Minnesota Journal of Law, Science & Technology

Volume 21 | Issue 1

Article 3

12-20-2019

When Cute Becomes Criminal: Emoji, Threats and Online Grooming

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Marilyn M. McMahon & Elizabeth A. Kirley, *When Cute Becomes Criminal: Emoji, Threats and Online Grooming*, 21 MINN. J.L. Sci. & Tech. 37 (2019).

Available at: https://scholarship.law.umn.edu/mjlst/vol21/iss1/3



When Cute Becomes Criminal: Emoji, Threats and Online Grooming

Marilyn M. McMahon* & Elizabeth A. Kirley*

ABSTRACT

Emoji are widely used and are frequently perceived as cute or benign adjuncts to online communications. Employed to humanize truncated digital messages by conveying humor, emotion, and sociability, emoji perform a far more sinister role when used to convey threats or to facilitate the sexual exploitation of minors. These activities exploit the emotive function of emoji and/or their role in facilitating trust, albeit for a criminal purpose. This paper explores the role of emoji in both threats and online grooming. Through a review of a sampling of criminal cases from diverse jurisdictions, we examine relevant prosecutions and find that emoji are being increasingly recognized as a facilitator or adjunct to criminal threats and unlawful sexual solicitation made on online platforms such as Facebook and Instagram or through private messaging. The review also examines the multiple and diverse ways in which evidence of emoji has been admitted in criminal trials, raising contentious (but hitherto largely unrecognized) issues in relation to the application of the best evidence rule. While noting the distinctive opportunities, challenges, and problems posed in relation to how to interpret and best represent these stylized visual representations in criminal proceedings, the article concludes that despite these various difficulties, imposing criminal liability for threats or unlawful solicitation conveyed by

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emoji is a necessary evolution of the criminal law, demonstrating its adaptation to the digital age.

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INTRODUCTION

Emoji are images, symbols, or icons used in online communication (that is, communication via cell phone text messaging, electronic mail, personal or instant messaging, chat rooms, bulletin boards, or similar) to convey information, emotion, and attitudes. Shigetaka Kurita, a Japanese designer, is credited with developing an original set of 176 emoji in 1999

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^{1.} While emoji can be produced in other contexts, such as handwritten notes, this article focuses on their use in online communications. *See Unicode Technical Standard #51: Unicode Emoji*, UNICODE, http://unicode.org/reports/tr51/ (last visited Oct. 20, 2019) ("Emoji are pictographs (pictorial symbols) that are typically presented in a colorful cartoon form and used inline in text. They represent things such as faces, weather, vehicles and buildings, food and drink, animals and plants, or icons that represent emotions, feelings, or activities.").

for use on cell phones.² Since 2010 they have been included in the Unicode system (a standard character indexing system) and the Unicode Consortium has responsibility for approving guidelines and standards in relation to new emoji.³ Cell phone keyboards now come automatically equipped with emoji and Facebook recently diversified its 'Like' button to five emoji reactions, developments that have generated an exponential increase in emoji use. It is estimated that there are now almost 2,800 different emoji, including a range of anthropomorphic images with varying facial expressions, hair type, and skin tones.⁴ With more than two-thirds of Americans using social media,⁵ and nearly all of the online population using emoji in their communications,⁶ it is accurate to state that there has been an explosive increase in the use of these little images.⁷ Commentators have acclaimed emoji as being "the language of

2. See Mayumi Negishi, Meet Shigetaka Kurita, the Father of Emoji, WALL STREET J. (Mar. 26, 2014, 5:36 AM), http://blogs.wsj.com/japanrealtime/2014/03/26/meet-shigetaka-kurita-the-father-of-emoji/ (detailing Kurita's invention of the "176 12-pixel by 12-pixel images that became the foundation for all emoji" in 1999). See also Rachel Scall, © ■: Emoji as Language and Their Place Outside American Copyright Law, 5 N.Y.U. J. INTELL. PROP. & ENT. L. 381, 382 (2016) ("Kurita developed a series of symbols that represent emotions and other abstract ideas.").

^{3.} See UNICODE, supra note 1 ("[The Unicode Consortium] provides design guidelines for improving the interoperability of emoji characters across platforms and implementations.").

^{4.} This is based on a sub-total figure of 2,740 that does not include duplications and minor modifiers of standard emoji (e.g. skin tone modifier) supplied by Unicode. See Emoji Counts, v12.0, UNICODE, https://unicode.org/emoji/charts/emoji-counts.html [https://perma.cc/X7BX-F7PU] (last updated Sept. 24, 2019) (counting the total without the typical duplicates or components).

^{5.} More than 70% of Americans use some form of social media. Social Media Fact Sheet, PEW RES. CTR. (Jan. 12, 2017), http://www.pewinternet.org/fact-sheet/social-media/.

^{6.} Approximately 92% of online consumers use emoji. Brandy Shaul, Report: 92% of Online Consumers Use Emoji [Infographic], ADWEEK (Sept. 30, 2015), http://www.adweek.com/digital/report-92-of-online-consumers-use-emoji-infographic/.

^{7.} See CMO.com Staff, Infographic: 92% of World's Online Population Use Emojis, CMO (Nov. 22, 2016), https://www.cmo.com/features/articles/2016/11/21/report-emoji-used-by-92-of-worlds-online-population.html [https://perma.cc/Y7DW-ZDZU] (describing emoji as "the fastest-growing language worldwide").

the online era," and "the fastest growing language in the world." Such is their impact that in 2015 the Oxford Dictionary hailed the "Face With Tears of Joy" emoji ⊜ as the word of the year. 10

What motivates people to use these little icons? In addition to the practical benefits of speed and their independence of literacy and particular languages, surveys conducted with emoji users indicate that they use these and other images to help them communicate and connect with others, 11 and to express emotions. 12 It seems that emoji perform a similar function in online communications to that of small talk and non-verbal behaviour in offline, ordinary speech—they can inject emotion, nuance, humor, and sociability. 13 They connect the linguistic and the social. 14 In functional, truncated digital messages, emoji can perform what linguists call a "phatic function" analogous to small talk in offline speech; that is, they often facilitate interactions rather than having the purpose of simply conveying

^{8.} Julia Greenberg, *That ;) You Type Can and Will Be Used Against You in a Court of Law*, WIRED (Feb. 12, 2015), https://www.wired.com/2015/02/emoji-in-court-cases/ [https://perma.cc/28F3-5YD6].

^{9.} Bernadine Racoma, *How Emojis Are Perceived Differently by Different Cultures*, DAY TRANSL. (Feb. 8, 2018), https://www.daytranslations.com/blog/emojis-amongst-cultures/ [https://perma.cc/UK65-25PQ].

^{10.} Katy Steinmetz, Oxford's 2015 Word of the Year Is This Emoji, TIME (Nov. 17, 2015), http://time.com/4114886/oxford-word-of-the-year-2015-emoji/.

^{11.} See Molly McHugh, What the Different Emoji Hearts of Instagram Mean, WIRED (May 6, 2015, 7:00 AM), https://www.wired.com/2015/05/different-emoji-hearts-instagram-mean/ [https://perma.cc/GZ6V-ALRH] ("[E]moji are more about being understood than a simple social trend . . . ").

^{12.} See Carolyn Kelly, Do You Know What I Mean > :(—A Linguistic Study of the Understanding of Emoticons and Emojis in Text Messages 17–19 (Jan. 13, 2015) (unpublished Bachelor thesis, Halmstad University), http://www.diva-portal.org/smash/get/diva2:783789/FULLTEXT01.pdf [https://perma.cc/DG8K-YF64] (describing a questionnaire of ninety secondary school students in Stockholm regarding whether there is a universal meaning for emoji and emoticons. The study found the meaning of icons is reliant on the situation and the mood: they do not stand on their own regarding meaning and, in 70% of cases, they are used to "make text easier to understand.").

^{13.} See Ying Tang & Khe Foon Hew, Emoticon, Emoji, and Sticker Use in Computer-Mediated Communication: A Review of Theories and Research Findings, 13 INT'L J. COMM 2457, 2468 (2019) (finding that the motivations for using emoji include "elevated levels of personalization, expressiveness, humor, and enjoyment" as well as "accuracy, sociability, [and] efficiency").

^{14.} See id. at 2464 (finding that "emoji intensified the sense of connectivity and the level of social presence").

or seeking information.¹⁵ Just as non-verbal behavior such as pitch, volume, speed of speech, gestures, and facial expressions fundamentally informs our verbal communications,¹⁶ emoji can also improve one-dimensional texting and posting by adding emotion, sociability, and humor.¹⁷ In essence, just as people rely on non-verbal behavior to help them express themselves and to understand others, emoji perform a similar role in online communications: they manage the communication climate.¹⁸

The emotional function of emoji has been confirmed in various studies. A large-scale comparison of tweets with and without emoji found that those containing emoji had a significantly higher rating of sentiment (emotion and attitudes). Additionally, an online poll conducted in the United States reported that most respondents believed that using emoji helped them to connect and communicate their thoughts and feelings. Interestingly, just over half the respondents indicated that they were actually more comfortable expressing their

15. See MARCEL DANESI, THE SEMIOTICS OF EMOJI: THE RISE OF VISUAL LANGUAGE IN THE AGE OF THE INTERNET 19 (2017) (describing phatic function and suggesting three subcategories of phatic statement: utterance opener, utterance ending, and silence avoider).

^{16.} See Albert Mehrabian, Silent Messages 43 (1971) (describing an off-cited study in which the author concludes that 93% of the meaning in verbal messages that are inconsistent or contradictory comes from the associated non-verbal communication such as tone of voice or facial expression).

^{17.} See Tang & Hew, supra note 13; Amelia Butterly, What Your Most Frequently Used Emoji Say About You, BBC (Nov. 17, 2015), http://www.bbc.co.uk/newsbeat/article/34846913/what-your-most-frequently-used-emoji-say-about-you (estimating "roughly 70% of emoji usage, sent every day, relates to emotional experience of some kind").

^{18.} See Leading Reasons for Using Emojis According to U.S. Internet Users as of August 2015, STATISTA (Oct. 14, 2015), https://www.statista.com/statistics/476354/reasons-usage-emojis-internet-users-us/ (finding 70.4% of respondents agreed that emoji "help [them] more accurately express what [they are] thinking").

^{19.} See Petra Kralj Novak et al., Sentiment of Emojis, PLOS ONE, Dec. 7, 2015, at 7, https://doi.org/10.1371/journal.pone.0144296 ("[I]t seems safe to conclude that the presence of emojis has a positive impact on the emotional perception of the tweets by humans. After all, this is probably the main reason why they are used in the first place.").

^{20.} See 10 Years with the iPhone: Communication Is Now Visual, TENOR (June 27, 2017), https://tenor.com/blog/10-years-with-the-iphone -communication-is-now-visual/ ("77% believe the people they frequently text/mobile message better understand the thoughts and feelings they are trying to communicate when using visual expressions rather than words alone.").

emotions visually in mobile messages than voicing them in telephone conversations.²¹ These findings are especially true for younger users, those most prolific in the use of emoji.²² These attributes of emoji have contributed to their therapeutic use in an app developed by Bris, a Swedish non-profit children's rights organization.²³ This app—Abused Emoji—utilizes both the ability of emoji to convey emotion and the greater ease associated with online communication to facilitate disclosure of experiences of abuse by children and young people.²⁴ Therapists use the app by posing questions and getting children to respond by selecting from a collection of specially developed emoji.²⁵ The emoji set includes a child being slapped on the face, a young girl or boy with a bruised face, an angry parent with a glass containing alcohol, and others.²⁶

Although it has garnered relatively less attention, some individuals employ emoji for less positive purposes. The key expressive function of emoji means that they can readily be employed as part of hate speech, cyber-bullying and cyber harassment, witness intimidation, and other crimes. Thus, emoji have been incorporated in racist posts on social media, such as posts using a pig emoji to demonstrate opposition to Muslims.²⁷

^{21.} See id. ("59% are more comfortable expressing their emotions using visual expressions in mobile messaging than voicing them in phone conversations.").

^{22.} See Marília Prada et al., Motives, Frequency and Attitudes Toward Emoji and Emoticon Use, 35 TELEMATICS & INFORMATICS 1925, 1931 (2018) ("Younger (vs. older) participants reported using more emoji and emoticons expressed more positive attitudes and identified more with the motives for their use.").

^{23.} See Megan Logan, These Emoji Make It Easier for Kids to 'Talk' About Abuse, WIRED (June 2, 2015, 12:51 PM), https://www.wired.com/2015/06/abused-emoji/ [https://perma.cc/VC6N-WFSV] (stating that the app "help[s] young people communicate their emotions, experiences, and struggles using variations on popular emoji").

^{24.} See id. (stating that children and teens might "find it easier to use emoji to express their feelings").

^{25.} See id. ("The Abused Emoji set includes many images that resemble Unicode emoji but have been modified to portray injuries (a child with a black eye or a bandage) or difficult situations (such as a child between two parents and a glass of wine or beer).").

^{26.} See id. (providing examples of fifteen modified emoji that portray injuries and abuses).

^{27.} See Ariadna Matamoros-Fernández, How the Use of Emoji on Islamophobic Facebook Pages Amplifies Racism, THE CONVERSATION (Nov. 12, 2018, 2:02 PM), https://theconversation.com/how-the-use-of-emoji-on

The smiley face and the wink symbol have been employed in cyber-bullying.²⁸ Those who wish to threaten and induce fear also use emoji.²⁹ Disaffected students have threatened schools by including "gun, bomb[,] and knife" emoji in their posts, 30 and rat, gun, and gunshot emoji have been used to intimidate a witness in at least one criminal trial.³¹ Perpetrators of domestic violence have employed emoji in online communications for negative and hostile purposes.³² Additionally, a central perceived attribute of emoji—their cuteness and playfulness makes them an ideal grooming tool to be used by those seeking to sexually exploit minors. The anonymity of the web, combined with apparently innocent and benign emoji, can easily mask the criminal purpose of solicitation.³³ Consequently, while the use of emoji to facilitate online communication is almost universally viewed in a positive light because they make messages "friendlier and fun,"34 these cartoonish images may have a

-islamophobic-facebook-pages-amplifies-racism 105285 (explaining how the pig emoji has been used to convey racist messaging toward Muslims).

^{28.} See Paul E. Madlock & David Westerman, Hurtful Cyber-Teasing and Violence: Who's Laughing Out Loud?, 26 J. INTERPERSONAL VIOLENCE 3542, 3552 (2011) (identifying the smiley and wink emojis as "redressive communication behaviors that perpetrators [of cyberbullying] used to mitigate the hurtfulness of the cyber-tease"); Qing Li, New Bottle but Old Wine: A Research of Cyber Bullying in Schools, 23 COMPUTERS HUM. BEHAV. 1777, 1777 (2005) (defining cyber-bullying as "bullying via electronic communication tools").

^{29.} See, e.g., Justin Jouvenal, A 12-Year-Old Girl Is Facing Criminal Charges for Using Certain Emoji. She's Not Alone., WASH. POST (Feb. 27, 2016, 2:47 PM), https://www.washingtonpost.com/news/local/wp/2016/02/27/a-12-year-old-girl-is-facing-criminal-charges-for-using-emoji-shes-not-alone/ ("[C]artoonish symbols have been used to stalk, harass, threaten or defame people.").

^{30.} Id.

^{31.} People v. Smith, No. B284766, 2019 Cal. App. Unpub. LEXIS 1691, at *4 (Cal. Ct. App. Mar. 12, 2019).

^{32.} See, e.g., United States v. Elonis, 730 F.3d 321, 326 (3d Cir. 2013) (in this case, defendant Elonis included used the "bomb" emoji to threaten his victim).

^{33.} See generally Jessica Whitney et al., Don't Want to Get Caught? Don't Say It: The Use of EMOJIS in Online Human Sex Trafficking Ads, PROC. 51st HAW. INT'L CONF. SYS. SCI. 4273 (2018), http://hdl.handle.net/10125/50426 (examining the use of emoticons in ads related to online human trafficking).

^{34.} Melany Valderrama, *Do You Speak Emoji?*, MEDIUM (Dec. 11, 2017), https://medium.com/@melanyv1/do-you-speak-emoji-200c7222430 [https://perma.cc/4BUT-E5AC].

darker and relatively unexplored side that reveals their potential association with criminal liability.

In this article we investigate two aspects of the dark side of emoji: their use in criminal threats and the online grooming of minors. We review a number of relevant cases from diverse jurisdictions, outlining the role of emoji in the alleged wrongdoing and identifying interpretative challenges associated with their use. Ancillary difficulties in representing emoji in criminal proceedings are also addressed, with consideration of the best evidence rule leading to recommendations about how emoji are best entered into evidence.

