesn't support
24 those views. At least, surprising to me.

04:59 25 Q. And did you consider the impact of Ripple's

04:59 1 sales of XRP into the market that the time as -- you
2 know, whether they would have an effect on price?

3 A. At this time, I personally did that
4 back-of-the-envelope calculation, essentially
04:59 5 imagining -- basically, running a counterfactual where
6 Ripple doesn't engage in those trades and assuming all
7 other trades are equal.

8 Q. Sorry. I think I was not clear. So when
9 you're doing --

05:00 10 You said people at Ripple did analysis of the
11 correlation and found maybe there were a couple
12 instances where there were some, but less correlation
13 than you expected?

14 A. Right.

05:00 15 Q. Okay. When you were doing that analysis, did
16 you sort of control for the fact that Ripple might have
17 been making sales into the market such that those sales
18 might be putting some downward pressure on the price, as
19 you intuitively suggest here?

05:00 20 MR. CERESNEY: Objection to the form.

21 THE WITNESS: I -- I don't know.

22 BY MR. TENREIRO:

23 Q. You don't know if you included that or not,
24 if you controlled for that or not?

05:00 25 A. I did not look closely at the analysis.

05:00 1 Q. Do you think that's something you should look
2 at if you're doing that correlation analysis?

3 MR. CERESNEY: Objection.

4 THE WITNESS: I'm not an economist,
05:00 5 but -- I don't know what you should control
6 for.

7 BY MR. TENREIRO:

8 Q. Okay, and you also don't know who has the
9 company's results of the analysis; is that right?

05:01 10 A. I don't know.

11 Q. Could you figure that out by like searching
12 your e-mail or -- I'm just trying to figure out how I
13 would get my hands on that. Perhaps the wrong use of --

14 MR. CERESNEY: Objection.

05:01 15 MR. TENREIRO: Perhaps the wrong use
16 of --

17 MR. CERESNEY: For several reasons.

18 THE WITNESS: I -- I have a recollection
19 that I saw the report, but it may just be that
05:01 20 it was discussed. I don't know -- I'm not
21 even positive I saw the actual document.

22 I know there was a meeting where the
23 conclusions were discussed. My recollection
24 is that that was [REDACTED] meeting, but I'm
05:01 25 not sure at this point.

05:01 1 BY MR. TENREIRO:

2 Q. Okay. All right. Let's look at Exhibit 52.

3 (Thereupon, a 10-page document entitled "I

4 am David Schwartz, Chief Cryptographer at

05:01 5 Ripple. AMA!" was introduced as DS Exhibit 52

6 for identification.)

7 BY MR. TENREIRO:

8 Q. There's a Reddit, "AMA," meaning "Ask me

9 anything," right?

05:01 10 A. Uh-huh. Yes.

11 Q. Okay, and this appears to be --

12 This is 50 pages, and I've only printed 10 of them

13 to save some trees, and I'm going to ask you about pages

14 3, 6, and maybe 9. Sorry, 8. I believe this is from

05:02 15 2018.

16 (Thereupon, an informal discussion was

17 held off the record.)

18 MR. CERESNEY: Is this printed out in the

19 sequence which the questions and answers

05:02 20 occur? Do you know, Jon?

21 MR. DANIELS: I believe these are

22 uploaded. These are based on votes. It's not

23 really a conversation.

24 MR. CERESNEY: And it --

05:02 25 Would Mr. Schwartz's response be to the

05:02 1 question immediately before? I'm just asking
2 because if it's showing him an excerpt, I just
3 want to make sure the rest of it's not --

4 MR. TENREIRO: My belief --

05:02 5 My understanding is his responses are --
6 as you see here, his responses are the most
7 popular -- you know, upvoted responses to the
8 original post.

9 MR. CERESNEY: Okay, but -- but is --

05:03 10 Can you see the questions to which he's
11 responding in this -- in the printout?

12 MR. TENREIRO: Yeah. It's not questions.
13 He responds to --

14 He can correct me if I am wrong. There's
05:03 15 a post that's made that I believe he started.
16 "I am the Chief Cryptographer and one of the
17 the original architects," and then people
18 comment.

19 There's 520 comments. People start
05:03 20 upvoting the comments that are responding to
21 his post, and then he responds to a comment.

22 MR. CERESNEY: Okay. So what I'm
23 saying --

24 MR. TENREIRO: It's not questions he's
05:03 25 responding to. It's more comments.

05:03 1 MR. CERESNEY: But you have the comment
2 he's responding to in this comment?

3 MR. TENREIRO: Yes. It's right above his
4 post.

05:03 5 BY MR. TENREIRO:

6 Q. Mr. Schwartz, did you understand that to be
7 the presentation as I described it?

8 A. Yes.

9 Q. Okay. So, for example, just to start as an
05:03 10 example, on page 3, in the middle, [REDACTED] says,
11 "Hi, David. [REDACTED] mentioned (in the interview at
12 Google) that 'XRP is not static' and open for
13 improvement. Could you elaborate on the possibilities?"

14 Then you say:

05:04 15 "Ripple has a team of talented developers working
16 on improving the scalability and reliability of the XRP
17 Ledger."

18 I'm not going to read all of it, but just sort of
19 reading that, do you understand that seems to be a
05:04 20 response to the "Hi, David" comment above?

21 A. Yes.

22 Q. Okay, so what are you talking about there?
23 What is Ripple's team of talented developers doing
24 there?

05:04 25 A. Making the ledger more powerful, increasing

05:04 1 its feature set. I cite specifically features like
2 payment channels and escrows that originated at Ripple.

3 Q. On page 6, you say in the middle:

4 "XRapid is our first enterprise product delivering
05:04 5 payments bridged by XRP."

6 Can you explain what that means?

7 A. Yes. The thesis behind xCurrent and the
8 RippleNet strategy was to enable enterprises to bridge
9 payments using XRP. XRapid actually delivered on that.

05:05 10 Q. That was the first time that there was a
11 product that was using XRP, potentially?

12 MR. CERESNEY: Objection.

13 THE WITNESS: That was that first time
14 there was a Ripple product that used XRP to
05:05 15 bridge off ledger payments.

16 BY MR. TENREIRO:

17 Q. As opposed to the exchange we discussed?

18 A. The decentralized exchange, which could
19 bridge on the payments.

05:05 20 Q. Okay, so on page 9, you say:

21 "I think three things really set XRP apart from any
22 other digital asset. One is the amazing team of
23 dedicated professionals that Ripple has managed to
24 unmask the valid ecosystem around XRP."

05:05 25 Why is Ripple's team setting XRP apart from other

05:05 1 assets?

2 MR. CERESNEY: Hold on. I think you said
3 page 9.

4 MR. TENREIRO: It's page 8.

05:05 5 THE WITNESS: Starts on page 8.

6 MR. CERESNEY: Hold on, David. Take a
7 look at that.

8 BY MR. TENREIRO:

9 Q. Yeah, take a look.

05:05 10 A. So the question I'm responding to is really
11 specifically focused on the difference between [REDACTED]
12 and Ripple --

13 Q. Uh-huh.

14 A. -- and the core difference between [REDACTED]
05:06 15 and Ripple is the team that built the ledger went on to
16 work at Ripple.

17 Q. Well, you say:

18 "I think three things really set XRP apart from any
19 other digital asset." You say your testimony is just
05:06 20 setting it apart from [REDACTED]?

21 A. No. I think -- I think I'm -- I think I
22 picked that -- I think one of the reasons I picked that
23 particular thing like to list first and to call out was
24 because of this particular combination of [REDACTED].

05:06 25 But I do agree that you could -- you could make a

341

05:06 1 similar comparison with any other digital asset and
2 there will be differences. You know, there would be
3 differences, so this is also something that will set XRP
4 apart, perhaps not the same extent as other digital
05:06 5 assets.

6 Q. Those include Bitcoin and Ethereum?

7 A. Yes.

8 Q. Let's move on to Exhibit 57.

9 (Thereupon, a 38-page document entitled
05:06 10 "Why the world needs Ripple XRP - Whitepaper"
11 dated January 15, 2020" was introduced as DS
12 Exhibit 57 for identification.)

13 BY MR. TENREIRO:

14 Q. If Ripple sort of disappeared today,
05:07 15 what's -- what's -- what do you think would happen to
16 the ODL product?

17 A. I don't think the ODL --

18 MR. CERESNEY: Objection. Objection. Go
19 ahead.

05:07 20 THE WITNESS: I don't think the ODL
21 product coexist without Ripple, because it's a
22 Ripple product.

23 BY MR. TENREIRO:

24 Q. In what ways does Ripple -- you know, help
05:07 25 the existence of the ODL product?

05:07 1 A. Well, Ripple developed the software. Ripple
2 owns the software. It's a proprietary Ripple product,
3 so someone else who wanted to continue it would have to
4 develop the software themselves to meet the requirements
05:08 5 of the product.

6 Q. Are there other ways in which Ripple makes
7 efforts with respect to the product other than
8 developing the software?

9 A. (No response).

05:08 10 Q. I think you mentioned some partnerships with
11 exchanges. Are there other things that Ripple does with
12 respect to the --

13 A. Ripple pitches the products to customers,
14 gets them to sign contracts and so on.

05:08 15 Q. Relationships with market makers for
16 liquidity on certain corridors?

17 A. For corridors that -- yeah, the rate would
18 not be as high without those market makers.

19 Q. And do you --

05:08 20 Would the product be viable without those
21 product -- those market makers? At least, on the U.S.
22 dollar/Mexican peso corridor?

23 MR. CERESNEY: Objection.

24 BY MR. TENREIRO:

05:08 25 Q. As far as you know?

05:08 1 A. I think the --
2 I think today, the USD/MXN peso corridor would be
3 viable at a lower volume level without -- without Ripple
4 incentivizing the market makers.

05:08 5 Q. And when did that "today" start?

6 A. I would say probably roughly a year ago, but
7 again, I would have to look at the volume number to say.
8 Those payments had to be fairly small. They tend
9 to be around \$300 or so, which means you don't need that
05:09 10 much liquidity in that market.

11 Q. The market makers buy XRP for Mexican pesos?

12 A. Yes.

13 Q. On that side of the tranche?

14 A. Yes. They buy XRP, and they provide the
05:09 15 Mexican pesos that are delivered to the recipient.

16 Q. Where do they get the Mexican pesos from?

17 A. Whatever sources they have. Probably foreign
18 exchange.

19 Q. Like a foreign exchange with a bank or ...

05:09 20 A. I mean, I'm -- I'm speculating. I'm
21 speculating, here.

