原註

本書の文中に付している小数字は、下の出典・参考文献の番号に対応します。ウェブサイトはすべて2024年11月15日最終閲覧。ページが失われたなど、存在が確認できなかったものに関してはハイパーリンクを付していません。

はじめに

1. Andrew Ross Sorkin, "Lehman Files for Bankruptcy; Merrill Is Sold," *New York Times*, September 14, 2008, http://www.nytimes.com/2008/09/15/business/15lehman.html.

2. Gloria McDonough-Taub, "The Collapse of Merrill Lynch Now Told in 'Crash of the Titans,' " *CNBC*, November 12, 2010, http://www.cnbc.com/id/40028933; Reuters staff, "TIMELINE: History of Merrill Lynch," *Reuters*, September 15, 2008, http://www.reuters.com/article/us-merrill-idUSN1546989520080915.

3. Tim Paradis, "Stocks End Worst Week Mixed After Wild Session," Associated Press, Wayback Machine 経由の URL は, October 11, 2008, https://web.archive.org/web/20081015170539/http://ap.google.com/article/ALeqM5gHs5OM3gFG_DytQQZFbWfgPT08MAD93NULL80.

4. Satoshi Nakamoto, "Bitcoin P2P e-cash paper," metzdowd.com, October 31, 2008, https://www.metzdowd.com/pipermail/cryptography/2008-October/014810.html.

5. James Chen, "Low Interest Rate Environment Definition," Investopedia, November 29, 2020, http://www.investopedia.com/articles/markets/060816/us-interest-rates-why-rates-have-been-low-long-time-gs-jpm.asp.

6. "The March of Financial Services Giants into Bitcoin and Blockchain Startups in One Chart," *CB Insights*, February 19, 2017,

https://www.cbinsights.com/research/financial-services-corporate-blockchain-investments.

7. "The State of the Token Market," Fabric Ventures and Token Market, January 31, 2018, https://static1.squarespace.com/static/5a19eca6c027d8615635f801/t/5a73697bc8302551711523ca/1517513088503/The+State+of+the+Token+Market+Final2.pdf ; "2017 Venture Capital Investment in Blockchain," *CoinDesk*, last modified February 18, 2018, https://docs.google.com/spreadsheets/d/1lDtzMD3Bb-shQCtkVOareMANjo9E7N2JUmQnhBfpl8E/edit?usp=sharing , sourced from https://www.coindesk.com/bitcoin-venture-capital/.

8. "Timeline of CME Achievements," CME Group, accessed March 28, 2021, https://www.cmegroup.com/company/history/timeline-of-achievements.html ; "Company Achievements in 2016," CME Group, accessed March 28, 2021, https://www.cmegroup.com/investor-relations/annual-review/2016/financials.html

9. Jared Podnos (@jpodnos), "Cryptocurrency: The Discussion on Twitter Keeps Growing," Twitter, November 15, 2017, https://blog.twitter.com/official/en_us/topics/insights/2017/Cryptocurrency-The-Discussion-on-Twitter-Keeps-Growing.html.

10. "Presidio Forest," National Park Service, last modified March 31, 2012, https://www.nps.gov/prsf/planyourvisit/presidio-forest.htm ; "History of the Presidio," The Presidio, accessed March 28, 2021, https://www.presidio.gov/visit/history-of-the-presidio ; "Fort Point National Historic Site," The Presidio, accessed March 28,2021, https://www.presidio.gov/places/fort-point-national-historic-site .

第1章

1. Satoshi Nakamoto, "Bitcoin: A Peer-to-Peer Electronic Cash System," Bitcoin.org, accessed April 3, 2021, https://bitcoin.org/bitcoin.pdf.

2. "Quick Facts," The Abelard School, accessed April 3, 2021, https://www.abelardschool.org/quick-facts.

3. Steven Leckart, "The Stanford Education Experiment Could Change Higher Learning Forever," *Wired,* Wayback Machine 経由の URL は, March 20, 2012, https://web.archive.org/web/20140421091649/https://www.wired.com/2012/03/ff_aiclass .

4. @kiba, "Bitcoin Weekly Looking For Writers," BitcoinTalk, March 25, 2011, https://bitcointalk.org/index.php?topic=4916.msg71816 #msg71816.

5. @kiba, "[RANSOM] Bitcoin Weekly ransoming experiment," BitcoinTalk, June 20, 2011, https://bitcointalk.org/index.php?topic=20235.msg253364#msg253364 .

6. Adrian Chen, "The Underground Website Where You Can Buy Any Drug Imaginable," *Gawker*, June 1, 2011, https://www.gawkerarchives.com/the-underground-website-where-you-can-buy-any-drug-imag-30818160.

7. Vitalik Buterin, "Bitcoin and the Goldbugs," *Bitcoin Weekly,* Wayback Machine 経由の URL は, June 12, 2011, https://web.archive.org/web/20110617050611/http://bitcoinweekly.com/articles/bitcoin-and-the-goldbugs .

8. Vitalik Buterin, "Social Democracy Enforced in Currency," *Bitcoin Weekly,* Wayback Machine 経由の URL は, August 15, 2011, https://web.archive.org/web/20110828021149/http://bitcoinweekly.com/articles/s

ocial-democracy-enforced-in-currency . *Bitcoin Weekly* (@BitcoinWeekly) Twitter page, Twitter, accessed April 3, 2021, https://twitter.com/BitcoinWeekly . *Bitcoin Weekly* homepage, Wayback Machine 経由の URL は, static for months after September 2011, https://web.archive.org/web/20110601000000*/http://bitcoinweekly.com.

9. ミハイはサイバネティクスと経済情報学の学位を取得。

10. Matthew N. Wright, "Pre-order Bitcoin Magazine—Quality Control, Final Revisions on Proofs," BitcoinTalk, January 25, 2012, https://bitcointalk.org/index.php?topic=61017.msg711286#msg711286 .

11. Vitalik Buterin, "Introduction to Bitcoin Terminology Part II," *Bitcoin Magazine*, March 3, 2012, https://bitcoinmagazine.com/articles/introduction-to-bitcoin-terminology-part-ii-1330796614 .

12. Vitalik Buterin, "Common Misconceptions About Bitcoin—a Guide for Journalists," *Bitcoin Magazine*, December 29, 2012, https://bitcoinmagazine.com/articles/common-misconceptions-about-bitcoin-a-guide-for-journalists-1356758643 .
注：この記事は2012年12月29日のもので、本文中のここの時点よりあとだが、これ以前の記事はほとんど残っていない。

13. Matthew N. Wright, "September 2012 Bet Resolution," BitcoinTalk, February 2, 2013, https://bitcointalk.org/index.php?topic=140654 .

14. Ripple homepage Wayback Machine 経由の URL は, April 8, 2013, https://web.archive.org/web/20130408174039/https://ripple.com .

15. Vitalik Buterin, "Mastercoin Suggestion: Contracts for Difference," November 4, 2013, https://bitcointalk.org/index.php?topic=324830.0 .

16. J. R. Willett invented the initial coin offering: Laura Shin, "Here's the Man Who Created ICOs and This Is the New Token He's Backing," *Forbes*, September 21, 2017, https://www.forbes.com/sites/laurashin/2017/09/21/heres-the-man-who-created-icos-and-this-is-the-new-token-hes-backing/?sh=4a22cd0b1183.

17. Vitalik Buterin, "Bitcoin in Canada, Part I: Introducing the Bitcoin Alliance of Canada," *Bitcoin Magazine*, October 11, 2013, https://bitcoinmagazine.com/articles/exploring-the-bitcoin-alliance-of-canada-part-i-1381547131.

18. Anthony Di Iorio (@Anthony Di I.), "Meet at Pauper's Pub in T.O. for a beer and wings and talk all things Bitcoin," Meetup, November 3, 2012, https://www.meetup.com/decentral_ca/events/87122762 .

19. Charles Hoskinson, "Charles Hoskinson of the Bitcoin Education Project," Let's Talk Bitcoin, audio posted to YouTube by The LTB Network, June 9, 2013, 0:24, https://www.youtube.com/watch?v=lBrQ07aPsL0 .

20. Inside Bitcoins homepage, Wayback Machine 経由の URL は, December 10, 2013, https://web.archive.org/web/20131210091116/https://www.mediabistro.com/insidebitcoins.

21. James Ball, "Silk Road: The Online Drug Marketplace That Officials Seem Powerless to Stop," *The Guardian*, March 22, 2013, https://www.theguardian.com/world/2013/mar/22/silk-road-online-drug-marketplace.

22. "Past Weather in Toronto, Ontario, Canada—January 2014," TimeandDate.com, https://www.timeanddate.com/weather/canada/toronto/historic?month=1&year

=2014 .

第2章

1. "Past Weather in Miami, Florida, USA—January 2014," TimeandDate.com, https://www.timeanddate.com/weather/usa/miami/historic?month=1&year=2014.

2. "BTC Miami Program Final Preview 5," Scribd, Wayback Machine 経由の URL は, February 8, 2014, http://web.archive.org/web/20140208025634/http://www.scribd.com/doc/20130 1458/BTC-Miami-Program-Final-Preview-5.

3. "Background on the mechanics of the ether pre-sale," *Ethereum Foundation Blog*, July 9, 2014, https://blog.ethereum.org/2014/07/09/how-to-make-a-purchase-in-the-ether-presale.

4. Gavin Wood (@gavofyork), "Ethereum contributions until February 22, 2014," GitHub, https://github.com/ethereum/aleth/graphs/contributors?from=2013-12-25&to=2014-02-22&type=c; Jeffrey Wilcke (@obscuren), "Go Ethereum contributions until February 22, 2014," GitHub, https://github.com/ethereum/go-ethereum/graphs/contributors?from=2013-12-29&to=2014-02-22&type=c.

5. 当時ギャビンは誰にも言わなかったが、以前ある人物から、ローンチ前にイーサリアムのコードベースを"フォーク"（またはコピーを作成）し、自分自身で構築してはどうかと提案されたものの、ギャビンはそれを拒否した。

6. 暗号経済学とは一種のゲーム理論であり、暗号ネットワーク内のさまざまなプレーヤーにインセンティブを与え、分散型ネットワークを存続さ

せるためのサービスを提供させる。なんらかの企業が核となって従業員を雇い、特定の責任を負わせるといった必要はない。

7. "Ethereum Booth at the Bitcoin Expo 2014," video posted to YouTube by Ethereum, April 30, 2014, https://www.youtube.com/watch?v=O4nHKA3EsME.

8. Gavin Wood, "ÐApps: What Web 3.0 Looks Like," gavwood.com, April 17, 2014, https://gavwood.com/dappsweb3.html.

9. Gavin Wood, "Less-techy: What Is Web 3.0?," gavwood.com, April 23, 2014, https://gavwood.com/web3lt.html.

10. Armand Tanzarian, "Recap: Central European Bitcoin Expo 2014," *Cointelegraph*, June 5, 2015, https://cointelegraph.com/news/recap_central_european_bitcoin_expo_2014.

11. ジェフリーの「身を引く」というこの発言を聞いたなかには、「ジェフリーとギャビンが」身を引くという意味だと受け取った人も少なからずいたようだ。なにしろ、後年のインタビューでは、この発言を、開発チームのリーダーとみなされていたギャビンの発言だったと回想する人が多かった。

第3章

1. "SEC Charges Bitcoin Entrepreneur with Offering Unregistered Securities," SEC, June 3, 2014, https://www.sec.gov/news/press-release/2014-111.

2. Jake Frankenfield, "Howey Test," Investopedia, updated March 29, 2021, https://www.investopedia.com/terms/h/howey-test.asp.

3. "Foundation Ethereum (Foundation Ethereum), in Baar, CHE-292.124.800, Grienbachstrasse 55, 6340 Baar, Foundation (new registration). Certificate date: 09.07.2014," Swiss Official Gazette of Commerce, July 17, 2014, https://shab.ch/shabforms/servlet/Search?EID=7&DOCID=1618923.

4. Vitalik Buterin, "Launching the Ether Sale," *Ethereum Foundation Blog*, July 22, 2014, https://blog.ethereum.org/2014/07/22/launching-the-ether-sale.

5. クラウドセールとネットワーク立ち上げのあいだにプロトコルに携わった人々は、最大で給与の20%に相当する金額までクラウドセール価格で財団から ETH を購入できた。

6. "Terms and Conditions of the Ethereum Genesis Sale," Wayback Machine経由によるEthereum.org, July 23, 2014, https://web.archive.org/web/20140723212709/https://www.ethereum.org/pdfs/TermsAndConditionsOfTheEthereumGenesisSale.pdf.

7. "Dan Larimer and Vitalik Buterin at the North American Bitcoin Conference in Miami," video posted to YouTube by BitShares, April 18, 2014, https://www.youtube.com/watch?v=mP82XmUNgNM.

8. Daniel, "The Coming Demise of the Altcoins (and What You Can Do to Hasten It)," *The Mises Circle*, March 14, 2014, http://themisescircle.org/blog/2014/03/14/the-coming-demise-of-the-altcoins.

9. @Spoetnik, "[ETH] Ethereum = Scam," BitcoinTalk, July 23, 2014, https://bitcointalk.org/index.php?topic=707237.0.

10. @GameKyuubi, "I AM HODLING," BitcoinTalk, December 18, 2013, https://bitcointalk.org/index.php?topic=375643.0.

11. LocalBitcoins.com 経由。

12. "Mittweida," Wikipedia, アクセス日March 8, 2021,
    https://en.wikipedia.org/wiki/Mittweida#cite_note-1.

13. Gavin Wood (@gavofyork), "Initial commit, Ethereum / yellowpaper," GitHub,
    April 2, 2014,
    https://github.com/ethereum/yellowpaper/commit/0d0d23301d077bbdab5cafae6
    ab06001e282fae2.

14. ギャビンがイエローを選んだのは、「白の次に妥当な色に思えたから」。

15. Shideneyu, "I am a developer and I don't understand the Yellow Paper," Reddit,
    March 21, 2016,
    https://www.reddit.com/r/ethereum/comments/4bbnp4/i_am_a_developer_and_
    i_dont_understand_the_yellow; Polo46, "If you find the Yellow paper hard to
    read, this will help you," Reddit, October 5, 2016,
    https://www.reddit.com/r/ethereum/comments/560h6s/if_you_find_the_yellow_p
    aper_hard_to_read_this.

16. Yoichi Hirai (@pirapira), "Remove the modulo 2^{256} effect in the memory
    size computation #185," GitHub, September 9, 2016,
    https://github.com/ethereum/yellowpaper/pull/185, "Fix mistakes in
    DELEGATECALL semantics #187," September 29, 2016, GitHub,
    https://github.com/ethereum/yellowpaper/pull/187, and "Nitpicking equation
    (100) #188," GitHub, September 29, 2016,
    https://github.com/ethereum/yellowpaper/pull/188.

17. Vitalik Buterin, "Olympic: Frontier Pre-Release," *Ethereum Foundation Blog*,
    May 9, 2015, https://blog.ethereum.org/2015/05/09/olympic-frontier-pre-release.

18. Gavin Wood, "Another Ethereum ÐEV Update," *Ethereum Foundation Blog,* Wayback Machine 経由の URL は, June 15, 2015, https://web.archive.org/web/20150629033357/https://blog.ethereum.org/2015/06/15/another-ethereum-dξv-update .

19. "What Is Ether?," Wayback Machine 経由による Ethereum.org, August 7, 2015, https://web.archive.org/web/20150807141640/https://ethereum.org/ether ; "Ethereum Frontier Release," Ethereum.org, Wayback Machine 経由の URL は, August 2, 2015, https://web.archive.org/web/20150802035735/https://www.ethereum.org.

20. Stephan Tual, "Announcing the New Foundation Board and Executive Director," *Ethereum Foundation Blog*, July 30, 2015, https://blog.ethereum.org/2015/07/30/announcing-new-foundation-board-executive-director.

第4章

1. Anthony Di Iorio, "Ethereum Foundation is hiring an Executive Director," *Ethereum Foundation Blog*, April 8, 2015, https://blog.ethereum.org/2015/04/08/ethereum-foundation-is-hiring-an-executive-director.

2. Ming Chan (@mingchan88), "Lived in CO for almost a decade . . . ," Twitter, May 10, 2019, https://twitter.com/mingchan88/status/1126683499757428736?s=20.

3. @cjphi, "Looks like the early contributor distribution was released about 20

hours ago from the Ethereum foundation via the multisig smart contract," Reddit, August 16, 2015, https://www.removeddit.com/r/ethereum/comments/3h7oel/_.

4. Stephan Tual (@Ursium), "No, it's not . . . ," August 16, 2015, comment on "Early Contributor Distribution," Reddit, August 16, 2015, https://www.reddit.com/r/ethereum/comments/3h7oel/early_contributor_distribution/cu59240.

5. Vitalik Buterin (@vbuterin), "Okay, let me elaborate . . . ," August 17, 2015, comment on "Early Contributor Distribution."

6. Stephan Tual (@Ursium), "So for the interest of clarity here . . . ," August 17, 2015, comment on "Early Contributor Distribution."

7. Vitalik Buterin (@vbuterin), "The 'I don't remember . . . ,' " August 17, 2015, comment on "Early Contributor Distribution."

8. Vitalik Buterin (@vbuterin), "Also, it's worth noting that . . . ," August 20, 2015, comment on "Early Contributor Distribution."

9. Stephan Tual, "A message from Stephan Tual," *Ethereum Foundation Blog*, September 3, 2015, https://blog.ethereum.org/2015/09/03/a-message-from-stephan-tual.

10. Vitalik Buterin, "The Evolution of Ethereum," September 28, 2015, *Ethereum Foundation Blog*, https://blog.ethereum.org/2015/09/28/the-evolution-of-ethereum.

11. Shanghai's Wanxiang Blockchain Labs.

12. Jemima Kelly, "Nine of World's Biggest Banks Join to Form Blockchain Partnership," *Reuters*, September 15, 2015, https://www.reuters.com/article/us-

banks-blockchain-idUSKCN0RF24M20150915 ; Jemima Kelley, "Thirteen More Top Banks Join R3 Blockchain Consortium," *Reuters*, September 29, 2015, https://www.reuters.com/article/banks-blockchain-idUSL5N11Z2QE20150929.

13. "DevCon 1," YouTube, video playlist, last updated March 1, 2016, https://www.youtube.com/playlist?list=PLJqWcTqh_zKHQUFX4IaVjWjfT2tbS4NVk.

14. "DECVON1: Slock.it—Christoph Jentzsch," イーサリアムによるユーチューブへの投稿動画, January 7, 2016, https://www.youtube.com/watch?v=uy6P5_WQoUI.

15. "Former Ethereum CCO Stephan Tual Joins Slock.it Team," *Slock.it* (blog), November 6, 2015, https://blog.slock.it/former-ethereum-cco-stephan-tual-joins-slock-it-team-9fd956f2408.

16. Wayback Machine 経由による Ethcore ホームページ, November 23, 2015, https://web.archive.org/web/20151123010243/https://www.ethcore.io.

第5章

1. Gavin Wood, "The last Blog Post," *Ethereum Foundation Blog*, January 11, 2016, https://blog.ethereum.org/2016/01/11/last-blog-post.

2. Vitalik Buterin, "Ethereum Foundation Internal Update," *Ethereum Foundation Blog*, January 7, 2016, https://blog.ethereum.org/2016/01/07/2394/.

3. Parity Technologies, "Performance Analysis," February 2, 2016, *Parity Technologies Blog*, https://www.parity.io/blog/performance-analysis.

4. Gavin Wood (@gavofyork), "ANNOUNCING PARITY, the World's Fastest and Lightest Ethereum Implementation Written in Rust Language," Reddit, February 9, 2016, https://www.reddit.com/r/ethereum/comments/44y9vv/announcing_parity_the_worlds_fastest_and_lightest/cztzz5p.

5. "CoinScrum & Proof of Work Present: Tools for the Future—Gavin Wood," video uploaded to YouTube by Satoshi Pollen, December 10, 2014, https://www.youtube.com/watch?time_continue=13&v=WdgQI6CA4-E&feature=emb_logo.

6. DAO contributions from June 21, 2015, to July 26, 2016, GitHub, https://github.com/slockit/DAO/graphs/contributors?from=2015-06-21&to=2016-07-26&type=c.