I. THREATS

Just before Meng Hongwei, then-President of Interpol, disappeared in China in September 2018, he sent a message containing an emoji of a knife to his wife, indicating that he was in danger.³⁵ While this case illustrates the use of emoji by a victim to indicate his sense of danger, there are many instances when emoji have been used to convey the threat. For instance, after the journalist Fletcher Babb conducted risky research into the black market in illegal drugs conducted through Instagram, he received a comment on his account from one of the dealers he had been investigating; the comment included .³⁶ Babb observed, "It might be spelled out in Emoji, but a death threat's a death threat."³⁷

Although Babb apparently did not follow up on the matter, several recent cases have evaluated whether communications containing emoji sent by defendants in criminal trials constituted criminal threats. In 2016 a young man in France sent a text message accompanied by a gun emoji to his exgirlfriend; he was charged under article 222-17 of the French

^{35.} See Bill Chappell, China Will Prosecute Former Interpol Leader on Bribery Charges, NPR (Mar. 27, 2019, 8:52 AM), https://www.npr.org/2019/03/27/707119539/china-will-prosecute-former-interpol-leader-on-bribery-charges ("Meng's wife reported him missing; she later received an alarming text on her phone showing a knife emoji.").

^{36.} Fletcher Babb, Eric Sundermann & Drew Millard, Lean on Me: Emoji Death Threats and Instagram's Codeine Kingpin, NOISEY (Oct. 25, 2013, 12:30 PM), vice.com/en_us/article/6anpbr/lean-on-me [https://perma.cc/TJ99-STBB].

^{37.} Id.

Penal Code with making a death threat.³⁸ After the court accepted that the message (one of many sent to her) contained a "death threat in the form of an image," it convicted the defendant, fined him 1,000 euro, and sentenced him to six months imprisonment.³⁹ In another case, a court in New Zealand considered the role of an emoji in a message posted by a man to his ex-partner's Facebook page: "You're going to fucking get it ₹7."40 The defendant was charged with stalking and admitted that the message was threatening;41 the judge found that the inclusion of the airplane emphasized that the defendant was going to fly from the island in New Zealand where he lived to the other island where the victim resided and sentenced the defendant to eight months imprisonment.⁴²

In these messages the role of the emoji was simply to amplify the textual content of the message, with the gun and airplane emphasizing the means by which the threat would be effected or the manner in which the defendant would get to the victim.⁴³ The presence of the emoji expanded upon the clear meaning of the message, giving it extra impact and immediacy. The text messages themselves were clearly threatening and determining both the senders' intent and the messages' effect on the recipient (matters integral to most threat and stalking cases) was relatively straightforward.⁴⁴ It is unsurprising that both men were convicted.

But sometimes the presence of emoji complicates the assessment of a threat by introducing ambiguity or uncertainty. For instance, how are we to interpret an adolescent's threat to

^{38.} See Henry Samuel, Frenchman Jailed for Three Months for Sending Ex-Girlfriend Gun Emoji, Telegraph (Mar. 31, 2016, 4:53 PM), https:// www.telegraph.co.uk/news/2016/03/31/frenchman-jailed-for-three-months-for -sending-ex-girlfriend-gun/ [https://perma.cc/M5GS-UVAS].

^{40.} Rob Kidd, Judge Accepts Plane Emoji Was Threat to Victim, N.Z. HERALD A005 (Jan. 11, 2017).

^{41.} See Judge Stumped by 'Emoji' Threat, N.Z. HERALD (Jan. 18, 2017), http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11779883 [https://perma.cc/5GC2-BC33] (defendant's lawyer stating "[h]e accepts it was threatening in nature").

^{42.} See Kidd, supra note 40 ("Coake was jailed for eight months.").

^{43.} See id. ("Judge Phillips said it suggested Coake was 'coming to get her").

See, e.g., United States. v. Elonis, 730 F.3d 321, 329-35 (3d Cir. 2013) (discussing Circuit Court rulings on 18 U.S.C.A. § 875(c) and true threats in the instant communications context).

blow up her school, accompanied by a laughing face with tears of joy emoji : as a genuine signifier of imminent mass killing or the impulsive, ill-considered, emotionally cathartic (but not intentionally homicidal) act of a teenager?⁴⁵ Or what of a Dutch teenager's message threatening to kill the Prime Minister, accompanied by smiley face emoji?46 Similarly, how are we to interpret a message sent by an adult that prima facie appears to contain a threat of violence but is accompanied by a winking face © or a tongue-poking out icon © or ©?⁴⁷ And what are we to make of the man who admitted sending a hostile text message but claimed that the inclusion of an emoticon⁴⁸ would lead a reader to understand that "he was merely deeply unhappy ... rather than sadistically bloodthirsty for revenge."49 Clearly, a key issue is the role of positive emoji in either negating or amplifying (in a paradoxical manner) an apparent threat. This moves away from the usual focus on the affective meaning and impact of emoji and instead directs attention to what linguists term illocutionary force: the sender's intention in selecting and using emoji in a particular communication.⁵⁰

45. See, e.g., People v. L.F. (In re LF.), No. A142296, 2015 Cal. App. LEXIS 3916, at *4 (Cal. Ct. App. June 3, 2015) (hereinafter L.F.) (discussing whether a high school student's tweets implying shooting students at her school were genuine when "laughing face emojis" and the phrase "just kidding" were included).

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^{46.} See GHAMS 2 Mei 2010, ECLI:NL:GHAMS:2010:BM5826 (Neth.) cited in Xandra E. Kramer, Challenges of Electronic Taking of Evidence: Old Problems in a New Guise and New Problems in Disguise (Sept. 1, 2018). See generally Symposium, Evidence in the Process, IL CONF. INTERN. & XXVI J. IBEROAMERICANAS DER. PROC. IIDP & IAPL, https://ssrn.com/abstract=3282678.

^{47.} See generally Petition for Writ of Certiorari at 8, Elonis v. United States, 135 S. Ct. 2001 (No. 13–983) ("Petitioner responded that his son 'should dress up as matricide for Halloween,' adding, 'I don't know what his costume would entail though. Maybe [petitioner's wife's] head on a stick?' Petitioner ended the post with an 'emoticon' of a face sticking its tongue out, which he understood to be an indication a post is meant in 'jest.") (internal citations omitted).

^{48.} Emoticons are the predecessors of emoji. They are "a series of text characters (typically punctuation or symbols) . . . meant to represent a facial expression or gesture (sometimes when viewed sideways)." *See* UNICODE, *supra* note 1.

^{49.} Enjaian v. Schlissel, No. 14-CV-13297, 2015 WL 3408805, at *6 (E.D. Mich. May 27, 2015) (internal quotation marks omitted).

^{50.} Eli Dresner & Susan C. Herring, Functions of the Nonverbal in CMC: Emoticons and Illocutionary Force, 20(3) COMM. THEORY 249 (2010).

A. YOUTH, IMPULSIVITY AND THREATS

On the first issue, concerning posts that appear to threaten harm issued by young people, these messages clearly raise issues of intent and impulsivity. Psychologists have identified adolescence as a time of both high sensation seeking and relatively high impulsivity. 51 This, combined with the speed with which messages can be constructed and disseminated on the internet, clearly creates the potential for liability for threats that were never intended to be taken seriously. On the other hand, the identification of imminent school violence through postings on social media has emerged as a significant point of intervention (and possible prevention) since the shootings at Columbine High School.⁵² As school shooters have not infrequently communicated their intentions on social media,53 monitoring for threats has increased and students are now being arrested and prosecuted for threatening posts.⁵⁴ For instance, a high school student in Maine was charged with "terrorizing" after he posted messages comprising a gun emoji, a television clip of a person brandishing a gun and a caption that referenced

51. See Laurence Steinberg et al., Age Differences in Sensation Seeking and Impulsivity as Indexed by Behavior and Self-Report: Evidence for a Dual Systems Model, 44(6) DEVELOPMENTAL PSYCHOL. 1766 (2008) (noting a "significant negative correlation between chronological age and impulsivity").

^{52.} See generally Social Sentinel, https://www.socialsentinel.com (In 1999 two students at Columbine High School in Denver, Colorado, killed 15 people, including themselves. Among the numerous responses to the event was the development of Social Sentinel. This program monitors social media platforms such as Facebook, Instagram, Twitter and Gmail to identify emoji, phrases, keywords and hashtags that, through matching with a proprietary library of more than half a million 'behavioural threat indicators' identified by the developer, indicates a threat and generates an alert. The developer has not provided data on the accuracy of the behavioural threat indicators).

^{53.} For instance, Nikolas Cruz, who killed 17 people at Marjory Stoneman Douglas High School in Florida, had posted a comment to YouTube before the killings where he stated, "Im [sic] going to be a professional school shooter." Therese Apel, 'Nikolas Cruz' YouTube Comment Brings FBI to Bail Bondman's Door, USA TODAY (Feb. 15, 2018, 1:35 PM), https://www.usatoday.com/story/news/nation-now/2018/02/15/florida-school-shooting-nikolas-cruz-youtube -comment-bail-bondsman/341236002/ [https://perma.cc/A2V9-P4AD].

^{54.} See, e.g., Mike Plaisance, Nothing Playful About Massacre Threats Decorated with Emojis, MASSLIVE (Mar. 25, 2018), https://www.masslive.com/news/2018/03/nothing_playful_about_massacre.html [https://perma.cc/9BWB-6RDQ] (discussing law enforcement efforts to prosecute students for social media posts that "threaten harm" even if intended as "jokes or parodies," or adorned with "multicolored hearts and emojis").

the following day at his school.⁵⁵ In Maine, terrorizing is a Class C felony crime when a threat "cause[s] the evacuation of a building" or causes people to be "moved to . . . or remain in a designated . . . area."⁵⁶ A student at another school was arrested after posting the message "I'm coming" accompanied by a \bigcirc .⁵⁷ The possibility of identifying threatening posts, intervening, and prosecuting has been increased through the development of algorithm-based programs such as Social Sentinel and Geo Listening, which monitor students' public media posts to identify and analyze threats and then pass alerts to school districts and police.⁵⁸ This monitoring was taken a step further by the recent enactment of the Marjory Stoneman Douglas High School Public Safety Act in Florida; the Act establishes a new state

55. See Alan Bennett, Maine Teen Faces Felony Charge After Posting Gun Emoji on Social Media App, BANGOR DAILY NEWS (June 6, 2016, 10:09 AM), https://bangordailynews.com/2016/06/06/news/maine-teen-faces-felony-charge -after-posting-gun-emoji-on-social-media-app/ (describing the police response to the Instagram post).

^{56.} ME. STAT. tit. 17-A, § 210 (2019). The statute reads in relevant part: "1.A person is guilty of terrorizing if that person in fact communicates to any person a threat to commit or to cause to be committed a crime of violence dangerous to human life, against the person to whom the communication is made or another, and the natural and probable consequence of such a threat, whether or not such consequence in fact occurs, is:

^{. . . .}

B. To cause evacuation of a building, place of assembly or facility of public transport or to cause the occupants of a building to be moved to or required to remain in a designated secured area. Violation of this paragraph is a Class C crime."

^{57.} Anthony V. Coppola, *Police: Instagram Threat to Millville High School Said Tm Coming, 'Had Coffin Emoji*, DAILY J. (Sept. 26, 2018, 11:26 AM), https://www.thedailyjournal.com/story/news/crime/2018/09/26/police-student-used-instagram-make-threat-millville-high-school/1430903002/.

^{58.} See, e.g., Mark Keierleber, As Schools Comb Social Media for Potential Threats, Has Mass Shooting Anxiety Turned Administrators into the Internet Police'?, THE 74 (Dec. 5, 2018), https://www.the74million.org/article/as-schools-comb-social-media-for-potential-threats-has-mass-shooting-anxiety-turned-administrators-into-the-internet-police/ (describing how Social Sentinel "help[s] schools pick up on troubling social media posts [by] . . . collect[ing] social media data and us[ing] artificial intelligence to run posts against a 'library of harm' containing some 450,000 phrases, keywords, hashtags—even emojis—that . . . could indicate a suspicious post."); Aaron Leibowitz, Could Monitoring Students on Social Media Stop the Next School Shooting?, N.Y. TIMES, (Sept. 6, 2018), https://www.nytimes.com/2018/09/06/us/social-media-monitoring-school-shootings.html (discussing a California school district that hired the Geo Listening company "in response to student suicides in which online bullying had been cited as a factor.").

government office that, *inter alia*, has responsibility for coordinating a centralized, integrated repository of data on school safety, with social media being one of the data sources that is monitored.⁵⁹ In the light of these developments, it is unsurprising that the issue of threats by young people on social media has arisen in several criminal cases in the United States.

Consider one such case: A twelve-year-old student attending Sidney Lanier Middle School in Fairfax, Virginia, made a series of posts involving a combination of text and gun, knife, and bomb emoji to her Instagram account. Among the controversial postings was:⁶⁰



The posts were reported to police who believed that the text and emoji conveyed a credible threat of violence to be performed in the library of the school the student attended. The student was charged with computer harassment and threatening school personnel with death or serious injury. The *Washington Post* described the case as: ... one of a growing number where authorities contend the cartoonish [emoji] symbols have been used to stalk, harass, threaten or defame people. 12 It is not clear how the matter was resolved; because the student was a juvenile, hearings were not open to the public. Nevertheless, while the content of the messages is clearly troubling, whether it satisfies the legal elements of the offences charged (such as an intent to kill or cause serious injury) when sent by a twelve-year-old is questionable.

^{59.} See ch. 2018-3, § 21, 2018 Fla. Laws 1, 35–36 (codified in FLA. STAT. § 1001.212 (2018)) (providing for the creation of the Office of Safe Schools and the creation and analysis of a database partially consisting of data from social media sources); cf. Benjamin Herold, To Stop School Shootings, Fla. Will Merge Government Data, Social Media Posts., EDUC. WEEK (July 26, 2018), https://www.edweek.org/ew/articles/2018/07/26/to-stop-school-shootings-fla-will-merge.html [https://perma.cc/W4V9-F9J2] (discussing privacy concerns surrounding the Florida Office of Safe Schools social media database).

^{60.} See Jouvenal, supra note 29. Note that the gun emoji used here is for illustrative purposes. The actual gun emoji that appeared in the student's postings may have looked different, as the appearance of emoj vary from platform to platform and the platform used by the student was not identified.

^{61.} See id.

^{62.} *Id*.

A case in New York more clearly demonstrated reservations about attaching criminal liability to online messages involving emoji. Seventeen-year-old Osiris Aristy was charged with making a terrorist threat and aggravated harassment of police after posting several messages on his Facebook page, including "N---- run up on me he gunna get blown down," accompanied by an emoji of a police officer with three emoji guns pointed at his head.⁶³ Another message repeated the emoji sequence involving police and guns.⁶⁴ Aristy's lawyer argued that there was no real intent to make a threat and that the messages were a form of posturing, simply expressing Aristy's dislike of police. 65 Conversely, the criminal complaint stated the images constituted a threat to police, making them feel intimidated and harassed, creating fear for their safety and causing alarm and annoyance. 66 Features of the emoji that caused particular concern were the clear identification of the victim prototype, repetition of the weapon emoji that added immediacy to the message, the urgency indicated by placement of the weapons close to the officer's head, and the existence of several previous postings earlier the same evening that contained violent messages from the teenager. However, a grand jury declined to indict the defendant, apparently due in part to lack of clear intent.67

Another case, involving a Californian high-school student (LF) who was arrested and charged in 2015 with making a criminal threat, actually resulted in conviction. LF sent a series

^{63.} Thomas Tracy, Winking Smiley Face: Brooklyn Teen Boy's Emoji Cop Threat Charges Tossed by Grand Jury, N.Y. DAILY NEWS (Feb. 3, 2015), https://www.nydailynews.com/new-york/nyc-crime/grand-jury-tosses-brooklyn-teen-emoji-threat-charges-article-1.2101735 [https://perma.cc/R5X2-QUKL].

^{64.} See Victor Luckerson, Kids Are Facing Criminal Charges for Using Emoji, TIME (Feb. 29, 2016) http://time.com/4241846/emoji-crimes/[https://perma.cc/694B-5Y52].

^{65.} See Tracy, supra note 63 ("He expressed a dislike of the police based on a particular experience, but never threatened to act on that."). See Jouvenal, supra note 29 ("These kids are not threatening cops, they are just trying to say, 'I'm tough.' It's posturing.").

^{66.} See Jouvenal, supra note 29.