22 MR. CERESNEY: And so therefore?

23 THE WITNESS: Yeah, I can --
24 I could speculate where they would get
05:09 25 them from, but --

05:09 1 MR. CERESNEY: But you're not going to.

2 THE WITNESS: -- wherever market makers
3 will get Mexican pesos from.

4 BY MR. TENREIRO:

05:09 5 Q. Do you know in this context?

6 A. I don't.

7 Q. Okay. Let's move on.

8 So what I have is Exhibit 57. I wanted you to look
9 at pages 19 and 21, please. This one is called "Why the
05:10 10 World Needs Ripple XRP."

11 A. Yes.

12 Q. You know, in the middle you say:

13 "In practice, we probably have a lot of power right
14 now." Is that power over the Ripple Ledger? Is that --

05:10 15 A. Which page?

16 MR. CERESNEY: Nineteen.

17 THE WITNESS: Yeah, and I clarify
18 precisely what I mean in the next sentence.

19 "We could probably do some evil at the
05:10 20 margins for a short period of time," so
21 that -- that's about sort of short-term
22 operational, yeah.

23 BY MR. TENREIRO:

24 Q. Yeah, but if you did something evil, people
05:10 25 would stop following you, essentially, is what you're

05:10 1 saying?

2 A. Right. We would immediately lose that power.

3 Q. And that's probably still true today, to the
4 extent you have any power?

05:11 5 A. Right.

6 Q. So Ripple's incentivized by sort of market
7 reactions to not do something "evil"?

8 A. Yeah.

9 Q. Later, you say:

05:11 10 "On the other hand, we do hold an awful lot of XRP.
11 We could, for example, crash the market for XRP by
12 selling a huge amount in a short period of time. That
13 will hurt us more than anyone else."

14 Why is that the case? Or why was that the case in
05:11 15 2017?

16 A. Because we hold more XRP than anyone else
17 does.

18 Q. But why would crashing the price help -- hurt
19 you?

05:11 20 A. That could impact the long-term price, which
21 would mean that we couldn't use our XRP for any of the
22 business purposes that we talked about.

23 Q. Including revenue and developing uses?

24 A. It would include all of them.

05:11 25 Q. Is that still true today, that if you did

05:11 1 something to crash the market for XRP by selling a huge
2 amount, that would hurt you more than anyone else?

3 A. I believe so.

4 Q. For the same reasons we just discussed, your
05:11 5 inability -- you couldn't use your XRP for any of the
6 business purposes that we talked about?

7 A. Right.

8 Q. Okay. Then, you say:

9 "Our comment has demonstrated to date precisely the
05:12 10 opposite. We've worked to lock up XRP and we've
11 discussed our plans for how we will release XRP to the
12 world."

13 What do you mean there?

14 A. What I mean is that we've acted in our own
05:12 15 interest.

16 We haven't -- we haven't done long-term damage to
17 the XRP ecosystem, because we have an incentive not to
18 do that.

19 Q. Later, you say:

05:12 20 "If you think we will be good stewards and our
21 plans are likely to build them in, then you will tend to
22 expect the price to go up."

23 Please explain that.

24 (Pause.)

05:12 25 THE WITNESS: I think at that time I did

05:13 1 believe the prices were responsive or would be
2 responsive to -- to specific factors of the
3 individual projects.

4 BY MR. TENREIRO:

05:13 5 Q. And why you expressing these views publicly?
6 (Pause.)

7 BY MR. TENREIRO:

8 Q. Other than to annoy Mr. Ceresney?

9 MR. CERESNEY: If you recall.

05:13 10 (Pause.)

11 THE WITNESS: I mean, I ... I don't know
12 why I was saying that in this particular
13 context at this -- at that time.

14 BY MR. TENREIRO:

05:13 15 Q. Okay. Are you aware of Ripple pausing or
16 stopping programmatic sales to stabilize the price of
17 XRP?

18 A. I am aware that Ripple paused programmatic
19 sales at some point. I'm not sure why.

05:14 20 Q. Are you aware of any programmatic purchases
21 to stabilize and increase the price of XRP?

22 A. No.

23 Q. Okay.

24 A. Well, I'm -- I am aware -- programmatic
05:14 25 purchases? No.

05:14 1 Q. Okay. Let's put that aside, Mr. Schwartz.
2 At any point --

3 At any point in time -- and then we can be more
4 specific, but at any point in time, did you have a view
05:14 5 as to whether increasing the use cases for XRP could
6 increase its demand?

7 A. Yes.

8 Q. Do you still hold that view today?

9 A. I hold the view that that may become true at
05:14 10 some time in the future but is not currently true and
11 hasn't been in most -- in the past.

12 Q. Then it could become true that increasing the
13 use cases for XRP could potentially increase the demand
14 for XRP?

05:15 15 A. Yes, at some future point.

16 Q. Is Ripple still engaged in efforts to
17 potentially increase the use for XRP?

18 MR. CERESNEY: Objection. Objection.

19 BY MR. TENREIRO:

05:15 20 Q. Okay.

21 A. Ripple is still -- has -- still has engineers
22 who are developing the XRP Ledger, but Ripple releases
23 software that enables people to use the XRP ledger and
24 so on.

05:15 25 Q. So is that a "yes"?

05:15 1 A. Yes.

2 MR. CERESNEY: I think he's answered the
3 question.

4 BY MR. TENREIRO:

05:15 5 Q. Well, is Ripple still engaged in efforts to
6 potentially increase the uses?

7 I just want to understand whether releasing
8 software that enables people to use the software
9 ledger --

05:15 10 Are you saying that also could increase the use of
11 XRP itself?

12 A. It --

13 MR. CERESNEY: So -- hold on. Objection
14 to the form. I think that was a compound
05:15 15 question.

16 If you can rephrase the question, he can
17 answer the question.

18 BY MR. TENREIRO:

19 Q. All right, so my question was: Is Ripple
05:16 20 still engaged in efforts to potentially increase the use
21 for XRP?

22 Your answer -- paraphrasing -- was about engineers
23 enabling people to use the software ledger, so my
24 question is slightly different.

05:16 25 Is Ripple still engaged in efforts to potentially

05:16 1 increase the use of XRP itself?

2 MR. CERESNEY: Objection.

3 THE WITNESS: I listed things that we're
4 doing. I don't know that I would characterize
05:16 5 them that way.

6 BY MR. TENREIRO:

7 Q. How would you characterize those?

8 So releasing software, for example, that enables
9 people to use the software ledger, you would not
05:16 10 characterize it as potentially increasing the use of XRP
11 itself?

12 A. I -- I would say that making it easier for
13 people to use the XRP Ledger could increase their use of
14 the XRP Ledger or XRP itself.

05:16 15 Q. Is it your testimony Ripple currently is more
16 focused on increasing the use of the XRP Ledger than the
17 use of XRP?

18 (Pause.)

19 THE WITNESS: I don't know that I said
05:17 20 that, but I would agree with that statement.

21 (Thereupon, a 34-page document entitled
22 Ripple: 'The fundamental Value of XRP' - Page 5
23 - Press - Xrp Chat" was introduced as DS Exhibit
24 40 for identification.)

05:17 25 BY MR. TENREIRO:

05:17 1 Q. Let's look at Exhibit 40, please, another
2 chat from December 2017.

3 MR. CERESNEY: What page are we on?

4 MR. TENREIRO: This one will be 17.

05:17 5 (Pause.)

6 BY MR. TENREIRO:

7 Q. It seems like the post is or the comment is:
8 "My basic understanding is that a higher price for
9 XRP will create more liquidity, less friction, and
05:18 10 greater capacity in the network. I know using XRP=good,
11 but can an expert please educate us, technologically
12 speaking?"

13 And I think you responded:

14 "A higher price tends to correlate with more
05:18 15 liquidity. It's not really a direct cause and effect
16 relationship, but they tend to move in tandem."

17 What is the base for that statement?

18 A. As I've explained --

19 Actually, I've explained that in several other
05:18 20 places, but the idea is that the higher the value of an
21 asset is, there tends to be more liquidity.

22 It's easiest to understand if you think of very
23 extreme cases, like trying buy a house with Bitcoin when
24 Bitcoin was a dollar versus when Bitcoin was \$60,000.

05:18 25 Q. You need fewer Bitcoins?

05:18 1 A. Right, and therefore, the market can more
2 easily supply them, even though it's the same price
3 value, yeah.

4 Q. You say next:

05:18 5 "The ideal situation for Ripple would be an
6 increasing price over the long term with few downward
7 spikes." Why? Why do you say that?

8 A. Because that would maximize the value that
9 Ripple would be able to get for the XRP it holds, and it
05:19 10 would also increase other people's desire to receive XRP
11 to incentivize partnerships and so on.

12 Q. Would it also increase Ripple's revenue, as
13 you say in the next statement?

14 A. Yes. A long-term increase in price would
05:19 15 increase the value that Ripple could get themselves.

16 Q. Later, you say:

17 "This is my kind of dream scenario for XRP.
18 Companies that have to make payments around the world
19 buy XRP at below market by facilitating other people's
05:19 20 payments and using XRP to make payments below market,
21 because they only have to pay from the 'from XRP' half.

22 All those piles of XRP people are holding increase
23 demand, increasing price, reducing the holding cost of
24 XRP to zero or negative."

05:20 25 So are you explaining here that as companies might,

05:20 1 for example, buy XRP in something like an ODL
2 transaction, that would increase the demand and
3 therefore the price of XRP?

4 MR. CERESNEY: Objection.

05:20 5 THE WITNESS: No, that's not what I'm
6 saying.

7 BY MR. TENREIRO:

8 Q. What are you saying?

9 A. I'm saying that if people held XRP to make
05:20 10 their payments, that would increase the value of XRP.

11 Q. And the price? Increased demand, increasing
12 price, correct?

13 A. Well, preventing a decrease in price.

14 Q. So even though it says here "increasing
05:20 15 price," you mean -- what you're saying is you mean at
16 least keeping the price the same?

17 A. Right, and that's why I say, "holding cost of
18 XRP to zero," warning. The concern is that it not be
19 dropping in price, not that it necessarily be increasing
05:20 20 in price.