7. ほかのDAOは、スロック・イットが「TheDAO」という普遍的な名称を付けたことに反発した。しかし結局、どんな名称がふさわしいかはTheDAOのローンチ後にDAOトークン保有者が投票で決めればいいと判断し、この名称を維持した。

8. Stephan Tual, "On Contractors and Curators," *Slock.it* (blog), April 9, 2016, もとの URL はhttps://blog.slock.it/on-contractors-and-curators-2fb9238b2553#.d3447n7i0 , 現在の URL は https://laurashin.com/cryptopians/05/08-On-DAO-Contractors-and-Curators.

9. 14日間にわたる議論の末。

10. このフォーラムは、TheDAO だけでなく、あらゆる種類の DAO の「コミュニケーション・ニーズに応える」ものだった。

11. Stephan Tual, "A Primer to Decentralized Autonomous Organizations (DAOs),"

Slock.it (blog), March 3, 2016, もとの URL は https://blog.slock.it/a-primer-to-the-decentralized-autonomous-organization-dao-69fb125bd3cd, 現在の URLは https://laurashin.com/cryptopians/05/11-A-Primer.

12. このフォーラムは forum.daohub.org へ移動した。

13. Wayback Machine 経由による TheDAO ホームページ, April 27, 2016, https://web.archive.org/web/20160427120234/http://daohub.org.

14. Wayback Machine 経由による TheDAO ホームページ, April 30, 2016, https://web.archive.org/web/20160430204625/https://daohub.org.

15. Stephan Tual, "Daohub.org gets a facelift, full scope of The DAO is revealed," *Slock.it* (blog), April 21, 2016, https://web.archive.org/web/20201108111107if_/https://blog.slock.it/daohub-org-gets-a-facelift-full-scope-of-the-dao-is-revealed-4d4c43eaf7b.

16. "The Curator: World-Class Signatories," daohub.org, Wayback Machine 経由の URL は, April 27, 2016, https://web.archive.org/web/20160427071543/http://daohub.org/curator.html.

17. このコードはオープンソースで "Standard DAO Framework"という名称だった。

18. Wayback Machine 経由によるマイイーサウォレットのホームページ, April 28, 2016, https://web.archive.org/web/20160428051624/http://www.myetherwallet.com.

19. Judy Gordon, "11 Questions for Blockchain Community Manager, Auryn Macmillan," Medium, February 1, 2019, https://medium.com/omnisparx/11-questions-for-blockchain-community-manager-auryn-macmillan-c0b7997d44d4.

20. DAOトークンコントラクトを作成するトランザクションに関しては、"Transaction Details," Etherscan, April 30, 2016, https://etherscan.io/tx/0xe9ebfecc2fa10100db51a4408d18193b3ac504584b51a4e55bdef1318f0a30f9.

21. TheDAO へおよそ200万ドル相当の ETH を送ったウォレット（送信した ETH の数量はそれぞれ1, 50,000, 75,000, 135,000, 5.5555, 53,000）。"Transactions: For 0x198ef1ec325a96cc354c7266a038be8b5c558f67," Etherscan, https://etherscan.io/txs?a=0x198ef1ec325a96cc354c7266a038be8b5c558f67&p=31.

22. "Just DAO it"ミームが入った "#DAO #LMDAO" については以下を参照。The DAO (@The_DAO_Project), Twitter, May 2, 2016, https://twitter.com/The_DAO_Project/status/727221296623435776?s=20.

23. Stephan Tual, "The Inexorable Rise of the DAO," *Slock.it* (blog), May 6, 2016, もとの URL は https://blog.slock.it/the-inexorable-rise-of-the-dao-2b6e739b2615#.ao9c9xi8s, 現在の URL は https://laurashin.com/cryptopians/05/23-The-Inexorable-Rise.

24. 5月6日の終値は2086万7694ドルまで上昇した。

25. The DAO (@The_DAO_Project), "The #DAO now has 3% of ALL #ETH in existence!! @DAOhubORG...," Twitter, May 7, 2016, https://twitter.com/The_DAO_Project/status/728904324521308160?s=20.

26. DAOhub (@DAOhubORG), "This is going to be the most epic crowdfunding project in history . . . ," Twitter, May 8, 2016, https://twitter.com/DAOhubORG/status/729377184054448129.

27. BTCWagering, "And we're supposed to believe this was an honest mistake? . . . ," Medium, May 14, 2016, https://medium.com/@BTCWagering/and-were-supposed-to-believe-this-was-an-honest-mistake-ba703a58d50a.

28. @ReaderE, "This is the first evidence . . . ," May 14, 2016, comment on "The DAO Creation Period Price Schedule: There is 24 more hours until the price *actually* rises," Reddit, May 14, 2016, https://www.reddit.com/r/TheDao/comments/4jap6d/the_dao_creation_period_price_schedule_there_is.

29. Gavin Wood, "Why I've Resigned as a Curator of the DAO," Medium, May 13, 2016, https://gavofyork.medium.com/why-ive-resigned-as-a-curator-of-the-dao-238528fbd447.

30. Johann Wolfgang von Goethe, "The Sorcerer's Apprentice," trans. Katrin Gygax, accessed March 28, 2021, http://www.gygatext.ch/english_translations_zurich_sorcerers_apprentice.html.

31. 正確には1172万7772.78。

32. Gertrude Chavez-Dreyfuss, "Virtual company may raise $200 million, largest in crowdfunding," Reuters, May 17, 2016, https://www.reuters.com/article/us-blockchain-crowdfunding-idUKKCN0Y82LI?edition-redirect=uk.

33. TheDAO へ31万5000ETH を送ったイーサリアムアドレス。"Transactions: For 0x198ef1ec325a96cc354c7266a038be8b5c558f67," Etherscan, accessed March 28, 2021, https://etherscan.io/txs?a=0x198ef1ec325a96cc354c7266a038be8b5c558f67&p=31.

34. Elaine Ou (@eiaine), "#theDAO is a risk-free investment because token prices increase by time: Early buyers can split off after crowdsale . . . ," Twitter, May 16, 2016, https://twitter.com/eiaine/status/732260022294454272.

35. Stephan Tual, "DAO.Security, a Proposal to guarantee the integrity of The DAO," *Slock.it* (blog), May 25, 2016, もとの URL は https://blog.slock.it/dao-security-a-proposal-to-guarantee-the-integrity-of-the-dao-3473899ace9d, 現在の URL は https://laurashin.com/cryptopians/05/35-DAO.Security.

36. @miadeg600, "Slock is trying to loot the DAO . . . ," May 26, 2016, comment on "DAO.Security, a Proposal to guarantee the integrity of The DAO," Reddit, May 25, 2016, https://www.reddit.com/r/ethereum/comments/4l2d7m/daosecurity_a_proposal_to_guarantee_the_integrity.

37. Dino Mark, Vlad Zamfir, and Emin Gün Sirer, "A Call for a Temporary Moratorium on the DAO," *Hacking, Distributed*, May 27, 2016, https://hackingdistributed.com/2016/05/27/dao-call-for-moratorium.

38. Nathaniel Popper, "Paper Points Up Flaws in Venture Fund Based on Virtual Money," *New York Times*, May 27, 2016, https://www.nytimes.com/2016/05/28/business/dealbook/paper-points-up-flaws-in-venture-fund-based-on-virtual-money.html.

39. Alex van de Sande (@avsa), "The Moratorium and how to move forward," Reddit, June 1, 2016, https://www.reddit.com/r/TheDao/comments/4m1t24/the_moratorium_and_how_to_move_forward/?sort=new.

40. Michael del Castillo, "Will The DAO Become Ethereum's Mt Gox?," *CoinDesk*, June 9, 2016, https://www.coindesk.com/dao-can-keep-

becoming-next-mt-gox.

41. そのオープンソースが管理されているギットハブ内。

42. LefterisJP, "DAO Improvement Request 5—Add Option to withdraw() from the DAO #148," GitHub, May 17, 2016, https://github.com/blockchainsllc/DAO/issues/148.

43. CryptoCompare Index ETH All Data (Trading Volume Chart), up to the week of June 20, 2016, https://www.cryptocompare.com/coins/eth/charts/USD?p=ALL&fTs=1457413200&tTs=1485061200.

第6章

1. Vitalik Buterin, "Bitcoin Network Shaken by Blockchain Fork," *Bitcoin Magazine*, March 13, 2013, https://bitcoinmagazine.com/articles/bitcoin-network-shaken-by-blockchain-fork-1363144448.

2. A Guest, "Untitled [Ethereum Foundation/exchanges Skype chat og]," Pastebin, June 17, 2016, https://pastebin.com/aMKwQcHR.

3. Peter Vessenes, "More Ethereum Attacks: Race-to-Empty is the Real Deal," *Vessenes* (blog), June 9, 2016, https://vessenes.com/more-ethereum-attacks-race-to-empty-is-the-real-deal.

4. "About Peter," *Vessenes* (blog), accessed March 29, 2021, https://vessenes.com/about; Christian Reitwiessner, "Smart Contract Security," *Ethereum Foundation Blog*, June 10, 2016, https://blog.ethereum.org/2016/06/10/smart-contract-security.

5. Stephan Tual, "No DAO funds at risk following the Ethereum smart contract 'recursive call' bug discovery," *Slock.it* (blog) Wayback Machine 経由の URL は, June 12, 2016, https://web.archive.org/web/20160617173409/https://blog.slock.it/no-dao-funds-at-risk-following-the-ethereum-smart-contract-recursive-call-bug-discovery-29f482d348b?gi=2c2267d6aa56.

6. Vitalik Buterin (@VitalikButerin), "I will provide my opinion in the way that @Truthcoin would approve of: I have been buying DAO tokens since the security news," Twitter, June 11, 2016, https://twitter.com/VitalikButerin/status/741832934814949377.

7. 子DAO# 59 作成トランザクション。"Transaction Details," Etherscan, June 8, 2016, https://etherscan.io/tx/0x5798fbc45e3b63832abc4984b0f3574a13545f415dd672cd8540cd71f735db56.

8. 子DAO# 59 の作成者は30万5000 DAOトークンをクラーケンへ移動。"Transaction Details," Etherscan, June 14, 2016, https://etherscan.io/tx/0x0b5dfbbce4c4dad6eb92c0790fa9903cd7f27e70d9cadcd6aa30a63c0c11f7d6 ; child DAO creator moves 306,914.7019250663811563 DAO tokens to Poloniex: "Transaction Details," Etherscan, June 14, 2016, https://etherscan.io/tx/0xf0daeb80b0635bc78eb724660d8788c6758ffe7f5ce705c943121c43b388d7f0 .

9. TheDAO 攻撃開始。 "Transaction Details," Etherscan, June 17, 2016, https://etherscan.io/tx/0x0ec3f2488a93839524add10ea229e773f6bc891b4eb4794c3337d4495263790b .

10. TheDAO 攻撃者はシェイプシフトで2 BTCを7910.21 DAOトークンに交

換。ビットコインブロックチェーン上について詳しくは以下を参照。
"Summary," Blockchain.com, June 14, 2016,
https://www.blockchain.com/btc/tx/a048110f721000be7ff090a85a7363040d56
4071073ba26bb3214eea9ce7a1e , シェイプシフト API 経由のもとの URL
は https://shapeshift.io/txstat/1HLmLSobXDdgKDvVcxFNGHAEYaFzENJgDr,
現在の URL は https://laurashin.com/cryptopians/06/10a-1HLmL., イーサリ
アムブロックチェーン上について詳しくは以下を参照。"Transaction
Details," Etherscan, June 14, 2016,
https://etherscan.io/tx/0xc017561624884dff6916f1e4e6f450cd1ccefc0c922727ec
cb8ed791e224c0e2 ; DAO attacker exchanging 2 BTC for 8,306.09610816
DAO tokens via ShapeShift: on Bitcoin blockchain, see "Summary,"
Blockchain.com, June 14, 2016,
https://www.blockchain.com/btc/tx/7999c3b21a8972422cb5fef039342f549e79
3bf052931a5b2a5325dc7c39a15c , シェイプシフト API 経由のもとの URL
は https://shapeshift.io/txstat/1HAiPwQsBqSmFpgyBmbPpLJX uxXEeqEs6T,
現在の URL はhttps://laurashin.com/cryptopians/06/10b-1HAiP., イーサリア
ムブロックチェーン上について詳しくは以下を参照。 "Transaction
Details," Etherscan, June 14, 2016,
https://etherscan.io/tx/0x099ef900a2b9959a191a67a58c81897776c66942aac0a
7166760a7896c3c52a2 ; TheDAO 攻撃者はシェイプシフト経由で 2 BTCを
8306 DAOトークンに交換。ビットコインブロックチェーン上について
詳しくは以下を参照。"Address," Blockchain.com, June 14, 2016,
https://www.blockchain.com/btc/address/1C4dt6HozjP3Ea9aCdmy54sq4aNSV
MDUBp , シェイプシフト API 経由のもとの URL は
https://shapeshift.io/txstat/1C4dt6HozjP3Ea9aCdmy54sq4aNSVMDUBp, 現在
のURLはhttps://laurashin.com/cryptopians/06/10c-1C4dt., イーサリアムブロ
ックチェーン上について詳しくは以下を参照。 "Transaction Details,"
Etherscan, June 14, 2016,

https://etherscan.io/tx/0x11476dd78f9495e4c6abde63f973b8b441cce7c988971 5d7096ad416d7d4272e ; TheDAO 攻撃者はシェイプシフト経由で 1.4 BTC を 52.02 ETH に交換。ビットコインブロックチェーン上について詳しくは以下を参照。 "Summary," Blockchain.com, June 14, 2016, https://www.blockchain.com/btc/tx/04b06448610397cde63253bd4a8551f bcea2bcd61ba 4fd0552b86384eb0fcd18 , シェイプシフト API 経由のもとの URL は

https://shapeshift.io/txstat/1BBtWCku9TRYkT9ZTvAJKVsYVTBJbpkZ9s, 現在のURL はhttps://laurashin.com/cryptopians/06/10d-1BBtW., イーサリアムブロックチェーン上においては以下を参照。 "Transaction Details," Etherscan, June 14, 2016, https://etherscan.io/tx/0x40b63d8b2d6933e126f2707dee9545adc54461d24f464 a016dc6b9a71ef159cc ; TheDAO 攻撃者の DAOトークンの主たるイーサリアムアドレス。 "Token TheDAO," Etherscan, https://etherscan.io/token/0xbb9bc244d798123fde783fcc1c72d3bb8c189413?a=0 x969837498944ae1dc0dcac2d0c65634c88729b2d.

11. TheDAO 攻撃者はコントラクト 0xc0ee9 を使い、アカウント 0x969 から子DAO #59 に賛成票を投じた。 "Transaction Details," Etherscan, June 15, 2016, https://etherscan.io/tx/0x1de9b7db4d55af395518b83a49dafe0c37cb746e840ce9 d4bc367cb050dbe6ac ; Ｔｈｅ DAO 攻撃者はコントラクト 0xf835a を使い、アカウント 0xf35e2 から子DAO #59 に賛成票を投じた。 "Transaction Details," Etherscan, June 15, 2016, https://etherscan.io/tx/0xb5ff2d7a165baba4ca8d7bf8223af9dcf956ec6a4f4f85dbd d3ebea0111251ed.

12. 2016年6月16日、TheDAO 攻撃者はシェイプシフトで 0.67744325 BTC を

交換しようとしたが、攻撃者のリターンアドレスへ返却された。
ShapeShift API 経由のもとの URL は
https://shapeshift.io/txstat/1GYmoQPGh9S9dj3ADnhwK32TRh8U7pjBVD, 現
在の URL はhttps://laurashin.com/cryptopians/06/12-1GYmo., ビットコイン
ブロックチェーン上について詳しくは以下を参照。 "Summary,"
Blockchain.com, June 16, 2016,
https://www.blockchain.com/btc/tx/afd6fc9cb2910445b126cbfd8a8dd58b4d535
9356688f416635c12b15fcab7bf.

13. 2016年6月16日、TheDAO攻撃者はシェイプシフト経由で1.23628167
BTCを46.87979279 ETHに交換した。ビットコインブロックチェーン上
について詳しくは以下を参照。 "Summary," Blockchain.com,
https://www.blockchain.com/btc/tx/8883a039f4b5df3e90a0aa15fc485dcbc1efb
bef3bee32bfa0e985ae63c1e11a , シェイプシフト API 経由のもとの URL は
https://shapeshift.io/txstat/17yqy Lree8URtSnZbZu6S5EMKjTMnzo8b7, 現在
のURLはhttps://laurashin.com/cryptopians/06/13-17yqy., イーサリアムブロ
ックチェーン上については以下を参照。 "Transaction Details," Etherscan,
June 16, 2016,
https://etherscan.io/tx/0x512df37c9702e2cbfd761d4f336e6f01911a84a1b3b91f
731e9675ef79b81d13.

14. 2016年6月16日、TheDAO 攻撃者はシェイプシフトで 0.667 BTC を25
ETH に交換した。ビットコインブロックチェーン上について詳しくは以
下を参照。
https://www.blockchain.com/btc/tx/009ab0293e8f24c76f1d7fce018dfca1059c1b
ef6819670d8f11c6c277531bdc , シェイプシフト API 経由のもとの URL は
https://shapeshift.io/txstat/14mMb4xdSW8hZtzboHFHVzAUhnwLf11sSK, 現在
のURLはhttps://laurashin.com/cryptopians/06/14a-14mMb., イーサリアムブ

ロックチェーン上については以下を参照。"Transaction Details,"
Etherscan, June 16, 2016,
https://etherscan.io/tx/0xc6a773490f9e69f4bce6dc1c887c52fb5d51917be256bbb
873ef2c18014cf1a8 ; 2016年6月16日、TheDAO 攻撃者はシェイプシフトで
0.4 BTC を14.9258 ETH に交換した。詳しくは以下を参照。"Summary,"
Blockchain.com,
https://www.blockchain.com/btc/tx/3b26f606cc9e381b48a1aa87585af3611cee6
fcfab325c61a216a783a4866f46 , シェイプシフト API 経由のもとの URL は
https://shapeshift.io/txstat/1FB1MuuCn G9ERrKqZAcsKUPgy19WReRAub,
現在のURLはhttps://laurashin.com/cryptopians/06/14b-1FB1M., イーサリア
ムブロックチェーン上については以下を参照。"Transaction Details,"
Etherscan, June 16, 2016,
https://etherscan.io/tx/0xd120cfdb68baa17e519cf1e3d18efb35432a77afe8a0809
61aff42d07199515b ; TheDAO 攻撃者はシェイプシフトで0.31304245 BTC
を1283.55 DAOトークンに交換した。ビットコインブロックチェーン上に
ついては以下を参照。"Summary," Blockchain.com,
https://www.blockchain.com/btc/tx/e90687a4e7f3593e5dee704b801b46164509
e6e887ecc0ac5a3fc8c44723a285 , シェイプシフト API 経由のもとの URL
は https://shapeshift.io/txstat/1ERErQFpZUjfqmc4HR9SLovx9Qxh GiZa1Q, 現
在の URL はhttps://laurashin.com/cryptopians/06/14c-1EREr., イーサリアム
ブロックチェーン上については以下を参照。"Transaction Details,"
Etherscan, June 16, 2016,
https://etherscan.io/tx/0x46de32fec895a13373c523a8e20263faf2ae5410468b3d9a
f41127d08dd42688.

15. TheDAO 攻撃者が TheDAO で再帰呼び出し攻撃に成功した最初の例。
"Transaction Details," Etherscan, June 17, 2016,
https://etherscan.io/tx/0x0ec3f2488a93839524add10ea229e773f6bc891b4eb4794

c3337d4495263790b.

16. Stephan Tual, "DAO Security Advisory: live updates," *Slock.it* (blog), June 17, 2016, Wayback Machine 経由の URL は https://web.archive.org/web/20160622212451/https://blog.slock.it/dao-security-advisory-live-updates-2a0a42a2d07b?gi=e1baac16ac65 ; Vitalik Buterin, "CRITICAL UPDATE Re: DAO Vulnerability," *Ethereum Foundation Blog*, June 17, 2016, https://blog.ethereum.org/2016/06/17/critical-update-re-dao-vulnerability.

17. "THE FILTER #88 'Tough Day for The DAO,' " 2016年6月18日、グリフ・グリーンへのインタビュー。ザ・フィルタによって投稿された YouTube 動画は https://www.youtube.com/watch?v=GvgTivwzcuo.