^{67.} *Id.* (stating that a grand jury declined to indict Aristy); *see also* Greenberg, *supra* note 8 (providing context for the incident: "Osiris Aristy opened up Facebook, posted a photo of a gun and wrote, 'feel like katxhin a body right now.' Later that night, he added, 'Nigga run up on me, he gunna get blown down' and followed that with an emoji of a police officer and three-gun emoji pointing at it. After an hour, he posted a similar message."').

of tweets to her 500 followers over the course of three hours.⁶⁸ The tweets included the messages:

"Aint nobody safe 100";69

"Mfs wanna test me now **w** w you crazy I'm crazy too let's die shooting";

"I really wanna challenge shooting at running kids not fun [.]"⁷⁰

The student used more than 40 emoji in her tweets, mostly the "laughing face" and "tears of joy" icons⁷¹ which conventionally indicate happiness and joy but which also have been used to indicate 'mocking and glee' at the misfortune of others. 72 LF also included the text "jk" (just kidding) and "lmao" (laughing my ass off).73 At her trial, her defense was that she did not intend to make a threat and the statements were exaggerated, dramatic, and meant to be a joke (a fact that she said was emphasised by the inclusion of the numerous emoji).⁷⁴ Clearly, the key issue in dispute was whether LF had demonstrated the requisite intent for making a criminal threat.⁷⁵ LF was convicted and a subsequent appeal was unsuccessful; the appeals court held that it was reasonable for the juvenile court to conclude that the defendant intended her statements to be taken as a threat and that the tweets had demonstrated a real, specific threat that had caused sustained and reasonable fear in the victims.⁷⁶

72. See Abi Wilkinson, The 'Tears of Joy' Emoji Is the Worst of All—It's Used to Gloat About Human Suffering, GUARDIAN (Nov. 24, 2016 8:52 AM), http://www.theguardian.com/commentisfree/2016/nov/24/tears-of-joy-emoji-worst-gloat-about-human-suffering ("[T]here's something about this particular character... that just feels inherently mocking and cruel.").

75. See id. at *9—*13 (discussing whether the minor "had the specific intent that her tweets be taken as a threat").

^{68.} People v. L.F. ($In\ re\ L.F.$), No. A142296, 2015 Cal. App. LEXIS 3916, at *2, *6 (Cal. Ct. App. June 3, 2015)

^{69.} *Id.* at *2. The № emoji is generally taken to refer to 100 percent.

^{70.} *Id.* The laughing emoji placed at the end of this message was central to the defendant's argument that her messages were humorous rather than threatening in n⁺ture.

^{71.} *Id.* at *1—*5.

^{73.} L.F., 2015 Cal. App. LEXIS 3916, at *4, *28 n.6 (accepting the definition for "lmao" as "laughing my ass off" and "jk" as "just kidding.").

^{74.} Id. at *12.

^{76.} See id. at *10, *14 (finding the appeal not persuasive and that the minor's statements constituted a criminal threat).

B. ADULTS AND THREATS

Cases of threatening messages that include emoji, sent by adults, have involved a wide range of issues including domestic violence, stalking, witness intimidation, and threatened assault. However, the cases of Anthony Elonis in the United States and Jayde Booth in Australia share similarities with the case of the high school student LF insofar as both adult defendants claimed that the emoji accompanying their text messages indicated that they were being humorous rather than intentionally threatening.⁷⁷ In addition, Elonis disclaimed any serious intent to carry out his threats because he maintained his texts were, in fact, rap lyrics and therefore more art or fantasy than reality.⁷⁸

Anthony Elonis had posted an online message suggesting that his son should dress up as matricide for his Halloween costume and could include his ex-wife's head impaled on a stick.⁷⁹ He claimed that the inclusion of a tongue-out emoticon (:-P) demonstrated that he was joking, engaging in hyperbole just meant to shock.⁸⁰ Both district and appellate courts disagreed and Elonis was convicted of threatening his estranged wife (his postings also included violent lyrics and other postings directed at her on his Facebook account).⁸¹ A further appeal to the Supreme Court was successful on grounds unrelated to the emoji; the Court briefly noted that the rise of social media use has made such domestic violence tactics more commonplace but did not address the issue of the evidentiary value of emoji as

^{77.} See United States. v. Elonis, 730 F.3d 321, 323 (3d Cir. 2013) (discussing whether the defendant "subjectively intended his statements to be understood as threats").

^{78.} Id. at 325.

^{79.} Id. at 324.

^{80.} *Id.* at 324, 331; *see also* Petition for Writ of Certiorari, *supra* note 47 at 8 (discussing Elonis' use of the emoticon); *No Clear Cut Outcome for Supreme Court's Internet Free Speech Case*, CBS NEWS (Dec. 1, 2014), http://www.cbsnews.com/news/no-clear-cut-outcome-for-supreme-courts-internet -free-speech-case/ (highlighting comments by John Elwood, one of Elonis' attorneys: "That is a risk on the Internet, where you're frequently speaking to people . . . without the context of tone of voice, body gestures, and frequently talking to people who you don't even know in the physical world.").

^{81.} Elonis, 730 F.3d at 321, 327 (Finding Elonis violated 18 U.S.C. § 875(c) which prohibits "transmit[ting] in interstate or foreign commerce any communication containing any threat to kidnap any person or any threat to injure the person of another.").

digital speech.⁸² Similarly, in Australia, Jayde Booth was arrested for breaching an Apprehended Violence Order (an order that restrained him from contacting his ex-partner) after he sent her a text message with an emoji of a head with a gun pointed at it.⁸³ After being charged by police he claimed "[i]t was just an emoji,"⁸⁴ and that he never meant to hurt or scare the victim.⁸⁵

No such defense was attempted by a defendant in Illinois who in 2016 pled guilty to a charge of attempted aggravated intimidation after posting a message on his Facebook page that included an expletive, a photograph in which he made a vulgar gesture toward a police officer (who was depicted in the background), an emoji of a handgun pointed at a police officer, and an emoji of a bomb. Aggravating factors were the inclusion of the officer's street name in the posting and the identification by the prosecutor that the bomb emoji signified that the defendant was a member of a street gang called the Bomb Squad. The defendant was sentenced to a year's probation.

Violent and threatening emoji have also been included in social media posts intended to intimidate witnesses and prevent them from testifying at trial. For instance, in California a young woman (T.R.) was called to testify that Reginald Washington, a member of the Bacc Street Cripps (BSC) gang, had intended to

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^{82.} See George Robert Blakey, Federal Threats Statute—Mens Rea and the First Amendment—Elonis v. United States, 129 HARV. L. REV. 331, 331 (2015) (noting that the Supreme Court left unresolved the questions of "whether a defendant can be convicted under the federal threats statute absent proof that he subjectively intended to threaten anyone" and "if the statute itself does not require this evidence, whether the First Amendment does.").

^{83.} See Angela Thompson, 'Just an Emoji': Illawarra Man Charged after Text Threat, SYDNEY MORNING HERALD (Feb. 5, 2018, 10:23 AM), https://www.smh.com.au/national/nsw/just-an-emoji-illawarra-man-charged-after-text-threat-20180205-h0tofd.html [https://perma.cc/PYQ8-9P3H].

^{84.} *Id*.

^{85.} Id.

^{86.} See Associated Press, Emojis Taken as Threat Against Officer Lead to Probation for Peoria Man, CHI. TRIBUNE (Sept. 17, 2016), http://www.chicagotribune.com/news/local/breaking/ct-emojis-threat-peoria -20160917-story.html (reporting the case).

^{87.} Andy Kravetz, *Peoria Man Convicted for Using Emojis to Threaten Police Officer*, J. STAR (Sept. 15, 2016, 12:41 PM), https://www.pjstar.com/news/20160915/peoria-man-convicted-for-using-emojis-to-threaten-police-officer.

^{88.} Id.

pimp her.⁸⁹ However, postings to T.R.'s Facebook page of emoji of guns, gunshot, and rats by another BSC gang member, Dayvon Smith, were sufficient to intimidate her and she disappeared without testifying.⁹⁰ Smith was subsequently charged with several offenses, including intimidating a witness.⁹¹ At his trial, the court accepted that the emoji of rodents, guns, and gunshot were evidence that Smith intended to dissuade T.R. from testifying.⁹² Smith was convicted and appealed.⁹³ The appeals court observed in relation to the emoji:

The four gunshot emojis and three gun emojis were evidence Smith was seeking to encourage other viewers of his Facebook page to shoot T.R. His comments included three emojis, each representing a hand with the thumb and forefinger touching and the other fingers pointed up, representing the letter "b," a symbol of the Bacc Street Crips. The jury could have reasonably concluded from the photograph and comments that Smith intended to communicate that T.R. was a despised female who had told on Washington, and she was therefore a "rat" or snitch whom members of the gang should kill to assure she did not testify against Washington at his trial. 94

Finally, a case in Spartanburg County, South Carolina demonstrated that the use of emoji alone, without the interpretative aid of text, can be sufficient to constitute some crimes. The perpetrators were arrested for stalking after posting the following: ••• And what exactly was the threat? That someone would be beaten (fist), leading to (pointed finger), hospitalization (ambulance).

C. FROM GUNS TO WATER PISTOLS

Before leaving the issue of threats and emoji, it is interesting to note that this issue has now led technology companies to institute changes in their emoji graphics. In 2015 anti-gun activists in New York began a campaign to "disarm the

91. *Id*. at *1.

^{89.} People v. Smith, No. B284766, 2019 Cal. App. Unpub. LEXIS 1691, at *2 (Cal. Ct. App. Mar. 12, 2019).

^{90.} Id. at *10.

^{92.} *Id.* at *21.

^{93.} *Id.* at *1.

^{94.} Id. at *19.

^{95.} Mike Flacy, *Two Men Arrested For Sending Threatening Emoji Over Facebook*, DIG. TRENDS (June 10, 2015 9:00 PM) https://www.digitaltrends.com/social-media/two-men-arrested-for-sending-threatening-emoji-over-facebook/ (The defendants had threatened or attacked the recipient on a prior occasion.).

iPhone."96 They wanted to change the conversation around guns by symbolically removing the "gun we all carry." In 2016 Apple responded by changing its gun emoji from a traditional metaland-bullets model into a water pistol: \$\sim\$_\mathbb{F}.98 Subsequently, other major internet companies have followed suit and Google, Samsung, and Twitter all now have innocuous water-pistol-type emoji.⁹⁹ Given that this change effectively turns the gun emoji from a weapon to a toy, it will be interesting to chart the impact of this change on prosecutions for making online threats. 100 But this must be counterbalanced with another development that has the possibility of increasing the impact and immediacy of online threats—the introduction of Bitmoji. 101 These are personalized emoji that individuals create to represent themselves, utilizing apps that allow them to replicate key aspects of their appearance, including skin tone, hair color, facial structure, body type, etc. 102 Forbes magazine has referred to Bitmoji as "adorable avatars" that facilitate communication by infusing online messages with identity. 103 However, while these representations do not have the realism of photographs, it is not

96. Kif Leswing, Apple Made a Controversial Change in 2016—But Now All of Silicon Valley is Playing Catch-Up, Bus. Insider Austl. (Apr. 26, 2018), https://www.businessinsider.com.au/apple-gun-emoji-change-squirt-gun-has-led-google-samsung-facebook-microsoft-to-follow-suit-2018-4?r=US&IR=T.

99. See Thuy Ong, Google and Facebook Adopt Water Gun Emoji, Leaving Microsoft Holding the Pistol, VERGE (Apr. 25, 2018, 5:39 AM), https://www.theverge.com/2018/4/25/17278902/google-dumping-pistol-emoji-watergun-microsoft [https://perma.cc/F472-JWB7] (showing a comparison chart of technology companies replacing gun emoji with water gun emoji).

^{97. #}DisarmtheiPhone, YOUTUBE (Jul. 30, 2015), https://www.youtube.com/watch?v=hbXAXYYZJxM.

^{98.} Leswing, supra note 96.

^{100.} It is worth noting, however, that the L.F. case discussed above concerned the successful prosecution of a student who used a water pistol emoji, rather than an emoji of a "metal and bullets" gun. People v. L.F., No. A142296, 2015 Cal. App. LEXIS 3916 (Cal. Ct. App. June 3, 2015).

^{101.} BITMOJI, https://www.bitmoji.com/ (last visited Oct. 23, 2019).

^{102.} See Tyler Lacoma, What Is Bitmoji?, DIGITAL TRENDS (July 10, 2019, 11:30 AM), https://www.digitaltrends.com/mobile/what-is-bitmoji/ (introducing Bitmoji, a "secondary social media app that people use to create little cartoon versions of themselves").

^{103.} See Alyson Krueger, The Inside Story of Bitmojis: Why We Love Them, How They Make Money, Why They Are Here to Stay, FORBES (Mar. 24, 2016) https://www.forbes.com/sites/alysonkrueger/2016/03/24/the-deeper-meaning-behind-bitmojis-why-we-all-love-them-so-much/#3ddd95984a43.

difficult to anticipate their less-than-adorable, criminal use in personalized, threatening, and exploitative messages.

II. ONLINE GROOMING

'Grooming' is a general term for the preparatory manipulation of children into sexual victimization; it describes a course of conduct engaged in for the purpose of encouraging or manipulating the child or young person to engage in sexual behavior.¹⁰⁴ A distinctive feature of online grooming is the manner in which interactions occur: the exploitation may consist of getting the young person to send sexually explicit photographs of themselves, 105 to take part in sexual activities via a webcam or smartphone, 106 to have sexual conversations online or by text, 107 and/or to agree to meet with the offender (so that contact abuse can take place). Consequently, depending on the form of abuse, victim and offender may or may not meet in person, 108 a factor exploited by offenders (who frequently present themselves as younger and with similar interests and attitudes as their intended victim). 109 Such activity could be difficult to prosecute under traditional sex offense laws which often require proof that

^{104.} See Samantha Craven et al., Current Responses to Sexual Grooming: Implications for Prevention, 46 How. J. CRIM. JUST. 60, 61 (2007) ("[S]exual grooming itself is a preparatory act; it is preparation for the occurrence of child sexual abuse").

^{105.} See Claire Lilley, UK Policy Responses and Their International Relevance, in ONLINE RISK TO CHILDREN: IMPACT, PROTECTION AND PREVENTION 189, 191 (Jon Brown ed., 2017) (detailing different forms of online child sexual abuse, and in particular the methods offenders use to encourage self-generated sexual images of young people).

^{106.} See id. at 192 ("The end goal may [] be to persuade the child to abuse himself or herself via webcam, for example.").

^{107.} See id. ("[S]exual communication may not always end in a face-to-face meeting...").

^{108.} See id. ("[N]owadays the ultimate goal for many offenders is not necessarily to meet a child; the Internet give (sic) offenders new ways to exert control and influence over children without ever having to touch them, and they may live hundreds of miles away from the child.").

^{109.} The anonymity and identity manipulation available to online sexual predators was the subject of an "unmasking" advertising campaign in 2014 by the French children's rights organization, Innocence en Danger. Using grotesque human versions of popular emoji the organization sought to increase awareness of the dangers of "virtual friends." *Emoticones*, INNOCENCE IN DANGER (July 16, 2017), https://innocenceendanger.org/2019/11/11/nouvelle-campagne-rosa-park/ [https://perma.cc/VTN-C2HP].

face-to-face contact between offender and child occurred, or at least had been arranged. 110

A. GROOMING IN THE DIGITAL AGE

UNICEF has identified online grooming as one of the key global threats that "expose[s] children to sexual abuse and exploitation." The emergence of online grooming reflects the fact that children and young people's lives are becoming increasingly digital. It is estimated that in Europe about 46% of children aged nine to sixteen years owned a smartphone in 2016, 112 with a similar figure for children aged ten to twelve years in the United States in 2017. 113 While those findings might be expected, what is perhaps surprising is the young age at which children engage in online activities and communication. In Australia, a survey by the federal eSafety Commissioner found that 81% of parents with pre-school children (*i.e.* children aged two to five years) reported that their children used the internet. 114 In the U.S., half the children under the age of twelve

110. INT'L CTR. FOR MISSING & EXPLOITED CHILDREN, ONLINE GROOMING OF CHILDREN FOR SEXUAL PURPOSES: MODEL LEGISLATION & GLOBAL REVIEW 5 (2017) ("Despite the growing frequency of online sexual abuse, the online grooming laws that do exist predominantly require that communication with the child be followed by a meeting or a clear plan to meet, such as traveling or making arrangements to travel to meet the child."). Under historical sexual offences legislation in the United Kingdom, prosecuting online grooming was difficult. However, reforms introduced by the Serious Crimes Act 2015 (UK) and the Sexual Offences (Scotland) Act of 2009 now make such prosecutions easier by recognizing that sexual communications for the purpose of grooming might not always occur face to-face and through "ma[king] it an offense to send or direct sexual communication to a child for the purpose of obtaining sexual gratification or humiliating, distressing or alarming the child." Lilley, *supra* note 105, at 192.