21 Q. Later, you say:

22 "Ripple's preferred price of XRP is as high as
23 possible, preferably increasing."

24 A. Right.

05:21 25 Q. What do you mean there?

05:21 1 A. If the price -- I don't believe this is a
2 possible scenario, but if the price of XRP were reliably
3 increasing over the long term, that would not only
4 maximize what Ripple could get by selling their XRP but
05:21 5 also the holding cost of the XRP would be zero or
6 negative. There would be no obstacle as using XRP as a
7 payment source.

8 Q. Let's look at Exhibit 58, please.
9 (An informal discussion was held off the
05:21 10 record.)

11 (Thereupon, a three-page document entitled
12 "Considering that the banks don't use XRP coins
13 for their transactions, how can the XRP price go
14 high even if the banks adopt the Ripple
05:21 15 platform?" dated 11/12/17 was introduced as DS
16 Exhibit 58 for identification.)

17 BY MR. TENREIRO:

18 Q. Towards the bottom, you say:
19 "If Ripple is successful getting XRP used as a
05:22 20 vehicle asset in international payments, new corporates
21 like AirBNB" -- I'm skipping the parenthetical -- "could
22 significantly add to the demand for XRP."

23 Do you see that part?

24 A. Yes.

05:22 25 Q. What do you mean there? Well, let me try to

05:22 1 short-circuit this -- you know, but please answer fully.

2 Is this the same concept we discussed about if
3 someone needs to utilize the asset, that could increase
4 its demand for the asset?

05:22 5 A. Yes, this is the same idea.

6 Q. Later, you say at the bottom:

7 "These forces could be expected to increase the
8 price of XRP."

9 So is this an -- is there an expression of the idea
05:22 10 that this demand could also lead to an increase in the
11 price of XRP?

12 A. Yes.

13 Q. Then, you say:

14 "At least, that's what Ripple's betting on. After
05:23 15 all, the reason we're doing this is to increase the
16 demand for XRP to increase the value we can extract from
17 our stash of XRP."

18 Do you see that?

19 A. Yes.

05:23 20 Q. What did you mean, "the value we can
21 extract"?

22 A. I can't tell you, sitting here today, what I
23 meant four years ago in that sentence.

24 Q. Does Ripple itself use XRP to bridge
05:23 25 payments?

05:23 1 A. The ODL product does. That's a Ripple
2 product, so Ripple's customers. Yeah, there's an
3 interaction there.

4 Q. Right, and so MoneyGram -- let's -- I know.
05:24 5 When MoneyGram was using ODL -- you know, they were
6 relying on the ODL product to sort of, I guess, further
7 their business, one might say?

8 A. Right.

9 Q. But was Ripple -- you know, engaged in this
05:24 10 type of -- those type of transactions itself?

11 A. Not to my knowledge.

12 Q. Okay. To the extent -- you know, banks might
13 use the xCurrent product, is Ripple itself using that
14 platform as opposed to selling it or licensing it?

05:24 15 A. No.

16 (Thereupon, a Ripple document entitled
17 "Where a community about your favorite things is
18 waiting for you" dated 22 Jun 2017 was
19 introduced as DS Exhibit 59 for identification.)

05:24 20 BY MR. TENREIRO:

21 Q. Okay. Let's take a look at Exhibit 59. This
22 has a lot of pages. I'm just going to ask you about the
23 first one.

24 A. Yes.

05:25 25 Q. Why are you talking about "how big you want

05:25 1 to dream" here?

2 The question is: "Mathematically speaking, what is
3 the highest price Ripple could potentially get to?" and
4 you start by saying, "It all depends how big you want to
05:25 5 dream."

6 A. Yes.

7 Q. Why would you be dreaming about how high the
8 price -- it says "Ripple" here, but I assume it's really
9 a reference to XRP?

05:25 10 A. Yeah. I'm not sure of the date on this.

11 Q. June -- June 2017.

12 A. Yeah, I believe I assumed they meant XRP.

13 Q. Why?

14 A. Because I don't know what else would have a
05:25 15 price.

16 Q. So you're talking about dreaming big with
17 respect to the price of XRP?

18 A. As I understood the question, mathematically
19 speaking -- it requires a sort of mathematical analysis,
05:25 20 and in order to do that, you have to sort of --

21 In talking about how high something can go, you
22 have to sort of imagine -- you have to construct -- you
23 have to construct scenarios from the most plausible to
24 the -- you know, less plausible.

05:26 25 Q. Were you ever instructed by someone at Ripple

05:26 1 not to tout XRP as potentially increasing in price?

2 MR. CERESNEY: Objection.

3 THE WITNESS: Not that I recall.

4 BY MR. TENREIRO:

05:26 5 Q. Did you have an understanding that sort of
6 talking about potential increase in price could make XRP
7 more attractive to investors or speculators?

8 MR. CERESNEY: Objection.

9 THE WITNESS: I think it stands to reason
05:26 10 that talking to -- that talking about an
11 increase in price would be make something more
12 attractive to speculators.

13 BY MR. TENREIRO:

14 Q. Did that matter to you either way?

05:26 15 A. No. I just answered the question.

16 Q. The question that the person posed?

17 A. Yes.

18 Q. Did you -- you know, understand whether
19 making this kind of statement could have consequences in
05:26 20 terms of the legal status of XRP under the U.S.
21 securities laws?

22 A. I'm sure I wasn't thinking about that at the
23 time.

24 Q. Okay. Let's go to Exhibit 61, and then we'll
05:27 25 take a break.

05:27 1 (Thereupon, a four-page document entitled
2 "Forbes - The Bear Case for XRP - Page 3 - Press
3 - Xrp Chat" was introduced as DS Exhibit 61 for
4 identification.)

05:27 5 BY MR. TENREIRO:

6 Q. Exhibit 61 is, I think, an excerpted chat.
7 Let's see. "Forbes - The Bear Case for XRP." Do you
8 recall that article in Forbes?

9 A. Yes.

05:27 10 Q. Okay. It's on page 3. On December 20th,
11 2017, you say:

12 "There are a few technical errors, but I think the
13 key thing is to look at his thesis."

14 A. Yes.

05:27 15 Q. "He seems to concede that Ripple is building
16 a better payments system that banks will use." I'm
17 skipping. Then, you say:

18 "Nevertheless, he's arguing that despite being able
19 to build massive payments volume, having influence over
05:27 20 almost every aspect of the system, with a phenomenal
21 team, a warchest with a notional value in the tens of
22 billions, and every incentive to make it happen, and we
23 still won't be able to get XRP to be used as a
24 settlement asset."

05:28 25 Then, you kind of have what I will describe as sort

05:28 1 of a rhetorical conclusion to your statement. What do
2 you mean by "influence over almost every aspect of the
3 system"?

4 A. I believe what I meant there was this was
05:28 5 specifically talking about Ripple's payment network, and
6 I meant we choose the customers. We write the software.
7 We develop the software.

8 Even -- you know, RippleNet is a Ripple product.
9 It's -- it's inside Ripple's control in ways that the
05:28 10 XRP Ledger is not.

11 Q. The "warchest with a notional value in the
12 tens of billions" -- does that refer to the holdings of
13 XRP that Ripple had?

14 A. That refers to multiplying the current price
05:28 15 of XRP times the amount of XRP that Ripple had. That's
16 why I say, "notional."

17 Q. Then "every incentive to make it happen."
18 What does that refer to, that sentence?

19 A. That was Ripple's strategy at the time, was
05:29 20 to build that payment network. That was what we were
21 focused on.

22 Q. I just want to understand.

23 When you say, "incentives," are you talking
24 financial incentives or is there something else there
05:29 25 that's incentivizing Ripple? For example, does it

05:29 1 include reputational incentives?

2 A. I think it would, but I think I was
3 primarily --

4 I think I had financial incentives in mind there,
05:29 5 but certainly, other type of incentives probably to a
6 lesser extent as well.

7 Q. Could you --

8 If you have any in mind, could you give them to me,
9 please? Other type of incentives that are not financial
05:29 10 ones?

11 A. Initially -- initially, all I was thinking
12 about financial incentives, yes.

13 Q. Okay.

14 A. But there are also reputational incentives as
05:29 15 well.

16 MR. TENREIRO: All right. Let's take a
17 break. I just want to see how much time we
18 have left.

19 THE VIDEOGRAPHER: Going off the record,
05:29 20 5:29.

21 (Recess taken at 5:29 p.m.)

22 (Resumed at 5:45 p.m.)

23 THE VIDEOGRAPHER: Back on the record at
24 5:45.

25

05:45 1 BY MR. TENREIRO:

2 Q. So Mr. Schwartz, is it fair to say over the
3 course of certain years, you held the view that Ripple's
4 efforts to develop a use for XRP might potentially
05:46 5 increase demand and therefore the price of the asset?

6 A. There were times when I believed that -- that
7 the price and demand could be influenced by what Ripple
8 was doing to build a use case for XRP.

9 Q. Is it fair to say that, as we've seen over
05:46 10 the course of some exhibits today, you expressed that
11 belief publicly on a number of occasions?

12 A. Yes.

13 Q. Okay. Based on your interactions aligned
14 with people interested in the XRP markets or in Ripple
05:46 15 generally, did you come to any conclusions as to whether
16 individuals who participate in this market had come to a
17 adopt your own belief that price could be influenced by
18 what Ripple was doing to build a use case for XRP?

19 A. I don't know.

05:47 20 Q. Okay. Did you at times have a concern as to
21 when XRP or the sales of XRP, to be more precise, could
22 be deemed to be the sales of a security under U.S.
23 federal law?

24 A. Yes.

05:47 25 MR. CERESNEY: Objection.

05:47 1 BY MR. TENREIRO:

2 Q. When did that concern arise?

3 A. It would have been as soon as I would -- it
4 would have been shortly before this litigation
05:47 5 commenced.

6 Q. What about with -- shortly before this
7 litigation commenced? Okay.

8 Did you have a concern that XRP sales being deemed
9 the sales of a security would harm Ripple's ability to
05:47 10 sell XRP?

11 MR. CERESNEY: Objection.

12 By the way, you can answer this if it's
13 not influenced by discussions with counsel.

14 THE WITNESS: I didn't know that it
05:47 15 could -- that it could cause harm, but I was
16 concerned that it could potentially.