18. TheDAO 攻撃者が TheDAO に対して行なった最後の再帰呼び出し攻撃。"Transaction Details," Etherscan, June 17, 2016, https://etherscan.io/tx/0xa348da60799bff3ca804b3e49c96edebea44c5728a97f64bec3e21056d42f6e3.

19. TheDAO 攻撃者が吸い取った量。"Contract 0x304a554a310C7e5 46dfe434669C62820b7D83490," Etherscan, June 17, 2016, https://etherscan.io/address/0x304a554a310c7e546dfe434669c62820b7d83490#analytics.

20. 2016年6月17日に取引された ETH の量。Ethereum," CoinMarketCap, accessed April 4, 2021, https://coinmarketcap.com/currencies/ethereum/historical-data.

21. WhalePanda, "The Un-ETH-ical fork," Medium, June 18, 2016, https://medium.com/@WhalePanda/the-un-eth-ical-fork-2d87041c9591.

22. Vitalik Buterin, "Thinking About Smart Contract Security," *Ethereum Foundation Blog*, June 19, 2016, https://blog.ethereum.org/2016/06/19/thinking-smart-contract-security.

23. Guest, "An Open Letter," Pastebin, June 18, 2016, https://pastebin.com/CcGUBgDG.

24. @IAMnotA_Cylon, "I know this is a joke . . . ," June 17, 2016, comment on "Critical update RE: DAO Vulnerability," Reddit, June 17, 2016, https://www.reddit.com/r/ethereum/comments/4oiqj7/critical_update_re_dao_vulnerability/d4d5ne7?utm_source=share&utm_medium=web2x.

25. [Deleted user], "The guy who stole my car . . . ," June 18, 2016, comment on "Critical update RE: DAO Vulnerability."

26. @lehmakook, "It is. Even DAO's own website . . . ," June 17, 2016, comment on "Critical update RE: DAO Vulnerability."

27. Christoph Jentzsch, "What the 'Fork' Really Means," *Slock.it* (blog), June 18, 2016, https://blog.slock.it/what-the-fork-really-means-6fe573ac31dd.

28. この大口投資家はあらかじめ、クラウドセールに投資する前、スロック・イットが合法かどうかを同社に問い合わせた。

29. Alex van de Sande (@avsa), "Update on the White Hat attack," Reddit, June 21, 2016, https://www.reddit.com/r/ethereum/comments/4p7mhc/update_on_the_white_hat_attack.

30. Avsa, "Update on White Hat attack."

31. ロビンフッドグループが資金救出のため行なった最初の再帰呼び出し攻

撃。"Contract Internal Transactions: For Address 0xb136707642a4ea12f b4bae8 20f03d2562ebff487," Etherscan, June 21, 2016, https://etherscan.io/txsInternal?a=0xb136707642a4ea12fb4bae820f03d2562ebff487&p=15.

32. ロビンフッドグループが資金救出のため行なった2回目の再帰呼び出し攻撃。"Contract Internal Transactions: For Block 1745931," Etherscan, June 21, 2016, https://etherscan.io/txsInternal?block=1745931.（細かく見るとわかるだろうが、DAOトークンが32回送信されたにもかかわらず、ETHは31回しか返されていない。DAOトークンの最後の送信は、無効化を防ぐため、ロビンフッドグループの悪意のあるコントラクトへ戻された。無効化されてしまうと、ロビンフッドグループやほかの攻撃者は新しいコインを調達しなければならないからだ）。

33. ロビンフッドグループが資金救出のため行なった3回目の再帰呼び出し攻撃。"Contract Internal Transactions: For Block 1745967," Etherscan, June 21, 2016, https://etherscan.io/txsInternal?block=1745967.

34. TheDAO攻撃の模倣者が、TheDAOからの吸い上げを開始。"Contract Internal Transactions: For Address 0xf4c64518ea10f9 95918a454158c6b61407ea345c," Etherscan, June 21, 2016, https://etherscan.io/txsInternal?a=0xf4c64518ea10f995918a454158c6b61407ea345c&p=18.

35. ロビンフッドグループが600万DAOトークンで再帰呼び出し攻撃を開始。"Transaction Details," Etherscan, June 21, 2016, https://etherscan.io/tx/0xf8bf7170b0b380efe43130c99c399953032b3a074af44ec92f8ced11cbbb30f7.（攻撃者がTheDAOの31%を流出させ、ほかの人たちがさらに少し流出させたため、1ヒットあたり4万1187ETHしか戻ってこ

なかった）。

36. 模倣者がTheDAO攻撃を試みたが、すぐにあきらめた。 "Contract Internal Transactions: For Address 0xaeeb8ff27288bd abc0fa5ebb731b6f409507516c," Etherscan, June 21, 2016, https://etherscan.io/txsInternal?a=0xaeeb8ff27288bdabc0fa5ebb731b6f40950751 6c&p=2.

37. Alex van de Sande (@avsa), "DAO IS BEING SECURELY DRAINED. DO NOT PANIC," Twitter, June 21, 2016, https://twitter.com/avsa/status/745313647514226688.

38. Alex van de Sande (@avsa), "DAO is now mostly empty. 7.2M ether have been secured so far . . . ," Twitter, June 21, 2016, https://twitter.com/avsa/status/745364898583056385?s=20.

39. van de Sande (@avsa), "Update on the White Hat attack."

第7章

1. Fabian Vogelsteller (@frozeman), "We know the curator . . . ," June 21, 2016, comment on "Update on the White Hat attack."

2. Stephan Tual (@Ursium), "This is being heavily debated . . . ," June 21, 2016, comment on "Update on the White Hat attack."

3. @C1aranMurray, "I was a hardforker but now no need . . . ," June 22, 2016, comment on "Update on the White Hat attack."

4. Christoph Jentzsch, "What the 'Fork' Really Means," *Slock.it* (blog), June 18,

2016, https://blog.slock.it/what-the-fork-really-means-6fe573ac31dd; Lefteris Karapetsas, "A DAO Counter-Attack," *Slock.it* (blog), June 19, 2016, https://blog.slock.it/a-dao-counter-attack-613548408dd7#.c2nmoe60a.

5. "THE FILTER #88 'Tough Day for The DAO,' " 2016年6月18日、グリフ・グリーンへのインタビュー。ザ・フィルタによって投稿された YouTube 動画は https://www.youtube.com/watch?v=GvgTivwzcuo.

6. Lefteris Karapetsas, "White Hat Siphoning Has Occurred. What Now?," *Slock.it* (blog), June 22, 2016, https://blog.slock.it/white-hat-siphoning-has-occurred-what-now-f7ba2f8d20ef#.mglcr7m9y.

7. Karapetsas, "White Hat Siphoning."

8. Bitcoin Suisse AG (@BitcoinSuisseAG), "Communique from the White hat DAO joiner," Reddit, June 23, 2016, https://www.reddit.com/r/ethereum/comments/4pij7r/communique_from_the_white_hat_dao_joiner.

9. Fabian Vogelsteller (@frozeman), "I can verify its him…," June 23, 2016, comment on Reddit, "Communique from the White hat DAO joiner."

10. "Hard Fork Ethereum to Revert the Hack of The DAO," Change.org, accessed March 29, 2021, https://www.change.org/p/ethereum-hard-fork-ethereum-to-revert-the-hack-of-the-dao.

11. Jan Kocjan, "Hard fork to revert stolen DAO funds," The DAO, June 18, 2016, https://dao.consider.it/hard-fork-to-revert-stolen-dao-funds.

12. Stephan Tual (@stephantual), ".@el33th4xor was aware of exploit but didn't inform the DAO security group he joined on 5/31 #theDAO," Twitter, June 20, 2016, https://twitter.com/stephantual/status/745013737074081792?s=20.

13. Emin Gün Sirer (@el33th4xor), "These guys will do anything except admit failure and take responsibility," Twitter, June 20, 2016, https://twitter.com/el33th4xor/status/745016651800805376?s=20.

14. Emin Gün Sirer (@el33th4xor), "If the ETH community bails out the DAO (and I believe they should), we need to put in place a social wall around Slockit to avoid a repeat," Twitter, June 21, 2016, https://twitter.com/el33th4xor/status/745231124583026688?s=20.

15. Taylor Van Orden (@insomniasexx), "And THIS is the hate I am talking about . . . ," June 22, 2016, comment on "Cornell Professor Calls for DAO 2.0 Movement," Reddit, June 22, 2016, https://www.reddit.com/r/ethereum/comments/4pcsq8/cornell_professor_calls_for_dao_20_movement/d4jwbce/?utm_source=reddit&utm_medium=web2x&context=3.

16. Emin Gün Sirer (@el33th4xor), "Hi there, I'm the professor to whom you said, 'grow the fuck up.' . . . ," June 23, 2016, comment on "Cornell Professor Calls for DAO 2.0 Movement."

17. Stephan Tual (@stephantual), "The only acceptable way forward," Twitter, June 17, 2016, https://twitter.com/stephantual/status/743856574620270592?s=20.

18. @Revofever, "Posting memes after you've caused your investors to lose millions . . . only in crypto," Twitter, June 17, 2016, https://twitter.com/revofever/status/743929415751573504?s=20

19. Ryan Radloff (@RyanRadloff), "don't worry man, if things don't work out this time we can just fork again, then fork after that if the last fork doesn't work," Twitter, June 24, 2016,

https://twitter.com/RyanRadloff/status/746452955025506304?s=20 ; Frank F (@Lightrider), "yeah it's super frustrating when people represent things like how safe & secure their robo investment program is to the public," Twitter, June 23, 2016, https://twitter.com/Lightrider/status/746112635549081601?s=20.

20. [deleted user], "Will Stephan Tual Apologize?," Reddit, June 18, 2016, https://www.reddit.com/r/ethereum/comments/4oq6yh/will_stephan_tual_apologize.

21. Péter Szilágyi, "DAO Wars: Your voice on the soft-fork dilemma," *Ethereum Foundation Blog*, June 24, 2016, https://blog.ethereum.org/2016/06/24/dao-wars-youre-voice-soft-fork-dilemma.

22. Fabian Vogelsteller (@feindura), "With the soft fork being vulnerable there are two options left: a hardfork only affecting TheDAOs, or doing nothing . . . ," Twitter, https://twitter.com/feindura/status/747836161452875776?s=20.

23. "TheDAO Proposal_ID 242," Etherscan, July 8, 2016, Wayback Machine 経由の URL は
https://web.archive.org/web/20160714055313/http://etherscan.io/token/thedao-proposal/242.

24. "TheDAO Proposal_ID 243," Etherscan, July 13, 2016, Wayback Machine 経由の URL は
https://web.archive.org/web/20160713002933/http://etherscan.io/token/thedao-proposal/243.

25. "TheDAO Proposal_ID 263," Etherscan, July 11, 2016, Wayback Machine 経由の URL は
https://web.archive.org/web/20170722132438/https://etherscan.io/token/thedao-proposal/263 ; "TheDAO Proposal_ID 265," Etherscan, July 10, 2016,

Wayback Machine 経由の URL は
https://web.archive.org/web/20160710103342/http://etherscan.io/token/thedao-proposal/265 ; "TheDAO Proposal_ID 266," Etherscan, July 7, 2016, Wayback Machine経由の URL は
https://web.archive.org/web/20160710103139/http://etherscan.io/token/thedao-proposal/266.

26. White Hat DAO recursive calls with 25.4 million DAO tokens: "Transaction Details," Etherscan, July 11, 2016,
https://etherscan.io/tx/0xa08553f20ff46a944e8c3a0a8df8bc56a2c8daea41037ba5b3f212dc07a9b47d.

27. Lefteris Karapetsas (@LefterisJP), "DTH [DAO Token Holders]: Voting request for Counter-Attack Proposals," Reddit, July 4, 2016,
https://www.reddit.com/r/ethereum/comments/4r89jq/dth_voting_request_for_counterattack_proposals.

28. [deleted user], "Come on /u/LefterisJP, you leave us hanging . . . ," July 4, 2016, comment on Karapetsas, "DTH: Voting request."

29. Stephan Tual, "Why the DAO robber could very well return the ETH on July 14th," Medium Ursium blog, July 9, 2016, Wayback Machine 経由の URL は
https://web.archive.org/web/20160709150904/https://medium.com/ursium-blog/why-the-dao-robber-could-very-well-return-the-eth-on-july-14th-4ecb950c2592.

30. @logical, "Hmmmm. So Stephan Tual thinks . . . ," July 9, 2016, comment on "Why the DAO robber could very well return the ETH on July 14th—Ursium blog," Reddit, July 9, 2016,
https://www.reddit.com/r/ethereum/comments/4s0l1k/why_the_dao_robber_could_very_well_return_the_eth.

31. Transaction in which the Robin Hood Group whitelisted the Dark DAO in the multisig: "Transaction Details," Etherscan, July 11, 2016, https://etherscan.io/tx/0x9257c2e0a11de7b7427d4607f5908d6448278070bb735 00139387930826fedc0.

32. Christoph Jentzsch, "Options in the Hard Fork," *Slock.it* (blog), July 7, 2016, https://blog.slock.it/options-in-the-hard-fork-90e467483c0.

33. "Vote: TheDAO Hard Fork," Carbonvote.com, accessed March 31, 2021, http://v1.carbonvote.com.

34. Jeffrey Wilcke, "To fork or not to fork," *Ethereum Foundation Blog*, July 15, 2016, https://blog.ethereum.org/2016/07/15/to-fork-or-not-to-fork.

35. Christoph Jentzsch, "Options in the Hard Fork," *Slock.it* (blog), July 7, 2016, https://blog.slock.it/options-in-the-hard-fork-90e467483c0#.10qltz4hw.

36. Vitalik Buterin (@VButerin), "All monetization schemesfragment . . . ," October 9, 2014, "Comment on 'What's Wrong with Counterparty,' " Reddit, October 9, 2014, https://www.reddit.com/r/Bitcoin/comments/2is4us/whats_wrong_wit h_counterparty.

37. たとえば、ローンチから2週間後の真夜中、彼やほかのメンバーは、Go クライアントのエラーによって、チェーンが分裂したことを確認した。 そこで、彼らはそれを修正し、クライアントをアップグレードするため にすべてのマイニングプールに電話した。

38. Vitalik Buterin (@vbuterin), "Quick HF safety tips for users," Reddit, July 17, 2016, https://www.reddit.com/r/ethereum/comments/4t9mzg/quick_hf_safety_tips_fo

r_users.

39. Vitalik Buterin (@vbuterin), "A contract to conditionally send ether to another account post-hF to protect yourself from replay attacks if desired/needed," Reddit, July 17, 2016, https://www.reddit.com/r/ethereum/comments/4t9jv5/a_contract_to_conditionally_send_ether_to_another.

40. WithdrawDAO smart contract: "Contract 0xBf4eD7b27F1d6665 46E30D74d50d173d20bca754," Etherscan, accessed March 31, 2021, https://etherscan.io/address/0xbf4ed7b27f1d666546e30d74d50d173d20bca754.

41. July 20, 2016, on "Past Weather in City of Ithaca, New York, USA— July 2016," TimeandDate.com, https://www.timeanddate.com/weather/@5122440/historic?month=7&year=2016.

42. "IC3-Ethereum Crypto Boot Camp and Workshop at Cornell University," The Initiative for CryptoCurrencies and Contracts, accessed March 31, 2021, https://www.initc3.org/events/2016-07-20-IC3-Ethereum-Crypto-Boot-Camp-and-Workshop-at-Cornell-University.html.

43. Christoph Jentzsch, "What an accomplishment!," *Slock.it* (blog), July 20, 2016, https://blog.slock.it/what-an-accomplishment-3e7ddea8b91d.

44. @pokerman69, "These guys have some nerve . . . ," July 20, 2016, comment on "What an accomplishment!—Slock.it Blog," Reddit, July 20, 2016, https://www.reddit.com/r/ethtrader/comments/4tr62w/what_an_accomplishment_slockit_blog/d5jmhvm?utm_source=share&utm_medium=web2x.

45. "How do I convert my The DAO tokens into ethers using the withdrawal contract after the hard fork?," StackExchange, Ethereum, July 19, 2016,

updated July 20, July 23,
https://ethereum.stackexchange.com/questions/7204/how-do-i-convert-my-the-dao-tokens-into-ethers-using-the-withdrawal-contract-aft.

46. TheDAO 攻撃者のDAO トークンが1段階移動。"Token Transfers: For 0xc0ee9db1a9e07ca63e4ff0d5fb6f86bf68d47b89," Etherscan, June 17, 2016, https://etherscan.io/tokentxns?a=0xc0ee9db1a9e07ca63e4ff0d5fb6f86bf68d47b89&p=1 ; 2段階目の移動。"Contract 0xca04D26035 6D19f0D7255041542C9Cbc866F2cB3," Etherscan, July 10, 2016, https://etherscan.io/address/0xca04d260356d19f0d7255041542c9cbc866f2cb3#tokentxns ; 3段階目の移動。"Contract 0x038DDC33dB89d12C4B92607F9ED4a5d6D0D84C2e," Etherscan, July 11, 2016, https://etherscan.io/address/0x038ddc33db89d12c4b92607f9ed4a5d6d0d84c2e#tokentxns ; 4段階目の移動。"Address 0xBe3aE5Cb97c253DdA67181C 6E34E43F5C275E08b," Etherscan, July 11, 2016, https://etherscan.io/address/0xbe3ae5cb97c253dda67181c6e34e43f5c275e08b#tokentxns ; Wallet from which DAO tokens used in このウォレットから、TheDAO 攻撃で使われたDAO トークンが引き出し用コントラクトへ送られた。"Address 0x26D2d3c9020926020b06923A38Fa3 D21572cEb5F," Etherscan, July 23, 2016, https://etherscan.io/address/0x26d2d3c9020926020b06923a38fa3d21572ceb5f#tokentxns .

47. このトランザクション内で、TheDAO 攻撃で使われた DAO トークンが引き出し用コントラクトへ送られた。"Transaction Details," Etherscan, July 23, 2016, https://etherscan.io/tx/0x0774db73b879b2fb4821286ced1c1ea6958b1799ee9d6c25c58e8bbd91c797cf .

48. @jps_, "Two Chains," Reddit, July 15, 2016,
https://www.reddit.com/r/ethereum/comments/4sx5kz/two_chains.

49. Aaron van Wirdum, "Rejecting Today's Hard Fork, the Ethereum Classic
Project Continues on the Original Chain: Here's Why," *Bitcoin Magazine*, July
20 2016, https://bitcoinmagazine.com/articles/rejecting-today-s-hard-fork-the-
ethereum-classic-project-continues-on-the-original-chain-here-s-why-
1469038808.

50. ハッシュとは、ある種のブロックチェーンネットワークが数学的に難し
いパズルを毎秒何回解くことができるかを表す。

51. "Ethereum Network Hash Rate Chart," Etherscan, accessed March 31, 2021,
https://etherscan.io/chart/hashrate.

52. "Daily Average Hashrate (TH/s)," Ethereum Classic Explorer, accessed March
31, 2021, https://etc.tokenview.com/en/chart/dailyHashrate.

53. @Seccour, "[ETHC] Ethereum Classic Speculation," BitcoinTalk, July 21,
2016,
https://bitcointalk.org/index.php?topic=1559738.msg15659195#msg15659195.

54. Jameson Lopp (@lopp), "Ethereum Classic has < 1% of @ethereumproject's
hashing power and while there are plenty of sellers, no one's buying," Twitter,
July 21, 2016, https://twitter.com/lopp/status/756261363819905025.

55. @Mentor77, "Please sell us your eTHC / ETH Classic!," Reddit, July 21,
2016,
https://www.reddit.com/r/ethereum/comments/4tzf9o/please_sell_us_your_ethc
_eth_classic.

56. Celina Guerrero, "Enterprising Young Composer Founds Sheet Music

Publishing House," Musical America Worldwide, January 25, 2012, https://www.musicalamerica.com/news/newsstory.cfm?archived=0&storyID=26629&categoryID=5.

57. そのほかの取引所は、クラーケンと、中国の取引所であるユンビ。

58. Tristan D'Agosta, "An Open Letter from Tristan D'Agosta," Poloniex, press release, accessed March 31, 2021, https://poloniexus.circle.com/press-releases/2015.05.19-Open-Letter.