^{111.} ECPAT INT'L & RELIGIONS FOR PEACE, PROTECTING CHILDREN FROM ONLINE SEXUAL EXPLOITATION 6 (2016).

^{112.} See Giovanna Mascheroni & Kjartan Ólafsson, The Mobile Internet: Access, Use, Opportunities and Divides Among European Children, 18 NEW MEDIA & SOC'Y 1657, 1664 (2016) (using data collected through a 2013–2014 survey of approximately 3500 respondents aged nine to sixteen years in seven European countries, including the UK).

^{113.} See Mobile Kids: The Parent, the Child and the Smartphone, NIELSEN (Feb. 28, 2017) https://www.nielsen.com/us/en/insights/article/2017/mobile -kids-the-parent-the-child-and-the-smartphone/ (finding that 45% of children obtained a service plan at ten to twelve years old).

^{114.} ESAFETY COMM'R, Supervising Preschoolers Online, https://www.esafety.gov.au/about-the-office/research-library/digital-parenting

had a social media account in 2016, with Facebook and Instagram being most popular. 115

Less security conscious than older users when using social media, children and young people can quickly befriend strangers via interactions on social networking websites or while playing a multiplayer game. 116 Research from England confirms the questionable social connections that young people make online: just over one in five children aged twelve to fifteen years who were game players had online contact with someone they had not previously met.¹¹⁷ In a related manner, a US Pew Research study conducted over two weeks in 2014 reported that onequarter (24%) of teen "daters" or roughly 8% of all teens, had dated or hooked up with someone they first met online. 118 Pew found that: "Of those who have met a partner online, the majority met on social media sites and the bulk of them met on Facebook"119 Another startling trend that could facilitate online contact between strangers and children is that, while 85% of children accessed the Internet from a room shared with the family in 2012, that number dropped to 76% in 2016, and 24% had 'private' access from their bedrooms, compared to 15% in 2012. 120

⁻supervising-pre-schoolers-online (last visited Oct. 22, 2019) (showing results from survey of 3250 parents of children aged two to seventeen during July-

^{115.} See Kids & Tech: The Evolution of Today's Digital Natives, INFLUENCE CENT., http://influence-central.com/kids-tech-the-evolution-of-todays-digital -natives/ (last visited Oct. 23, 2019) (explaining that half of children have social media accounts by age 12, with 77% of them using Facebook and Instagram).

^{116.} See Owen Gough, Millennial Employees Sloppiest at Cyber Security, Study Finds, SMALL BUS. (Oct. 18, 2017), https://smallbusiness.co.uk/millennial -employees-cyber-security-2541207/ (revealing that "the 'digital natives' of Generation Y... appear to be less security conscious than their middle-aged and baby boomer colleagues").

^{117.} OFFICE OF COMMC'NS, CHILDREN AND PARENTS: MEDIA USE AND ATTITUDES REPORT 109 (Nov. 29 2017). https:// www.ofcom.org.uk/__data/assets/pdf_file/0020/108182/children-parents-media -use-attitudes-2017.pdf (surveying people who play games against people they have not met in person across age groups).

^{118.} Amanda Lenhart et al., Teens, Technology, and Romantic Relationships, PEW RES. CTR. (Oct. 1, 2015), https://www.pewinternet.org /2015/10/01/teens-technology-and-romantic-relationships/.

^{119.} *Id*.

^{120.} Jay Donovan, The Average Age for a Child Getting Their First Smartphone is Now 10.3 Years, TECHCRUNCH (May 19, 2016, 1:56 PM), https://techcrunch.com/2016/05/19/the-average-age-for-a-child-getting-their -first-smartphone-is-now-10-3-years/ [https://perma.cc/CPW8-T6VL].

These developments, transforming the way that children and young people interact with strangers, are exploited by sexual offenders who can also now gain unprecedented access to information about potential victims through websites such as MySpace.com.¹²¹

The presence of inbuilt webcams in many computers and cell phones facilitates exchanging photos and videos with these new "friends," thereby further facilitating social interaction—and the possibility of sexual exploitation. 122 Indeed, various studies in the United Kingdom have revealed a disturbing state of affairs: more than one in ten young persons aged between eleven and sixteen years old who had a social network profile had received unwanted sexual messages while online. 123 Another online survey of nearly 40,000 children and young people reported that "1 in 25 primary school children had been sent or shown a naked or semi-naked image by an adult."124 The head of the Child Online Exploitation Centre (the police agency dealing with the sexual abuse of children in the United Kingdom) observed in 2012 that the agency was receiving 1,000 reports a month relating to "online grooming, online sexual abuse, making arrangements to meet a child online, or a child being in immediate danger."125

Clearly, the presence of so many children and young people online presents an unprecedented opportunity for sexual offenders to gain access to them. It is unsurprising, therefore, that Eric Goldman, a Professor at Santa Clara University School of Law who monitors cases involving emoji, has observed that

^{121.} See Kevin Poulsen, Attorneys General Demand MySpace Give Up Sex Offenders, WIRED (May 14, 2007, 3:00 PM), https://www.wired.com/2007/05/attorneys-gener/ (discussing the exploitation of children on MySpace).

^{122.} See generally. H.R. REP. No. 31-737, at 13 (2007) (describing a young man who was victimized by child predators who contacted him over the internet after they saw his image on a webcam).

^{123.} CLAIRE LILLEY ET AL., NAT'L SOC'Y FOR THE PREVENTION OF CRUELTY TO CHILDREN, THE EXPERIENCES OF 11–16 YEAR OLDS ON SOCIAL NETWORKING SITES 13 (2014) https://www.basw.co.uk/system/files/resources/basw_104623 -6_0.pdf.

^{124.} NAT'L SOC'Y FOR PREVENTION OF CRUELTY TO CHILDREN, CHILDREN SENDING AND RECEIVING SEXUAL MESSAGES 1, https://www.nspcc.org.uk/globalassets/documents/online-safety/children-sending-receiving-sexual-messages.pdf.

^{125.} Zoe Hilton, Online Sexual Grooming, VODAFONE (2016), https://www.vodafone.com/content/parents/expert-views/online_sexual_grooming.html.

"By far the most common types of cases involving emojis are sexual predation cases." 126

B. EMOJI AND ONLINE GROOMING

Emoji and emoticons contribute significantly to a sense of playfulness, ¹²⁷ as well as promote trust. ¹²⁸ Novel research that has analyzed the actual online conversations of convicted sexual offenders confirms that the use of emoji and emoticon are common in their grooming conversations, ¹²⁹ and are used for these purposes. The mother of one eleven-year-old victim of online sexual predation described the process as follows: "It began with [the offender] sending her friendly messages, a few jokes, some emojis thrown in – all relatively innocent." ¹³⁰

The use of emoji can be as simple as the inclusion of a love heart in a request to see the naked body of a minor¹³¹ or a devil

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^{126.} Eric Goldman, What's New with Emoji Law? An Interview, TECH. & MKTG L. BLOG (Feb. 11, 2019), https://blog.ericgoldman.org/archives/2019/02/whats-new-with-emoji-law-an-interview.htm [https://perma.cc/9H23-7YZ4].

^{127.} See Sara H. Hsieh & Timmy H. Tseng, Playfulness in Mobile Instant Messaging: Examining the Influence of Emoticons and Text Messaging on Social Interaction, 69 COMPUTERS HUM. BEHAV. 405, 412 (2017) ("Emoticon use in mobile instant messaging also facilitates perceived playfulness.").

^{128.} See generally Valerie Sheehan & Joe Sullivan, A Qualitative Analysis of Child Sex Offenders Involved in the Manufacture of Indecent Images of Children, 16(2) J. SEXUAL AGGRESSION 143 (2010) (describing the process by which sex offenders build trust with young victims).

^{129.} See April Kontostathis et al., Chat Coder: Toward the Tracking and Categorization of Internet Predators, URSINUS C., http://webpages.ursinus.edu/akontostathis/KontostathisTextMining2009Final.pdf (last visited Oct. 13, 2019) (describing a program that reviews uses of emoticons among other features of conversation to distinguish between predatory and non-predatory conversations); see also Connie Barber & Silvia Bettez, Deconstructing the Online Grooming of Youth: Toward Improved Information Systems for Detection of Online Sexual Predators, 35th INTL. CONF. INFO. SYS., AUCKLAND (2014) at 7, https://pdfs.semanticscholar.org/91f3/591158dbbd8ea0c2ee110c27a6358fb47 6e.pdf [https://perma.cc/ZFB7-ZVN6] ("The use of emoticons or symbols inside of the social media conversation constitute over half of the identified extrinsic characteristics [of predatory conversations] (53%).").

^{130.} Hannah H., Internet Safety: A Mother's Story of How a Paedophile Groomed Her 11-Year-Old Daughter Online, INDEP. (Feb. 6, 2017, 11:11 PM), https://www.independent.co.uk/life-style/health-and-families/internet-safety-day-hannah-h-mother-paedophile-online-grooming-11-year-old-daughter-facebook-webcam-a7560801.html [https://perma.cc/5C5B-6MLA].

^{131.} See Alexandra Back, 'I Want to See Your Nude Body': AFP Employee Charged with Grooming, CANBERRA TIMES (May 8, 2018), https://www.canberratimes.com.au/national/act/australian-federal-police-employee -charged-with-child-grooming-20180508-p4zdy3.html.

in a message explicitly soliciting vaginal and oral sex from a fifteen-year-old girl posted to a chat room by a man in Nebraska. 132 Emoji are easily employed, as demonstrated in the case of a ninety-two-year-old offender in the United Kingdom who believed he was messaging two young girls (the "girls" were actually members of a civilian group established to expose online pedophiles) on the social messaging site Waplog and arranged to meet them to have sex with them. 133 When sentencing him, the judge assessed the defendant as "well-versed in using chat sites and very adept at using language and emojis to keep what [he] believed to be young girls engaged in conversations with [him]."134 Disturbingly, while emoji are easy to use, they are hard to monitor in online communications as they cannot be identified in automated searches as readily as words¹³⁵—a combination that makes them especially useful to those seeking to evade law enforcement.

While emoji may evade conventional surveillance and online monitoring by law enforcement, interpreting the meaning and function of emoji in online grooming is often easy. In the previously described grooming cases from Australia, the United States, and the United Kingdom, the meaning of the textual content of the messages was unambiguous and the emoji merely an amplifying adjunct: the offenders textually urged their victims to send them photographs of themselves naked, solicited them to have sexual intercourse with them and/or took steps to arrange for them to actually meet so that physical contact could occur. ¹³⁶ Similarly, a sexual offender who sends a photograph of himself naked to a young girl, covering his genitals with a smiley

132. State v. Atchison, 15 Neb. App. 422, 424–25 (2007) (The defendant in this case believed his target was a fifteen-year-old girl, but he was in fact speaking with undercover police officers).

135. As one relevant example, at the time of this article's publication, no major legal research database allows a researcher to search for particular emoji.

^{133.} Man, 92, Jailed for Grooming After Online Vigilantes Set Up Meeting, BREAKINGNEWS (June 12, 2017), https://www.breakingnews.ie/world/man-92-jailed-for-grooming-after-online-vigilantes-set-up-meeting-793205.html (reporting on an elderly man who was jailed for sending sexually explicit messages that included emojis).

^{134.} *Id*.

^{136.} See Atchison, 15 Neb. App. at 424–27; Back, supra note 131 and accompanying text; BREAKINGNEWS, supra note 133 and accompanying text.

face emoji, 137 has unambiguously sexually communicated with a victim, with the emoji functioning to promote trust, make the gradual invitation to sexual activity "fun," and, utilizing the conventional "cuteness" of the image, manipulatively injecting an element of playfulness into the exchange.

However, as with online threats, in some cases determining the meaning and function of emoji can be more difficult, either because the sender claims that their function was benign or because the emoji had a coded (double) meaning. 138 For instance, when the high-profile English footballer Adam Johnson stood trial for two counts of sexual activity with a minor, his online communications with the victim—in which he encouraged her to send him photographs of herself naked and arranged two meetings with her—included the use of emoji. 139 At his trial, two instances of emoji use were highlighted: first, a text message to the victim ("You felt very turned on") accompanied by the purple devil 😇 emoji¹⁴⁰ and second, following an online disclosure by the victim that she was 15 years old, the see-no-evil monkey 2.141 The prosecution asked Johnson about the specific reasons why he had used both emoji, perhaps to demonstrate that Johnson was choosing to ignore (not see) that his victim was under the age at which she could lawfully consent to sexual intercourse and that he was aware of his wrongdoing. 142 The feeble defense strategy to counter this was that Johnson was

^{137.} Andy Richardson, Teacher Who Sent Pupil a Picture of Himself Naked but for a Smiley Face Emoji Is Jailed, WALESONLINE (Aug. 31, 2017), https://www.walesonline.co.uk/news/wales-news/teacher-who-sent-pupil -picture-13555860 (reporting on a male teacher who sent the photograph to one

of his female students and was convicted of inciting a child to engage in sexual activity whilst in a position of trust).

^{138.} See, e.g., Barbara Speed, Adam Johnson and the See-No-Evil Monkey: What Happens When Emojis Turn Up In Court? NEW STATESMAN (March 10, https://www.newstatesman.com/science-tech/social-media/2016/03 /adam-johnson-and-see-no-evil-monkey-what-happens-when-emojis-turn (reporting on an offender who used these defenses for two counts of sexual activity with a minor).

^{139.} In addition, he "pleaded guilty to one count of sexual activity with a minor and one charge of grooming." Sunderland's Adam Johnson Admits Child Sex Charge, BBC NEWS (Feb. 10, 2016), https://www.bbc.com/news/uk-england -35541528.

^{140.} Speed, supra note 138.

^{141.} Id.

^{142.} Id.

simply immature and liked emojis. 143 Johnson himself gave evidence at his trial that he had used the monkey emoji because it was "just a funny picture." 144 Unsurprisingly, he was convicted of the charges and sentenced to a term of imprisonment. 145

Another complicating factor when investigating the use of emoji in online grooming is that those engaged in illegal sexual activities often attribute these images with a double meaning to mask their conduct. 146 For instance, an analysis of more than 8,000 online advertisements in the U.S. revealed that sex traffickers frequently employ emoji to communicate about those who they are making available for rape, assault, and other forms of sexual exploitation.¹⁴⁷ The study specifically identified emoji including the growing heart (a young girl), cherries or cherry blossom (virginity), an arriving airplane (movement of a minor), and a crown (flagging that a pimp controls the victim). 148 Similarly, online communications between pedophiles often utilise images to identify their sexual preferences and mask their illegal activities. 149 It is unsurprising, therefore, that those who groom young victims online also frequently employ coded emoji. 150 Thus, messages that may prima facie appear innocent

^{143.} *Id*.

^{144.} Id.

^{145.} See Natalie Meehan, Opinion: Eggplants, Context and the Problem with Emojis, BRANDWATCH (April 15, 2016), https://www.brandwatch.com/blog/context-of-emojis/ [https://perma.cc/QB3J-78CL] (discussing Johnson's case and its outcome).

^{146.} See, e.g., Whitney, supra note 33, at 4275–79 (using "natural language processing methods to develop an improved ontology of online sex trafficking ads" in response to evolving language of such ads); FED. BUREAU OF INVESTIGATION, CYBER DIV., SYMBOLS AND LOGOS USED BY PEDOPHILES TO IDENTIFY SEXUAL PREFERENCES (Jan. 31, 2007) https://file.wikileaks.org/file/FBI-pedophile-symbols.pdf [https://perma.cc/NZR6-WCLZ] (describing a similar practice that uses custom symbols rather than emoji).

^{147.} See Whitney, supra note 33, at 4275-79.

^{148.} See id. at 4280.

^{149.} Since 1995 the *Innocent Images Operation* of the Cyber Division of the Federal Bureau of Investigation in the United States has worked to identify and dismantle online child sex exploitation and pornography groups. The operation has identified symbols and logos commonly used by sex offenders to identify their sexual preferences. *See* FED. BUREAU OF INVESTIGATION, *supra* note 146 and accompanying text.