17 BY MR. TENREIRO:

18 Q. In terms of the ability to sell specifically
19 or other harm?

05:48 20 A. Well, I didn't know -- let me back up a
21 little bit.

22 It's always been an objective for both Ripple and
23 myself through Ripple to distribute XRP, and we don't
24 have an effective distribution currently other than
05:48 25 sales.

05:48 1 So if our ability to sell XRP is impacted, then we
2 would have no other way to distribute it, and that would
3 essentially freeze the distribution of XRP.

4 Q. Have you ever had an effective distribution
05:48 5 mechanism other than sales?

6 A. Yes.

7 MR. CERESNEY: Objection.

8 BY MR. TENREIRO:

9 Q. What was that? The giveaways?

05:48 10 A. The giveaways.

11 Q. That was in what year?

12 A. I believe they --

13 Well, they must have started in early 2012, but I
14 think they geared up more -- you know, in 2013 or so.

05:48 15 Q. Did they stop at some point?

16 A. Yes.

17 Q. When?

18 A. I believe the GitHub giveaway was the last
19 giveaway we did, but I don't recall the timeline.

05:49 20 Q. Other than the giveaways and the sales, has
21 Ripple ever had another effective distribution method
22 for XRP?

23 A. I would say --

24 I would say using it to invest would be another one
05:49 25 and then giving it to partners to incentivize -- you

05:49 1 know, various different behaviors.

2 (Thereupon, an informal discussion was
3 held off the record.)

4 BY MR. TENREIRO:

05:49 5 Q. A moment ago, you said you don't have an
6 effective distribution other than sales.

7 So are you saying at some point, you had an
8 effective distribution method such as investing, but you
9 don't have that anymore?

05:49 10 A. I -- I think that to the extent that -- I --
11 yeah, I -- I'm not being very precise. Let me be a
12 little more precise.

13 I would expect that if it impacted our ability to
14 sell XRP, it would also impact our -- I think "sell"
05:50 15 would be broad enough to cover those other forms of
16 distribution that would impact as well. I don't think
17 it would discriminate in fact some of those means of
18 distribution and not others.

19 Q. Some of them are sales for other -- let's say
05:50 20 like cash or fiat. Some of them are distributions as
21 investments or partnerships? That's what you mean?

22 A. Right.

23 Q. Okay, and if I mention something -- you know,
24 if I say, "the Perkins Coie memos," do you know what I'm
05:50 25 talking about?

05:50 1 A. Yes.

2 Q. What's that?

3 A. There were two memos that Perkins Coie
4 prepared for -- I believe it was OpenCoin at the time
05:50 5 but eventually became Ripple, an opinion on the legal
6 risks and implications of what -- what OpenCoin became
7 Ripple was planning to do at that time.

8 Q. Did you read those memos?

9 A. I was given one of those two memos at the
05:50 10 time, and I believe I read it briefly at the time, but
11 I -- I didn't look at it closely.

12 Q. So is it fair to say that because you didn't
13 look at it closely, after reading it -- well, did you --

14 After reading it, however closely you read it, did
05:51 15 you have any concern as to whether sales of XRP could be
16 sales of securities under U.S. law?

17 A. That was not a concern of mine at that time.

18 Q. Okay. Did you ever share those memos with --

19 Did you ever share either of the memos with
05:51 20 anybody?

21 A. I didn't.

22 Q. Did anyone else at Ripple?

23 A. My understanding was that at least one of
24 those memos was -- was intended to be shown to potential
05:51 25 investors, but I don't know for sure that it was

05:51 1 actually shown to them or which.

2 Q. Where are the memos like kept? Are they on
3 like a share drive somewhere at Ripple?

4 A. I don't know.

05:51 5 Q. If you wanted to look for them now, what
6 would you do?

7 A. I would look on the -- the Google documents
8 on the Google drive that I have access to.

9 Q. That's a shared Ripple Google drive?

05:51 10 A. Yes.

11 Q. Do you know if they are there or not?

12 A. I have not searched for them.

13 Q. I just want to make sure I understand what
14 you're saying. You are saying they could be there; you
05:52 15 just haven't looked?

16 A. Right.

17 Q. Are there other legal memos in there?

18 A. I have not searched for any legal memos, so I
19 don't know.

05:52 20 Q. Does Mr. Garlinghouse have access to that
21 drive?

22 A. I don't know.

23 Q. Well, he's your direct report, so have you
24 ever like put a document in it for him to look at?

05:52 25 Sorry. You report to him, rather?

05:52 1 A. The way I would do it is I would generally
2 designate particular people to have access to the
3 document as opposed to a group generally.

4 So it could be the document is there but he wasn't
05:52 5 given access to it, for example.

6 Q. Did you engage in efforts --

7 Did you assist Ripple in efforts with respect to
8 getting exchanges to list XRP?

9 (Pause.)

05:52 10 THE WITNESS: The only thing that I ever
11 did to assist exchanges in listing XRP is
12 respond to technical questions that they may
13 have had, at least to my recollection.

14 BY MR. TENREIRO:

05:53 15 Q. Did Ripple engage in efforts to get exchanges
16 to list XRP?

17 A. I believe --

18 I believe employees of Ripple talked to exchanges
19 about listing XRP.

05:53 20 Q. Why?

21 A. I think the hope was that more listings would
22 open up additional corridors for ODL.

23 (Thereupon, an e-mail chain with the top
24 e-mail dated 7/13/18 from Brad Garlinghouse to

05:53 25 [REDACTED] et al., "Subject: Coinbase

05:53 1 decision" was introduced as Exhibit DS 63 for
2 identification.)

3 BY MR. TENREIRO:

4 Q. Let's look at Exhibit 63. This is a one-page
05:53 5 e-mail from Mr. Garlinghouse to you. July 13th, 2018 at
6 the bottom.

7 He says, "The more I process Coinbase's decision,
8 the more I think we need to get more aggressive and
9 educate the industry on key variables that are
05:54 10 apparently getting little attention."

11 What is Coinbase's decision?

12 A. I believe this was Coinbase's decision not to
13 list XRP, but I'm not sure.

14 Q. Why did Ripple care about that decision?

05:54 15 A. Because Coinbase's decision was based on a
16 decision that it was not decentralized.

17 Q. And did you become more aggressive in
18 educating the industry on key variables after that?

19 A. I think we were aggressive beforehand and
05:54 20 aggressive afterwards. I don't know that there was any
21 specific change.

22 Q. Were you aggressive in terms of messaging
23 your views about whether or how much the XRP Ledger was
24 decentralized?

05:55 25 A. I think that's a fair characterization of my

05:55 1 social media postings.

2 Q. And was Ripple aggressive on that point as
3 well, beyond just your postings?

4 MR. CERESNEY: Objection.

05:55 5 MR. GERTZMAN: Objection to the form.

6 THE WITNESS: Ripple did circulate a
7 number of documents, discussing the
8 decentralization parameters and the status of
9 the XRP Ledger.

05:55 10 BY MR. TENREIRO:

11 Q. What was the purpose of distributing these
12 documents?

13 A. The purpose of distributing those documents
14 was to ensure that market actors like Coinbase had
05:55 15 accurate information when they made these kind of
16 decisions.

17 Q. And why did Ripple care about that?

18 MR. GERTZMAN: Objection to the form.

19 THE WITNESS: Ripple was working to
05:55 20 increase utility, liquidity, and adoption of
21 the XRP Ledger at the time and concerns about
22 centralization were a drag on adoption.

23 BY MR. TENREIRO:

24 Q. At the top, Mr. Garlinghouse says --
05:56 25 essentially paraphrasing, he wanted everyone's help

05:56 1 understanding what happened, and what the implications
2 are, and what we can do to attack the problem.

3 Do you see that?

4 A. Yeah, I see that now.

05:56 5 Q. Did you come to a conclusion as to what the
6 implications of Coinbase's decisions could be for Ripple
7 or XRP?

8 A. I don't know if it was a consequence of this,
9 but at some time, we were concerned -- we were hoping
05:56 10 that Coinbase might be an ODL partner -- obviously, if
11 they don't list the asset.

12 It's hard for me to say in time, but -- that
13 certainly would have been a major concern at one point
14 in time, but I don't remember if that was specifically
05:56 15 connected with this decision.

16 Q. Let's look at Exhibit 64, please.

17 (Thereupon, an e-mail chain with the top
18 e-mail dated 7/14/18 from Brad Garlinghouse to
19 Chris Larsen et al. document was introduced as
05:57 20 DS Exhibit 64 for identification.)

21 BY MR. TENREIRO:

22 Q. All right. So this is a Saturday, July 14th
23 e-mail, so it's the day after the e-mail we just looked
24 at. Mr. Garlinghouse e-mails you and Mr. Larsen,
05:57 25 "Agenda Bullet Points."

05:57 1 Do you know why he was e-mailing you and
2 Mr. Larsen?

3 A. No.

4 Q. Below, [REDACTED] writes:

05:57 5 "Exchanges, U.S., Kraken, Bittrex" -- I'm skipping,
6 obviously. Further down, it says "HBUS."

7 What is "HBUS"?

8 (Pause.)

9 THE WITNESS: I don't -- I don't know.

05:58 10 BY MR. TENREIRO:

11 Q. Do you see where it says "Not listing at the
12 moment due to litigation and lack of legal opinion from
13 us"?

14 Do you see that?

05:58 15 A. Yes.

16 Q. Then it says "itBit -- need regulatory
17 clarity." Do you see that?

18 A. Yes.

19 Q. Did you come to understand exchanges -- at
05:58 20 least some exchanges did not list XRP because of lack of
21 a legal opinion from Ripple?

22 A. I was -- I was not aware that was an issue
23 with any exchange until I saw this document.

24 Q. So in 2018 or do you mean now?

05:58 25 A. Now.

05:58 1 Q. Okay. Did you ever discuss that issue with
2 anyone?

3 A. No.

4 Q. Do you know if Ripple provided legal opinions
05:58 5 to these exchanges?

6 A. I don't.

7 Q. Did there come a point in time that you
8 believed XRP was not a security because of the FinCEN
9 settlement?

05:59 10 MR. CERESNEY: Objection.

11 THE WITNESS: I -- I did believe XRP not
12 a security both before and after the
13 settlement.

14 BY MR. TENREIRO:

05:59 15 Q. So the FinCEN settlement does not change your
16 view?