59. "24 Hour Volume Rankings (Exchange) Week of March 11, 2016," CoinMarketCap March 11, 2016, Wayback Machine 経由の URL は, https://web.archive.org/web/20160311200242/http://coinmarketcap.com/exchanges/volume/24-hour ; "24 Hour Volume Rankings (Exchange) Week of February 21, 2016," CoinMarketCap, February 21, 2016, Wayback Machine 経由の URL は https://web.archive.org/web/20160221144920/http://coinmarketcap.com/exchanges/volume/24-hour.

60. "Responses to Common ETC Questions," Poloniex, press release, July 27, 2016, https://poloniexus.circle.com/press-releases/2016.07.26-responses-to-common-etc-questions.

61. Poloniex (@Poloniex), "ETC/BTC and ETC/ETH #Ethereum Classic markets added . . . ," Twitter, July 24, 2016, https://twitter.com/Poloniex/status/757068619234803712?s=20.

62. Poloniex (@Poloniex), "All users who had an #Ethereum balance at the moment of the fork now have a matching balance of $ETC," Twitter, July 24, 2016, https://twitter.com/Poloniex/status/757069127018315777?s=20 .

第8章

1. Heriberto Montalvo (@HMontalvo369), "wow what a lack of morals…," Twitter, July 24, 2016, https://twitter.com/HMontalvo369/status/757126269951545344?s=20.

2. @Crypto_Bitlord, "the original and the best! This is great news for unadulterated Ethereum!," Twitter, July 24, 2016; tweet since deleted.

3. Chandler Guo (@ChandlerGuo), "I am Chandler Guo, a 51% attack on Ethereum Classic (ETC) is coming with my 98G hashrate http://powtopos.com," Twitter, July 24, 2016, https://twitter.com/chandlerguo/status/757191880740184064?lang=en.

4. "Daily Average Hashrate (TH/s)," Ethereum Classic Explorer, accessed March 31, 2021, https://etc.tokenview.com/en/chart/dailyHashrate.

5. "Ethereum Foundation Skype Chat," Imgur, July 26, 2016, https://imgur.com/a/DHexx#4I1WrPY.

6. Barry Silbert (@BarrySilbert), "Bought my first non-bitcoin digital currency…Ethereum Classic (ETC)…," Twitter, July 25, 2016, https://twitter.com/barrysilbert/status/757628841938472961?s=20.

7. Barry Silbert (@BarrySilbert), "For those inquiring, @GenesisTrading is facilitating OTC block trading of Ethereum Classic (ETC). Min block size of $25,000," Twitter, July 25, 2016, https://twitter.com/barrysilbert/status/757705666915995648?s=20.

8. Fellow Traveller (@JZAK07), "It means if you have $25k you had been

planning on lighting on fire, this may be more amusing," Twitter, July 26, 2016, https://twitter.com/JZAK07/status/757792669447749643?s=20.

9. "Kraken opens classic ether (ETC) markets and credits ETC to accounts," *Kraken* (blog), July 26, 2016, https://blog.kraken.com/post/227/kraken-opens-classic-ether-etc-markets-and ; Barry Silbert (@BarrySilbert), "Ethereum Classic (ETC) added to Bittrex exchange," Twitter, July 26, 2016, https://twitter.com/barrysilbert/status/758010212154507264?s=20.

10. Barry Silbert (@BarrySilbert), "Watch the hash rate. ETC up to 6% http://fork.ethstats.net," Twitter, July 26, 2016, https://twitter.com/barrysilbert/status/757932068261203968; Barry Silbert (@BarrySilbert), "ETH: 3400 GH/s [82.5%] ETC: 720 GH/s[17.5%] http://fork.ethstats.net," Twitter, July 26, 2016, https://twitter.com/barrysilbert/status/758038319322324992.

11. Barry Silbert (@BarrySilbert), "What a day," Twitter, July 26, 2016, https://twitter.com/barrysilbert/status/758067873604665345.

12. Alex van de Sande (@avsa), "Classic feels like a troubled teenager son: you love them, created them, helped them grow, yet all they talk is murdering you on your sleep," Twitter, July 26, 2016, https://twitter.com/avsa/status/757943094293721088.

13. Charles Hoskinson (@IOHK_Charles), "Two words to guarantee downvotes on the ethereum or bitcoin reddit. Put Charles Hoskinson in the title. So glad to be loved:)," Twitter, March 13, 2015, https://twitter.com/IOHK_Charles/status/576497897358823424?s=20 ; Charles Hoskinson (@IOHK_ Charles), "I never thought I'd tweet this . . . I'm rejoining Ethereum to start making contributions to Classic. Will report more later," Twitter, July 27, 2016,

https://twitter.com/IOHK_Charles/status/758277705766989830?s=20.

14. "Ethereum Classic," BTC-e News July 27, 2016, Wayback Machine 経由の URL は https://web.archive.org/web/20160729025821/https://btc-e.com/news/230.

15. Barry Silbert (@BarrySilbert), "Given number of people calling me an idiot for buying ETC, I'm feeling real good right now. Reminds me of '12 when I started buying BTC <$10," Twitter, July 30, 2016, https://twitter.com/barrysilbert/status/759384165099896832.

16. Хуёвый Путин (@Banderovetz), "@VitalikButerin Vitaliy is it true that you left ETH and now working with ETC team? Can you kill this rumor once and for all please!," Twitter, August 1, 2016, https://twitter.com/Banderovetz/status/760200055341056000?s=20.

17. Vitalik Buterin (@VitalikButerin), "I am working 100% on ETH," Twitter, August 1, 2016, https://twitter.com/VitalikButerin/status/760232885483806720?s=20.

18. Mihai Alisie (@MihaiAlisie), "I am working 100% on ETH #ethereum @AkashaProject," Twitter, August 3, 2016, https://twitter.com/MihaiAlisie/status/760791821287120897?s=20 ; Joseph Lubin (@ethereumJoseph), "I am working 100% on ETH. @ ethereumproject @ConsenSysLLC," Twitter, August 2, 2016, https://twitter.com/ethereumJoseph/status/760601142032211968?s=20 ; Retweets of Vitalik Buterin's "I am working 100% on ETH" tweet: Twitter, accessed March 31, 2021, https://twitter.com/VitalikButerin/status/760232885483806720/retweets.

19. blank (@kristopherives), "What will you do if ETC price overtakes ETH?,"

Twitter, August 2, 2016,
https://twitter.com/kristopherives/status/760597317116305409?s=20.

20. Vitalik Buterin (@VitalikButerin), "I still won't support ETC," Twitter, August 3, 2016,
https://twitter.com/VitalikButerin/status/760865764236627968?s=20.

21. Stan Higgins, "The Bitfinex Bitcoin Hack: What We Know (and Don't Know),"
CoinDesk, August 3, 2016, https://www.coindesk.com/bitfinex-bitcoin-hack-know-dont-know.

22. Chris Harborne sends 38,383 ETH into the DAO after the hard fork:
"Transaction Details," Etherscan, July 21, 2016,
https://etherscan.io/tx/0xe10c1efa895d2ec1aa343c9d1282acfa3c43183b684a484023c3f094ab84fb6f.

23. ホワイトハットグループが3340万 DAOトークンを持っていたことを示すトランザクション。"Transaction Details," Etherscan, July 28, 2016,
https://etherscan.io/tx/0x3ff544bff23ec89463b247889097300537c1d0690ef973c93e8bf59990c04983.

24. WhalePanda, "Ethereum: Chain of liars & thieves," Medium, August 16, 2016,
https://medium.com/@WhalePanda/ethereum-chain-of-liars-thieves-b04aaa0762cb.

25. Griff Green, "The DAO's Edge Cases Multisig (Post Hard Fork)," Medium,
August 2, 2016, https://medium.com/edge-cases-multisig-phf-official-channel/the-daos-edge-cases-multisig-post-hard-fork-2f107380bd61.

26. TheDAO 攻撃者は10個のトランザクションにより、（吸い上げた）360万ETCを孫 DAO へ送った。"Token Address:

0x10abb5efecdc09581f8b7cb95791fe2936790b4e," Ethereum Classic Explorer, July 23, 2016, https://etc.tokenview.com/en/address/0x10abb5efecdc09581f8b7cb95791fe2936790b4e.

27. この時点までにジアンも DAO キュレーターになっていた。

28. 厳密に言えば、ボットというよりリポジトリである。

29. この機能は「内部トランザクション」と呼ばれる。

30. Jordi Baylina (@jbaylina), "Follow Up Statement on the ETC Salvaged from attackDAOs," Reddit, August 12, 2016, https://www.reddit.com/r/EthereumClassic/comments/4xauca/follow_up_statement_on_the_etc_salvaged_from ; Alexis Roussel, "The White Hats and DAO Wars: Behind the Scenes," *Bity Blog*, August 13, 2016, https://blog.bity.com/2016/08/14/the-white-hats-and-dao-wars-behind-the-scenes.

31. Griff Green, "$55 Million Shockwave: How the DAO Hack Changed Ethereum," interview by Matt Leising, *CoinDesk*, July 29, 2020, video, 36:35, https://www.coindesk.com/video/55-million-shockwave-how-the-dao-hack-changed-ethereum.

32. 当時のポロのある従業員の見解によると、トリスタンはハードフォークを支持せず、TheDAO に大金をつぎ込んだ大口投資家への救済措置だとみなしていた。また、ETC か ETH のどちらを選ぶかはホワイトハットグループが決めるのではなく、トークン保有者の希望に応じて決めるべき、と考えていた。

33. Baylina, "Follow Up Statement."

34. @openvpn_squid, "So basically you stole 7 million in ETC . . . ," August 12, 2016, comment on "Follow Up Statement."

35. @frozeman, "You are aware, that without their efforts . . . ," August 12, 2016, comment on "Follow Up Statement."

36. WhalePanda, "Ethereum: Chain of liars & thieves."

37. Stephan Tual, "On a personal note, from Stephan Tual," *Slock.it* (blog) Wayback Machine 経由の URL は, August 18, 2016, https://web.archive.org/web/20170623155231if_/https://blog.slock.it/on-a-personal-note-from-stephan-tual-710f32e6eeb.

38. このブログ投稿は https://medium.com/p/710f32e6eeb/responses/show にあったが、現在は削除されている。

39. これらのコメントは https://www.reddit.com/r/ethereum/comments/4ybe4t/on_a_personal_note_from_stephan_tual_slockit_blog にあったが、現在は削除されている。

40. Alexis Roussel (@rachyandco), "ETC withdraw contract to be reviewed," Reddit, August 19, 2016, https://www.reddit.com/r/ethereum/comments/4yhz8h/etc_withdraw_contract_to_be_reviewed.

41. [deleted user], "Let's get that etc . . . ," August 19, 2016, comment on Roussel, "ETC withdraw contract to be reviewed."

42. @DaxClassix, " 'Free Money!' Part II . . . ," August 19, 2016, comment on Roussel, "ETC withdraw contract to be reviewed."

43. Alexis Roussel, "Whitehat Withdrawal contract—Update and Next Steps," *Bity*

Blog, August 26, 2016, https://blog.bity.com/2016/08/26/whitehat-withdrawal-contract-update-and-next-steps.

44. Alexis Roussel, "Whitehat Withdrawal contract—Last update before deployment," *Bity Blog*, August 29, 2016, https://blog.bity.com/2016/08/29/whitehat-withdrawal-contract-last-update-before-deployment.

45. Roussel, "Whitehat . . . Last update before deployment," updated August 30, 2016.

46. Poloniex (@Poloniex), "We're waiting to get clearance from law enforcement before releasing the WhiteHat ETC now that the withdrawal contract is ready," Twitter, August 31, 2016, https://twitter.com/Poloniex/status/770858288783196160?s=20.

47. Jesse Powell (@jewpow) and Taylor Van Orden (@insomniasexx), "We are really the worst . . ." and "You are the worst because . . . ," comments on "Whitehat Withdrawal contract—Last update before deployment," Reddit, August 30, 2016, https://np.reddit.com/r/ethereum/comments/50781i/whitehat_withdrawal_contract_last_update_before.

48. Poloniex (@Poloniex), "We are preparing to release the WhiteHat ETC to the withdrawal contract within the next several hours," Twitter, August 31, 2016, https://twitter.com/Poloniex/status/771081593855307776?s=20.

49. Kraken (@Krakenfx), "Within the next few hours, Kraken will release 499,402.88737 ETC to the WHG's withdraw contract," Twitter, August 31, 2016, https://mobile.twitter.com/krakenfx/status/771081955790065665.

50. TheDAO 攻撃者は10個のトランザクションにより、（吸い上げた）360

万ETCを孫 DAO へ送った。"Token Address: 0x10abb5efecdc09581f8b7cb95791fe2936790b4e," Ethereum Classic Explorer, July 23, 2016, https://etc.tokenview.com/en/address/0x10abb5efecdc09581f8b7cb 95791fe2936790b4e.

51. 吸い上げられた360万 ETC がアドレス0x10abbから0xc362へ移動した。"Transaction Info: 0xa4031e961908b82e19911e780ec9836635dc92ce 7444a97f6af8316d55850650," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/2202824/0; 吸い上げられた 360万 ETC がアドレス 0xc362 から 0x5e8f へ移動した。"Transaction Info: 0x7089794758f739f54fcd17d86f947c1f94dc8ef2d6d9fc16451b3 e5e7eb74cca," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/2202833/12.

52. TheDAO 攻撃者と思われる人物がイーサリアムクラシック開発チームの寄付用アドレスに 1000ETC を寄付した。"Transaction Info: 0x38d8dda6e d65444762143215ff1c2742b8c16f312766415755661389b1a6198b," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/2202943/1; @bit_novosti, "Call for action: What can I do to help Ethereum Classic project?," Reddit, July 22, 2016, https://www.reddit.com/r/EthereumClassic/comments/4u4o61/call_for_action_ what_can_i_do_to_help_ethereum.

53. TheDAO攻撃者のものと思われるアドレスが11A'のバニティーアドレスから0.6931ETCを受け取った。"Transaction Info: 0xb0a0cdb4c3991242aef b74a4db d51c377cd4b635613f0d6aebee67047bc32239," Ethereum Classic Explorer, September 6, 2016, https://etc.tokenview.com/en/tx/2206508/1.

54. このような公開鍵を総当たり攻撃で導き出すのにかかる平均計算回数は、

(16^11)/2 回、すなわち8.8兆回になる。計算に16という数字を使ったのは、このようなアドレスが「16進数」、つまり0から9までとAからFまでの合計16の文字と数字を使うからである。つまりこの計算は、11個のAを得るために11乗を計算し、2で割って試行回数の平均を求めている。

55. 8時3分41秒、アドレス 0xaaaaaaaaaaaaが 0x222222222222fc20 から ETH を受け取った。Normal Address: 0xaaaaaaaaaaaaf7376faade1dcd50b104e8b70f3f2," Ethereum Classic Explorer, September 6, 2016, https://etc.tokenview.com/en/address/0xaaaaaaaaaaaaf7376faade1dcd50b70f3f2; 協定世界時 6時3分42秒、アドレス0xaaaaaaaaaaaaが x222222222222fc20からETHを受け取った。"Transaction Details," Etherscan, September 6, 2016, https://etherscan.io/tx/0x9b8f549455673b63145160465f6ed72984e532ea12b850c738e67361c7ba6faf ; "Transaction Details," Etherscan, September 6, 2016; アドレス 0x222222222222fc20がxdeadbeefb880から ETH を受け取った。"Address 0x22222222222fC2025C46a84d8c1fE44265054446," Etherscan, June 28, 2016, https://etherscan.io/address/0x22222222222fc2025c46a84d8c1fe44265054446 ; 0xdeadbeefb880 receives from 0x0000000008b4c9: "Address 0xdeAdbEeFb880c9C347a173Bb5B69A629389937a9," Etherscan, May 10, 2016, https://etherscan.io/address/0xdeadbeef b880c9c347a173bb5b69a629389937a9 ; アドレス 0x0000000008b4c9 が4つのバニティーアドレスから受け取った。"Transactions: For 0x0000000008b4c94610f112d6bae67a198ca6269d," Etherscan, accessed March 31, 2021, https://etherscan.io/txs?a=0x0000000008b4c94610f112d6bae67a198ca6269d&p=3 .

56. TheDAO 攻撃者と思われる人物が ETC をほかの複数のアドレスへ送った。"Normal Address: 0x085acc2d9794fc82e88b9b7b561ac3fea56406a9," Ethereum Classic Explorer, accessed March 31, 2021, https://etc.tokenview.com/en/address/0x085acc2d9794fc82e88b9b7b561ac3fea56406a9.

第9章

1. Griff Green, "ExtraBalance Withdraw Contract to be Funded on September 15th," Medium, September 13, 2016, https://medium.com/curator-multisig-phf-official-channel/extrabalance-withdraw-contract-to-be-funded-on-september-15th-a800b4d746f0#.2mbcbpa59.

2. Bok Khoo (@BokkyPooBah), "The DAO ExtraBalWithdraw Contract Has Now Been Topped Up," Reddit, September 16, 2016, https://www.reddit.com/r/ethereum/comments/532523/the_dao_extrabalwithdraw_contract_has_now_been.

3. "Directors," IC3: The Initiative for CryptoCurrencies & Contracts, September 10, 2016, Wayback Machine 経由の URL は https://web.archive.org/web/20160910051422/https://www.initc3.org/people.html.

4. "Founder of the Apache Software Foundation Joins Linux Foundation to Lead Hyperledger Project," Hyperledger, May 19, 2016, https://www.hyperledger.org/announcements/2016/05/19/founder-of-the-apache-software-foundation-joins-linux-foundation-to-lead-hyperledger-project.

5. マイクロソフトの「Azure」は、サービスとしての初のブロックチェーン。

6. IBM は、オープンソースプロジェクトとの関係を築くことに前向きとみられており、たとえばレッドハットや Linux がその典型例である。オープンソース財団にコードを提供し、その製品を軸に企業コンサルティング事業を構築する。

7. "Jerry Cuomo," LinkedIn, accessed April 1, 2021, https://linkedin.com/in/jerry-cuomo-0891902.

8. 具体的にいえば、当時、イーサリアムのコードベースはすべて GPL ライセンスとなっていた。

9. そのような許容的なライセンスの一例として、Apache 2.0 が挙げられる。

10. Ian Allison, "Hyperledger Project Reflects on Blockchain Politics," *International Business Times*, January 31, 2017, https://www.ibtimes.co.uk/hyperledger-project-reflects-blockchain-politics-1603381.

11. イーサリアムのエコシステムは Light Ethereum Subprotocol (LES) で話し合われ、Parity は Parity ノードのためだけに Parity Light Protocol (PIP) を作成した。

12. 苦言の一部は「パイパー・メリアム」に掲載された。"An open letter to Gavin and Ethcore," Medium, March 6, 2017, https://medium.com/@pipermerriam/an-open-letter-to-gavin-and-ethcore-a733714646c5#.5eqmywscm ; Piper Merriam (@pipermerriam), "An open letter to Gavin and Ethcore," Reddit, March 6, 2017, https://www.reddit.com/r/ethereum/comments/5xv3yn/an_open_letter_to_gavin_and_ethcore ; and Piper Merriam, "An open letter to the Ethereum community," Medium, March 7, 2017, https://medium.com/@pipermerriam/an-

open-letter-to-the-ethereum-community-e03170423e4f.

13. Ming Chan, "Devcon2: Welcome & Introduction Panel," video posted to YouTube by Ethereum Foundation, October 11, 2016, 15:04, https://www.youtube.com/watch?v=1wayaZ1-BE&list=PLaM7G4Llrb7xqzgOwbvNv63_KM7VH84Rd&index=2&t=0s.

14. 2016年7月1日から9月20日までの平均ブロックタイムのデータについては、以下を参照。"Ethereum Average Block Time," YCharts, July 1, 2016, to September 20, 2016, accessed April 1, 2021, https://ycharts.com/indicators/ethereum_average_block_time.

15. Péter Szilágyi (@karalabe), "From Shanghai, with love (1.4.12)," GitHub, September 18, 2016, https://github.com/ethereum/go-ethereum/releases/tag/v1.4.12.

16. Alex van de Sande (@avsa), "Fixed. It seems that the total damage of the vulnerability was that devcon2 presentations are running 30 min late," Twitter, September 19, 2016, https://twitter.com/avsa/status/777738871899422720.

17. Christoph Jentzsch, "Smart Contract Security," video posted to YouTube by Ethereum Foundation, October 25,2016, https://www.youtube.com/watch?v=466bmp6bs9g&list=PLaM7G4Llrb7xqzgOwbvNv63_KM7VH84Rd&index=14&t=0s11:15-11:35.