^{150.} See Paul Maslin, Not All Emojis Are Cute, SAFEGUARDING HUB (Feb. 4, 2019), https://safeguardinghub.co.uk/not-all-emojis-are-cute/ (observing that emoji used for threatening, harmful, or coercive purposes are "commonly associated with online predators and child sexual exploitation").

in nature may have their true purpose of flirtation and sexual solicitation hidden. Many people are now aware that ***** represents a penis, ***** signifies breasts, ***** refers to sexual intercourse and ***** kinky sexual activity. Other, less well-known emoji are **♣** for ejaculation and **•** for vagina. ¹⁵¹ So prevalent are these forms of coded online exchange that those investigating online grooming now have an app that will translate emoji for them. ¹⁵²

The use of coded emoji was significant in a recent prosecution in Australia. A Queensland man was charged with using a carriage service to groom a minor for sexual activity after he used what police described as "X-rated" (eggplant, raindrops and taco)¹⁵³ emoji to communicate over a four month period with a twelve-year-old girl.¹⁵⁴ According to police, the offender used these emoji in social media, text messaging and gaming platforms to contact the girl and groom her for the purpose of arranging actual contact and offending.¹⁵⁵ While the emoji used by the offender in that case were easily interpreted as their dual meaning is well-known, coding is not invariant and can be expected to change over time and to vary between socio-cultural

^{151.} Guides for parents are available on the Internet; See, e.g., Olivia Lewis-Deane, A Parents Guide to Emojis, FOSTER CARE SOLUTIONS (Jul. 17, 2018), https://fostercaresolutions.co.uk/2018/07/17/a-parents-guide-to-emojis/ [https://perma.cc/S28F-CBBT] (providing one example of a guide for interpreting the sexual double-meaning of certain emoji.); See also Stephanie Linning, X-Rated Guide to the Hidden Meaning Behind Emojis: A Parent's Guide to Emojis, DAILY MAIL (Feb. 9, 2017), https://www.dailymail.co.uk/femail/article-4200384/The-X-rated-meanings-popular-emojis.html [https://perma.cc/ZUA7-FG9P] (another example).

^{152.} See Tammy Vigil, Parents Beware: Kids Know Secret Emoji Language, FOX31 & CHANNEL 2 NEWS (May 10, 2016), https://kdvr.com/2016/05/10/parents-beware-your-kids-probably-know-secret-emoji-language/(noting that one child predator investigator uses the app "Speak Emoji").

^{153.} The prosecution argued these emoji respectively represented a penis, ejaculation, and a vagina. Telephone Interview with Brendan Smith, Detective Inspector, Mackay Police Criminal Investigation Branch, Queensland, Austl. (Oct. 10, 2018).

^{154.} See James Hetherington, Man Arrested for Using Emoji to Groom Young Teenagers, NEWSWEEK (June 3, 2018), https://www.newsweek.com/man-arrested-using-emoji-groom-young-teenagers-1005566 [https://perma.cc/T2DT-CQME] (quoting a detective as saying "[T]here are some emoji out there that are commonly known as being X-rated and they have a dual purpose.").

^{155.} See Smith, supra note 153 and accompanying text.

groups, 156 making the future interpretation of coded emoji potentially difficult.

III. INTERPRETATIVE CHALLENGES

As previously noted, emoji are most often used to enhance ordinary text, ¹⁵⁷ hence on most occasions the task is not simply to attribute meaning to discrete emoji but rather to interpret their meaning in the context of the complete message (text *and* visual icon). As *Wired* staff writer Julia Greenberg has observed, "emoji in isolation could cause some puzzlement, but in the context of a textual message . . . the sender's intended meaning of an emoji is usually clear. ¹⁵⁸"

Consequently, for most messages the meaning of a particular communication will be able to be determined initially by examining the text and then considering the function of any accompanying emoji—all within the context of other available evidence, of course.¹⁵⁹ For messages where emoji reinforce, complement, or emphasize textual content, interpretation is relatively straightforward.¹⁶⁰ For instance, where text and image are consistent and negative, such as a threat to kill accompanied by a bomb emoji, the presence of the emoji simply emphasizes the threat. This occurred in several of the cases discussed previously, such as when a defendant threatened to kill his ex-partner and included an emoji of a gun in the message.¹⁶¹ Similarly, a person who puts rat, gun and gunshot emoji on the Facebook page of a woman who is due to appear as

^{156.} See generally Hannah Miller, Daniel Kluver, Jacob Thebault-Spieker, Loren Terveen & Brent Hecht, Understanding Emoji Ambiguity in Context: The Role of Text in Emoji-Related Miscommunication, INT'L ASS'N FOR THE ADVANCEMENT OF ARTIFICIAL INTELLIGENCE CONFERENCE ON WEB & SOC. MEDIA, May 17–20, 2017 available at http://www.brenthecht.com/publications/icwsm17_emojitext.pdf [https://perma.cc/PE9C-MKJE] (discussing the variable interpretation of emoji across both platforms and cultures).

^{157.} Tang, supra note 13.

^{158.} Greenberg, supra note 8.

^{159.} See Kelly, supra note 12, at 20-22.

^{160.} See Vyvyan Evans, THE EMOJI CODE: HOW SMILEY FACES, LOVE HEARTS, AND THUMBS UP ARE CHANGING THE WAY WE COMMUNICATE 125–136 (2017) (discussing how nonverbal cues guide interpretation in the context of both physical speech and emoji); see also Daantje Derks, Arjan E. R. Bos & Jasper von Grumbkow, Emoticons and Online Message Interpretation, 26 Soc. Sci. Computer Rev. 379, 385–86 (2008) ("The present study revealed that emoticons are useful in strengthening the intensity of a message.").

^{161.} See Thompson, supra note 83 and accompanying text.

a witness in an upcoming trial (and links the emoji to the trial) might expect to be found *prima facie* liable for intimidating a witness. ¹⁶² Sometimes a neutral emoji may also serve a negative function in the particular circumstances of the case, such as when a defendant texts his ex-partner that she is "going to get it," accompanying this with an emoji of an airplane (thereby indicating the way that he was going to travel to get to her). ¹⁶³ A man who sends a photograph of himself naked to a young girl, covering his genitals with a smiley face emoji, can similarly expect to be found liable for a grooming offence with the emoji merely being an adjunct to make the exchange more playful. ¹⁶⁴

However, for online communications where the text is accompanied by an emoji which conflicts with its prima facie textual content (the "mixed message"), 165 interpretation is more difficult. Consider a text message threatening to kill the recipient, accompanied by a smiley face emoji. Does the emoji amplify the threat or negate it by indicating irony, sarcasm or playfulness? This type of ambivalence is common in social media postings¹⁶⁶ and is central to threat cases where defendants claim that they did not have the mens rea for the offence with which they were charged. Courts have acknowledged that "[e]mojis clearly can have meaning and can alter what is otherwise the meaning of a phrase."167 Research by linguists tells us that when two components of a message are incongruous (one positive, one negative) the textual component will have a stronger impact on the assessment of the message. 168 In this example the negative textual threat dominates and the message will likely be perceived as a genuine threat to kill. Of course, offences involving threats to kill or seriously injure also typically require proof that the sender intended to issue a threat, which is a

164. See Richardson, supra note 137 and accompanying text.

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^{162.} See, e.g., People v. Smith, No. B284766, 2019 Cal. App. LEXIS 1691, at *4 (Mar. 12, 2019) (defendant found guilty of intimidating a witness after posting gun, gunshot, and rat emoji to the witness's Facebook page).

^{163.} Kidd. supra note 40.

^{165.} Evans, *supra* note 160, at 134.

^{166.} See generally Matamoros-Fernández, supra note 27 (discussing the use of funny and benign emoji in racist discourse on Facebook).

^{167.} State v. Nickell, WD80023 (Mo. Ct. of App. March 6, 2018) (Memorandum Supplementing Order Affirming Judgment Pursuant to Rule 30.25(b) at 8).

^{168.} See Derks et al., supra note 160, at 386 and accompanying text.

separate and distinct issue—and likely to prove more troubling for courts. 169

What of those messages where there is no accompanying text? The meaning of these online communications may be more difficult to interpret. The challenges that can arise may be summarized under four headings: cross-platform variability, issues of *mens rea*, individual and cultural variations in the meaning attributed to emoji, and coded emoji.

A. Cross-Platform Variability

A preliminary challenge confronting those using emoji, as well as courts considering their role and function in messages, is that these little icons can appear differently on various platforms (devices, software programs and operating systems) or even different generational versions of the same software within a platform.¹⁷⁰ Thus, a person who sends a particular emoji from, say, an iPhone, cannot be certain how it will appear on an Android phone. In essence, due to differences in the way each of the companies constructs their emoji, the image seen by recipients using one type of platform or phone might not be the same visual representation as one seen by a recipient possessing another type of platform or phone. 171 Research with emoji users has found that a substantial minority are not aware of this crossplatform variability and its potential as a source of miscommunication.¹⁷² Consider Adam Johnson's message containing the 'devil/smiling face with horns' emoji, sent to his

169. See, e.g., Elonis v. United States, 135 S.Ct. 2001 (2015) (holding that the defendant's crime of communicating a threat required showing that defendant intended to issue threats or knew that communications would be viewed as threats).

^{170.} See Eric Goldman, Emojis and the Law, 93 WASH L. REV. 1228, 1254 (2018) (explaining that a sender and recipient can receive different messages across platforms without realizing it).

^{171.} See Alex Hern, Why are Samsung's Emojis Different from Everyone Else?, GUARDIAN (Sept. 6, 2017), https://www.theguardian.com/technology/2017/sep/06/why-are-samsung-emojis-different-from-everyone-else [https://perma.cc/UNQ3-EAK5] (discussing the difficulties Apple users have in exchanging emojis with Samsung users).

^{172.} Hannah M. Hillberg, Zachary Levonian, Daniel Kluver, Lorebn Terveen and Brent Hecht, What I See is What You Don't Get: The Effects of (Not) Seeing Emoji Rendering Differences Across Platforms. PROC. OF THE ACM ON HUM.-COMPUTER INTERACTION, 2 CSCW 124, at 3 (2018) (stating that 25% of 710 respondents in a survey indicated they were not aware emojis have multiple renderings across platforms).

fifteen-year-old victim;173 it would display in different ways on various platforms, appearing as satanic in Facebook, relatively benign in Messenger and devilish on Apple:174

(Apple), (Facebook) or (Messenger)

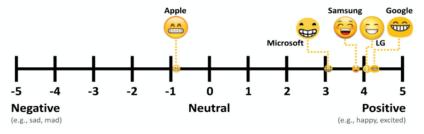
Cross-platform variability wasn't an issue in Johnson's case, but this discrepancy illustrates the possibility of cross-platform confusion and misinterpretation; it is a factor to take into consideration when assessing the criminal liability of defendants.

While different platforms have moved towards more harmonized depictions of emoji in recent years, anomalies still exist. In the diagram below, from a 2016 comparison of the Microsoft image with other similarly named images from the keyboards of competitors, we see how the same smiling face image is translated by other platforms. The graphic images vary considerably in sentiment (the degree to which they are perceived positively or negatively).

Fig. 1 An Example of Platform Variance 175

Same Emoji + Different Smartphone Platform = Different Emotion

For example, if you send the Apple emoji to a Google Nexus, they'll see the Google emoji, and vice versa!



^{173.} See Speed, supra note 138 and accompanying text.

^{174.} Full Emoji List, UNICODE, http://unicode.org/emoji/charts/full-emoji -list.html (Describing the way most emoji appear across all major platforms. This table is released two or three times a year by the Unicode Consortium, a non-profit standardizing board).

^{175.} This chart was derived from research by GroupLens, a research lab at the University of Minnesota. Hannah Miller, Investigating the Potential for Miscommunication using Emoji, GROUPLENS (Apr. 5, 2016) https: //grouplens.org/blog/investigating-the-potential-for-miscommunication-using -emoji/ [https://perma.cc/VQ9L-97GW].

This variability in sentiment has been reported with other emoji, such as the "grimacing face" and could potentially be a significant matter when determining the meaning of communications.

Cross-platform variability is particularly relevant when a gun emoji is used. As previously noted, most major tech companies have now changed their gun emoji so that they appear more like harmless toys rather than actual weapons. 177 But this only applies to the latest versions of software. Users employing older software will still see old versions. Hence, it is possible that a person could send a message with a gun emoji that appeared on the sender's phone as a benign water pistol but on the recipient's phone as a traditional (and much more threatening) gun.

B. INDIVIDUAL AND CULTURAL VARIATIONS IN ATTRIBUTIONS OF MEANING TO EMOJI

For some emoji there are widely shared understandings of meaning (and, as will be considered in the next section, some shared meanings involve illicit activities). The most accurate formal source for identifying the meaning of emoji is the inventory approved and posted by the Unicode Consortium.¹⁷⁸ Although the Consortium's early array of emoji were criticised for being very limited in relation to cultural diversity, race, gender, and sexuality,¹⁷⁹ the current array of accepted emoji is becoming increasingly diverse, presenting a wider range of skin tones and cultural icons.¹⁸⁰ Nevertheless, subtle cultural

176. *Id.*; *See also* Garreth W. Tigwell & David R. Flatla, "Oh, That's What You Meant!": Reducing Emoji Misunderstanding, MOBILEHCI '16: PROC. OF THE 18TH INT'L CONF. ON HUM. "OMPUTER INTERACTION WITH MOBILE DEVICES AND SERV. ADJUNCT (Sept. 6—9, 2016) (comparing Android and Apple versions of emoji and reporting significant differences in the emotions attributed to emoji such as the "grimacing face").

178. See UNICODE, supra note 174 and accompanying text; see also Elizabeth Kirley & Marilyn McMahon, The Murky Ethics of Emoji: How Shall We Regulate a Web for Good?, RICHMOND J. L. & TECH. (forthcoming 2019) (discussing the specified Unicode list).

^{177.} See Leswing, supra note 96 and accompanying text.

^{179.} See Colette Shade, The Emoji Diversity Problem Goes Way Beyond Race, WIRED (Nov. 11, 2015), http://www.wired.com/2015/11/emoji-diversity-politics-culture/ [https://perma.cc/J2CL-JSPZ] ("The presence or absence of emoji both hints at and contributes to cultural visibility and erasure").

^{180.} See Marie C. Baca, Why emoji are—finally—becoming more diverse, WASH. POST, Jul. 17, 2019, https://www.washingtonpost.com

interpretations can lead to miscommunication, particularly when sexual innuendo, political differences, and criminal intent are thrown into the mix. The very rationale of hidden meanings, cryptography, semaphore, sarcasm, and irony is to utilize popular and seemingly neutral ideograms to service political agendas, cultural and physical differences, and nefarious intentions. Considerable complexity arises when meanings are not so clearly attributed and individual understandings are more significant. This is confirmed by empirical research.¹⁸¹

The variability of individual interpretations of emoji is wellestablished. An online survey by researchers at the University of Minnesota reported considerable differences in the meaning and sentiment (positive, neutral, or negative) associated with the twenty-five most common anthropomorphic emoji used by Twitter users. 182 Part of the variability occurred because of the cross-platform differences previously noted;183 however, even within platforms, significant differences frequently arose, indicating a lack of consensus. 184 For instance, the emoji with the most confusion about its meaning was Apple's 'unamused face' (2); respondents thought it represented disappointment, depression, suspicion or being unimpressed. 185 Another misconstrued image was Microsoft's 'smiling face with open mouth and tightly shut eyes' \(\exists\); 54% of respondents believed it was positive, 44% labelled it negative. 186 Images that contained conflicting information, such as a mixture of positive cues

184. Id. at 263.

185. Id. at 264.

186. Id. at 263.

[/]technology/2019/07/18/why-emoji-are-finally-becoming-more-diverse/ (discussing newly added emojis that provide greater racial and ethnic diversity).

^{181.} See generally Miller et al., supra note 156 at 1 ("[P]rior work has hypothesized that examining emoji in their natural textual contexts would substantially reduce the observed potential for miscommunication....[but we find]. . .when emoji are interpreted in textual contexts, the potential for miscommunication appears to be roughly the same.").

^{182.} See Hannah Miller et al., "Blissfully Happy" or "Ready to Fight": Varying Interpretations of Emoji, INT'L ASS'N FOR THE ADVANCEMENT OF ARTIFICIAL INTELLIGENCE CONFERENCE ON WEB & SOC. MEDIA, May 17–20, 2016, at 259, 263–264, available at https://www.aaai.org/ocs/index.php/ICWSM/ICWSM16/paper/download/13167/12746 (reporting that when the same emoji design was viewed on the same platform, people disagreed 25% of the time on whether the emoji had a positive, neutral, or negative sentiment, and that the disagreements increased when the emoji designs were viewed on different platforms).

^{183.} *Id*.

(smiles) along with negative elements (tears, shut eyes) were among the most likely to be misinterpreted. 187 Conversely, the least misconstrued images were frequently embellished with popular interpretation aids such as hearts, tears, or dominant upturned or downturned mouths. 188 The authors concluded that people often interpret emoji in "diverse fashions." 189

In conjunction with these individual differences in attributions of meaning, it appears that some cultural variations may exist. 190 While there is strong evidence of the universality of emoji, 191 they appear to be used more frequently in the U.S., the U.K. and Canada than in China and Japan, 192 with some minor variation in the popularity of particular emoji (the French are more likely to use hearts, the Australians alcohol-related images and Americans LGBT emoji). 193 The meaning attributed to particular emoji also may culturally vary; 194 for instance, carries religious significance in the West, but does not have a similar attribution in Muslim countries (joining the palms is not traditionally associated with Islamic prayer) 195 and in Japan it is simply used to indicate gratitude, without any necessary

^{187.} Id. at 264.