17 A. The FinCEN settlement was consistent with my
18 view, and so I became perhaps more firmly convinced, but
19 it did not significantly change my view.

05:59 20 Q. And what knowledge of the securities law did
21 you have such that you came to that conclusion after the
22 FinCEN settlement?

23 A. Only what I saw from what people discussed on
24 social media regarding the cryptocurrency space.

05:59 25 Q. And the base of forever your view before the

05:59 1 FinCEN settlement that was not a security was also based
2 on what you saw on social media regarding the
3 cryptocurrency space?

4 A. Yes.

05:59 5 Q. Was it based on conversations with lawyers at
6 all?

7 A. No.

8 Q. At some point in time -- let's go to Exhibit
9 80.

06:00 10 (Thereupon, a two-page e-mail chain with
11 the top e-mail dated 6/20/18 from [REDACTED]
12 to [REDACTED]@ripple.com was introduced as DS Exhibit
13 80 for identification.)

14 (An informal discussion was held off the
06:00 15 record.)

16 BY MR. TENREIRO:

17 Q. It's a two-page -- I think it's sort of a
18 Google Docs compendium.

19 A. Yes.

06:00 20 (Pause.)

21 BY MR. TENREIRO:

22 Q. You say:

23 "I think it would make sense to list some of the
24 factors Hinman cited on this chart, particularly the
06:00 25 ones that we do well on."

06:00 1 Do you see that?

2 A. Yes.

3 Q. What are the factors Hinman cited? What are
4 you talking about?

06:00 5 A. I don't recall.

6 From this document, it says Hinman cited some
7 factors on a chart, so I presume I had that in front of
8 me, but I don't recall.

9 Q. "Hinman" being an SEC person?

06:00 10 A. Yes.

11 Q. Are you aware that he made a speech sometime
12 around June 2018 about the status of Ethereum?

13 A. Yes.

14 Q. Did you read it?

06:01 15 A. No.

16 Q. Okay. So here you are sort of preparing some
17 document, it seems?

18 A. I think that was more just making
19 suggestions.

06:01 20 Q. Suggestions for what?

21 (Pause.)

22 BY MR. TENREIRO:

23 Q. Well, who is [REDACTED]?

24 A. My recollection is that [REDACTED] worked for
06:01 25 Ripple Comms at the time.

06:01 1 Q. It says:

2 "Warren and David: Can you please help populate
3 this chart with the criteria and data points? Ideally,
4 we want to tell the story that if we believe Bitcoin and
06:01 5 Ethereum are decentralized, then the facts also point to
6 the XRP Ledger being decentralized."

7 A. Yes, I see that.

8 Q. Okay. So does this refresh your memory as
9 to -- who were you telling the story to?

06:02 10 A. I -- I -- I think anyone -- anyone,
11 particularly regulators.

12 Q. So you prepared talking points for
13 regulators?

14 A. I wouldn't say it was -- I wouldn't say it
06:02 15 was talking points, but it was more just an analysis of
16 how we -- how we felt XRP -- the XRP Ledger did on the
17 Hinman factors.

18 Q. But you didn't read the Hinman factors?

19 A. I believe I had that chart, so I knew what
06:02 20 the factors were. But I did not review them in detail,
21 so it looks like I selected certain factors from
22 those -- from that.

23 Q. Why are you selecting particularly the ones
24 that "We do well on," and I -- I mean -- I presume "we"
06:02 25 means XRP?

06:02 1 A. Yeah. I do sometimes think because of my
2 involvement with the XRP Ledger from the early days, I
3 sometimes do -- I kind of think of it like in a
4 person -- in that personal way.

06:02 5 Q. Okay. Why are you selecting particularly the
6 ones that XRP does well on?

7 A. At the time, there were a number of factors
8 that people considered relevant for decentralization,
9 some of which that I felt were relevant and many of
06:03 10 which that I felt were a distraction -- were not very
11 relevant. And in particular, I felt that the ones that
12 were relevant were ones by which the XRP Ledger did
13 extremely well.

14 Q. As to whether it was centralized or not?

06:03 15 A. Yes, that's correct.

16 Q. And then you go -- you know, you list some
17 questions and answers, but you don't answer the last --
18 the last one on this page:

19 "Are independent actors setting the price or is the
06:03 20 promoter supporting the secondary market for the asset
21 otherwise influencing trading?"

22 Why didn't you answer that one?

23 A. I didn't feel like I was the person to answer
24 that, but I felt that that was a factor we should
06:03 25 address.

06:03 1 Q. And was that factor --

2 Did Ripple or XRP do well on that factor at that
3 time, in June of 2018?

4 A. Yes, there were a number of exchanges listing
06:03 5 XRP, and that was a robust secondary market.

6 (Pause.)

7 MR. TENREIRO: One second.

8 (Thereupon, an informal discussion was
9 held off the record.)

06:04 10 (Thereupon, an e-mail dated 7/23/18 from
11 [REDACTED] to Brad Garlinghouse et al. was
12 introduced as DS Exhibit 66 for identification.)

13 BY MR. TENREIRO:

14 Q. Let's look at Exhibit 66, please. On Exhibit
06:04 15 66, there's this "GDAX." Can you state for the record
16 what is GDAX?

17 A. GDAX is a digital asset exchange.

18 Q. And what participation, if any, did you have
19 with -- you know, this application?

06:05 20 A. I believe this particular one I just
21 reviewed.

22 Q. Okay. Seems like there's an attachment here,
23 "Supplemental Documentation, B5 Legal Opinion"?

24 A. It says so here, yes.

06:05 25 Q. What legal opinion was this?

06:05 1 A. I don't know.

2 Q. What other exchange received a legal opinion
3 from Ripple?

4 A. I don't know of any exchange receiving a
06:05 5 legal opinion.

6 Q. What exchanges did Ripple represent to that
7 it had received a legal opinion to?

8 A. I don't know.

9 Q. Why would Ripple provide a legal opinion or
06:05 10 as to what would Ripple provide a legal opinion to these
11 exchanges?

12 MR. CERESNEY: Objection. He just said
13 he doesn't know of any legal opinion being
14 provided.

06:05 15 MR. TENREIRO: And I asked, "Why would
16 Ripple provide a legal opinion?"

17 MR. CERESNEY: Can you answer the
18 question?

19 THE WITNESS: Not without speculating.

06:06 20 MR. GERTZMAN: Objection.

21 BY MR. TENREIRO:

22 Q. Do you know this reference, "B5 legal
23 opinion"? Do you know what it is?

24 A. I don't.

25

06:06 1 Q. Okay. Let's move on. Do you know what the
2 [REDACTED] is?

3 A. I believe that's a company that Ripple had
4 used as a -- either for public relations or
06:06 5 communications.

6 Q. Okay. Why did Ripple hire them?

7 MR. GERTZMAN: Objection to the form.

8 BY MR. TENREIRO:

9 Q. What interactions, if any, have you had with
06:06 10 the [REDACTED]?

11 A. That I'm not sure.

12 Q. I'm sorry. You're not sure what interactions
13 you've had, because you can't identify who worked for
14 them; is that right?

06:06 15 A. Right. In other words, I've had meetings
16 with people who may have been with the [REDACTED] but
17 I can't place who's with what.

18 Q. Do you know where they worked out of? Did
19 they work out of Ripple's offices?

06:07 20 A. I don't think so. I don't believe so, but I
21 don't know.

22 Q. Do you know who they report to, if anyone?

23 A. I sus- -- I believe they report either
24 directly or indirectly to [REDACTED].

06:07 25 Q. That's the Comms person at Ripple?

06:07 1 A. Right, exactly. Because we use them for
2 Comms. That would have been her, but they would have
3 been reporting indirectly.

4 (Thereupon, an e-mail dated 4/18/17 from
06:07 5 [REDACTED] to [REDACTED] et al.,
6 "Subject: Please don't comment on this XRP Chat
7 post" was introduced as DS Exhibit 31 for
8 identification.)

9 BY MR. TENREIRO:

06:07 10 Q. Let's look at Exhibit 31, please.

11 (Pause.)

12 BY MR. TENREIRO:

13 Q. This is an April 2017 e-mail. Do you know
14 who [REDACTED] is?

06:08 15 A. Yes.

16 Q. Who is it?

17 A. She was a product manager who, I believe, at
18 this time was supporting the C++ team.

19 Q. Those are the programmers?

06:08 20 A. Yes.

21 Q. She says, "I know you are very active on Xrp
22 Chat forum and it's good to have employee presence
23 there, but please don't comment on this post regarding
24 Ripple XRP lockup plans." Is that a reference to the
06:08 25 time release or escrow?

06:08 1 A. I believe so.

2 Q. Do you know why she asked you not to comment?

3 (Thereupon, an informal discussion was
4 held off the record re: Zoom interference.)

06:08 5 THE WITNESS: I think she had a concern
6 over either incorrect information or piecemeal
7 release of information.

8 BY MR. TENREIRO:

9 Q. Is it fair to say that to the extent you
06:08 10 reported to Mr. Larsen or Mr. Garlinghouse various
11 times, they were aware of your -- the fact that you had
12 an active -- you know, online presence?

13 MR. CERESNEY: Object to form.

14 THE WITNESS: Yes.

06:09 15 BY MR. TENREIRO:

16 Q. And what's the basis for you -- what's the
17 basis for your answer? How do you know that they were
18 aware?

19 MR. CERESNEY: Objection.

06:09 20 THE WITNESS: We -- we would sometimes
21 respond to each other's posts on Twitter --
22 each other's tweets, and sometimes we would
23 talk about each other -- each other's social
24 media posts.

25

06:09 1 BY MR. TENREIRO:

2 Q. That includes Larsen and Garlinghouse posts?

3 A. I don't know that I ever had that
4 conversation with Chris Larsen, but I -- I don't know
06:09 5 for sure he's aware. It would be very surprising to me
6 if he wasn't.

7 Q. Why would you be surprised if he wasn't?

8 A. Just because I believe it's generally known,
9 so even though I didn't discuss it with him.

06:09 10 (Thereupon, an e-mail dated 2017-12-21
11 from [REDACTED] to David Schwartz et al.
12 was introduced as DS Exhibit 47 for
13 identification.)

14 BY MR. TENREIRO:

06:09 15 Q. Okay. Let's go to Exhibit 47.