18. Jeffrey Wilcke, "The Ethereum network is currently undergoing a DoS attack," *Ethereum Foundation Blog*, September 22, 2016, https://blog.ethereum.org/2016/09/22/ethereum-network-currently-undergoing-dos-attack ; Vitalik Buterin, "Transaction spam attack: Next Steps," *Ethereum Foundation Blog*, September 22, 2016, https://blog.ethereum.org/2016/09/22/transaction-spam-attack-next-steps.

19. Wilcke, "The Ethereum network is currently undergoing a DoS attack."

20. 以下にも同様の声がある。@TommyEconomis, "Why did Gavin leave the Ethereum team?," Reddit, November 12, 2016, https://www.reddit.com/r/ethereum/comments/5clffg/why_did_gavin_leave_the_ethereum_team.

21. Gavin Wood, "Onwards," Parity, October 6, 2016, https://www.parity.io/onwards.

22. Péter Szilágyi (@karalabe), "What else should we rewrite? (1.4.14)," GitHub, September 28, 2016, https://github.com/ethereum/go-ethereum/releases/tag/v1.4.14 ; @woodaxed, "Into the Woods (1.4.13) not syncing #3049," GitHub, September 27, 2016, https://github.com/ethereum/go-ethereum/issues/3049 ; Péter Szilágyi (@karalabe), "Come at me Bro (1.4.15)," GitHub, October 3, 2016, https://github.com/ethereum/go-ethereum/releases/tag/v1.4.15 .

23. Hudson Jameson, "FAQ: Upcoming Ethereum Hard Fork," *Ethereum Foundation Blog*, October 18, 2016, https://blog.ethereum.org/2016/10/18/faq-upcoming-ethereum-hard-fork ; Hudson Jameson, "Hard Fork No. 4: Spurious Dragon," *Ethereum Foundation Blog*, November 18, 2016, https://blog.ethereum.org/2016/11/18/hard-fork-no-4-spurious-dragon.

24. Jameson, "Hard Fork No. 4."

25. "Ethereum Asia Pacific Limited," OpenGovSG, accessed April 1, 2021, https://opengovsg.com/corporate/201629253N .

26. Tagesregister-Nr. 13416 vom 21.10.2016 / CHE-292.124.800/ 03128115, Swiss Official Gazette of Commerce, October 21, 2016,

https://shab.ch/shabforms/servlet/Search?EID=7&DOCID=3128115 .

第10章

1. Fred Ehrsam, "Ethereum Is the Forefront of Digital Currency," *Coinbase Blog*, May 24, 2016, https://blog.coinbase.com/ethereum-is-the-forefront-of-digital-currency-5300298f6c75.

2. Fred Ehrsam, "Blockchain Tokens and the Dawn of the Decentralized Business Model," *Coinbase Blog*, August 1, 2016, https://blog.coinbase.com/app-coins-and-the-dawn-of-the-decentralized-business-model-8b8c951e734f.

3. Joel Monegro, "Fat Protocols," *USV Blog*, August 8, 2016, https://www.usv.com/writing/2016/08/fat-protocols.

4. Fabian Vogelsteller (@frozeman), "ERC: Token standard #20," GitHub, November 19, 2015, https://github.com/ethereum/EIPs/issues/20.

5. "Listed Domestic Companies, Total—United States," World Bank, accessed April 2, 2021, http://data.worldbank.org/indicator/CM.MKT.LDOM.NO?locations=US&year_high_desc=false.

6. Kosala Hemachandra (@kvhnuke), "Ether Wallet: Open Source JavaScript Client-Side Ether Wallet," GitHub, August 17, 2015, Wayback Machine 経由の URLは https://web.archive.org/web/20150817002506/http://kvhnuke.github.io/etherwallet/#.

7. "Whois Record for MyEtherWallet.com," DomainTools, accessed April 2, 2021,

https://whois.domaintools.com/myetherwallet.com.

8. MyEtherWallet homepage, September 1, 2015, Wayback Machine 経由のURL
   は https://web.archive.org/web/20150901202109/http://www.myetherwallet.com.

9. Taylor Monahan (@insomniasexx), "MyEtherWallet Chrome Extension: The
   Beta Has Arrived," Reddit, February 9, 2016,
   https://www.reddit.com/r/ethereum/comments/44vbef/myetherwallet_chrome_e
   xtension_the_beta_has.

10. Taylor Monahan (@insomniasexx), "How to participate in 'The DAO' creation
    via MyEtherWallet (yes . . . right NOW!)," Reddit, April 30, 2016,
    https://www.reddit.com/r/ethtrader/comments/4h3xph/how_to_participate_in_the
    _dao_creation_via; "Withdraw DAO," MyEtherWallet, October 3, 2016,
    Wayback Machine 経由の URL は
    https://web.archive.org/web/20161003170011/https://www.myetherwallet.com/#
    the-dao.

11. Alex Sunnarborg, "Blockchain for CPU? Analyzing Golem's Ethereum Token
    Sale," *CoinDesk*, November 11, 2016, https://www.coindesk.com/analyzing-
    golems-blockchain-token-sale.

12. "Golem: Will It Enable the P2P Computing Market?," Smith + Crown,
    November 5, 2017, Wayback Machine 経由の URL は
    https://web.archive.org/web/20171105091745/https://www.smithandcrown.com/
    golem-will-enable-p2p-computing-market.

13. "Enterprise Ethereum," Trademark Electronic Search System (TESS),
    United States Patent and Trademark Office, accessed April 2, 2021,
    https://tmsearch.uspto.gov/bin/showfield?f=doc&state=4809 : v6zvyt.2.2;
    "Enterprise Ethereum Alliance," Trademark Electronic Search System (TESS),

United States Patent and Trademark Office, accessed April 2, 2021, https://tmsearch.uspto.gov/bin/showfield?f=doc&state=4809:v6zvyt.2.1.

14. Michael del Castillo, "Big Corporates Unite for Launch of Enterprise Ethereum Alliance," *CoinDesk*, February 28, 2017, https://www.coindesk.com/big-corporates-unite-for-launch-of-enterprise-ethereum-alliance.

15. "Week in Ethereum News: February 19, 2017," Week in Ethereum News, February 19, 2017, https://weekinethereumnews.com/week-in-ethereum-news-february-19-2017.

16. Jules Kim's Twitter profile: ScoobyDoo (@CointrolFreak), Twitter, accessed April 2, 2021, https://twitter.com/CointrolFreak.

17. "Margin Trading," Poloniex, August 17, 2016, Wayback Machine 経由のURL は https://web.archive.org/web/20160817225211/https://poloniex.com/support/about MarginTrading.

18. Laura Shin, "The Emperor's New Coins: How Initial Coin Offerings Fueled a $100 Billion Crypto Bubble," *Forbes*, July 27, 2017, https://www.forbes.com/sites/laurashin/2017/07/10/the-emperors-new-coins-how-initial-coin-offerings-fueled-a-100-billion-crypto-bubble/#3f10cbe16ece.

19. Johannes Pfeffer, "The Gnosis Token Auction," ConsenSys, May 2, 2017, https://media.consensys.net/the-gnosis-token-auction-9c2f59d2387.

20. "The Aragon Token Sale: The Numbers," Aragon, May 19, 2017, https://blog.aragon.org/the-aragon-token-sale-the-numbers-12d03c8b97d3 ; Corey Petty, "A Look at the Aragon ICO Investment Distribution," Medium, May 18, 2017, https://medium.com/blockchannel/a-look-at-the-aragon-ico-investment-distribution-a78f601229d8.

21. "Consensus 2017: Making Blockchain Real," *CoinDesk*, May 21, 2017, Wayback Machine 経由の URL は https://www.coindesk.com/events/consensus-2017.

22. MobileGo homepage, May 20, 2017, Wayback Machine 経由の URL は https://web.archive.org/web/20170520190735/https://mobilego.io.

23. @aknnig, "Stability of myEtherWallet during hectic ICO," Reddit via Removeddit, May 3, 2017, https://www.reddit.com/r/ethtrader/comments/68zgjn/stability_of_myetherwallet_during_hectic_ico.

24. @hiamat, "i had that issue too, my transaction went through for the 3rd try . . . ," May 3, 2017, comment on "Stability of myEtherWallet"; "How Ethereum Mining Works," *CoinDesk*, March 30, 2017, https://www.coindesk.com/learn/ethereum-101/how-ethereum-works.

25. Taylor Monahan (@insomniasexx), "Holy shit. I think you might be right . . . ," May 3, 2017, comment on, "Stability of myEtherWallet."

26. Jonathan Keane, "$35 Million in 30 Seconds: Token Sale for Internet Browser Brave Sells Out," *CoinDesk*, May 31, 2017, https://www.coindesk.com/35-million-30-seconds-token-sale-internet-browser-brave-sells.

27. MyEtherWallet (@MyEtherWallet), "WAT #batshitcrazy, 1.89% got in; $67k in failed fees, largest fee paid: $6,374.51," Twitter, May 31, 2017, https://twitter.com/myetherwallet/status/870029936941162496?s=20.

28. "Insolvenzverschleppung," Wikipedia, accessed April 2, 2021, https://de.wikipedia.org/wiki/Insolvenzverschleppung.

29. $525 million in 2017 versus $7.5 million in December 2016: "CryptoCurrency

Market Capitalizations," CoinMarketCap, June 19, 2017, Wayback Machine 経由のURLは
https://web.archive.org/web/20170619185948/https://coinmarketcap.com/exchanges/volume/24-hour ; "CryptoCurrency Market Capitalizations," CoinMarketCap, December 19, 2016, Wayback Machine 経由の URL は
https://web.archive.org/web/20161219192347/https://coinmarketcap.com/exchanges/volume/24-hour.

30. [deleted user], "IMPORTANT: Bancor's terms state that you can't participate in the IPO if you're American," Reddit, June 11, 2017, https://www.reddit.com/r/Bancor/comments/6go169/important_bancors_terms_state_that_you_cant.

31. "Bancor Network Token (BNT) Contribution & Token Allocation Terms," Medium, June 5, 2017, https://medium.com/@bancor/bancor-network-token-bnt-contribution-token-creation-terms-48cc85a63812.

32. MyEtherWallet (@MyEtherWallet), "We're doing everything we can to keep shit online. CHECK your ACCOUNT—your TX may / may have shows up. 3k+ pending TXs still in pool," Twitter, June 12, 2017, https://twitter.com/myetherwallet/status/874285733707526145.

33. Joon Ian Wong, "Ethereum unleashed the 'initial coin offering' craze, but it can't handle its insane success," *Quartz*, June 15, 2017, https://qz.com/1004892/the-bancor-ico-just-raised-153-million-on-ethereum-in-three-hours.

34. Wong, "Ethereum Unleashed the 'initial coin offering' craze."

35. "Global Cryptocurrency Charts: Percentage of Total Market Capitalization (Dominance)," CoinMarketCap, accessed April 2, 2021,

https://coinmarketcap.com/charts.

36. "The Status Network: A Strategy Towards Mass Adoption of Ethereum," Status, accessed April 2, 2021, https://status.im/whitepaper.pdf.

37. Ryan Shea (@ryanshea), "The Status ICO on Ethereum started just minutes ago and already has over 10,000 unconfirmed TX's worth 450,000 ETH https://slacknation.github.io/medium/018 /," Twitter, June 20, 2017, https://twitter.com/ryaneshea/status/877196958380810240?s=20.

38. @legosexual, "Can we make a mega thread for people to explain what's happening to ETH today?," Reddit via Removeddit, June 21, 2017, https://www.removeddit.com/r/ethereum/comments/6imd5u/can_we_make_a_mega_thread_for_people_to_explain.

39. Dan Finlay (@danfinlay), "No? Status just raised as much as they could possibly want, for chat stickers and ads," Twitter, June 21, 2017, https://twitter.com/danfinlay/status/877333592346476544?s=20.

40. Joon Ian Wong, "Fake news of a fatal car crash wiped out $4 billion in ethereum's market value yesterday," *Quartz*, June 26, 2017, https://qz.com/1014559/vitalik-buterin-dead-a-hoax-on-4chan-crashed-ethereums-price.

41. Vitalik Buterin (@VitalikButerin), "Another day, another blockchain use case," Twitter, June 25, 2017, https://twitter.com/VitalikButerin/status/879127496024772610?s=20.

42. "Global Cryptocurrency Charts," CoinMarketCap.

43. MyEtherWallet (@MyEtherWallet), "Cmonnnnnnn ☺ Have you learned NOTHING from the last week?! Take your heads out greedy asses (you too,

FOMO investors!) & look around," Twitter, June 26, 2017, https://twitter.com/myetherwallet/status/87927998 7378987008?s=20; MyEtherWallet (@MyEtherWallet), "Sit down— we've got some news for you. Kickass products can exist without a token & taking all the money," Twitter, June 29, 2017, https://twitter.com/myetherwallet/status/880372623225442304?s=20.

44. Jeremiah O'Connor and Dave Maynor, "COINHOARDER: Tracking a Ukrainian Bitcoin Phishing Ring DNS Style," Talos, February 14, 2018, https://blog.talosintelligence.com/2018/02/coinhoarder.html.

45. MyEtherWallet (@MyEtherWallet), "1/ Alright Crappy Token Creators listen up. I am 100% out of patience. It's 10am. I haven't slept. And you are going to get to hear me rant," Twitter, July 17, 2017, https://x.com/myetherwallet/status/886997735911546880?s=20.

第11章

1. 原因は、パリティがマルチシグの展開に使っていたライブラリにあった。

2. Blockchain at Berkeley (@CalBlockchain), "WARNING!!," Twitter, July 19, 2017, https://twitter.com/CalBlockchain/status/887742667928608772?s=20.

3. WhalePanda (@WhalePanda), "Critical security alert for $ETH @ParityTech wallet if you're using it for multisig," Twitter, July 19, 2017, https://twitter.com/WhalePanda/status/887743901053980672?s=20.

4. Hirish (@hirishh), "Are you ready for Ethereum Very Classic?," Twitter, July 19, 2017, https://twitter.com/hirishh/status/887769486606168064?s=20.

5. If I don't Survive, I was BORN FREE! (@Get_Liquid), "So hardfork to get the $32M? Or are those people not well connected to the foundation so fuckem?,"

Twitter, July 19, 2017,
https://twitter.com/Get_Liquid/status/887782487715442689?s=20.

6. Lorenz Breidenbach et al., "An In-Depth Look at the Parity Multisig Bug,"
    Hacking, Distributed, July 22, 2017,
    https://hackingdistributed.com/2017/07/22/deep-dive-parity-bug . On the Parity
    multisig attacker cashing out of 50 ETH the day after the attack: "Transaction
    Details," Etherscan, July 20, 2017, accessed April 2, 2021,
    https://etherscan.io/tx/0x774fe88a114804eb8484df7b716f381d4b6bae0e7d145d5f
    820c16c8097bd42b.

7. Parity Technologies (@ParityTech), "IMPORTANT: SECURITY ALERT:
    https://blog.parity.io/security-alert-high-2/ . . . Move funds in multi-sig wallet
    created in Parity Wallet 1.5 or higher immediately," Twitter, July 19, 2017,
    https://twitter.com/ParityTech/status/887747980719206401?s=20.

8. Parity Technologies, "Security Alert," Parity, July 21, 2017,
    https://www.parity.io/security-alert.

9. ホワイトハットグループのジョルディ・バイリーナが3億6600万 BAT を
    受け取ったことを示すトランザクション。"Transaction Details," Etherscan,
    July 19, 2017,
    https://etherscan.io/tx/0x9b9ce2bf968aa430e0117627f337ea697b4bb70a450d108f
    82f13bfadc68c35f ; ホワイトハットグループのジョルディ・バイリーナが
    169.69 FUCKtoken を受け取ったことを示すトランザクション。
    "Transaction Details," Etherscan, July 19, 2017,
    https://etherscan.io/tx/0x79251a90595a257399c2bb4421e1f113a1fcf8c80b6c230
    3adfee32c4ba1da70.

10. Jordan Pearson, "How Coders Hacked Back to 'Rescue' $208 Million in
    Ethereum," *Vice*, July 24, 2017,

https://www.vice.com/en_us/article/qvp5b3/how-ethereum-coders-hacked-back-to-rescue-dollar208-million-in-ethereum .

11. Jordi Baylina (@jbaylina), "Rescued Multisig Owners Can Use a Smart Contract to Request Where the WHG Should Send the Funds," Reddit, July 23, 2017, https://www.reddit.com/r/ethereum/comments/6p4luj/rescued_multisig_owners_can_use_a_smart_contract.

12. Jordi Baylina (@jbaylina), "The WHG has Returned ~95% of the Funds and Now Hold Less Than $10 Million Worth of Rescued Funds," Reddit, July 26, 2017, https://www.reddit.com/r/ethereum/comments/6povrc/the_whg_has_returned_95_of_the_funds_and_now_hold.

13. Mitch Brenner, "How I Snatched 153,037 ETH After a Bad Tinder Date," Medium, September 12, 2017, https://medium.com/@rtaylor30/how-i-snatched-your-153-037-eth-after-a-bad-tinder-date-d1d84422a50b.

14. "Cyber Enforcement Actions: Digital Assets/Initial Coin Offerings," US Securities and Exchange Commission (SEC), accessed April 2, 2021, https://www.sec.gov/spotlight/cybersecurity-enforcement-actions ; "U.S. SECURITIES AND EXCHANGE COMMISSION, Litigation Release No. 23870," SEC, June 30, 2017, https://www.sec.gov/litigation/litreleases/2017/lr23870.htm.

15. Gertrude Chavez-Dreufuss, "U.S. SEC Official Urges Companies Issuing Tokens to Protect Investors," Reuters, May 23, 2017, https://www.reuters.com/article/us-sec-blockchain-idUSKBN18K05Q.

16. @megashira1, "$4.5million USD worth of VERI stolen," BitcoinTalk, July 23,

2017,
https://bitcointalk.org/index.php?topic=1887061.msg20335511#msg20335511.

17. 正確には3万6688ドル。"Address 0x3fff90bF31
4673194c3A265Ed1c0aA68f59550C4," Etherscan, June 15, 2021,
https://etherscan.io/address/0x3fff90bF314673194c3A265Ed1c0aA68f59550C4#analytics.

18. Homepage of the World's First 100% Honest Ethereum ICO, June 27, 2017,
Wayback Machine 経由の URL は
https://web.archive.org/web/20170627123240/https://uetoken.com.

19. "SECURITIES AND EXCHANGE COMMISSION; SECURITIES
EXCHANGE ACT OF 1934; Release No. 81207 / July 25, 2017; Report of
Investigation Pursuant to Section 21(a) of the Securities Exchange Act of
1934: The DAO," SEC, July 25, 2017,
https://www.sec.gov/litigation/investreport/34-81207.pdf .

20. "A Section 21(a) Report History Lesson: SEC Issues New One Cautioning
Rating Agencies," TheCorporateCounsel.net, September 1, 2010,
https://www.thecorporatecounsel.net/blog/2010/09/nyse-regulation-transfers-its-regulatory.html .

21. Harry Denley (@sniko_), "People need to do their DD. Suicide was 23 hrs 35
mins ago:/," Twitter, July 28, 2017,
https://twitter.com/sniko_/status/890935790523600900 .

22. MyEtherWallet (@MyEtherWallet), "1. We. Have NOT been hacked . . . ,"
Twitter, July 20, 2017,
https://twitter.com/myetherwallet/status/888111215448178688?s=20 .

23. Muneeb (@Muneeb), "Crypto communities using Slack get targetted by phishing attacks and removing unique usernames massively adds to that problem," Twitter, October 12, 2017, https://twitter.com/muneeb/status/918577964643766272.

24. Harry Denley (@sniko_), "A quick peek into a #phishers mail box. Look at the number of targets (and it's not a full list)—this is for 1 domain," Twitter, August 20, 2017, https://twitter.com/sniko_/status/899342140572131328/photo/1.

25. Lily Hay Newman, "A Very Dumb Mistake Costs Cryptocurrency Investors Big Time," *Wired*, August 21, 2017, https://www.wired.com/story/enigma-ico-ethereum-heist .

26. Laura Shin, "Hackers Have Stolen Millions of Dollars in Bitcoin— Using Only Phone Numbers," *Forbes*, December 20, 2016, https://www.forbes.com/sites/laurashin/2016/12/20/hackers-have-stolen-millions-of-dollars-in-bitcoin-using-only-phone-numbers.