^{188.} Id.

^{189.} Id. at 266.

^{190.} See Sharath Chandra Guntuku et al., Studying Cultural Differences in Emoji Usage Across the East and the West, INT'L ASS'N FOR THE ADVANCEMENT OF ARTIFICIAL INTELLIGENCE CONFERENCE ON WEB & SOC. MEDIA, June 12–14, 2019, at 226, 226, available at https://aaai.org/ojs/index.php/ICWSM/article/download/3224/3092/ ("The analysis of Emoji use in the East and the West reveals recognizable normative and culture specific patterns.").

^{191.} Id. at 232.

^{192.} *Id.* at 229 fig.2 (illustrating the normalized frequency of emoji use in the East and the West grouped by Unicode categories of emojis).

^{193.} See Most-Used Emoji Revealed: Americans Love Skulls, Brazilians Love Cats, the French Love Hearts, SWIFTKEY: BLOG, (April 21, 2015), https://blog.swiftkey.com/americans-love-skulls-brazilians-love-cats-swiftkey-emoji-meanings-report/ (analyzing how different nationalities use emoji).

^{194.} See Alex Rawlings, Why Emoji Mean Different Things in Different Cultures, BBC: FUTURE (Dec. 11, 2018), https://www.bbc.com/future/article/20181211-why-emoji-mean-different-things-in-different-cultures ("[W]hat we mean when we use those emojis actually varies greatly, depending on culture, language, and generation.").

^{195.} See id. ("[T]he clasped hands emoji ranked consistently in the top three of all emojis used, while in Arabic it ranked ninth and was not amongst Urdu's most commonly used emojis at all.").

religious significance. ¹⁹⁶ In North America, England, and Australia the eggplant-as-penis or taco-as-vagina iconography are established social coding. ¹⁹⁷ Japanese users are generally more likely than English speakers to employ emoji and emoticon to convey 'positive politeness' (such as showing interest or admiration). ¹⁹⁸

In summary, it is predictable that some emoji and messages will be challenging to interpret¹⁹⁹ and others will have more commonly understood meanings (at least within cultural or subgroups). While the growing body of research into the emoji lexicon combined with appropriate expert assistance as well as consideration of context should help to weaken an offender's claim that their use of emoji had a subjective meaning that

^{196.} See id. ("In Japan, where emojis originate, the symbol is generally used as to mean 'please' or 'thank you', without necessarily evoking religious connotations.").

^{197.} See, e.g., John-Michael Bond, A Beginner's Guide to Sexting with Emoji, DAILY DOT (Jan. 16, 2018, 12:07 PM), https://www.dailydot.com/irl/sexting-emoji/ ("The eggplant has come to be the symbol for the penis....[t]acos represent the vagina[.]"); Anna Johnstone, Get the Emo Down, SUN (June 19, 2018, 11:32 AM), https://www.thesun.co.uk/fabulous/5537901/emoji-meanings-history-aubergine-circus-tent/ (describing the eggplant emoji as symbol for penis).

^{198.} Barry Kavanagh, A Cross-Cultural Analysis of Japanese and English Non-Verbal Online Communication: The Use of Emoticons in Weblogs, in XIX:3 INTERCULTURAL COMM. STUD. 65 (Margaret U. D'Silva ed., 2010), available at https://www.researchgate.net/publication/235913040_A_cross_cultural_analysis_of_Japanese_and_English_non-verbal_online_communication_

The_use_of_emoticons_in_weblogs (suggesting Japanese users may use emoticons to "assist the verbal meaning of the message," such as when the message sounded "too serious" because Japan is high context culture whereas America is a low context culture). The more frequent use of emoji and emoticon in weblogs studied by the researcher might have been due to the fact that at the time this research was conducted, emoji had been available in Japan longer than they had in English speaking countries. See, e.g., Johanna Mayer, The Origin of the Word Emoji', SCI. FRIDAY: SCI. DICTION (Mar. 13, 2019), https://www.sciencefriday.com/articles/the-origin-of-the-word-emoji/

[[]https://perma.cc/7S78-XKQE] (discussing Japan's use of emojis as early as 1999 and America's use of emojis beginning in 2011).

^{199.} Online emoji translation services have emerged to accommodate the problems caused by this diversity and possible misinterpretation. See, e.g., EMOJIPEDIA, https://emojipedia.org (last visited Oct. 19, 2019). Keith Broni, an employee of a London based translation service, also claims to be an emoji translator. See Luke Graham, Meet a Guy Who Makes a Living Translating Emojis, CNBC: CAREERS (July 17, 2017, 9:10 AM), https://www.cnbc.com/2017/07/17/meet-a-guy-who-makes-a-living-translating-emojis.html [https://perma.cc/7NWV-7URF] (discussing Broni's job as an "Emoji Translator").

would not necessarily be shared by others, the potential for miscommunication and misinterpretation is clear. Difficulties are even more likely to arise when an accused claims to have used emoji in an ironic, sarcastic, or humorous way that neutralises an apparent threat.

C. "JUST A FUNNY PICTURE": HUMOROUS, WITHOUT THE NECESSARY MENS REA FOR A CRIMINAL OFFENCE?

When Adam Johnson testified at his trial for sex offences, he explained that he sent an emoji of a see-no-evil-monkey to the victim (who had just disclosed that she was 15 years old) because he liked the 'funny picture.' 200 In a related manner, the cases of L.F. (the Californian high school student who was convicted of making a criminal threat after she threatened to shoot students at her school),²⁰¹ Anthony Elonis (the man whose Facebook message suggested that his ex-wife's head should be impaled on a stick),²⁰² and Jayde Booth (who threatened his ex-partner)²⁰³ involved claims by defendants that they did not have the relevant criminal intent for the offences with which they were charged. Instead, they too claimed to have been acting in a humorous manner—perhaps misguided and unfortunate, but devoid of any serious intent to do wrong.²⁰⁴ Central to this type of defense is the claim that the presence of emoji neutralized or negated any possible intent to threaten; the defendants were allegedly sending 'funny pictures' rather than engaging in criminal threats or illegal grooming.205 The defense relies on common, everyday usage of emoji, where their inclusion frequently negates, or at least tempers, the preceding text by

201. See In re L.F., No. A142296, 2015 WL 3500616, at *1–3 (Cal. Ct. App. June 3, 2015).

^{200.} Speed, supra note 138.

^{202.} See Elonis v. United States, 135 S. Ct. 2001, 2004-2007 (2015).

^{203.} See Thompson, supra note 83 (describing Booth's charge and bail refusal after allegedly using an emoji message to threaten his former partner).

^{204.} See Elonis, 135 S. Ct. at 2007–2008 (defendant arguing that "threat" in the statute required an intent to inflict harm, which he said he did not have); In re L.F., 2015 WL 3500616 at *1 (defendant stating "she did not mean the statements she had made on Twitter and that they were a joke"); Thompson, supra note 83 (defendant telling former partner "[i]t was just an emoji. You know I would never hurt you[.]").

^{205.} See, e.g., In re L.F., 2015 WL 3500616 at *6 ("Minor's best friend testified that she had read the tweets and did not take them seriously, and that the use of laughing emojis in the tweets indicated that minor joking."); Thompson, supra note 83 ("It was just an emoji.").

introducing irony or sarcasm.²⁰⁶ It is noteworthy that similar claims have arisen in family law cases where estranged partners have included emoji in hostile online postings and subsequently claimed they were merely being humorous.²⁰⁷ The "just joking" defense was actually successful in a defamation case in Michigan when the court accepted that the inclusion of an emoticon representing a face with a tongue sticking out (indicating a joke, sarcasm, or disgust) in a message that was potentially defamatory made it "patently clear that the commentator was making a joke."²⁰⁸

However, in each of the threat or grooming cases cited above, courts rejected the "just joking" explanation and convicted the defendants; the extreme nature of each defendant's conduct and repeated messaging over an extended period persuaded courts that the threats or grooming efforts were intentional and criminal. Nevertheless, research confirms that messages believed by the sender to be humorous can sometimes be perceived as hostile by the recipient,²⁰⁹ so how are

^{206.} Research into sentiment analysis or how messaging affects emotions may be helpful here. This research has shown that some emoji can provoke strong positive or negative sentiments, but there are other emoji that can have a neutral affect. See, e.g., Novak et al., supra note 19, at 3. For example, a flushed face @ and a bomb • have a uniform negativity, whereas both a face with cold sweat 3 and a crying face 3 have been found to be "bipolar with a high negativity and positivity" that balance each other out. See id. at 5. fig.3. The yin/yang symbol ♥ has been determined to be very neutral in the sentiment it provokes. See id. Those distinctions suggest that courts might well find a criminal threat or other violence related charge is most readily established when clearly negative emoji are used and that difficulty will occur when positive or neutral emoji accompany a prima facie threat. See e.g., Dami Lee, Emoji Are Showing Up in Court Cases Exponentially, and Courts Aren't Prepared, VERGE (Feb. 18, 2019, 10:13 AM), https://www.theverge.com/2019/2/18/18225231 /emoji-emoticon-court-case-reference ("[T]he ambiguity in how emoji are displayed and what we interpret emoji to mean could become a larger issue for courts to contend with.").

^{207.} See e.g., RC (Mother) v. AB (Father) [2015] EWHC (Fam) 1693 [23(vi)] (describing that the father posted a picture of the mother with a devil emoji over the mother's face, in which the father stated he posted the altered photo to be "cheeky" and "humorous").

^{208.} Ghanam v. Does, 845 N.W.2d 128, 145 (Mich. Ct. App. 2014); see id. at 133 n.4 (explaining that the emotion of ":P" can indicate a joke, sarcasm, or disgust).

^{209.} See Yehuda Baruch, Bullying on the Net: Adverse Behavior on e-Mail and its Impact, 42 INFO. & MGMT. 361, 362 (2005) ("Messages considered by the sender as innocent humor can trigger an escalating spiral exchange of e-mail bullying.").

we to distinguish the misguided from those who are attempting to hide hostility behind a veil of claimed humor? Both empirical research and many of the cases cited confirm that when a message is sent, interpretation begins by examining any textual content. When emoji are also present, they perform an adjunctive role. Emoji that are incongruent with context, such as the smiley face accompanying a threat will inevitably require contextual background information (such as the prior relationship of the parties) to determine the meaning of the communication and whether the emoji constitutes, or contributes to, unlawful activity.

D. CODED EMOJI

One of the key contextual pieces of information that can assist in the interpretation of emoji is awareness of coded meanings among a particular group or subculture. Some "coding" is relatively benign, as illustrated by the . This emoji is rarely used to indicate an actual peach; in more than 75% of tweets analyzed in one study it was used to indicate a butt, suggest sexual connotations, or refer to fitness or positive feeling.²¹² While this sort of attribution may be relatively innocuous, in grooming cases a double meaning will be troubling: apparently benign or cute emoji may have an "X-rated" or sexually charged meaning. 213 As Michelle McManus and Louise Almond have observed, "many researchers agree that although the motivations behind interactions are sexually deviant, they may seem innocent in nature when observed, making it difficult to identify before actual abuse occurs."214 This could potentially complicate prosecutions. But it is important to recall that courts have dealt with issues like this before; it is arguable that emoji

^{210.} See discussion supra Section III.A.

^{211.} See, e.g., Tang, supra note 13.

^{212.} See Hamdan Azhar, How We Really Use the Peach, EMOJIPEDIA (Dec. 16, 2016), https://blog.emojipedia.org/how-we-really-use-the-peach/[https://perma.cc/34QH-ZMU4] (showing that 33% of tweets use the emoji "as a shorthand for butt," 27% have "sexual connotations," 13% refer to "fitness," and 4% signify "feeling peachy or generally positive").

^{213.} See Michelle McManus & Louise Almond, The Virtual Door to Online Child Sexual Grooming is Wide Open, THE CONVERSATION (Feb. 1, 2018), https://theconversation.com/the-virtual-door-to-online-child-sexual-grooming-is-wide-open-90972 (revealing that it is difficult to identify potential groomers simply from online communications).

^{214.} *Id*.

are similar to logos and slang used by gangs subject to criminal prosecution. As Greg Hurley, previously a defense attorney and now an analyst for the National Center for State Courts, has observed: "emoji are no different than drug slang in a criminal controlled substances case [and] . . . [t]hey may need some interpretation in some situations, in others the content may be obvious."²¹⁵ In cases involving drug slang, courts, when confronted with exchanges between gang members, have been able to call on witnesses (including expert witnesses) or defendants themselves to explain the meaning of the slang used.²¹⁶ A similar approach could be used with the use of coded emoji. This is illustrated in a recent pimping case in the San Francisco Bay area.²¹⁷

During the course of an operation targeting prostitutes, police charged a defendant with pimping. 218 Among the evidence against him was an Instagram message sent by him to a woman, "Teamwork make the dream work," accompanied by the emoji 🍆 **७ 6**, and another message including the **७**.²¹⁹ The meaning of the messages was disputed.²²⁰ The defendant claimed to have a subjective, lawful intent that was inconsistent with the mens rea of the offense with which he was charged—his lawyer argued that the message could simply indicate that he was trying to strike up a romantic relationship with the woman.²²¹ Prosecutors called an expert witness specializing in sex trafficking to assist them. 222 The expert testified that the messages used emoji that had commonly understood, coded meanings among pimps and prostitutes: the high heels represented prostitutes wearing fancy shoes, the bags of money signified a working relationship between the sender and the

^{215.} Greenberg, supra note 8.

^{216.} See, e.g., People v. Roberts, 184 Cal. App. 4th 1149, 1193–94 (2010) (permitting the admission of the expert's testimony concerning the interpretation of gang slang used in the defendant's telephone conversations).

^{217.} See People v. Jamerson, A153218, 2019 WL 459012, at *1 (Ca. Ct. App. Feb. 6, 2019) (finding defendant guilty on pimping and pandering by encouraging).

^{218.} *Id*.

^{219.} Id. at *2; Lee, supra note 206.

^{220.} See Jamerson, 2019 WL 459012, at *8 (defendant objected that "Teamwork make the dream work" "had a specific meaning in the world of pimping and prostitution").

^{221.} Id.

^{222.} Id. at *2.

recipient, and the crown indicated that the "pimp is the king."²²³ While the emoji messages were ultimately not critical to the prosecution, the expert testimony supported the claim of pimping with the emoji essentially translating to "wear your high heels to come make some money."²²⁴

VI. EMOJI AS EVIDENCE

A final consideration is how emoji should be treated when communications containing them are tendered in evidence in criminal trials, with the ancillary issue of how they should be presented in opinions. There are currently no guidelines or established protocols dealing with emoji, and there is little relevant academic research. Cases where internet posts and text messages have been admitted as evidence pertaining to offline offenses have some relevance,²²⁵ although they also do not usually address the issue of how to represent emoji and emoticons that are present.

Some context for this issue is provided by a study that investigated the status of electronic evidence, 226 conducted by a Dutch researcher at Erasmus University, Rotterdam, in 2018.227 Her systematic review of electronic evidence in eleven jurisdictions worldwide found that emoji and emoticons most commonly arose in evidence in criminal cases, frequently in

224. Lee, supra note 206.

[D]ata (comprising the output of analogue devices or data in digital form) that is manipulated, stored or communicated by any manufactured device, computer or computer system or transmitted over a communication system, that has the potential to make the factual account of either party more probable or less probable than it would be without the evidence.

INST. OF ADVANCED LEGAL STUDIES, ELECTRONIC EVIDENCE 19 (Stephen Mason & Daniel Seng eds., University of London, 4th ed. 2017).

227. See generally Kramer, supra note 46 (discussing present problems and future challenges of electronic evidence).

^{223.} *Id*.

^{225.} For example, an acknowledgement by a defendant charged with rape that the victim had not consented, accompanied by the sad emoticon ("I'm sorry! I wanted you to say no one more time then it would have stopped . . . : (") was introduced by the prosecution at trial. See Married Father Accused of Rape Tells His Alleged Victim ':/ I'm Sorry' and 'Focus On The Good' in Whatsapp Messages, Telegraph (Sept. 15, 2016, 11:54 PM), https://www.telegraph.co.uk/news/2016/09/15/married-father-accused-of-rape-tells-his-alleged-victim--im-sorr/.