16 It's a December 2017 e-mail. I'm not sure why it
17 doesn't have a Bates number, but it's from [REDACTED]
18 [REDACTED] --

19 A. Yes.

06:10 20 Q. -- at the [REDACTED] to you.

21 "Hi, David. Sharing a suggested tweet below to
22 amplify the announcement that XRP is on 50 exchanges."
23 What is that about?

24 A. This is a suggested --

06:10 25 This is a case where someone at Ripple who

06:10 1 apparently works for the [REDACTED] but has an
2 @Ripple.com address is asking me to tweet something.

3 Q. Wait. Where is the @Ripple e-mail address?
4 It says from "[REDACTED]" --

06:10 5 A. Oh, I guess not. I thought she was a Ripple
6 employee, but I guess not.

7 Q. So it says "Tweet: \$XRP is more accessible
8 than ever - listed on 50 exchanges with more coming."
9 Did you make that tweet?

06:10 10 A. I don't recall.

11 Q. Do you know why they asked you to make that
12 tweet?

13 A. Looks like there's an "insights" post.

14 Q. "Insights" post --

06:11 15 A. Yes.

16 Q. -- meaning?

17 A. That's a collection of posts that Ripple
18 makes on various subjects, and they wanted me to draw
19 attention to this one.

06:11 20 Q. Do you know why, though, they wanted you to
21 draw attention to this one?

22 A. No.

23 Q. Why would anyone in the market want to know
24 about accessibility of XRP?

06:11 25 MR. CERESNEY: Objection.

06:11 1 MR. GERTZMAN: Objection to form.

2 THE WITNESS: If you were --

3 If you were going to build a project on
4 the XRP Ledger that used XRP, a concern might
06:11 5 be that it would be difficult for people to
6 obtain it.

7 MR. CERESNEY: Are you speculating?

8 THE WITNESS: Yeah, I'm speculating.

9 BY MR. TENREIRO:

06:11 10 Q. I'm asking you:

11 Did you ever discuss with the Hatch people or
12 anyone at Ripple why they were asking?

13 You know, "Look. It's my Twitter account. Why are
14 you asking me to tweet these things? Why does anybody
06:12 15 care?"

16 A. No, I never asked.

17 Q. Did you have your own view as to why they
18 might want you to make these tweets?

19 A. Yes.

06:12 20 Q. What is that view? Your own view?

21 A. My view is that it's difficult to use XRP in
22 a project if the people who are using that project can't
23 easily get access to XRP.

24 Q. Okay, and do you know if Ripple also -- in
06:12 25 addition to tweeting out to the -- you know, world, also

06:12 1 maybe e-mailed potential project users to let them know
2 that XRP was now on the exchange?

3 A. Not to my knowledge.

4 (Thereupon, an e-mail dated 2018-01-09
06:12 5 from [REDACTED] to David Schwartz et al.
6 was introduced as DS Exhibit 48 for
7 identification.)

8 BY MR. TENREIRO:

9 Q. All right. Let's look at Exhibit 48. It's
06:12 10 another proposed tweet.

11 (Pause.)

12 THE WITNESS: Yes.

13 BY MR. TENREIRO:

14 Q. Did you tweet this?

06:13 15 A. I don't know.

16 Q. Do you agree with this statement?

17 "You're right. It's not like Bitcoin, and it isn't
18 meant to be"?

19 A. Without seeing the tweet that I'm responding
06:13 20 to, it's hard for me to know what -- what I'm
21 necessarily agreeing with here.

22 Q. Do you agree with the statement "Ripple is
23 decentralized and recently placed 55 billion in escrow
24 to create certainty of the supply"?

06:13 25 A. No, because in 2018, I don't think -- I don't

06:13 1 think I would have used the term "Ripple."

2 "@Ripple" here is Ripple's corporate Twitter
3 handle. Ripple is a company and is not decentralized.

4 Q. What is the fact of how --

06:13 5 How does 55 billion XRP being in escrow have to do
6 with centralization or decentralization?

7 A. Some people, particularly -- some people
8 connect with -- as a decentralization factor the
9 distribution of the token.

06:14 10 Q. The token has been distributed?

11 A. Right, the amount of distribution of the
12 token. I don't, but I don't always push back on it,
13 because you can't fight every battle every day.

14 Q. When you say that the supposed -- the
06:14 15 proposed tweet says "real financial institutions are
16 using it," what is "it" there?

17 A. I think that -- I would have to speculate.

18 Q. Don't speculate. Did you --

19 Did you ever have any concerns that -- you know,
06:14 20 Ripple's public statements at times might be creating
21 confusion between Ripple and XRP?

22 A. No.

23 Q. You know, here do you know what "[REDACTED]"
24 refers to?

06:15 25 A. It refers, to, I believe, an ODL partner.

06:15 1 Q. Okay. Did you ever --
2 Did there come a time when Ripple's Comms people
3 might have sort of worked with you to identify -- to
4 evaluate sort of your Twitter followers?

06:15 5 A. Yes.

6 Q. What was the purpose of that?

7 A. I think the purpose of that was we had -- we
8 had received an allegation, essentially, that there were
9 bots following me that were trying to amplify or promote
06:15 10 Ripple or XRP in a -- in an abnormal or unfair way, and
11 we wanted to determine if that was true or not.

12 Q. For what purpose?

13 A. Well, if it was true, we would want to see if
14 there was something we could do about it, and if it
06:15 15 wasn't true, we would have wanted to potentially counter
16 the narrative.

17 Q. And what did you conclude? Was it or was it
18 not?

19 A. We concluded there were bots following me,
06:16 20 but most of the -- more of the bots were sort of anti.
21 They were FUD -- bots creating FUD.

22 But by the time we had the analysis complete,
23 nobody was particularly interested in the allegation
24 anymore. It didn't seem useful to dredge up a false
06:16 25 allegation, to rebut it when the allegation then went

06:16 1 away.

2 Q. Got it. Let's go to --

3 Let me just ask you a couple questions. What is
4 the purpose of the Xpring initiative?

06:16 5 A. Initially, the Xpring initiative was like a
6 venture capital arm of -- for Ripple to get us access to
7 being close so we could see what was going on in the
8 industry, perhaps steer projects in better directions,
9 perhaps combat projects.

06:16 10 At the time, this was during the ICO craze. We
11 felt that that was harmful and we were trying to steer
12 projects away from that, and later it sort of changed.
13 It changed over time.

14 Q. Let's take a look at Exhibit 68 and 69.

06:17 15 Sorry, 68.

16 (An informal discussion was held off the
17 record.)

18 (Thereupon, an e-mail chain with top
19 e-mail dated 7/18/19 from Brad Garlinghouse to
06:17 20 David Schwartz" was introduced as DS Exhibit 68
21 for identification.)

22 BY MR. TENREIRO:

23 Q. So Exhibit 68 is a July 18, 2019 e-mail from
24 Mr. Garlinghouse to you, responding to a July 17 e-mail
06:17 25 from you to him, where you talk about an issue with

06:17 1 Xpring that you're working on that you wanted to make
2 sure he was aware of. Then, you say:
3 "There's a narrative going around on Twitter and
4 some forums feeding into the narrative we're trying turn
06:17 5 our XRP into USD as soon as possible and Xpring is a
6 related attempt to diversify its exposure to other
7 cryptocurrency projects because we fear/expect/cause XRP
8 underperforming other cryptocurrencies and this
9 narrative is very harmful to us and untrue."

06:18 10 A. Yes.

11 Q. Why did you view this narrative as harmful?

12 A. Because -- because the -- the reality is the
13 opposite.

14 Q. You say, "This narrative is very harmful to
06:18 15 us and untrue."

16 Was there another reason, other than it being
17 untrue, why the narrative was harmful?

18 A. I mean, just generally, anyone who
19 describe -- who says that we're doing something for
06:18 20 purposes completely different from what we say we're
21 doing creates a reputational risk and perception of
22 dishonesty, and it just -- it just is not -- it's not
23 something anyone should be doing.

24 Q. So --

06:19 25 A. It would be saying we're doing one thing

06:19 1 while we were doing something completely different.

2 Q. So, for example, it's not true that xPring
3 was an attempt to regulate and diversify its exposure
4 from other cryptocurrencies?

06:19 5 A. It -- it had the effect of doing that.

6 But that was not an objective, and we certainly
7 didn't do that because we feared, expected, or caused
8 XRP to underperform other cryptocurrencies.

9 Q. Was one of the purposes of the Xpring
06:19 10 initiative to potentially incentivize the development of
11 other uses for XRP?

12 A. Yes.

13 Q. And did the Xpring initiative utilize XRP in
14 any way to provide these incentives?

06:19 15 A. I'm not sure what you mean by -- you mean
16 prior to these incentives?

17 Q. No, no. So did --

18 For example, did Ripple incentivize -- did Ripple
19 fund companies -- you know, utilizing XRP?

06:19 20 A. Yes.

21 Q. As a part of the Xpring initiative?

22 A. Yes.

23 Q. Did Ripple permit these companies to sell
24 their own XRP to obtain funds for their -- you know,
06:20 25 endeavors?

06:20 1 A. I don't -- I don't know that we prohibited
2 them from doing so.

3 Q. Was Ripple aware that the companies might be
4 selling the XRP to fund their endeavors?

06:20 5 A. I would have to speculate.

6
7 (Thereupon, an e-mail chain with top
8 e-mail dated 3/31/2020 from David Schwartz to
9 Brad Garlinghouse was introduced as DS Exhibit
06:20 10 69 for identification.)

11 BY MR. TENREIRO:

12 Q. Okay. Exhibit 69.

13 A. Yes.

14 Q. What is this e-mail from March 2020 referring
06:20 15 to?

16 A. This is an e-mail -- well, there's several
17 different e-mails here, but the trigger -- the beginning
18 of all of this was an e-mail from [REDACTED] to
19 Brad Garlinghouse.

06:21 20 Q. And could you -- who is [REDACTED]?

21 A. [REDACTED] is a developer who develops
22 on the XRP Ledger. He has a company called [REDACTED]
23 [REDACTED].

24 Q. Okay. Is it fair to say, essentially,
06:21 25 that -- I mean, the title -- the subject is "Xpring is a

06:21 1 Disaster"?