27. "Swiss Criminal Code, Article 146," Federal Council of the Swiss Confederation, accessed April 2, 2021, https://www.admin.ch/opc/en/classified-compilation/19370083/201903010000/311.0.pdf.

28. アンソニーは、同じくトロントにいたヴィタリックの父親ドミトリーにも、説得を依頼した。過去にも、アンソニーがディセントラルの従業員たちと険悪な関係に陥ったとき、ドミトリーが仲裁に入ったことがある。心理学のある研究によれば、誰かにマグカップを見せて「いくらで買うか」と尋ね、別の人に同じマグカップを見せて「いくらで売るか」と尋ねると、売る立場になった人のほうがそのマグカップの価値を高く見積もる傾向にあるという。この「売り手バイアス」の極端な例がアンソニ

一だった。そういう彼の性格を踏まえ、彼が一億五五〇〇万ドル相当を請求すると言いだした際、ドミトリーはその金額は高すぎるのではないかと疑った。

29. "Token Sale," Civic, accessed April 2, 2021, https://tokensale.civic.com; Anthony Di Iorio (@diiorioanthony), "I am an advisor to @skrumblehq," Twitter, April 18, 2018, https://twitter.com/diiorioanthony/status/986604519294291968?s=20 ; "Anthony Di Iorio," ICO Holder, accessed April 2, 2021, https://icoholder.com/en/ico-advisors/anthony-di-iorio-2618.

30. Simona Pop, "How Blockchain Bounties Helped Our Far-Flung Employees Collaborate," ConsenSys, August 6, 2018, https://media.consensys.net/how-blockchain-bounties-helped-our-far-flung-employees-collaborate-104ddec409ab?gi=23cd544e4291 .

31. "Ashoka Finley," LinkedIn, accessed April 2, 2021, https://www.linkedin.com/in/ashoka-finley-813aa223 .

32. "Yunyun Chen," LinkedIn, accessed April 2, 2021, https://www.linkedin.com/in/yunyunchen ; Sarah Baker Mills, "Blockchain Designer Profile: Yunyun Chen," *ConsenSys Media*, November 15, 2017, https://media.consensys.net/blockchain-designer-profile-yunyun-chen-7cb6dd2a3386 .

33. 彼の発言から逆算して、少なくともある時点では、彼が全 ETH の9%を保有していたと推定する者もいた。

34. "Robert Bench," LinkedIn, accessed April 2, 2021, https://www.linkedin.com/in/robert-bench-7a535b11 .

35. Cosmos, Dfinity, Polkadot, Tezos, etc.

36. Matthew J. Belvedere, "Unfazed by Wild Swings, Strategist Tom Lee Still Sees Bitcoin Surging Another 600% in 5 Years," *CNBC*, updated September 15, 2017, https://www.cnbc.com/2017/09/15/bitcoin-could-surge-another-600-percent-to-25000-dollars-in-5-years-says-strategist-tom-lee.html ; "Tom Lee: Here's Why Bitcoin Will Hit $25,000," *CNBC*, September 15, 2017, video, 2:48, https://www.cnbc.com/video/2017/09/14/tom-lee-heres-why-bitcoin-will-hit-25000.html .

37. Eli Meixler, "With over 29,000 Homicides, 2017 Was Mexico's Most Violent Year on Record," *Time*, January 21, 2018, https://time.com/5111972/mexico-murder-rate-record-2017 .

38. イーサリアム財団としても、事前にセキュリティーを懸案事項としていた。しかし、このコンファレンスは回ごとに違う大陸で開催することになっており、このときは北米大陸の番だった。カナダでは2014年にビットコインエキスポが開催されたばかりだったうえ、2017年時のドナルド・トランプ政権は7カ国の国民のアメリカ入国を禁止していたため、メキシコしか候補地がなかった。

39. Elaine Ramirez, "Crazy for Cryptocurrency: Why South Koreans Are Risking It All on Ethereum," *Forbes*, August 2, 2017, https://www.forbes.com/sites/elaineramirez/2017/08/02/crazy-for-cryptocurrency-why-south-koreans-are-risking-it-all-on-ethereum/#12a3aad46341.

第12章

1. この投稿は https://github.com/openethereum/openethereum/issues/6995 にあったが、現在は削除されている。

2. devops199 (@devops199), "paritytech/parity#6995 is this serious issue?," Gitter, November 6, 2017, https://gitter.im/paritytech/parity?at=5a008ef75a1758ed0f9610d6 .

3. Andrey Degtyaruk (@hlogeon), "Hey guys, Do you know your multisig was hacked? Why no one react on this?," Gitter, November 7, 2017, https://gitter.im/paritytech/parity?at=5a018a7bf7299e8f53808e81 .

4. A. F. Dudley (@AFDudley), "The person who killed the library made an understandable mistake," Gitter, November 7, 2017, https://gitter.im/paritytech/parity?at=5a01b297e44c43700ac9eb2b .

5. devops199 (@devops199), ":(," Gitter, November 7, 2017, https://gitter.im/paritytech/parity?at=5a01b552614889d4754e037a .

6. devops199 (@devops199), "will i get arrested for this?:(," Gitter, November 7, 2017, https://gitter.im/paritytech/parity?at=5a01b9d2b20c6424299b0380 .

7. アイコノミのマルチシグのドル価値は以下にもとづく。"Contract 0x376c3E5547C68bC26240 d8dcc6729fff665A4448," Etherscan, accessed April 2, 2021, https://etherscan.io/address/0x376c3E5547C68bC26240d8dcc6729fff665A4448#analytics；ミュージッコノミのマルチシグのドル価値は以下にもとづく。"Contract 0xc 7CD9d874F93F2409F39A95987b3E3C738313925," Etherscan, accessed April 2, 2021, https://etherscan.io/address/0xc7cd9d874f93f%202409f39a95987b3e3c738313925#analytics.

8. パリティーのバグによって凍結された多数のマルチシグウォレットの一覧は、以下を参照。 "Accounts Parity Bug," Etherscan, accessed April 2, 2021, https://etherscan.io/accounts/label/parity-bug/2?ps=100.

9. @latetot, "How could parity have been so reckless with the multisig wallets? . . . ," November 8, 2017, comment on @heliumcraft, "MegaThread: Parity Multi-Signature Library Self-Destruct," Reddit, November 8, 2017, https://www.reddit.com/r/ethereum/comments/7bl6da/megathread_parity_multisignature_library/dpismzz ; @latetot, "I will not support . . . ," November 8, 2017, comment on "MegaThread."

10. "A Postmortem on the Parity Multi-Sig Library Self-Destruct," Parity, November 15, 2017, https://www.parity.io/a-postmortem-on-the-parity-multi-sig-library-self-destruct.

11. @BeezLionmane, "Even with initiatizliation . . . ," November 8, 2017, comment on "MegaThread."

12. Vitalik Buterin (@VitalikButerin), "I am deliberately refraining from comment on wallet issues, except to express strong support for those working hard on writing simpler, safer wallet contracts or auditing   and formally verifying security of existing ones," Twitter, November8, 2017, https://twitter.com/VitalikButerin/status/928172344631115776?=20.

13. Vitalik Buterin (@vbuterin), "Reclaiming of ether in common classes   of stuck accounts #156," GitHub, https://github.com/ethereum/EIPs/issues/156.

14. @sciyoshi, "As noted elsewhere, this EIP as written won't allow withdrawing ether from multisig contracts created using the recently suicided Parity wallet library, since they *do* have code at their address . . . ," GitHub, November 7, 2017, https://github.com/ethereum/EIPs/issues/156#issuecomment-342698012.

15. パリティーのバグによって影響を受けたアカウントの一覧は、以下を参照。 "Accounts Parity Bug," Etherscan.

16. "Historical Snapshot—05 November 2017," CoinMarketCap, November 5, 2017, https://coinmarketcap.com/historical/20171105; "Historical Snapshot—19 June 2016," CoinMarketCap, June 19, 2016, https://coinmarketcap.com/historical/20160619.

17. Gavin Wood (@gavofyork), "Thanks to @VitalikButerin for the same—I could never have built #ethereum without you:-)," Twitter, August 10, 2017, https://twitter.com/gavofyork/status/895536200626425856?s=20.

18. Péter Szilágyi (@peter_szilagyi), "Ah yes, thank you @gavofyork for single handedly building #Ethereum! We—the other 30+ programmers—really enjoyed watching you work!," Twitter, August 10, 2017, https://twitter.com/peter_szilagyi/status/895560354951872512?s=20.

19. Yung Nam Cheah, "The Best Things to Do in Mong Kok, Hong Kong," The Culture Trip, June 24, 2019, https://theculturetrip.com/asia/china/hong-kong/articles/the-top-10-things-to-do-and-see-in-mong-kok-hong-kong.

20. Gunjan Banerji, "CBOE Teams Up with Winklevoss Twins for Bitcoin Data," *Wall Street Journal*, August 2, 2017, https://www.wsj.com/articles/cboe-teams-up-with-winklevoss-twins-for-bitcoin-data-1501675200.

21. "Timeline of CME Achievements," CME Group, accessed April 2, 2021, https://www.cmegroup.com/company/history/timeline-of-achievements.html ; "Bitcoin Pricing Product Frequently Asked Questions," CME Group, May 14, 2017, https://www.cmegroup.com/education/bitcoin/frequently-asked-questions.html ; CME Group, "CME Group Announces Launch of Bitcoin Futures," CME Group, October 30, 2017, https://www.cmegroup.com/media-

room/press-releases/2017/10/31/cme_group_announceslaunchofbitcoinfutures.html .

22. Laura Shin, "Will This Battle for the Soul of Bitcoin Destroy It?," *Forbes*, October 23, 2017, https://www.forbes.com/sites/laurashin/2017/10/23/will-this-battle-for-the-soul-of-bitcoin-destroy-it/?sh=46b3512e3d3c.

23. Brady Dale, "CBOE Releases New Details on Bitcoin Futures Contracts," *CoinDesk*, updated November 21, 2017, https://www.coindesk.com/cboe-releases-new-details-on-bitcoin-futures-contracts.

24. CME Group, "CME Group Self-Certifies Bitcoin Futures to Launch Dec. 18," CME Group, December 1, 2017, https://www.coindesk.com/cboe-releases-new-details-on-bitcoin-futures-contracts.

25. Axiom Zen, "CryptoKitties: The World's First Ethereum Game Launches Today," *PR Newswire*, November 28, 2017, https://www.prnewswire.com/news-releases/cryptokitties-the-worlds-first-ethereum-game-launches-today-660494083.html.

26. Joon Ian Wong, "The ethereum network is getting jammed up because people are rushing to buy cartoon cats on its blockchain," *Quartz*, December 4, 2017, https://qz.com/1145833/cryptokitties-is-causing-ethereum-network-congestion; Alyssa Hertig, "Loveable Digital Kittens Are Clogging Ethereum's Blockchain," *CoinDesk*, December 4, 2017, https://www.prnewswire.com/news-releases/cryptokitties-the-worlds-first-ethereum-game-launches-today-660494083.html.

27. Roham Gharegozlou, "What Makes a CryptoKitty Worth $140,000?—Ep.75," interview by Laura Shin, *Unchained*, August 7, 2018, podcast, 54:39. https://unchainedpodcast.com/what-makes-a-cryptokitty-worth-140000-ep-75.

28. Seema Mody, "Winklevoss Twin Predicts Multitrillion-Dollar Value for Bitcoin," *CNBC*, December 9, 2017, https://www.cnbc.com/2017/12/09/bitcoin-cameron-winklevoss-predicts-multitrillion-dollar-value-for-cryptocurrency.html ; Dan Murphy, "Analyst Who Predicted Bitcoin's Rise Now Sees It Hitting \$300,000–\$400,000," *CNBC*, December 17, 2017, https://www.cnbc.com/2017/12/17/bitcoin-price-ronnie-moas-sees-cryptocurrency-at-300000-400000.html ; Dan Murphy, "Trader Who Called Bitcoin Rally Says Cryptocurrency Will Surge Above \$100,000 in 2018," *CNBC*, December 11, 2017, https://www.cnbc.com/2017/12/11/bitcoin-could-exceed-100000-dollars-by-2018-says-trader.html.

29. Michelle Castillo, "This High School Dropout Who Invested in Bitcoin at \$12 Is Now a Millionaire at 18," *CNBC*, June 20, 2017, https://www.cnbc.com/2017/06/20/bitcoin-millionaire-erik-finman-says-going-to-college-isnt-worth-it.html ; Laura Shin, "Return of the Day Traders," *Forbes*, July 10, 2017, https://www.forbes.com/sites/laurashin/2017/07/10/return-of-the-day-traders ; Defend Assange Campaign (@DefendAssange), "My deepest thanks to the US government, Senator McCain and Senator Lieberman for pushing Visa, MasterCard, Payal, AmEx, Mooneybookers, et al, into erecting an illegal banking blockade against @WikiLeaks starting in 2010. It caused us to invest in Bitcoin—with > 50000% return," Twitter, October 14, 2017, https://twitter.com/DefendAssange/status/919247873648283653?s=20 .

30. Chris O'Brien, "Moonlambos Sells Lamborghinis for Bitcoin to Help Gilded Cryptocurrency Generation Spend Its Windfall," *VentureBeat*, December 15, 2017, https://venturebeat.com/2017/12/15/moonlambos-sells-lamborghinis-for-bitcoin-to-help-the-gilded-cryptocurrency-generation-spend-its-windfall .

31. John Saddington, "INITIAL LAMBO OFFERING— MoonLambos.io—Get YOUR Bitcoin Lambo Now!," Medium, January 1, 2018,

https://medium.com/@saddington/initial-lambo-offering-moonlambos-io-get-your-bitcoin-lambo-now-cf769d07612a.

32. @PineappleFund, "I'm donating 5057 BTC to charitable causes! Introducing The Pineapple Fund," Reddit, December 13, 2017, https://www.reddit.com/r/Bitcoin/comments/7jj0oa/im_donating_5057_btc_to_charitable_causes .

33. "40 Under 40: 2016," Fortune, accessed April 2, 2021, https://fortune.com/40-under-40/2016.

34. Vitalik Buterin, "Ethereum Foundation Internal Update," *Ethereum Foundation Blog*, January 7, 2016, https://blog.ethereum.org/2016/01/07/2394.

35. "About the Ethereum Foundation," Ethereum.org/foundation, September 6, 2015, Wayback Machine 経由の URL は https://web.archive.org/web/20150906200827/https://www.ethereum.org/foundation ; "About the Ethereum Foundation," Ethereum.org/foundation, March 4, 2016, Wayback Machine 経由の URL は https://web.archive.org/web/20160304212822/https://www.ethereum.org/foundation.

36. June (@JUN_SYNQA), "Omise is now official Special advisor (Thomas) for Ethereum. #omise #blockchain #ethereum https:// ethereum.org/foundation," Twitter, March 8, 2016, https://twitter.com/jun_omise/status/707168442449661952.

37. "Thomas Greco—About ECF," video uploaded to YouTube by LinkTime, May 17, 2018, https://www.youtube.com/watch?v=R6bl9vClE0M&t=216s.

38. "Clarifying the Role of the Ethereum Foundation with Ethereum's Aya

Miyaguchi | EDCON Toronto 2018," , June 19, 2018, 0:13, リンクタイムによってユーチューブにアップロードされた動画は https://www.youtube.com/watch?v=r3GhsbhsdSg.

39. Amir Taaki (@Narodism), "Bitcoin is turning into a failed project. The seeds of its destruction among the debris of a community blinded by numerical price increases, and imminent divine reclamation. One day you will all understand my words but it will be too late, the ship would have sailed," Twitter, December 26, 2017, https://twitter.com/Narodism/status/945693434500829184?s=20.

40. Vitalik Buterin (@VitalikButerin), "*All* crypto communities, ethereum included, should heed these words of warning. Need to differentiate between getting hundreds of billions of dollars of digital paper wealth sloshing around and actually achieving something meaningful for society," Twitter, December 27, 2017, https://twitter.com/VitalikButerin/status/945987507941978112?s=20.

41. Vitalik Buterin (@VitalikButerin), "If all that we accomplish is lambo memes and immature puns about 'sharting,' then I WILL leave . . . ," Twitter, December 27, 2017, https://twitter.com/VitalikButerin/status/945988644661207040?s=20.

42. Zheping Huang, "The world now has a cryptocurrency pop group," *Quartz*, January 10, 2018, https://qz.com/1177249/japans-kasotsuka-shojo-the-worlds-first-cryptopop-group-sings-about-bitcoin-and-cryptofraud.

43. Nellie Bowles, "Everyone Is Getting Hilariously Rich and You're Not," *New York Times*, January 13, 2018, https://www.nytimes.com/2018/01/13/style/bitcoin-millionaires.html.

44. @CryptoOnly, "Money Skeleton," Reddit, December 25, 2017,

https://www.reddit.com/r/ethtrader/comments/7m3uvm/money_skeleton.

45. "Past Weather in San Francisco, California, USA—January 2018,"
    TimeandDate.com, https://www.timeanddate.com/weather/usa/san-
    francisco/historic?month=1&year=2018.

エピローグ

1. Anna Irrera, "U.S. SEC Official Says Ether Not a Security, Price Surges,"
   Reuters, June 15, 2018, https://www.reuters.com/article/us-cryptocurrencies-
   ether/u-s-sec-official-says-ether-not-a-security-price-surges-idUSKBN1JA30Q.

2. Taylor Monahan, "A New Beginning: MyCrypto.com," Medium, February 8,
   2018, https://medium.com/mycrypto/mycrypto-launch-6a066bf41093.

3. Robert Hackett, "This Big Cryptocurrency Acquisition Could Create a Wall
   Street–Style Financial Giant," *Fortune*, February 26, 2018,
   https://fortune.com/crypto/2018/02/26/circle-cryptocurrency-trade-bitcoin/

4. Charles Hoskinson, "Blockchain Podcast #36—Charles Hoskinson, Founder of
   Cardano," interview by Finance Magnates, February 15, 2018, audio, 6:55, 7:32
   https://soundcloud.com/finance-magnates/blockchain-podcast-36-charles-
   hoskinson-founder-of-cardano/s-0vn8v.

5. Charles Hoskinson (@IOHK_Charles), "I graduated but did not complete a PhD.
   I will return and finish it after I retire . . . ," Twitter, September 9, 2018,
   https://twitter.com/IOHK_Charles/status/1038919675231358976?s=20.

6. Kevin Dugan, "Inside the Crypto Bro Fest That Took Over New York City,"
   New York Post, May 17, 2018, https://nypost.com/2018/05/17/inside-the-

extravagant-money-and-parties-that-define-cryptocurrency-craze.

7. Natalie Wong and Gerrit De Vynck, "Crypto Pioneer Buys Penthouse in Former Toronto Trump Tower," *Bloomberg*, June 20, 2018, https://www.bloomberg.com/news/articles/2018-06-20/crypto-pioneer-buys-canada-s-biggest-condo-in-former-trump-tower.

8. Olga Kharif, "Ethereum Co-Founder Says Safety Concern Has Him Quitting Crypto," *Bloomberg*, July 16, 2021, https://www.bloomberg.com/news/articles/2021-07-16/ethereum-co-founder-says-safety-concern-has-him-quitting-crypto?sref=m9L277rN.

9. Jeff Kauflin, "Cryptopia In Crisis: Joe Lubin's Ethereum Experiment Is a Mess. How Long Will He Prop It Up?" *Forbes*, December 5, 2018, https://www.forbes.com/sites/jeffkauflin/2018/12/05/cryptopia-in-crisis-billionaire-joe-lubins-ethereum-experiment-is-a-mess-how-long-will-he-prop-it-up /.

10. Nikhilesh De, "Ethereum Studio ConsenSys Just Bought an Asteroid Mining Company," *CoinDesk*, November 1, 2018, https://www.coindesk.com/blockchain-studio-consensys-acquires-asteroid-mining-space-startup.

11. David Canellis, "What we know about the ConsenSys layoffs, as told by a 'fired' employee," *The Next Web*, December 7, 2018, https://thenextweb.com/hardfork/2018/12/07/consensys-blockchain-layoffs.

12. Bijan Stephen, "ConsenSys Plans to Spin Out Most of Its Startups, and It's Going to Mean Layoffs," *The Verge*, December 20, 2018, https://www.theverge.com/2018/12/20/18150036/consensys-layoffs-employees-pending-startup-ethereum.

13. Jon Victor, "ConsenSys Seeks $200 Million from Investors After Bumpy Year," *The Information*, April 15, 2019, https://www.theinformation.com/articles/consensys-seeks-200-million-from-investors-after-bumpy-year.

14. "After Buying Planetary Resources, ConsenSys Sets Its Space Ideas Free—but Will Sell Off the Hardware," *Geekwire*, May 1, 2020, https://www.geekwire.com/2020/buying-planetary-resources-consensys-gives-away-science-asteroids-will-sell-rest.

15. Ian Allison, "ConsenSys Acquires JPMorgan's Quorum Blockchain," *CoinDesk*, August 25, 2020, https://www.coindesk.com/consensys-acquires-jp-morgan-quorum-blockchain.

16. "Blockchain Firm ConsenSys Raises $65 Million from J.P. Morgan, Others," Reuters, April 13, 2021, https://www.reuters.com/technology/blockchain-firm-consensys-raises-65-million-jp-morgan-others-2021-04-13.

17. Ian Allison, "ConsenSys Confidential: Ethereum Builder Is Back in Growth Mode, Document Reveals," *CoinDesk*, March 15, 2021, https://www.coindesk.com/consensys-confidential-ethereum-builder-is-back-in-growth-mode-document-reveals.

18. "Etherchain coin vote on EIP 999," etherchain.org, April 25, 2018, Wayback Machine 経由の URL は https://web.archive.org/web/20180425010204/https://www.etherchain.org/coin vote/poll/35.

19. 2017年11月1日の協定世界時18時28分、devops199 のアドレスがシェイプシフトから0.225 ETH を受け取ったことを示すトランザクション。

"Transaction Details," Etherscan, November 1, 2017, https://etherscan.io/tx/0x63e2f15fabb98351038961067c37b6015043b53427e6f1ffe8ae2414bd867611 ; converting 0.01018338 BTC to 0.22458989 ETC on ShapeShift: シェイプシフト API 経由のもとの URL は https://shapeshift.io/txstat/37b8Emgp2c2KF8GcqUUsSQdq92y5xEnQXP，現在の URL はhttps://laurashin.com/cryptopians/Epilogue/19-37b8E.

20. 2017年11月1日の協定世界時18時23分、ビットコインを交換するトランザクション。"Summary," Blockchain.com, November 1, 2017, https://www.blockchain.com/btc/tx/7ab55f84f3138aac405634e006ed766c729c16ff60f330e1e1f b3bb6b88409e8 ; transaction converting 0.2450965 ETH into 0.01041138 BTC on ShapeShift: シェイプシフト API 経由のもとの URL は https://shapeshift.io/txstat/0x7214fc28 ff65bf775d4b333d7ae7df40734c4084，現在の URL はhttps://laurashin.com/cryptopians/Epilogue/20-0x721.

21. 何度かの交換のあとパリティーのウォレットを凍結するために使用された ETH の最初の出資元アカウントは、6日間で1200件の取引を行なっていた。"Address 0x18788EdabBABc203BC7C15 7518dc4B2d4529F884," Etherscan, accessed April 3, 2021, https://etherscan.io/address/0x18788EdabBABc203BC7C157518dc4B2d4529F884.

22. "SEC v. PlexCorps, Dominic LaCroix, and Sabrina Paradis-Royer Case No, 17-cv-7007 (CBA) (RML) (E.D.N.Y.)," SEC, December 1, 2017, https://www.sec.gov/divisions/enforce/claims/plexcorps.htm ;Jordan Pearson, "PlexCoin Scam Founder Sentenced to Jail and Fined $10K," Vice, December 8, 2017, https://www.vice.com/en/article/qvzkx7/plexcoin-scam-founder-sentenced-to-jail-and-fined-10k.

23. シェイプシフトで 0.09 ETH を 0.256 XMR に交換したことを示すトラン

ザクション。"Tx Hash:

d78721d954fd66c1427a18711b467501db44a86db15bb4f09ea9033b4c564de6,"

xmrchain.net, January 16, 2018,

https://xmrchain.net/tx/d78721d954fd66c1427a18711b467501db44a86db15bb4f09ea9033b4c564de6.

24. 2018年1月15日の協定世界時7時41分、シェイプシフトで XMR を0.07329
ETH に交換したことを示すトランザクション。"Transaction Details,"
Etherscan, January 16, 2018, accessed April 3, 2021,
https://etherscan.io/tx/0x683c62528ec178049f29971427c6bbead552dcc1687c20a619069be5a9aa0f9 0; シェイプシフトで0.23XMR を 0.07329 ETH に交換
したことを示すトランザクション。シェイプシフト API 経由のもとの
URL は
https://shapeshift.io/txstat/04d2ab5112241124b917d131c9e3858b73c1ff15c04f7330dc55d26491beadee, 現在の URL は
https://laurashin.com/cryptopians/Epilogue/24-04d2a.

25. Ryan Mac, "A Cryptocurrency Pioneer Wrote About Sex with a Preteen Girl
on His Blog. He Says It Was Fiction," *BuzzFeed News*, September 19, 2018,
https://www.buzzfeednews.com/article/ryanmac/ethereum-cofounder-sex-underage-girl-fiction.

26. Ming Chan, "To Infinity and Beyond!," *Ethereum Foundation Blog*, January 31,
2018, https://blog.ethereum.org/2018/01/31/to-infinity-and-beyond . The other
four *Ethereum Foundation Blog* posts were "Devcon3 videos available now!,"
November 26, 2017, https://blog.ethereum.org/2017/11/26/devcon3-vids-available-now ; "Devcon3!!!," November 16, 2017,
https://blog.ethereum.org/2017/11/16/devcon3 ; "The Devcon2 site is now
live!," July 8, 2016, https://blog.ethereum.org/2016/07/08/devcon2-site-now-live ; "Ethereum Foundation and Wanxiang Blockchain Labs announce a

blockbuster event combining Devcon2 and the 2nd Global Blockchain Summit in Shanghai, September 19–24, 2016," April 5, 2016, https://blog.ethereum.org/2016/04/05/devcon2-and-blockchain-summit-shanghai-september2016 .

27. Ethereum Team, "Farewell and Welcome," *Ethereum Foundation Blog*, January 31, 2018, https://blog.ethereum.org/2018/01/31/farewell-and-welcome .

28. "Ethereum Development Halts After Vitalik Discovers Sex," *Coin Jazeera*, accessed April 3, 2021, https://coinjazeera.news/ethereum-development-halts-after-vitalik-discovers-sex .

29. "Two Arrested for Extortion of Startup Cryptocurrency Company," Department of Justice, US Attorney's Office, Eastern District of New York, September 18, 2019, https://www.justice.gov/usao-edny/pr/two-arrested-extortion-startup-cryptocurrency-company .

30. Dominic Kennedy and Oliver Wright, "Christopher Harborne: Brexit Party's Bankroller Has a Thai Doppelganger," *The Times*, November 27, 2019, https://www.thetimes.co.uk/article/christopher-harborne-brexit-partys-bankroller-has-a-thai-doppelgaenger-jnd0v9qdp.

31. "Brexit's top donor outed as Bitfinex, Tether parent shareholder," *Protos*, April 23, 2021, https://protos.com/bitfinex-tether-digfinex-shareholder-harborne-brexit-bankroller/.

32. アドレス0xf0e42（TheDAO 攻撃者のものと思われる）がイーサリアムにスパム攻撃もしくは DoS 攻撃を行なった。 "Transactions for 0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2," Etherscan, April 17, 2016, https://etherscan.io/txs?a=0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2&ps=100&p=152.

33. アドレス0xf0e42（TheDAO 攻撃者のものと思われる）が 0 ETH をランダムなイーサリアムアドレスへ送った。ブロックチェーンの肥大化を狙ったとも考えられる。"Transactions for 0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2," Etherscan, April 30, 2016, https://etherscan.io/txs?a=0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2&ps =100&p=60.

34. アドレス0xf0e42（TheDAO攻撃者のものと思われる）が TheDAO へ1 Weiずつ送った最初のトランザクション。"Transactions for 0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2," Etherscan, April 30, 2016, https://etherscan.io/txs?a=0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2&p= 141 ; TheDAO 攻撃者のものと思われるアドレスが TheDAO へ1 Weiずつ送った最後のトランザクション。"Transactions for 0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2," Etherscan, April 30, 2016, https://etherscan.io/txs?a=0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2&p =121 ；0.000111111111111 ETHの1回だけのトランザクション。"Transaction Details," Etherscan, April 30, 2016, https://etherscan.io/tx/0x2a56423a22c1a11d5552fa29d6909ca6534ab9094e144d c7bd95b9079cbf84ae .

35. アドレス0xf0e42（TheDAO 攻撃者のものと思われる）が TheDAO へ1 Weiずつ送り、無効化できないトランザクション。"Transactions for 0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2," Etherscan, May 2, 2016, https://etherscan.io/txs?a=0xf0e42abda410cefb5b4dc4de92a3de5b309e02f2&ps =100&p=1 .

36. TheDAO 攻撃者と思われる人物が、ダーク DAO から子 DAO へおよそ 36万4241 ETH を10回に分けて転送。"Address Info," Ethereum Classic Explorer, July 23, 2016,

https://etc.tokenview.com/en/address/0x10abb5efecdc09581f8b7cb95791fe2936790b4e.

37. TheDAO 攻撃者と思われる人物が、ダーク DAO から子 DAO を経由して 0xc362ef へ360万 ETC 以上を転送。"Transaction Info," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/0xa4031e961908b82e19911e780ec9836635dc92ce7444 a97f6af8316d55850650.

38. TheDAO 攻撃者と思われる人物が、ほぼすべての資金を HackerOne から HackerTwo へ転送。"Transaction Info," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/0x7089794758f739f54fcd17d86f947c1f94dc8ef2d6d9fc16451b3e5e7eb74cca ; TheDAO 攻撃者と思われる人物が、残りのおよそ 21 ETC を HackerOne から HackerTwo へ移動。"Transaction Info," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/0x3f23a60f8055889d37db263f30985bc1bb675331261689c0179c06d3b8b0d302.

39. TheDAO 攻撃者と思われる人物が、イーサリアムクラシックの開発チームの基金に寄付。"Transaction Info," Ethereum Classic Explorer, September 5, 2016, https://etc.tokenview.com/en/tx/0x38d8dda6ed65444762143215ff1c2742b8c16f312766415755661389b1a6198b?_ga=2.252282177.99485005.1629491395-1255823513.1608842673.

40. アドレス 1M2aaN へ BTC が送られた最初のトランザクション。Transaction Info," Ethereum Classic Explorer, October 25, 2016, https://etc.tokenview.com/en/tx/0x6946cf3cfe9117cc416e6141bbb5061ea06f838e7be753effcf919430078606e, シェイプシフト API 経由のもとの URL は

https://shapeshift.io/txstat/0x7bde7ea1eff53b95262c7597050ae9e0bc6315da,
現在の URL はhttps://laurashin.com/cryptopians/Epilogue/40-0x7bd, on ビットコインブロックチェーン上においては以下を参照。"Address,"
Blockchain.com, October 25, 2016,
https://www.blockchain.com/btc/address/1M2aaNN3GTw6dy13u
ScodHaQ8Egr6xr6Ew?page=12.

41. TheDAO 攻撃者と思われる人物が、2016年10月25〜26日、一連の現金化を再開。"Address Info," Ethereum Classic Explorer,
https://etc.tokenview.com/en/address/0x440afde443c7bcfdb7414aa9028e20cda7
4fc5d2, シェイプシフト API 経由のもとの URL は
https://shapeshift.io/txstat/0x440afde443c7bcfdb7414aa9028e20cda74fc5d2, 現在の URL はhttps://laurashin.com/cryptopians/Epilogue/41-0x440, ビットコインブロックチェーン上においては以下を参照。"Summary,"
Blockchain.com, October 25, 2016,
https://www.blockchain.com/btc/tx/8246fcc1ec4bad0826edd3b1419030c402b2
dd458c490a5eb18828a829da238a.

42. TheDAO攻撃者と思われる人物が、2016年10月26日、現金化を終了。
"Transaction Info," Ethereum Classic Explorer, October 26, 2016,
https://etc.tokenview.com/en/tx/0xfc079d1d9c991f5e78fddf57e5601b23bd1c71f
a5337bfc96aebc79823110cb, シェイプシフト API 経由のもとの URL は
https://shapeshift.io/txstat/0x01aedbcbe712ad602a53f2880 c5aeb0b436ae762,
現在の URL は https://laurashin.com/cryptopians/Epilogue/42-0x01a, ビットコインブロックチェーン上においては以下を参照。"Summary,"
Blockchain.com, October 26, 2016,
https://www.blockchain.com/btc/tx/b2a1853ff1963dd29100a3901064b1eaaf6c2
0000bf4c85e7f6491f780ad3ff3.

43. Dexaran が TheDAO 攻撃者と思われる人物へ 1.05 ETC を転送。
"Transaction Info," Ethereum Classic Explorer, October 28, 2016,
https://etc.tokenview.com/en/address/0xc9bea9379a8fade01240ee583535fac713b
71014.

44. Christian Seberino, PhD, "The Dexaran Interview," Medium, December 20,
2017, https://medium.com/@cseberino/conversation-with-the-dao-attacker-
dexaran-speaks-11d747a43083.

45. 2016年11月14日、TheDAO 攻撃者と思われる人物が現金化しようとした
とみられる2634.93 ETCをシェイプシフトがブロック。もとの ShapeShift
API の URL はhttps://shapeshift.io/txstat/0x55ba70d07ccd4c56247
ededa3c53531ad797146d, 現在の URL は
https://laurashin.com/cryptopians/Epilogue/45-0x55b.

46. 2016年11月16日、TheDAO 攻撃者と思われる人物が現金化しようとした
とみられる100.23 ETCをシェイプシフトがブロック。もとのShapeShift
APIの URL はhttps://
shapeshift.io/txstat/0xaa8b2834b45493f45702a56f33ce750ce41bd867, 現在の
URL は https://laurashin.com/cryptopians/Epilogue/46-0xaa8.

47. TheDAO 攻撃者と思われる人物が2016年12月2日に行なった最初の現金
化トランザクション。"Transaction Info," Ethereum Classic Explorer,
December 2, 2016,
https://etc.tokenview.com/en/tx/0xbcc26b8d6290c6657ef6bc 86361f5cf
ba9e46603b8f b5c9caf3ab0a9b3ee1187, シェイプシフト API 経由のもとの
URL は https://shapeshift.io/txstat/0xd9e7
681e234136c6871a159c6e0ef0fc6c3240be, 現在の URL は
https://laurashin.com/cryptopians/Epilogue/47a-0xd9e, ビットコインブロック

チェーン上においては以下を参照。Blockchain.com, December 2, 2016, https://www.blockchain.com/btc/tx/f66a327f25fe99b39fd977c58f548ce440293 ece1d294be1c140a01e9a5c6a6e；2016年12月5日、TheDAO 攻撃者と思われる人物がシェイプシフトで ETC から BTC への交換に成功した最初の一連のトランザクション。"Transaction Info," Ethereum Classic Explorer, December 5, 2016, https://etc.tokenview.com/en/tx/0x91bea0f7f3196ef1cfd20f1f2937152ce166762 de24cc8de7f7451b64994abd1, シェイプシフト API 経由のもとの URL は https://shapeshift.io/txstat/0xdabd6c8c83e66e67eecec11292af849f5cd74f29, 現在の URL はhttps://laurashin.com/cryptopians/Epilogue/47b-0xdab, ビットコインブロックチェーン上においては以下を参照。

https://www.blockchain.com/btc/tx/7b8a83690b1f3d104255c801a3da61467fcc 10417d51930cbf09d17f285c8016；12月6日、ETC から BTC へ交換する一連のトランザクションの最初。"Transaction info," Ethereum Classic Explorer, December 6, 2016, https://etc.tokenview.com/en/tx/0xaa984428299993512555000d06170863fc09f1 a801e8502688eba2cb5fa158e3, シェイプシフト API 経由のもとの URL は https://shapeshift.io/txstat/0x6a9f6edf4984ca7da52bc2c9b763 c2f972af4f5b, 現在の URL は https://laurashin.com/cryptopians/Epilogue/47c-0x6a9, ビットコインブロックチェーン上においては以下を参照。"Summary," Blockchain.com,

https://www.blockchain.com/btc/tx/3669c98967bebe9e2470fffba5a372a63210e 1b34139d388148d171066fdd349；ETC から BTC への交換に成功した一連のトランザクションの最初。Ethereum Classic Explorer, December 7, 2016, https://etc.tokenview.com/en/tx/0x7b31bae94a9e594e5d23f8c72d5804afd859f2 174de745f21ded6ffe3e16b8d8, シェイプシフト API 経由のもとの URL は https://shapeshift.io/txstat/0x32395d7c89af0be 5a32118340492e9e714fbd9bd,

現在の URL は https://laurashin.com/cryptopians/Epilogue/47d-0x323, ビット

コインブロックチェーン上においては以下を参照。"Summary,"

Blockchain.com,

https://www.blockchain.com/btc/tx/2a215bbbff9e534ad0ac60c1051811afdacb8

0e8d5ef65fe24ac40e1302b46aa .

48. 2016年12月9日、ETC から BTC への交換を5回試み、すべてシェイプシ

フトによってブロックされた一連のトランザクションの最初。

ShapeShift API 経由のもとの URL は

https://shapeshift.io/txstat/0x75ece5ff90 e323459b5cece076e058cdeaf3ee58, 現

在の URL はhttps://laurashin.com/cryptopians/Epilogue/48a-0x75e; 同日、

ETC から BTC への交換を5回試み、すべてシェイプシフトによってブ

ロックされた一連のトランザクションの最後。ShapeShift API 経由のも

との URL は

https://shapeshift.io/txstat/0xe49d037273e03ed8caaf509b70ca7020add550ca,

現在の URL は https://laurashin.com/cryptopians/Epilogue/48b-0xe49; 2016

年12月11日、ETC から BTC への交換を最後にふたたび試み、シェイプ

シフトによってブロックされたトランザクション。ShapeShift API 経由

のもとの URL は

https://shapeshift.io/txstat/0x204719cb08dceca8fd575c576083948d58450d11,

現在の URL は https://laurashin.com/cryptopians/Epilogue/48c-0x204.

49. イーサリアムクラシック上のダーク DAO に残っている総額。"Address

Info," Ethereum Classic Explorer,

https://etc.tokenview.com/en/address/0x5e8f0e63e7614c47079a41ad4c37be7def

06df5a.

50. TheDAO 攻撃者のものと思われる複数の現金化アドレスに残っている総

額。"Address Info," Ethereum Classic Explorer,
https://etc.tokenview.com/en/address/0x1b63be2d056b4a3befcda120b16ebde0
c3315118.

51. "Presumed DAO attacker sends 50 BTC to Wasabi," Blockchain.com,
September 7, 2019,
https://www.blockchain.com/btc/tx/aa8d7407f88dca9b1779880c3d2e3245e022
17f7366972d617f812c8dd73a96a .

52. "Node: TenX," 1ML, accessed September 26, 2021,
https://1ml.com/node/03f456e8c3479654da4498b64c1aa80656a33561d52f3444f593
0f5c4a410a6fb6.

53. トビーのものとみられるエンジェルリストのプロフィール（2021年9月
27日確認）。ユーザー名は "tobyai"。https://angel.co/u/tobyai；トビーの
ものとみられるベータリストのプロフィール（2021年9月25日確認）。
https://betalist.com/@tobyai；トビーのものとみられるギットハブのプロフ
ィール（2021年9月25日確認）。https://github.com/tobyai；"My
Keybaseproof [reddit:tobyai= keybase:tobyai]," トビー自身が本人のものと認め
たレディットのプロフィール（2021年12月12日確認）。
https://www.reddit.com/r/KeybaseProofs/comments/3wikg0/my_keybase_proo
f_reddittobyai_keybasetobyai_v；トビーのものとみられるリンクトイン
のプロフィール（2021年9月26日確認）。
https://www.linkedin.com/in/tobyai；トビーのものとみられるメディアムの
プロフィール（2021年9月26日確認）。
http://web.archive.org/web/20171019045939/https://medium.com/@tobyai；ト
ビーのものとみられるピンテレストのプロフィール（2021年9月26日確
認）。https://www.pinterest.com/tobyai；トビーのものとみられるレディッ
トのプロフィール（2021年9月26日確認）。

https://www.reddit.com/user/tobyai; トビーのものとみられるスタック・オーバーフローのプロフィール（2021年9月27日確認）。
https://stackoverflow.com/users/2080162/tobyai; トビーのものとみられるツイッターのプロフィール（2021年9月26日確認）。
https://twitter.com/tobyai .