^{226.} Electronic evidence refers to

relation to threats.²²⁸ In some countries, electronic evidence was confined primarily to the area of criminal law (e.g., Belgium and the Netherlands) and this form of evidence was more tightly regulated in criminal, rather than civil, matters.²²⁹ In common law countries (the United States, England, and Wales), the focus was on electronic discovery and disclosure,²³⁰ with a highly publicized dispute between the FBI and Apple following FBI requests to unlock iPhones for the purpose of criminal investigations.²³¹

Within litigated cases, when emoji are scattered through multiple text messages, emails, blogs, or social media, prosecutors sometimes do not bother to include them and/or refer juries to them when transcripts of communications are read to the jury or tendered as exhibits.²³² This practice was specifically condemned in the "Silk Road" Trial of Ross Ulbricht.²³³ The approach originally adopted by the prosecution in that trial was to read into evidence emails and chat logs containing statements made by Ulbricht but to make no mention of emoji that were included in them.²³⁴ Defense counsel objected

^{228.} See id. at 393–94 (including Belgium, England & Wales, Germany, Italy, the Netherlands, Norway, Poland, China, Japan, Canada, and the United States); see also id. at 408 (discussing the use of emoji as a threat or a softening device for a threatening text).

^{229.} See id. at 394 ("[E]lectronic evidence in criminal law is also treated more extensively in Belgium and the Netherlands among others.").

^{230.} Id. at 394-95.

^{231.} See, e.g., Danny Yadron, Spencer Ackerman & Sam Thielman, Apple Accuses FBI of Violating Constitutional Rights in iPhone Battle, GUARDIAN (Feb. 25, 2018) https://www.theguardian.com/technology/2016/feb/25/apple-fbi-iphone-encryption-request-response (reporting the lawsuit between Apple and the Justice Department); Amanda Holpuch, Tim Cook Says Apple's Refusal to Unlock iPhone for FBI Is a 'Civil Liberties' Issue, GUARDIAN (Feb. 22, 2016) https://www.theguardian.com/technology/2016/feb/22/tim-cook-apple-refusal-unlock-iphone-fbi-civil-liberties (calling Apple's refusal to cooperate with the government to unlock an iPhone "a defense of civil liberties").

^{232.} See, e.g., R v Rayfield [2017] NSWDC 174 (Austl.) (in this case the offender and victim both used emoji or emoticon in their numerous text-based exchanges and that transcripts of their exchanges provided to the courts simply noted "emoji omitted" at relevant points).

^{233.} See United States v. Ulbricht, No. 14-cr-68, 2014 U.S. Dist. LEXIS 151230, at $^*1-^*2$ (S.D.N.Y. July 9, 2014) (denying defendant's motion to dismiss his indictment "stemming from the creation, administration, and operations of an online marketplace known as 'Silk Road").

^{234.} See Madison Margolin, Emojis in Court Evidence, MEDIUM (Mar. 26, 2015), https://medium.com/@margolinmadison/emojis-in-court-evidence

to the omission and further argued that, because text messages and emoji "are designed to be absorbed through reading, not through hearing,"235 the jury should be allowed to read them. The presiding judge ruled that the jury should take note of any symbols in the messages because they were part of the evidence of the document.²³⁶ This resulted in the prosecution subsequently saying the word "emoticon" when verbally referring to the emoji and emoticons that appeared in emails and chat conversations²³⁷ (the prosecution apparently did not verbally describe the emoji or explain their meaning).²³⁸ However, given the nearly 3,000 emoji that now exist, with considerable differences between even related images (smiley face, smiling face with tears of joy, and grinning face with smiling eyes, etc.) the strategy of identifying them by using a descriptor like "emoticon" simple generic is entirely inadequate.²³⁹

⁻⁵⁵⁷eadb5758a [https://perma.cc/7FEU-JZPD] ("[D]uring the Federal District Court trial of Ross Ulbricht, . . . , a prosecuting attorney sparked debate when he failed to mention the presence of a smiling emoji at the end of an Internet post he read aloud to the jury[.]").

^{235.} Id.

^{236.} See Thomas Gorton, Judge Rules Emoticons Admissible in Silk Road Trial, DAZED (Jan. 29, 2015), https://www.dazeddigital.com/artsandculture/article/23440/1/judge-rules-emoticons-admissible-in-silk-road-trial (reporting that "the judge in the case has ruled that jurors should take note of all use of emoticons in the transcripts"). Cf. United States v. Ulbricht, No. 14-cr-68, 2014 U.S. Dist. LEXIS 145553, at *1–*2 (S.D.N.Y. Oct. 10, 2014) (denying defendant's motion to suppress evidence).

 $^{237.\} See\ Greenberg,\ supra$ note 8; Sarah Jeong (@sarahjeong), TWITTER (Jan. 22, 2015, 8:25PM), https://twitter.com/sarahjeong/status/558480572662947841/photo/1?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E558480572662947841&ref_url=https%3A%2F%2Fwww.dazeddigital.com%2Fartsandculture%2Farticle%2F23440%2F1%2Fjudge-rulesemoticons-admissible-in-silk-road-trial [https://perma.cc/77KA-7GXC].

^{238.} See Karen Henry & Jason Harrow, Exhibit A - Winky Face: Emoticon Evidence Enters Courts, LAW360 (Nov. 17, 2015), https://www.law360.com/articles/727700/courts-begin-considering-emoticon-and-emoji-evidence ("[T]he prosecution apparently did not describe the actual symbol or attempt to convey its intended meaning.").

^{239.} See Karen Henry & Jason Harrow, Digital Emotions: The Evidentiary Impact of Emoticons and Emojis, DAVIS, WRIGHT, TREMAINE (Nov. 16, 2015), https://www.dwt.com/Digital-Emotions-The-Evidentiary-Impact-of-Emoticons-and-Emojis-11-16-2015/ (arguing that courts should include actual emoji and emoticons in their opinions given the nuanced information contained in each emoji but cautioning the courts to carefully select the emoji to be included); Benjamin Weisner, At Silk Road Trial, Lawyers Fight to Include Evidence They Call Vital: Emoji, N.Y. TIMES (Jan. 28, 2015), https://www.nytimes.com

Despite its condemnation in the "Silk Road" trial, the practice of simply ignoring the presence of emoji in digital communications continues.²⁴⁰ Verbally or textually describing emoji and/or their meaning in online communications is also now common.²⁴¹ This can vary from blunt descriptions of the mere presence of emoji to detailed verbal and written descriptions. For example, transcripts of text messages have sometimes simply substituted the word "emoji" for the actual emoji that were used.²⁴² Alternatively, juries have been informed that particular communications included "four sad emojis," 243 a "paperclip symbol on the left hand side... and a smiley face on the other,"244 rats, guns, and gunshot,245 or a face with a tongue hanging out.²⁴⁶ This approach may seem appropriate because courts have previously accepted testimony describing objects such as heroin,²⁴⁷ whiskey jars,²⁴⁸ and stolen marked currency,²⁴⁹ without requiring the actual object to be received into evidence.²⁵⁰ However, this practice generally is restricted to

/2015/01/29/nyregion/trial-silk-road-online-black-market-debating- emojis.html (presenting a linguist's research that different emoji "convey a lot about a writer's intentions"); Next Witness: Will The Yellow Smiley Face Take The Stand?, NPR (Feb. 8, 2015), http://www.npr.org/2015/02/08/384662409/your-honor-id-like-to-call-the-smiley-face-to-the-stand [https://perma.cc/8M8S-CKUU].

^{240.} See, e.g., United States v. Dadona, No. ACM 39202, 2018 CCA LEXIS 325, at *3 n.3 (A.F. Ct. Crim. App. Oct. 3, 2019) ("This opinion quotes [] messages as they appear in prosecution exhibits except for 'emojis' or 'emoticons'...").

^{241.} See, e.g., State v. Pischel, 762 N.W.2d 595, 600 (Neb. 2009) (showing that an emoticon included in a text message sent by the offender was described as "expressing anger"); People v. Hastings, No. 336596, 2018 Mich. App. LEXIS 3561, at *1 (Mich. Ct. App. Nov. 27, 2018) (describing an emoji of two eyes textually).

^{242.} State v. Stotts, 2018-Ohio-3904, ¶ 12 (5th Dist.).

^{243.} State v. Robertson, 2018-Ohio-1640, 111 N.E.3d 659, at ¶ 17 (8th Dist.).

^{244.} Nichol v Nichol [2017] QSC 220, 14 (Austl.).

^{245.} See People v. Smith, No. B284766, 2019 Cal. App. LEXIS 1691, at *4 (Cal. Ct. App. Mar. 12, 2019) (describing multiple emojis textually, including fingers, a rat, a gun, and a gunshot).

^{246.} See Hastings, 2018 Mich. App. LEXIS 3561, at *4 (depicting an emoji of a face with a tongue hanging out).

^{247.} United States v. Figueroa, 618 F.2d 934, 941 (2d. Cir. 1980).

^{248.} Chandler v. United States, 318 F.2d 356, 357 (10th Cir. 1963).

^{249.} Holle v. State, 337 A.2d 163, 167 (Md. App. 1975).

^{250.} See, e.g., id. at 274 (explaining that it is not necessary to produce physical evidence at trial and that a description of physical evidence can be the equivalent of the physical evidence itself).

descriptions of physical objects.²⁵¹ It is unsound, both on psychological and legal grounds, to allow emoji to be presented in evidence for two reasons:

The first reason is that, unlike emoji, verbal and written descriptions of physical objects usually require relatively little interpretation by the counsel or witness providing the description. Additionally, verbal or textual descriptions of emoji require jurors to make attributions to the verbal and written summaries provided to them rather than directly to the emoji that were actually employed in the relevant communication. For instance, in State v. Atchison,252 the prosecution provided written descriptions of emoji, presenting them textually as "!Wink!"253 and "!Blushing!"254 and similar.255 This requires several levels of mediation of the emoii evidence: interpretation of the original emoji is followed by its verbal or written description in words (in State v. Atchison, accompanied by additional punctuation—exclamation marks), 256 which, in turn is subject to interpretation of the words (rather than the actual visual images) by jurors. Each level of mediation introduces the possibility of error.²⁵⁷

The second reason is that emoji, like the text messages in which they so often appear, 258 can be characterized as falling within the definition of "writing" in statutes such as the Federal Rules of Evidence ("letters, words, numbers, or their equivalent,

^{251.} *Id*.

^{252.} State v. Atchison, 730 N.W.2d 115, 120-21 (Neb. Ct. App. 2007) (using exclamation marks to both precede and follow the verbal description of the emoji).

^{253.} Id. at 120.

^{254.} Id.

^{255.} See id. at 121 (describing an emoji as "!Batting Eyelashes!").

^{256.} The routine addition of exclamation points in emoji evidence is improper. See Is It "Exclamation Mark" or "Exclamation Point" (!)?, LEXICO.COM. https://www.lexico.com/grammar/exclamation-mark-point [https://perma.cc/LQ6V-8W5A] (last visited Oct. 19, 2019) (explaining exclamation marks are used to indicate excitement, amusement, or phrases shouted or spoken loudly).

^{257.} See generally Goldman, supra note 170, at 1251 (explaining emoji have different meanings in different dialects and the general challenges of emoji interpretation).

^{258.} See State v. Espiritu, 176 P.3d 885, 892 (Haw. 2008) ("[A] text message is a writing because it consists of letters, words, or numbers, set down by mechanical or electronic recording, or other form of data compilation.").

set down in any form"). 259 As a form of writing, evidence of emoji is subject to the best evidence rule. 260

A. EMOJI AND THE BEST EVIDENCE RULE²⁶¹

The best evidence rule does not impose a general standard requiring the production of optimal evidence but specifically relates to writings, photographs, and other recordings. ²⁶² The rule (sometimes known as the original writing rule) has its origins in the common law in the eighteenth century when the reliability of copies made of documents was often dubious. ²⁶³ The rule is now a principle of evidentiary law that is found at both federal and state levels in the United States, ²⁶⁴ and is contained in related laws in other common law countries. ²⁶⁵ In the absence

260. See Espiritu, 176 P.3d at 892 (holding that the recipient of threatening text messages sent to her cell phone from the defendant was able to give verbal evidence about the content of the messages (including emoji) because, although the text messages were held to be "writing," an exception to the best evidence rule applied).

^{259.} FED. R. EVID. 1001 (emphasis added).

^{261.} Issues of relevance, authentication, and hearsay commonly arise in relation to discussions of electronic evidence but are outside the scope of this article.

^{262.} FED. R. EVID. 1002 ("An original writing, recording, or photograph is required in order to prove its content unless these rules or a federal statute provides otherwise.").

^{263.} Omychund v. Barker, 26 Eng. Rep. 15, 33 (1744) (holding that the court will admit the best evidence available to a particular case).

^{264.} For rules of evidence at the federal level, see generally FED. R. OF EVID. 1001–1008 (regarding federal best evidence rules). For rules of evidence at the state level, for example, see generally Cynthia Ford, What the Best Evidence Rule Is - and What it Isn't, 40 Mont. L. 22 (2014), http://scholarship.law.umt.edu/faculty_barjournals/115 (explaining the best evidence rule in the state of Montana); Paul Giannelli, Best Evidence Rule, FAC. PUB., 511 (1991) https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=1510&context=faculty_publications [https://perma.cc/S5ZS-E7MP] (explaining the best evidence rule in the state of Ohio).

^{265.} See McLeod v. Prestige Fin. Ltd. (2016) SC 69 (Scot.) (holding that the best evidence rule still applies in Scotland). But see Masquerade Music Ltd. & Ors v. Springsteen [2001] EWCA (Civ) 563 (Eng.) (holding that the best evidence rule "has finally expired" in England and Wales in relation to civil matters); Australian Evidence Act 1995 (Cth) s 51 (Austl.) (abolishing the best evidence rule and providing a simplified method of giving evidence of documents including those in an electronic form). Section 69 of the Police and Criminal Evidence Act 1984 (UK) governs the admissibility of digital records in criminal cases. This section simply provides that any use of a digital image as evidence must be accompanied by a certificate stating that either the computer system was at all times operating properly, or that any defect in its operation was not such as to affect the accuracy of the record being tendered.

of laws that specifically address digital images tendered in evidence, ²⁶⁶ this rule provides useful guidance.

The Federal Rules of Evidence in the U.S. provide that "[a]n original writing, recording, or photograph is required in order to prove its content unless these rules or a federal statute provides otherwise." 267 Writings and recordings are broadly defined to include writings from computer systems. Thus, a copy or facsimile of a document will be not admissible as evidence in a trial if an original document exists and can be obtained. In other words, an original is necessary to prove the contents of a writing, recording, or photograph. The rule is restricted to cases where the party offering the evidence is seeking to prove the contents of the writing, recording or photographic evidence and not just the fact that an event or fact was memorialized in this way. It ensures that courts receive evidence that best facilitates their task of correctly resolving disputed issues of fact. The sure of the correctly resolving disputed issues of fact.

However, when a document is created digitally using emoji accessed from a computer keyboard or Unicode Consortium array and stored electronically, distinctive issues arise. A fully electronic process produces no original physical document; and a key aspect of digital technology is the ease with which an original text or image can be reproduced. These distinctive characteristics have been recognized in modern statutory versions of the best evidence rule (such as Federal Rule of Evidence 1001(d)) that allow that the original of a digitally stored piece of evidence includes "any printout – or other output readable by sight" of that information, where the printout

^{266.} SELECT COMMITTEE ON SCIENCE AND TECHNOLOGY, FIFTH REPORT, 1997-8, HL, at 2.14 (UK) ("[T]here is no legislation which expressly covers digital images used as evidence, nor any reported cases in which the fact that an image was collected in digital form was at issue").

^{267.} FED. R. EVID. 1002.

^{268.} FED. R. EVID. 1001 advisory committee's note to 1972 proposed rules ("Present day techniques have expanded methods of storing data, yet the essential form which the information ultimately assumes for usable purposes is words and figures. Hence, the considerations underlying the rule dictate its expansion to include computers, photographic systems, and other modern developments.").

^{269.} Ford, *supra* note 264, at 22.

^{270.} FED. R. EVID. 1002.

^{271.} See Ford, supra note 264, at 22.

^{272.} Id. at 22–23.

"accurately reflects the information."²⁷³ Thus, a printout of messages sent through an internet chat room can be an original for the purposes of the rule.²⁷⁴

Apps such as *Snapchat* that make messages and pictures available for very limited periods of time create specific problems of access and authentication.²⁷⁵ Generally, however, since a printout of a digitally created document is a perfect clone of the original document and is regarded as equal in evidentiary force to the real thing, provided that the printouts of messages, emails, photographs, etc., containing emoji can be properly authenticated²⁷⁶ and are not excluded by other rules of evidence (such as relevance and hearsay), they will be admissible in evidence to prove their contents. But the best evidence rule operates to exclude documents that do not precisely mirror the original,²⁷⁷ paraphrase, or re-state it²⁷⁸—and this is what happens when emoji are not presented in their original, visual form. In essence, verbally or textually describing emoji is open to serious evidentiary challenge.

Where emoji are present in a communication, the manner in which they are usually presented to juries—varying from omission to verbal and textual descriptions that may include added punctuation marks—raises issues in relation to duplication. Such approaches alter the record through the manner in which the evidence of the emoji is conveyed. This is

274. See Laughner v. State, 769 N.E.2d. 1147, 1159 (Ind. Ct. App. 2002) (allowing printouts of internet chat room messages as best evidence in accordance with FED. R. EVID. 1001(3), the rule of evidence which is equivalent to the modern FED. R. EVID. 1001(d)).

^{273.} FED. R. EVID. 1001(D).

^{275.} But see FED. R. EVID. 1004 (providing that "other evidence of the contents of a writing, recording or photograph is admissible" if "[a]ll originals are lost or have been destroyed, unless the proponent lost or destroyed them in bad faith.").

^{276.} See Arthur Gingrande, Digital Documents and the Best Evidence Rule, DOC. MEDIA (Jan. 26, 2010) https://documentmedia.com/article-180-Digital -Documents-and-the-Best-EvidenceRule.html; cf. United States v. Jackson, 488 F. Supp. 2d 866 (D. Neb. 2007) (holding that a "cut-and-paste document" of instant messaging conversations collected and edited in a Microsoft Word document was inadmissible as evidence due to the copy method's unreliability).

^{277.} See, e.g., State v. Cook, 777 N.E.2d 882, 886-88 (Ohio Ct. App. 2002) (describing how the "best evidence" rule accepts documents that have been sufficiently mirrored from the original).

^{278.} FED. R. EVID. 1003; see R v. Robson & Harris [1972] 1 WLR 651 (C.C.C.) at 653-56 (Eng.) (describing the distinct authentication approach adopted in the United Kingdom).

significant because this evidence may influence a jury in unknown ways. Digital evidence can be very persuasive evidence in a case, particularly when issues of intent, motive, state of mind, or physical and mental condition are involved. ²⁷⁹ Yet there has been a notable absence of discussion about the legal issues involved in the reproduction of emoji in evidence. ²⁸⁰ One of the few cases to consider the matter was *State v. Nickell*. ²⁸¹

1. State v. Nickell

Ronald Nickell engaged in a series of online exchanges with a person he believed to be a thirteen-year-old girl (in reality, this person was a detective engaged in a covert operation). Nickell befriended the adolescent²⁸² on *Facebook* and over the course of a month exchanged messages that were accompanied by various emoji (smiley faces, emoticons, and unicorns).²⁸³ The messages became increasingly sexualized, asking the young girl about her sexual experiences, instructing her how to masturbate, and describing what he wanted to do to her sexually.²⁸⁴ After arranging to meet the victim, Nickell was arrested and charged with attempted enticement of a child.²⁸⁵

At trial, the court overruled the objection of Nickell's lawyer and admitted transcripts of his online conversations without the emojis that were part of the original exchanges. The defense argued that their inclusion was necessary to enable the jury to fully understand the intent of his statements (as the emoji provided context) and the best evidence rule required their inclusion.²⁸⁶

^{279.} See generally Authenticating Digital Evidence, AM. B. ASS'N. (April 2, 2019), https://www.americanbar.org/groups/gpsolo/publications/gp_solo/2014/september-october/authenticating_digital_evidence/ (offering suggestions on how to use digital evidence).

^{280.} SELECT COMMITTEE, supra note 266, at [3.28] and accompanying text.

^{281.} State v. Nickell, 540 S.W.3d 863 (Mo. Ct. App. 2018).

^{282.} In a memorandum explaining its order, the Missouri Court of Appeals referred to the victim as an actual adolescent rather than the Detective posing as a minor. State v. Nickell, WD80023 1 n.1 (Mo. Ct. App, Mar. 6, 2018) (mem.). This article will adopt the same convention.

^{283.} Id. at 4, 8.

^{284.} Id. at 8.

^{285.} Id.

^{286.} Nickell, WD80023 at 9 (mem.); see also Mo. REV. STAT. § 566.151 (2017).

Following conviction, Nickell appealed on the sole ground that because the transcripts omitted the emoji they were not a duplicate (i.e. an exact or true reflection) of the online conversations and violated the best evidence rule.²⁸⁷

The appellate court dismissed the appeal but did not provide reasons.²⁸⁸ A memorandum provided to the parties, although of no precedential value (it is not a formal opinion of the court)²⁸⁹ gives insight into judicial reasoning on this issue. The court identified two key issues: whether the trial court abused its discretion in declining to apply the best evidence rule and whether the admission of the transcripts without emoji violated that rule.²⁹⁰ Deciding the first issue in the negative, the court found it unnecessary to decide the second²⁹¹ leaving unanswered the fundamental issue of whether the omission of emoji violates the best evidence rule.

Significantly, the appellate court acknowledged that emoji "can give context and change the meaning of words and phrases." It accepted that "an exact reproduction of the conversation" between the appellant and the victim "would have been preferable." Nevertheless, it accepted that the trial court had not abused its discretion in declining to apply the best evidence rule to the particular facts of the case. The court noted:

A best evidence objection may be easily understood by a court when raised with regards to a will or contract, but we cannot say such is the case with a transcript of a Facebook conversation missing its emojis. Without identifying to the court more specifically what emojis were missing and their meaning or why the emojis changed the meaning of a word or phrase *in this case*, we cannot say that the trial court was given sufficient information to be found to have abused the wide discretion to which it is entitled in determining the applicability of the best evidence rule.²⁹⁴

289. Nickell, WD80023 at 2 (mem.) ("This statement does not constitute a formal opinion of this court. It is not uniformly available. It shall not be reported, cited or otherwise used in unrelated cases before this court or any other court.").

^{287.} State v. Nickell, 540 S.W.3d 863 (Mo. Ct. App. 2018) (holding that an online conversation transcript without emojis, copied from Facebook messages with emojis, is admissible).

^{288.} Id.

^{290.} Id. at 7.

^{291.} Id.

^{292.} Id.

^{293.} Id.

^{294.} Id. at 9 (emphasis in original).

In essence, the court accepted that the exclusion of the emoji and related material in the transcripts in this particular case did not materially change the nature of the sexually explicit statements and requests made by Nickell.²⁹⁵

While holding no authority, the decision is useful in highlighting how emoji must be demonstrated to be relevant (an objection or appeal based simply on exclusion will not be sufficient). The reasoning of the trial court (not challenged by the Court of Appeals) is best regarded as an exclusion based on an *exception* to the best evidence rule which permits exclusion when material is of little evidentiary value;²⁹⁶ neither court expressly held that the best evidence rule does not apply to the inclusion of emoji in messages.

B. THE WAY FORWARD

To avoid potential disputes about the admissibility of evidence of emoji, it is essential that these images appear in evidence at trial as they actually appeared in the original platform in the relevant communication.²⁹⁷ This has occurred in some cases²⁹⁸ and is the approach that best satisfies the best evidence rule. It is also how emoji should be included in court opinions and case reports (Westlaw and Lexis do not usually display emoji).²⁹⁹ Given the role of emoji in amplifying or modifying messages, tendering messages in evidence without including them, or verbally describing them rather than presenting them visually in their original form (as continues to occur in many trials), is problematic.

295. *Id.* at 8–9 ("Based on the graphic nature of the messages, describing in detail how she should masturbate, requesting intimate details of what she had and had not done sexually, asking her if she was 'wet' while masturbating, and describing what he wanted to do to her sexually it is difficult to understand how some emoji's could have shown, as he argues in his brief, that Nickell's only intent from the conversation was for them to get together and talk and eat pizza.").

^{296.} E.g., FED. R. EVID. 1004 (excepting the original writing, recording or photographic evidence as not required if "not closely related to a controlling issue").

^{297.} See Henry & Harrow, supra note 239 and accompanying text.

^{298.} See, e.g., Ukwuachu v. State, No. PD-0366-17, 2018 WL 2711167 (Tex. Crim. App. June 6, 2018) (discussing the admissibility of text messages, including an emoji).

^{299.} See generally Goldman, supra note 170.

Of course, as the court noted in State v. Nickell, 300 the presence of emoji accompanying texts may be of varying significance. It may be that their inclusion is of little evidentiary value; 301 in this case, an exception to the best evidence rule may apply.³⁰² This might occur, for instance, when a police operative pretends to be a juvenile and uses emoji to enhance the verisimilitude of an online communication sent to a suspected sex offender.³⁰³ In such cases the use of emoji may be strategically relevant in the investigative phase but of little or no relevance to the prosecution of the matter.³⁰⁴ This seems to have been the reasoning behind the decision of the Missouri Court of Appeals in State v. Nickell. Consequently, a defense lawyer seeking to challenge transcripts of evidence that omit emoji and other symbols should make the case for their inclusion clear by specifying to the court what emojis are missing, identifying their number or location, and giving examples of where they would have changed the context of the words used in a particular transcript.³⁰⁵

Allowing jurors to see emoji in context is simply the starting point to deciphering their meaning. The cases outlined above in relation to threats and grooming illustrate the problems confronting courts trying to decipher the significance of emoji. Having introduced them into evidence and obtained assistance in establishing their significance in a communication, the next step is for courts to explain their reasoning concerning the role of the emoji. Currently, when judges refer to emoji in their opinions they typically reach a conclusion of fact without providing any reasoned analysis. Thus, posts by teenagers are

^{300.} State v. Nickell, 540 S.W.3d 863 (mem. at 9).

^{301.} See Ukwuachu v. State, No. PD-0366-17, 2018 WL 2711167, at *6 n.7 (Tex. Crim. App. June 6, 2018) (Yeary, J., concurring) (noting the lack of testimony as to the inclusion of a particular emoji in a text message exchange tendered in evidence).

^{302.} See FED. R. EVID. 1004 (permitting the admission of a non-original copy of the evidence if it is not "closely related to a controlling issue").

^{303.} State v. Lewis, 423 P.3d 129 (Or. Ct. App. 2018). An emoji of a smiling face was sent in a text message by an undercover police operative masquerading as a fourteen-year-old female to a suspected sex offender who had made online contact.

^{304.} See, e.g., In re M.J., No. 0999, 2018 Md. App. LEXIS 157 (Md. Ct. Spec. App. Feb. 14, 2018) (determining defendant's electronic harassment charge based on the intimate photos posted of the victim, not the emoji present in one of defendant's posts).

^{305.} State v. Nickell, 540 S.W.3d 863 (mem. at 8).

interpreted as intentional threats with little analysis of the commonly offered defense: that the communication was an illadvised attempt at humor or a cathartic 'sounding off' rather than an intentional threat. More detailed reasoning on this and related issues would provide a basis for more consistent and principle-based decision-making by judges.

CONCLUSION

Emoji pervade online communications.³⁰⁶ Typically benign, they nevertheless can constitute or facilitate criminal activity where an element of an offence involves threat, solicitation, or online grooming of minors.³⁰⁷ Relying on conventional understandings of emoji as innocent and cute, defendants have repeatedly sought to avoid criminal liability by claiming that their use of emoji (such as the smiling or winking face) demonstrated an ironic or sarcastic modification of an ostensibly threatening message.³⁰⁸ Similarly, sexual offenders have tried to avoid liability by using coded emoji as slang or digital vernacular that masks the true purpose of their online interactions with potential victims.³⁰⁹ These cases present new challenges for criminal justice systems.³¹⁰ However, police, prosecutors, and defense lawyers have already been obliged to adapt as criminal cases increasingly involve evidence gathered from computers,

 $307.\ \ See, e.g.,$ Richardson, supra note 137; Speed, supra note 138; Lee, supra note 206.

^{306.} See, e.g., Shaul, supra note 6.

^{308.} See, e.g., Ghanam v. Does, 845 N.W.2d 128, 133 n.4 (Mich. Ct. App. 2014) 201, at 145 (discussing defendant's argument that an emoticon could be interpreted sarcastically or as a joke).

^{309.} See, e.g., Speed, supra note 138; and Lee, supra note 206.

^{310.} See, e.g., Emojis Can Now Be Used As Court Evidence, Here's What You Should Expect, CNBC (Feb. 25, 2019), https://www.cnbc.com/video/2019/02/25/emojis-can-now-be-used-as-court-evidence-heres-what-you-should-expect.html [https://perma.cc/9E56-MYBR] (indicating that regarding emoji "the courts had to adjust to text messaging... now they have to adjust to this... emoji have now overtaken emoticons in court opinions). See also, Lee, supra note 206.

cell phones, and other digital devices;³¹¹ the increased presence of emoji will simply be a further step in that progression.³¹²

Legislatures in several countries have responded to the troubling growth in online grooming by introducing new sexual offences that specifically criminalize online contact with a minor for a sexual purpose (without requiring physical contact).³¹³

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^{311.} See Benjamin Weiser, At Silk Road Trial, Lawyers Fight to Include Evidence They Call Vital: Emoji, N.Y. TIMES (Jan. 28, 2015), https://www.nytimes.com/2015/01/29/nyregion/trial-silk-road-online-black-market-debating-emojis.html ("[A]s criminal and civil cases increasingly involve evidence gathered from computers and cellphones, prosecutors and defense lawyers have been forced to adapt.") Digital evidence is also becoming increasingly important in prosecutions in International Criminal Courts. See Aida Ashouri, Caleb Bowers and Cherrie Warden, An Overview of the Use of Digital Evidence in International Criminal Courts, 11 DIGITAL EVIDENCE & ELECTRONIC SIGNATURE L. REV., 115 (2014) (reviewing international criminal cases involving digital evidence).

^{312.} See, e.g., Lee, supra note 206.

^{313.} For instance, a specific offence of 'sexual communication with a child' to remedy a problem with existing law, which required some form of contact, that was enacted in England and Wales in 2015 by Chapter 9 of the Sexual Offences Act 2015 (UK). See, e.g., Explanatory Notes, Serious Crimes Act 2015 9. http://www.legislation.gov.uk/ukpga/2015/9/pdfs/ukpgaen ch. _20150009_en.pdf (criminalizing sexual communication with a child without requiring a particular contact requirement). The offence prohibits the intentional sending of a "sexual communication" (which includes a communication intended to elicit a sexual response) to a child under sixteen by a person aged eighteen years or older. The offence applies to both offline and online communications with the latter including social media, texting, gaming platforms and email. In the first six months after the new offence came into force, 1,316 offences were recorded. See More Than 1,300 Cases of Sexual Communication with a Child Recorded in 6 Months After Change in the Law, NSPCC (2 Feb. 2018), https://www.nspcc.org.uk/what-we-do/news-opinion/ more-than-1300-cases-sexual-communication-with-child-recorded-after-change -law/ [https://perma.cc/XN52-8VMN] (summarizing the geographic, website, and age distribution of sexual communication with a child offenses in England and Wales). Girls aged between twelve and fifteen were the most likely to be targeted, although the youngest victim was a seven year-old girl. Facebook, Instagram and Snapchat were the most common sites used by offenders. See Tim Wyatt and Samuel Osborne, Cases of Children Being Groomed on Instagram Triple, Police Figures Show, INDEPENDENT (Mar. 1, 2019), https://www.independent.co.uk/news/uk/crime/instagram-grooming-sex-crime-[https://perma.cc/EZW9-868U] police-report-nspcc-children-a8801876.html (reporting an increase in online grooming crimes). For Australia, see Criminal Code 1995 (Cth) s 474.27(1) (criminalizing sexual communications if the sender believes the recipient to be under 16 years or age, or simply if the recipient is under 16 years of age). Cf. Canada: in R. v Morrison 2019 SCC 15. (a decision by the Supreme Court of Canada holding that requiring the accused to show reasonable belief that the victim was sixteen years of age violates the

These offences will likely increase the number of criminal prosecutions involving emoji, thereby generating some urgency in developing appropriate strategies for interpreting and representing them in criminal proceedings. Reflected in the exponential increase in emoji and emoticon references in U.S. court opinions since 2004 (with over 30% of all cases being heard in 2018),³¹⁴ it is clear that emoji will present increasing challenges for our courts.³¹⁵ Consequently, while acknowledging the distinct interpretative and representational challenges posed by communications using emoji and the difficulties associated with accurately presenting evidence of them to juries in criminal trials, imposing criminal liability for threats or sexual solicitation of minors conveyed by them is a necessary and vital evolution of the criminal law, demonstrating its adaptation to the digital age.

presumption of innocence. In Canada prosecutors must now prove the accused's knowledge of the victim's age beyond a reasonable doubt).

^{314.} Lee, supra note 206.

^{315.} See, e.g., CNBC, supra note 310.