2 A. Yeah.

3 Q. Okay, so I don't want to spend too much time
4 on his e-mail. I'm more interested in your response,
06:21 5 but he's expressing sort of negative views about the
6 Xpring initiative?

7 A. Yes.

8 Q. And what was your response?

9 A. My response was twofold.
06:21 10 First, that I think he's being a bit hyperbolic and
11 just -- he's angry, but I think the other part is that
12 there is -- there is some nugget of truth in the
13 criticism.

14 Q. What was a nugget of truth?

06:21 15 A. The nugget of truth was that we weren't
16 communicating well what the -- we weren't doing a good
17 job of communicating to people like [REDACTED] what
18 the -- what the purpose of the Xpring project was.

19 Q. Does that include communicating to the market
06:22 20 generally?

21 A. It includes communicating to the public
22 generally. We didn't have any specific way to
23 communicate with developers other than communicating
24 with the public.

06:22 25 (Thereupon, a 33-page printout entitled

06:22 1 "Insiders Dumping? - Page 6 - XRP Trading and
2 Price Speculation - Xrp Chat" was introduced as
3 DS Exhibit 37 for identification.)

4 MR. TENREIRO: Let's look at Exhibit 37,
06:22 5 please.

6 MR. CERESNEY: Are we done with this one?

7 MR. TENREIRO: Yeah.

8 MR. CERESNEY: What page?

9 BY MR. TENREIRO:

06:22 10 Q. Exhibit 37, page 9 and 12.

11 A. Yes.

12 Q. It seems like you said on May 25, 2017:

13 "Christian didn't leave. He's still pretty much in
14 the office every day."

06:23 15 Is that referring to Mr. Larsen?

16 A. Yes.

17 Q. Is this after he stepped down as CEO?

18 A. Yes.

19 Q. And is this consistent with your recollection
06:23 20 that you still reported to him after he stepped down as
21 CEO?

22 A. Yes.

23 Q. Is that also true he was focusing more on the
24 strategic things and not running the company's
06:23 25 day-to-day operations at that point?

06:23 1 A. Yes.

2 Q. On page 12, you seem to say at the end:

3 "Chris Larsen resigned his position as CEO. He's
4 still a board member and almost as active as ever."

06:23 5 Do you see that?

6 A. Yes.

7 Q. Was that true at that time?

8 A. Yes.

9 Q. Did that change at some time?

06:23 10 A. Yes.

11 Q. When?

12 A. Gradually, over a period of time probably
13 beginning sometime in 2018, he stopped -- he stopped
14 like showing up every day, and it --

06:24 15 He started -- he shows up as a board member at
16 board meetings, but his day-to-day responsibility was
17 dropped.

18 Q. Who decided that?

19 A. I assume he did, but I don't know.

06:24 20 MR. GERTZMAN: Objection to the --

21 BY MR. TENREIRO:

22 Q. Do you know why that was decided?

23 A. No.

24 MR. CERESNEY: Objection.

25

06:24 1 BY MR. TENREIRO:

2 Q. Sorry? Was the answer "no"?

3 A. No, I don't know.

4 Q. So is it fair to say that after he resigned
06:24 5 as CEO, there was a period where he was still going to
6 the office every day?

7 A. Yes.

8 Q. Let me -- I'm almost finished.

9 I think we're going to do -- go way back in time.
06:24 10 Something I forgot earlier, Exhibit 75.

11 (Thereupon, a nine-page document entitled
12 Opencoin Features Overview" bearing Bates Nos.
13 DS_RPLI0002158 through DS_RPLI0002166 was
14 introduced as DS Exhibit 75 for identification.)

06:25 15 BY MR. TENREIRO:

16 Q. Let me know if you recognize this document.

17 A. I know now that this is a document that
18 [REDACTED] sent me a copy of back in 2012, I believe.

19 Q. What do you mean, you "know now"?

06:25 20 A. I don't -- I don't have a recollection of
21 seeing it at that time, but I've been shown this
22 document recently.

23 Q. Okay.

24 MR. CERESNEY: Just to be clear, you've
06:25 25 been shown it in preparation?

06:25 1 THE WITNESS: Yes.

2 BY MR. TENREIRO:

3 Q. You just don't have a recollection of whether
4 you got it back then or not?

06:25 5 A. Right.

6 Q. Your recollection is that [REDACTED] prepared
7 it?

8 A. My recollection from seeing the document
9 in -- in context is that Mr. -- [REDACTED] sent me a
06:25 10 copy of it. I don't know that he prepared it.

11 Q. And do you know for what purpose it was
12 prepared?

13 A. I don't.

14 Q. Do you know when it was shared with anyone
06:26 15 outside of the company or the founders of the company?

16 A. I believe that [REDACTED] shared it with
17 someone who I considered potentially involving them or
18 the company in some way.

19 Q. Like an investor?

06:26 20 A. It might have been. Could have been a
21 potential employee. I don't recall.

22 Q. On the second page, it says "OpenCoin versus
23 Bitcoin." Do you see that?

24 A. Yes.

06:26 25 Q. And at the bottom, it says:

06:26 1 "Dedicated Team: This is probably our most
2 important advantage. Bitcoin is an open source project
3 without anyone leading it.

4 "OpenCoin, while also open source, will have a
06:26 5 potential team of developers and businesspeople behind
6 it." Do you see that?

7 A. Yes.

8 Q. Was that accurate back in 2012?

9 A. That we did or that we would?

06:26 10 Q. Well --

11 A. This is -- this is a prediction of the
12 future.

13 Q. Did that turn out to be correct, that
14 OpenCoin had a professional team of developers behind
06:27 15 it?

16 A. Depends what ... it's difficult to say,
17 because it's not really clear what it is here, and at
18 the time --

19 I think at the time this was drafted, there wasn't
06:27 20 a good understanding of what the role of the company
21 would be versus what the role of the -- the ledger would
22 be.

23 (Thereupon, an eight-page document
24 entitled "David "JoelKatz" Schwartz u/sjoelkatz)
06:27 25 - Reddit" dated 7/3/18 was introduced as DS

06:27 1 Exhibit 71 for identification.)

2 BY MR. TENREIRO:

3 Q. Let's look at Exhibit 71, please.

4 This is a calculation of posts, but I'm going to
06:28 5 focus on the first one.

6 A. Okay.

7 Q. You say:

8 "I will use the analogy of Google again. If Ripple
9 were Google, XRP would be the search engine and the
06:28 10 Internet would be Ripple's payment technology."

11 Do you see that?

12 A. Yes.

13 Q. Why are you making this analogy?

14 A. Do you have the date of this document?

06:28 15 Q. I think it's 2017. That's my best guess.

16 (Pause.)

17 MR. TENREIRO: Jon, do you know?

18 MR. DANIELS: Hold on.

19 (Thereupon, an informal discussion was
06:28 20 held off the record.)

21 THE WITNESS: It would help to see what
22 I'm responding to, but I imagine it was some
23 confusion between what Ripple is and what I
24 said it is.

25

06:29 1 BY MR. TENREIRO:

2 Q. Well, do you think that when people talk
3 about the Google search engine, they associate that with
4 Google or with something else?

06:29 5 MR. CERESNEY: Objection.

6 THE WITNESS: I don't know that it's a
7 great -- I mean, I was using that example to
8 illustrate a different point.

9 BY MR. TENREIRO:

06:29 10 Q. What point were you illustrating?

11 A. The point that I'm illustrating is that the
12 more -- the more value there is in the cryptocurrency
13 and the XRP ecosystem, the more value ... wait. I'm
14 trying to understand the point I'm making. Hold on a
06:29 15 second.

16 (Pause.)

17 THE WITNESS: Yeah, I actually do see.
18 it's a terrible analogy and I'm glad I
19 clarified it in the third paragraph, or I
06:30 20 wouldn't know what I meant.

21 What I'm saying is that Ripple -- Ripple,
22 like other participants in the cryptocurrency
23 ecosystem, can contribute to technologies like
24 the XRP Ledger and in a ledger, even though
06:30 25 they don't have a direct revenue model.

06:30 1 Because they -- because they expect to
2 participate in an ecosystem that has the
3 ability to make them money, just like Google
4 helps to build the Internet.

06:30 5 Even though Google can't directly
6 monetize the Internet, everything Google's
7 doing works better if the Internet is better.

8 BY MR. TENREIRO:

9 Q. Google monetizes its search engine?

06:31 10 A. Google -- the -- Google's search engine is
11 the way it monetizes the Internet.

12 Q. So is XRP the way Ripple monetizes the -- you
13 know, Interledger?

14 MR. CERESNEY: Objection.

06:31 15 THE WITNESS: And that's why this analogy
16 is bad. I -- I think I'm trying to say the
17 reverse.

18 BY MR. TENREIRO:

19 Q. Let's move on.

06:31 20 A. This -- this is a terrible --

21 Q. I'm sorry.

22 A. It's terribly worded. I mean, it's one
23 document, but this is really poorly worded.

24 MR. CERESNEY: You don't have to
06:31 25 apologize.

06:31 1 (Thereupon, an informal discussion was
2 held off the record.)

3 BY MR. TENREIRO:

4 Q. So is it a way, then, to monetize the ledger?
06:31 5 Is that what you're saying?

6 A. Yeah. What I'm --

7 What I'm trying to say is that if the
8 cryptocurrency ecosystem is healthier -- and the XRP
9 Ledger specifically -- that creates an opportunity for
06:31 10 companies like Ripple to build products and services
11 that can make money.

12 Just like a healthier Internet allows Google and
13 its competitors to build better -- have more useful
14 search engines and therefore have better revenue. I
06:32 15 think that's what I was trying to say there, but it's so
16 badly worded I can't be sure.

17 MR. TENREIRO: Before we finish, just
18 again on Exhibit 82, I would like to ask what
19 the basis for the assertion for privilege is.

06:32 20 MR. CERESNEY: Which is Exhibit 82?

21 MR. TENREIRO: The one you clawed back
22 today.

23 MR. CERESNEY: It's advice provided by an
24 attorney. It's actually a question asked by
06:32 25 an attorney of Mr. Schwartz in connection with

06:32 1 something the attorney was working on.

2 MR. TENREIRO: Okay. Are you going to
3 tell us what the legal advice is as to?

4 MR. CERESNEY: Well, it's a comment, not
06:32 5 a document. It's a question about a document
6 asked by an attorney of Mr. Schwartz, and in
7 the context of that, it talks about a point
8 that they have discussed -- that attorney and
9 Mr. Schwartz have discussed.