54. Toby Hoenisch, "TheDAO—risk free voting," Medium, May 28, 2016, Wayback Machine 経由の URL は http://web.archive.org/web/20170115195717/https://medium.com/@tobyai/the dao-risk-free-voting-dc1f8c90a272 .

55. Toby Hoenisch, "TheDAO—blackmailing withdrawals," Medium, May 28, 2016, Wayback Machine 経由の URL は http://web.archive.org/web/20170115184505/https://medium.com/@tobyai/theda o-blackmailing-withdrawals-5d097572405e .

56. Toby Hoenisch, "TheDAO—no safe withdrawals!?," Medium, May 28, 2016, Wayback Machine 経由の URL は http://web.archive.org/web/20170115184006/https://medium.com/@tobyai/the dao-no-safe-withdrawals-9dd568510d73 .

57. Toby Hoenisch, "TheDAO—a $150m lesson in decentralized governance," Medium, May 28, 2016, Wayback Machine 経由の URL は http://web.archive.org/web/20170115195425/https://medium.com/@tobyai/theda o-a-150m-lesson-in-decentralized-governance-b96a9d113bef .

58. Toby Hoenisch, "Announcing BlockOps: Blockchain Hack Chal- lenges," Medium, June 3, 2016, Wayback Machine 経由の URL は http://web.archive.org/web/20170116023030/https://medium.com/@tobyai/anno uncing-blockops-blockchain-hack-challenges-6d20282dcc70 .

59. Toby Hoenisch (@tobyai)がVitalik Buterinの以下の書き込みをリツイート。 "I will provide my opinion in the way that @Truthcoin would approve of: I have been buying DAO tokens since the security news," Twitter, June 17, 2016, https://twitter.com/tobyai/status/743945831158423552 .

60. Toby Hoenisch (@tobyai)がBarry Silbertの以下の書き込みをリツイート。 "Bought my first non-bitcoin digital currency . . . " Twitter, July 26, 2016, https://twitter.com/tobyai/status/757804661575258112 .

61. Giulio Prisco, "OneBit: Use Bitcoin Anywhere MasterCard PayPass Is Accepted,"*Bitcoin Magazine*, April 8, 2015, https://bitcoinmagazine.com/technical/onebit-use-bitcoin-anywhere-mastercard-paypass-accepted-1428526298 .

62. Annie Nova, "Some Cryptocurrency-Backed Debit Cards Dropped from Visa Network, Leaving Users Scrambling,"*CNBC*, January 5, 2018, https://www.cnbc.com/2018/01/05/some-cryptocurrency-backed-cards-dropped-from-visa-network.html .

63. "Official TenX Services Announcement," TenX blog Wayback Machine 経由 の URL は, October 1, 2020, http://web.archive.org/web/20210124155256/https://tenx.tech/blog/official-tenx-services-announcement .

64. "TenX, Meet Mimo," TenX blog, April 9, 2021, https://tenx.tech/tenx-meet-mimo .

65. "Claim Your MIMO Tokens Guide," Mimo Labs blog, April 9, 2021, https://medium.com/mimolabs/claim-your-mimo-tokens-guide-e983bbc4558f .

66. Kevin McSpadden, "TenX Co-Founder and President Julian Hosp Has Left the

Company,"*e27*, January 9, 2019, https://e27.co/tenx-co-founder-and-president-julian-hosp-has-left-the-company-20190109 .

67. Larry Cermak (@lawmaster), "I think it's time to revisit TenX today...," Twitter, November 17, 2018, https://twitter.com/lawmaster/status/1063770511682007041 ; David Z. Morris, "New Video Appears to Link TenX President to Lyoness Pyramid Scheme," December 5, 2018,*BreakerMag*, https://breakermag.breaker.io/new-video-appears-to-link-tenx-president-to-lyoness-pyramid-scheme .

68. "Manhattan U.S. Attorney Announces Arrest of United States Citizen for Assisting North Korea in Evading Sanctions," Department of Justice, US Attorney's Office, Southern District of New York, November 29, 2019, https://www.justice.gov/usao-sdny/pr/manhattan-us-attorney-announces-arrest-united-states-citizen-assisting-north-korea.

69. Kieran Smith, "Ethereum Developer Arrested over North Korea Controversy," Brave New Coin, December 3, 2019, https://bravenewcoin.com/insights/ethereum-developer-arrested-over-north-korea-controversy; Vitalik Buterin (@VitalikButerin), "Enjoy!," Twitter, January 18, 2019, https://twitter.com/VitalikButerin/status/1086190896515694592?s=20.

70. Erik Schatzker, "Paul Tudor Jones Buys Bitcoin as a Hedge Against Inflation," Bloomberg, May 7, 2020, https://www.bloomberg.com/news/articles/2020-05-07/paul-tudor-jones-buys-bitcoin-says-he-s-reminded-of-gold-in-70s ; Billy Bambrough, "A Legendary Hedge Fund Billionaire Just Flipped to Bitcoin—Calling It 'Better' Than Gold," *Forbes*, November 12, 2020, https://www.forbes.com/sites/billybambrough/2020/11/12/a-legendary-hedge-fund-billionaire-just-flipped-to-bitcoin-calling-it-better-than-gold ; Ray Dalio, "What I Think of Bitcoin," Bridgewater, January 28, 2021, https://www.bridgewater.com/_document/what-i-think-of-

bitcoin?id=00000177-6a27-db12-a3f7-eef731310000.

71. Steve Kovach, "Tesla Buys $1.5 Billion in Bitcoin, Plans to Accept It as Payment," *CNBC*, February 8, 2021, https://www.cnbc.com/2021/02/08/tesla-buys-1point5-billion-in-bitcoin.html ; Paul Vigna, "MassMutual Joins the Bitcoin Club with $100 Million Purchase," *Wall Street Journal*, December 10, 2020, https://www.wsj.com/articles/massmutual-joins-the-bitcoin-club-with-100-million-purchase-11607626800 ; Anna Irrera, "Exclusive: PayPal Launches Crypto Checkout Service," *Reuters*, March 30, 2021, https://www.reuters.com/article/us-crypto-currency-paypal-exclusive/exclusive-paypal-launches-crypto-checkout-service-idUSKBN2BM10N .

72. "Federally Chartered Banks and Thrifts May Provide Custody Services for Crypto Assets," Office of the Comptroller of the Currency, July 22, 2020, https://www.occ.gov/news-issuances/news-releases/2020/nr-occ-2020-98.html.

73. Brady Dale, "With COMP Below $100, a Look Back at the 'DeFi Summer' It Sparked," *CoinDesk*, October 20, 2020, https://www.coindesk.com/comp-below-100-defi-summer-over ; Laura Shin, "DeFi Security: With So Many Hacks, Will It Ever Be Safe?," *Unchained*, May 5, 2020, https://unchainedpodcast.com/defi-security-with-so-many-hacks-will-it-ever-be-safe .

74. William Foxley, "Ethereum 2.0 Beacon Chain Goes Live as 'World Computer' Begins Long-Awaited Overhaul," *CoinDesk*, December 7, 2020, https://www.coindesk.com/ethereum-2-0-beacon-chain-goes-live-as-world-computer-begins-long-awaited-overhaul.

75. "NFT Collectible Rankings by Sales Volume (All-time)," CryptoSlam, accessed April 3, 2021, https://cryptoslam.io .

76. Samantha Hissong, "Kings of Leon Will Be the First Band to Release an

Album as an NFT," *Rolling Stone*, March 3, 2021,
https://www.rollingstone.com/pro/news/kings-of-leon-when-you-see-yourself-album-nft-crypto-1135192 ; Sam Moore, "Kings of Leon Have Generated $2million from NFT Sales of Their New Album," *NME*, March 12, 2021, https://www.nme.com/news/music/kings-of-leon-have-generated-2million-from-nft-sales-of-their-new-album-2899349 ; Grace Kay, "Grimes Made $5.8 Million in Under 20 Minutes Selling Crypto-based Artwork," *Business Insider*, March 1, 2021, https://www.businessinsider.com/grimes-nft-art-warnymph-sells-for-millions-20-minutes-2021-3 .

77. EtherRock Price (@etherrockprice), "EtherRock 27 purchased for E888 Ether ($2,872,733.28) 5 hrs 56 mins ago (Aug-28-2021 09:37:29 AM +UTC) Txn: etherscan.io/tx/0x12c646e37…#EtherRock #EtherRocks," Twitter, August 28, 2021, https://twitter.com/etherrockprice/status/1431641800431714313 .

78. OpenSea monthly volume, DuneAnalytics, accessed August 30, 2021, https://dune.xyz/queries/3469/6913 .

79. Stephani Crets, "Etsy continues to grow sales and find new buyers," *Digital Commerce 360,* August 6, 2021, https://www.digitalcommerce360.com/2021/08/06/etsy-continues-to-grow-sales-and-find-new-buyers /.

80. Nathaniel Whittemore, "Are NFTs Just This Cycle's ICOs?," *CoinDesk*, March 2, 2021, https://uat.coindesk.com/podcasts/the-breakdown-with-nlw-episode/are-nfts-just-this-cycles-icos .

ペーパーバック版あとがき

1. Chainalysis (@chainalysis), "The NFT-gaming focused @Ronin_Net- work . . . ,"

Twitter, March 29, 2022,
https://twitter.com/chainalysis/status/1508871975300739082.

2. Andrew Hayward, "Ethereum Dev Virgil Griffith Gets Five Years in Prison for North Korea Trip,"*Decrypt*, April 19, 2022, https://decrypt.co/97624/ethereum-dev-virgil-griffith-gets-five-years-in-prison-for-north-korea-trip .

3. TerraClassicUSD to USD chart, CoinMarketCap, accessed March 7, 2023, https://coinmarketcap.com/currencies/terrausd .

4. Jeff Cox, "Inflation Rose 8.6% in May, Highest Since 1981,"*CNBC*, June 10, 2022, https://www.cnbc.com/2022/06/10/consumer-price-index-may-2022.html ; Jeff Cox, "Fed Likely to Boost Interest Rates by Three-Quarters of a Point This Week,"*CNBC*, June 13, 2022, https:// www.cnbc.com/2022/06/13/fed-reportedly-may-hike-rates-by-three-quarters-of-a-point-this-week.html ; Nikhilesh De, "Crypto Lending Service Celsius Pauses Withdrawals, Citing 'Extreme Market Conditions,'"*CoinDesk*, June 13, 2022, https://www.coindesk.com/policy/2022/06/13/crypto-lending-service-celsius-pauses-withdrawals-citing-extreme-market-conditions ; "Total Cryptocurrency Market Cap," CoinMarketCap, accessed March 7, 2023, https://coinmarketcap.com/charts.

5. Kate Irwin, "Ethereum Merge? Get Ready for the 'Surge, Verge, Purge, and Splurge,' Says Vitalik Buterin,"*Decrypt*, July 21, 2022, https://decrypt.co/105707/ethereum-merge-surge-verge-purge-splurge-vitalik-buterin .

6. "U.S. Treasury Sanctions Notorious Virtual Currency Mixer Tornado Cash," US Department of the Treasury press release, August 8, 2022, https://home.treasury.gov/news/press-releases/jy0916 .

7. Specially Designated Nationals and Blocked Persons List (SDN) Human Readable Lists, US Department of the Treasury, August 7, 2022, Wayback Machine 経由のURLは https://web.archive.org/web/20220807040754/https://home.treasury.gov/policy-issues/financial-sanctions/specially-designated-nationals-and-blocked-persons-list-sdn-human-readable-lists .

8. Mengqi Sun, "Crypto Advocacy Group Sues U.S. Treasury over Tornado Cash Sanctions,"*Wall Street Journal*, October 12, 2022, https://www.wsj.com/articles/crypto-advocacy-group-sues-u-s-treasury-over-tornado-cash-sanctions-11665610506.

9. "Is TRM Labs Blocking Addresses from DeFi Protocols? Ari Redbord Says Yes," interview by Laura Shin, *Unchained*, August 19, 2022, audio and video, https://unchainedcrypto.com/is-trm-labs-blocking-addresses-from-defi-protocols-ari-redbord-says-no-ep-387.

10. Eli Tan, Oliver Knight, and Nikhilesh De, "Someone Is Trolling Celebs by Sending ETH from Tornado Cash,"*CoinDesk*, August 9, 2023, https://www.coindesk.com/policy/2022/08/09/someone-is-trolling-celebs-by-sending-eth-from-tornado-cash.

11. "Why Kevin Zhou Believes Ethereum Will Have 3 Forks After the Merge," interview by Laura Shin, *Unchained*, August 5, 2023, audio and video, https://unchainedcrypto.com/why-kevin-zhou-believes-ethereum-will-have-3-forks-after-the-merge-ep-381.

12. "Ethereum Mainnet Merge Viewing Party," Ethereum Foundation, YouTube, September 15, 2022, https://www.youtube.com/watch?v=Nx-jYgI0QVI&t=10820s.

13. "The Merge Panda," Zora, accessed March 11, 2023,
    https://zora.co/collections/0x97d5dc811642aecebb149aec5c79b8252a4724a9.

14. "EthereumPoW to USD Chart," CoinMarketCap, accessed March 7, 2023,
    https://coinmarketcap.com/currencies/ethereum-pow.

15. Paul Kiernan and Vicky Ge Huang, "Ether's New 'Staking' Model Could Draw
    SEC Attention,"*Wall Street Journal*, September 15, 2022,
    https://www.wsj.com/articles/ethers-new-staking-model-could-draw-sec-
    attention-11663266224.

16. Maria Gracia Santillana Linares, "SEC Chairman Gary Gensler Implies That
    Ether Is a Security and Falls Under His Jurisdiction," *Forbes*, June 27, 2022,
    https://www.forbes.com/sites/mariagraciasantillanalinares/2022/06/27/sec-
    chairman-gary-gensler-implies-that-ether-is-a-security-and-falls-under-his-
    jurisdiction/?sh=6c5908f27775.

17. @milkman84, "How Prestigious Is Jane Street Capital?," Wall Street Oasis,
    June 15, 2007, https://www.wallstreetoasis.com/forum/trading/how-prestigious-
    is-jane-street-capital.

18. Chelsey Cox, "Former FTX CEO Sam Bankman-Fried Met with Top Officials
    at the CFTC More Than 10 Times over the Past 14 Months, Says Chairman
    Rostin Behnam,"*CNBC*, December 1, 2022,
    https://www.cnbc.com/2022/12/01/former-ftx-ceo-sam-bankman-fried-met-
    multiple-times-with-cftc-.html.

19. Tracy Wang, "FTX Founder Sam Bankman-Fried Signs Billionaires' Giving
    Pledge,"*CoinDesk*, June 1, 2022,
    https://www.coindesk.com/business/2022/06/01/ftx-founder-sam-bankman-
    fried-signs-billionaires-giving-pledge.

20. Steven Ehlich, "Meet the World's Richest 29-Year-Old: How Sam Bankman-Fried Made a Record Fortune in the Crypto Frenzy,"*Forbes*, October 6, 2021, https://www.forbes.com/sites/stevenehrlich/2021/10/06/the-richest-under-30-in-the-world-all-thanks-to-crypto/?sh=23a4448d3f4d.

21. Hank Tucker, "15 Under 40: The Youngest Billionaires on the 2021Forbes 400,"*Forbes*, October 5, 2021, https://www.forbes.com/sites/hanktucker/2021/10/05/15-under-40-the-youngest-billionaires-on-the-2021-forbes-400/?sh=526f70d16a5f.

22. Chris Matthews, "Sam Bankman-Fried Says He's a 'Scaled Down' J. P. Morgan of the Crypto Industry,"*Marketwatch*, October 13, 2022, https://www.marketwatch.com/story/sam-bankman-fried-says-hes-a-scaled-down-j-p-morgan-of-the-crypto-industry-11665697797.

23. "SBF vs. Erik Voorhees: How Do We Regulate Crypto?,"*Bankless Shows*, YouTube, October 28, 2022, https://www.youtube.com/watch?v=Ytaa_5liwMA.

24. Ian Allison, "Divisions in Sam Bankman-Fried's Crypto Empire Blur on His Trading Titan Alameda's Balance Sheet,"*CoinDesk*, November 2, 2022, https://www.coindesk.com/business/2022/11/02/divisions-in-sam-bankman-frieds-crypto-empire-blur-on-his-trading-titan-alamedas-balance-sheet.

25. CZ Binance (@cz_binance), "Liquidating our FTT is just post-exist risk management . . . ," Twitter, November 6, 2022, https://twitter.com/cz_binance/status/1589374530413215744.

26. Caroline Ellison (@carolinecapital), "@cz_binance if you're looking to minimize the market impact on your FTT sales, Alameda will happily buy it all from you today at $22!," Twitter, November 6, 2022,

https://twitter.com/carolinecapital/status/1589287457975304193.

27. Berber Jin, Eliot Brown, and Juliet Chung, "FTX Needs $8 Billion, Bankman-Fried Tells Investors,"*Wall Street Journal*, November 9, 2022, https://www.wsj.com/livecoverage/stock-market-news-today-11-09-2022/card/ftx-needs-8-billion-bankman-fried-tells-investors-2RSa5oqZyZZ5YrPLuZuL.

28. Andrew Kang (@rewkang), "FTX is Fine. Assets are fine. FTX has enough to cover all client holdings . . . ,"Twitter, March 10, 2023, https://twitter.com/Rewkang/status/1634220684707606540.

29. Sam Bankman-Fried (@sbf-ftx), "1) Hey all: I have a few announce- ments to make . . . ,"Twitter, November 8, 2022, https://twitter.com/SBF_FTX/status/1590012124864348160 ; CZ Binance (@cz_ binance), "Sad day. Tried but [crying emoji],"Twitter, November 9, 2022, https://twitter.com/cz_binance/status/1590463239925944320.

30. "Do Kwon of Terra: 'It Was Never Really About Money or Fame or Success, '" interview by Laura Shin, *Unchained*, October 18, 2022, audio and video, https://unchainedcrypto.com/do-kwon-of-terra-it-was-never-really-about-money-or-fame-or-success-ep-408.

31. Sander Lutz, "Celsius Pays Off Last DeFi Loan in Push to Recoup $1 Billion,"*Decrypt*, July 13, 2022, https://decrypt.co/105054/celsius-pays-off-last-defi-loan-in-push-to-recoup-1-billion ; Krisztian Sandor, "Liquidity Crunch Spreads to Crypto Lending as Institutional Borrowers Max Out Credit Pools,"*CoinDesk*, November 8, 2022, https://www.coindesk.com/markets/2022/11/09/liquidity-crunch-spreads-to-crypto-lending-as-institutional-borrowers-max-out-credit-pools ; Tarun Chitra (@tarunchitra), "If you look on-chain, Alameda paid back it's DeFi loans . . . ,"

Twitter, November 11, 2022,
https://twitter.com/tarunchitra/status/1591087700379324417.

32. MacKenzie Sigalos, "FTX's Gary Wang, Alameda's Caroline Ellison Plead
    Guilty to Federal Charges, Cooperating with Prosecutors,"*CNBC*, December 21,
    2022, https://www.cnbc.com/2022/12/22/ftxs-gary-wang-alamedas-caroline-
    ellison-plead-guilty-to-federal-charges-cooperating-with-prosecutors.html ;
    Jody Godoy and Luc Cohen, "FTX's Singh Pleads Guilty as Pressure Mounts
    on Bank- man-Fried,"*Reuters*, February 28, 2023,
    https://www.reuters.com/legal/ftxs-singh-agrees-plead-guilty-us-criminal-
    charges-lawyer-says-2023-02-28.

33. Jennifer Wieczner, "Can Gary Gensler Survive Crypto Winter? D.C.'s Top
    Financial Cop on Bankman-Fried Blowback,"*New York Magazine*, February 23,
    2023, https://nymag.com/intelligencer/2023/02/gary-gensler-on-meeting-with-
    sbf-and-his-crypto-crackdown.html.