06:32 10 Therefore, it was -- it reflects a
11 conversation between the attorney and Mr.
12 Schwartz and relates to a comment that the
13 attorney had on the document.

14 (Thereupon, a 31-page document entitled
06:32 15 "Master Press Q&A" was introduced as DS Exhibit
16 83 for identification.)

17 BY MR. TENREIRO:

18 Q. Exhibit 83. Here are copies. Last set of
19 questions.

06:33 20 (Thereupon, a 10-page entitled "Make XRP
21 Great" was introduced as DS Exhibit 84 for
22 identification.)

23 BY MR. TENREIRO:

24 Q. I'm just going to ask a couple brief
06:33 25 questions about Exhibit 83 and Exhibit 84. Do you

06:33 1 recognize what Exhibit 83 is?

2 A. I think so.

3 Q. What is it?

4 A. I believe this is a document Ripple provides
06:33 5 to employees to help them -- you know what? I'm not --
6 I'm not sure.

7 Q. Have you ever seen this before?

8 A. I think I've seen a similar document, but I'm
9 not sure this is that document.

06:33 10 Q. So --

11 A. This looks more detailed than the document
12 that I've seen.

13 Q. A similar document about "Press Q&A Points"?

14 A. A similar document in that it has a list of
06:33 15 general questions that people might ask about XRP, the
16 XRP Ledger, or Ripple with like suggested answers.

17 Q. People such as reporters, or what? Or market
18 participants?

19 A. The document that I saw was mostly intended
06:33 20 for employees to answer questions that they would
21 encounter.

22 This document looks for detailed than that, and I
23 don't know who it was intended for.

24 Q. Who would the employees encounter questions
06:34 25 from?

06:34 1 A. The general public.

2 Q. Anybody, right?

3 And Ripple was suggesting how employees should
4 respond to those questions?

06:34 5 A. Yes.

6 MR. CERESNEY: Just to be clear, you're
7 not sure this is that document?

8 THE WITNESS: This document looks bigger
9 and more detailed than that, so I don't know
06:34 10 that this is ...

11 BY MR. TENREIRO:

12 Q. Let's move on to Exhibit 84.

13 A. But it says:

14 "Please read the corporate narrative and fast
06:34 15 facts," so it seems like it's -- but I don't know.

16 Q. Can you please identify Exhibit 84 after
17 you've had a chance to look at it?

18 (Pause.)

19 THE WITNESS: What was your question?

06:35 20 BY MR. TENREIRO:

21 Q. Yes. What is this document?

22 A. This looks like a document suggesting radical
23 changes in the way Ripple operates.

24 Q. Who prepared it?

06:35 25 A. I don't know.

06:35 1 Q. Were you involved?
2 A. No. At least, not to my recollection.
3 Q. On page 3 -- sorry.
4 On page -- it looks like page 7, think. At the
06:35 5 front, it says "RPLI_SEC 576405." There's Comment 16.
6 A. Yes.
7 Q. "Thumbs up to David's comment"?
8 A. So I must have commented somewhere.
9 Q. "David: Currently, banks -- at least the
06:35 10 ones we are talking to -- do not route liquidity through
11 exchanges," etc.
12 A. Yes.
13 Q. What was the purpose of this document?
14 A. So this is -- this is --
06:35 15 I believe what's happened here is this document --
16 which I believe is, at least to some extent, a document
17 that I wrote or commented on -- has been imported into
18 this other document.
19 Q. What was the purpose of it?
06:36 20 A. The purpose?
21 Q. At the beginning, it says "Make XRP Great
22 Again." That's the title.
23 A. Well, the person who imported it to that
24 document --
06:36 25 That was their title, but my title was "Why Should

06:36 1 We Care About XRP Right Now?" They imported my document
2 into their document, I believe.

3 Q. To the extent you mentioned the document was
4 suggesting radical changes in Ripple's strategy, why was
06:36 5 that being suggested?

6 MR. CERESNEY: Do we know what time
7 period this is?

8 MR. TENREIRO: I believe, if you look at
9 the front page in the abstract, "While XRP has
06:36 10 been in existence for over four years," that
11 should give you a sense, more or less. Four
12 years? Seems like 2017, 2016.

13 THE WITNESS: I mean, this looks like a
14 position of someone who was critical of our
06:36 15 current strategy and was suggesting
16 significant changes to that strategy.

17 BY MR. TENREIRO:

18 Q. Strategy as to XRP?

19 A. Yes, and more -- and more broadly, but it
06:36 20 seems to be primarily focused on Ripple's strategy as to
21 XRP.

22 MR. TENREIRO: Okay. I'm out of time.

23 THE VIDEOGRAPHER: Okay. This concludes
24 the video deposition --

06:37 25 (Inaudible crosstalk.)

06:37 1 THE VIDEOGRAPHER: Sorry.
2 MR. CERESNEY: Go off the record.
3 THE VIDEOGRAPHER: Going off the record
4 at 6:37.
06:37 5 (Recess taken at 6:37 p.m.)
6 (Resumed at 6:50 p.m.)
7 THE VIDEOGRAPHER: Back on the record at
8 6:50.
9 MR. CERESNEY: Great. I have a few
06:50 10 questions, Mr. Schwartz.
11
12 CROSS-EXAMINATION
13 BY MR. CERESNEY:
14
06:51 15 Q. I want to hand you all of the exhibits, just
16 a pile of the exhibits that Mr. Tenreiro showed you
17 today. I don't know how many it was, but it was maybe
18 50, 60 exhibits or so.
19 Just take a look at those and tell me how many
06:51 20 social media posts have you had over the course of the
21 last nine years relating to Ripple or XRP.
22 A. Probably tens of thousands.
23 Q. Do these exhibits that Mr. Tenreiro showed
24 you today -- do they constitute, essentially, a very
06:51 25 small percentage of your total posts?

06:51 1 MR. TENREIRO: Object to form.

2 THE WITNESS: They do.

3 BY MR. CERESNEY:

4 Q. And in some of the posts that Mr. Tenreiro
06:51 5 showed you and when he questioned you, were there other
6 aspects of those posts that he did not read?

7 A. Yes.

8 Q. And in some of those posts, did you say
9 things that in some respects rebutted some of the pieces
06:52 10 of the posts that Mr. Tenreiro showed you?

11 MR. TENREIRO: Again, object to form.

12 Leading your witness.

13 THE WITNESS: Yes.

14 BY MR. CERESNEY:

06:52 15 Q. Now, have you in any of your posts over the
16 years made promises to XRP holders that Ripple would
17 take actions to increase the price of XRP?

18 MR. TENREIRO: Object to form.

19 THE WITNESS: I do not believe today that
06:52 20 I ever did so.

21 BY MR. CERESNEY:

22 Q. And did you ever make promises to holders of
23 XRP or give them assurances that the price of XRP would
24 rise to a certain level?

06:52 25 A. I do not believe I ever did so.

410

06:52 1 Q. In your posts, were you touting that Ripple's
2 actions could increase the price of XRP?

3 A. No.

4 Q. Was that your purpose in any of your posts?

06:53 5 A. No.

6 Q. What, generally, was the purpose of your
7 posts overall?

8 A. The general purpose of my posts were to
9 communicate with the world what -- what I was working
06:53 10 on, on the XRP Ledger and at Ripple.

11 Q. And did it essentially --

12 MR. CERESNEY: Strike that. No further
13 questions. That's it.

14 MR. TENREIRO: Do any of the individuals
06:53 15 want to ask questions?

16 (Thereupon, an informal discussion was
17 held off the record.)

18 MR. GERTZMAN: Nothing on behalf of
19 Mr. Larsen. Thank you.

06:53 20 MR. TENREIRO: Okay, and again, I
21 understand obviously we don't agree.

22 But we do want to state again we reserve
23 our rights to bring him back, especially since
24 we only covered 60 out of thousands of posts.

06:53 25 MR. CERESNEY: Well, you apparently

06:53 1 covered, I assume, what you thought were the
2 most important and you took your seven hours,
3 so of course we will object to that.

4 MR. TENREIRO: Thank you, Mr. Schwartz.

06:53 5 THE VIDEOGRAPHER: Going off the record.
6 This is the end of the video deposition of
7 David Schwartz. Going off the record at 6:53.
8 (Thereupon, the deposition adjourned at
9 6:53 p.m.)

10
11 *** *** ***
12
13
14
15
16
17
18
19
20
21
22
23
24
25

ACKNOWLEDGMENT OF WITNESS

I, DAVID SCHWARTZ, do hereby certify
that the foregoing testimony given by me on
May 26, 2021 is true and accurate, including
any corrections noted on the corrections page,
to the best of my knowledge and belief.

DAVID SCHWARTZ

At _____ in said County
of _____, this _____ day
of _____, _____, personally
appeared DAVID SCHWARTZ, and he made an oath to the
truth of the foregoing corrections by him subscribed.

Before me, _____, Notary
Public. My commission expires _____.

1 STATE OF NEW YORK)
2) ss:
3 COUNTY OF NEW YORK)

4 C E R T I F I C A T E

5 I, CHERYLL KERR, CSR, a Notary Public
6 within and for the State of New York and a Certified
7 Shorthand Reporter, do hereby certify that the witness
8 whose deposition is hereinbefore set forth, was duly
9 sworn by me and that such deposition is a true record of
10 the testimony given by such witness.

11 I further certify that I am not related to
12 any of the parties to this action by blood or
13 marriage and that I am in no way interested in
14 the outcome of this matter.

15 IN WITNESS WHEREOF, I have hereunto set my
16 hand this 28th day of May, 2021.

17
18 
19 -----
20 CHERYLL KERR, CSR
21
22
23
24
25

ERRATA SHEET FOR THE TRANSCRIPT OF:

Case Name: SEC v. Ripple Labs, et al.

Dep. Date: May 26, 2021

Deponent: David Schwartz

Reason codes:

1. To clarify the record.

2. To conform to the facts.

3. To correct transcription errors.

Pg.	Ln.	Now Reads	Should Read	Reason
-----	-----	-----------	-------------	--------

[illegible]

Signature of Deponent

SUBSCRIBED AND SWORN BEFORE ME

THIS DAY OF , 2021.

(Notary Public) My Commission Expires: