

Robert J. Condlin*

I. INTRODUCTION

Until recently the subject of online dispute resolution (“ODR”) has been a matter of interest to a relatively small part of the American legal community,² but that appears to be changing.

¹ Proponents of online dispute resolution sometimes disagree about the best initialism or acronym to describe the process. (An initialism is a set of initials pronounced separately, and an acronym is a set of initials pronounced as a word.) Each of the two obvious choices, ODR (Online Dispute Resolution), and ODS (Online Dispute Settlement), works either as an initialism (O-D-R), or as an acronym (ODS), but not as both. As an acronym ODR is odor, and as an initialism O-D-S is odious. Messrs. Bulinski and Prescott solve the problem by substituting “case” for “dispute” to get OCR. See Maximilian A. Bulinski & J.J. Prescott, *Online Case Resolution Systems: Enhancing Access, Fairness, Accuracy, and Efficiency*, 21 MICH. J. RACE & L. 205 (2016). As an initialism O-C-R does not evoke any unflattering associations, and as an acronym it is just “Ochre,” an ancient family of natural-earth-colored pigments whose major ingredient is dehydrated iron oxide-hydroxide. (Other possible initialisms and acronyms include iDR—Internet Dispute Resolution; eDR—Electronic Dispute Resolution; eADR—electronic Alternative Dispute Resolution; and oADR—online Alternative Dispute Resolution.) The foregoing options notwithstanding, I will use ODR (as an initialism) because most people use it, because “resolution” is more inclusive than “settlement,” and because not all “disputes” are “cases.”

* Professor of Law, University of Maryland Carey School of Law. Thanks to Joanna Bac, Don Gifford, David Gray, Michelle Harner, David Luban, Frank Pasquale and participants in a University of Maryland Law School Faculty Workshop, for very helpful comments; to Trisha Rider for superb research assistance; and to Sue McCarty for her customary trick of turning an ugly duckling of a manuscript into a Blue swan.

² For examples of the early literature, see ETHAN KATSH & JANET RIFKIN, *ONLINE DISPUTE RESOLUTION: RESOLVING CONFLICTS IN CYBERSPACE* (2001); Robert C. Bordone, *Electronic Online Dispute Resolution: A Systems Approach—Potential, Problems, and a Proposal*, 3 HARV. NEGOT. L. REV. 175 (1998); Joseph W. Goodman, *The Pros and Cons of Online Dispute Resolution: An Assessment of Cyber-Mediation Websites*, 2003 DUKE L. & TECH. REV. no. 0004, at 1; Louise Ellen Teitz, *Providing Legal Services for the Middle Class in Cyberspace: The Promise and Challenge of On-Line Dispute Resolution*, 70 FORDHAM L. REV. 985 (2001); Lucille M. Ponte, *Throwing Bad Money After Bad: Can Online Dispute Resolution (ODR) Really Deliver the Goods for the Unhappy Internet Shopper?*, 3 TUL. J. TECH. & INTELL. PROP. 55 (2001). While law school courses in Alternative Dispute Resolution began to proliferate in the 1980s, courses in ODR were less common. There were a few prescient innovators. Joseph Harbaugh, for example, one of the country’s leading negotiation scholars, see, e.g., JOSEPH D. HARBAUGH, *NEGOTIATION: WINNING TACTICS AND TECHNIQUES* (1988), offered a course in Online Negotiation at Nova Southeastern University College of Law, in which students engaged in face-to-face and online negotiation and compared the advantages and disadvantages of the two formats. But this was unusual.

In the last decade or so scholars,³ judges,⁴ and the organized Bar⁵ have begun to see ODR as a partial answer to the “access to justice”⁶ problem faced by people of limited means,⁷ and some even

ODR is popular across the world, *see, e.g.*, MOHAMED S. ABDEL WAHAB ET AL., *ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE: A TREATISE ON TECHNOLOGY AND DISPUTE RESOLUTION* (2012) (leading online dispute resolution anthology in which a majority of the contributions are from legal scholars outside the United States); Louis Del Duca et al., *Facilitating Expansion of Cross-Border E-Commerce: Developing a Global Online Dispute Resolution System*, 1 PENN. ST. J.L. & INT’L AFF. 59 (2012) (describing the “Anatomy of a Global ODR System”); Anjanette H. Raymond & Scott J. Shackelford, *Technology, Ethics, and Access to Justice: Should an Algorithm Be Deciding Your Case?*, 35 MICH. J. INT’L L. 485, 492–510 (2014) (describing ODR programs in India, Mexico, Canada, and the European Union); Colin Rule, *Technology and the Future of Dispute Resolution*, DISP. RESOL. MAG., Winter 2015, at 6 (“Many national governments and international agencies have examined the challenge of cross-border redress over the past 10 years and concluded that ODR is the future.”), but that notwithstanding, I will limit discussion here to United States based programs.

³ See Bulinski & Prescott, *supra* note 1, at 214–40; Amy J. Schmitz, *Remedy Realities in Business-To-Consumer Contracting*, 58 ARIZ. L. REV. 213 (2016); Dafna Lavi, *Three Is Not a Crowd: Online Mediation-Arbitration in Business to Consumer Internet Disputes*, 37 U. PA. J. INT’L L. 871 (2016); Scott J. Shackelford & Anjanette H. Raymond, *Building the Virtual Courthouse: Ethical Considerations for Design Implementation, and Regulation in the World of ODR*, 2014 WIS. L. REV. 615, 615, 618 n.9 (comprehensive list of scholarship on ODR). There is even a set of ABA Best Practices for online dispute resolution. See ABA TASK FORCE ON ECOMMERCE AND ADR, *RECOMMENDED BEST PRACTICES FOR ONLINE DISPUTE RESOLUTION SERVICE PROVIDERS* (2002), <http://www.americanbar.org/content/dam/aba/migrated/dispute/documents/BestPracticesFinal102802.authcheckdam.pdf> [hereinafter ABA BEST PRACTICES REPORT].

⁴ See ONLINE DISPUTE RESOLUTION ADVISORY GROUP, CIVIL JUSTICE COUNCIL, *ONLINE DISPUTE RESOLUTION FOR LOW VALUE CIVIL CLAIMS* (2015), <https://www.judiciary.gov.uk/wp-content/uploads/2015/02/Online-Dispute-Resolution-Final-Web-Version1.pdf> (hereinafter CIVIL JUSTICE COUNCIL REPORT) (report of the Civil Justice Council of England and Wales making the “case for ODR” and recommending the creation of an online dispute resolution program for English courts); BRIGGS, L.J., *CIVIL COURTS STRUCTURE REVIEW: INTERIM REPORT 75–88* (2015), <https://www.judiciary.gov.uk/wp-content/uploads/2016/01/ccsr-interim-report-dec-15-final1.pdf> (describing the implementation of a new online dispute resolution program for England and Wales).

⁵ See ABA COMMISSION ON THE FUTURE OF LEGAL SERVICES, *REPORT ON THE FUTURE OF LEGAL SERVICES IN THE UNITED STATES* 19 (2016), http://www.americanbar.org/content/dam/aba/images/abanews/2016FLSReport_FNL_WEB.pdf (“Online dispute resolution (ODR) is regularly used in the private sector to help businesses and individuals resolve civil matters without the need for court proceedings or court appearances, and there is increasing interest in creating court-annexed ODR systems.”); *ABA Announces Creation of Center for Innovation to Increase Access to Justice, Improve Legal Services Delivery*, ABA (Aug. 15, 2016), https://www.americanbar.org/news/abanews/aba-news-archives/2016/08/aba_announces_creati.html; Victor Li, *WABA Announces Plan to Create Center for Innovation*, ABA ONLINE J. (Aug. 16, 2016), http://www.abajournal.com/news/article/aba_announces_plan_to_create_center_for_innovation (“The purpose of the Center will be to foster innovative and ground-breaking approaches to bridging the access to justice gap as well as to improve the delivery of legal services . . . [T]he Center already has one major project lined up. [It is] going to assist with a court-annexed online dispute resolution pilot project . . . in New York.”).

⁶ ODR proponents discuss the subject of “access to justice” at length, but most of the time they treat the expression as a single word rather than a two-part phrase, and assume that provid-

see it as the “wave of the future”⁸ for most if not all forms of civil dispute resolution.⁹ Having honed its act in private, small-scale,

ing “access” to a dispute resolution system is the same as providing access to a “just” dispute resolution system. *See, e.g.,* Raymond & Shackelford, *supra* note 2, at 492–94. In an argument reminiscent of Plato’s Allegory of the Cave, they seem to assume that any dispute resolution system is better than the present brick-and-mortar system as long as participants in the system believe they are being treated fairly, that the “shadow” of justice is as good as the real thing. *See* ALLEN BLOOM, *THE REPUBLIC OF PLATO: SECOND EDITION* 404–07 (1991) (interpreting the Allegory of the Cave); Robert J. Fogelin, *Three Platonic Analogies*, 80 *PHIL. REV.* 371, 378–81 (1971) (“the Allegory of the Cave is a ‘parable’ to illustrate the degree in which our nature may be enlightened or unenlightened.”) Messrs. Bulinski and Prescott are the only writers to connect the “access” and “justice” points explicitly, by arguing that moving standardized, low-value disputes online will permit judges to devote more time and effort to (and thus provide more justice in) complex, high value cases. *See* Bulinski & Prescott, *supra* note 1, at 214–40. They also agree, however, that “the notion of ‘access to justice’” is “capacious,” and that the phrase is used to “convey a wide spectrum of ideas.” *Id.* at 215. Professor Remus makes a distinction similar to that between access and justice in her criticism of the market-exchange model for restructuring the legal profession, pointing out that it “narrows the goal [of] providing universal access to justice to [the goal of] providing universal access to the market for legal services.” *See* Dana Remus, *Reconstructing Professionalism*, U.N.C. Legal Stud. Res. Paper No. 2676094 33 (Apr. 2015), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2676094.

⁷ Professor Ponte describes the access problem faced by consumers in online transactions. *See* Lucille M. Ponte, *Boosting Consumer Confidence in E-Business: Recommendations for Establishing Fair and Effective Dispute Resolution Programs for B2C Online Transactions*, 12 *ALB. L.J. SCI. & TECH.* 441, 442–44 (2002) (“In Cyberspace, e-consumers with purchasing problems have no clear means of redress for their concerns because cyberspace has no uniform laws and no unified court system.”).

⁸ *See* Victor Li, *Is Online Dispute Resolution the Wave of the Future?*, ABA ONLINE J. (Mar. 18, 2015), http://www.abajournal.com/news/article/is_online_dispute_resolution_the_wave_of_the_future; Anna Stolley Persky, *Home Court Advantage*, ABA ONLINE J. 16 (December 1, 2016), http://www.abajournal.com/magazine/article/home_court_advantage/ (quoting the communications director of the Michigan Supreme Court describing “online court programs as the wave of the future”). Professors Katsh and Rule are particularly bullish on the potential of advanced dispute resolution software to take over the world of dispute resolution generally. *See* Ethan Katsh & Colin Rule, *What We Know and Need to Know About Online Dispute Resolution*, 67 *S.C. L. REV.* 329, 332 (2016) (extolling the power of advanced dispute resolution software to “take on the cases that have previously required human attention.”).

⁹ ABA COMMISSION ON THE FUTURE OF LEGAL SERVICES, *supra* note 5, at 19 (Some observers predict that “[i]n time, most dispute resolution processes will likely migrate online.”); HAGUE INSTITUTE FOR THE INTERNATIONALISATION OF LAW, *ODR AND THE COURTS: THE PROMISE OF 100% ACCESS TO JUSTICE?* (2016) (describing the spread of online dispute resolution internationally); Katsh & Rule, *supra* note 8, at 339 (“in time, most dispute resolution processes will likely migrate online”); Daniel Rainey, *Glimmers on the Horizon: Unique Ethical Issues Created by ODR*, *DISP. RESOL. MAG.*, Winter 2015, at 20, 21 (“Many of the new ODR applications . . . are targeting individual third-party practitioners and those in small firms who might take more traditional offline disputes into online disputes.”); Beth Trent & Colin Rule, *Online Dispute Resolution (ODR) and the Future of the Law*, *INSIDE COUNS.* (Aug. 8, 2015), <http://www.insidecounsel.com/2015/08/24/online-dispute-resolution-and-the-future-of-the-la> (“Ultimately, ODR will transform every aspect of dispute resolution, including the traditional forms of arbitration. Technology-facilitated communication will be as common in dispute resolution as it is in modern business.”); *see also* Ben Barton, *Modria and the Future of Dispute Resolu-*

online, commercial disputes,¹⁰ ODR now seems set on expanding into the world of public, civil disputing generally, bent on taking over most, if not all, of the civil judicial universe.¹¹ The principal forces behind this move are the forces behind many popular movements in the present day—money and convenience.¹² Software-driven systems for almost everything are thought to be less expensive and more nimble than brick and mortar systems (think Airbnb in housing, Uber in transportation, Ally Bank in banking, and the

tion, BLOOMBERG L. (Oct. 1, 2015), <https://bol.bna.com/modria-and-the-future-of-dispute-resolution/> (“[O]nline dispute resolution . . . is a growing substitute for in-court litigation. . . . Corporations all over the world are warming to the idea that disputes can be solved by computers so efficiently and fairly that they stop becoming a drag on profits and start becoming a method of increasing customer loyalty.”).

¹⁰ See Raymond & Shackelford, *supra* note 2, at 501–02 (describing the eBay ODR program, the first and most sophisticated of the early in-house ODR programs); BRIGGS, *supra* note 4, at 75–78 (describing different ODR systems, including early in-house programs); Shackelford & Raymond, *supra* note 3, at 623–30 (overview of the early ODR systems).

¹¹ See Ethan Katsh, *Dispute Resolution Without Borders: Some Implications for the Emergence of Law in Cyberspace*, 11 FIRST MONDAY, no. 2 (Feb. 6, 2006), <http://firstmonday.org/ojs/index.php/fm/article/view/1313/1233> (“[I]t is quite possible that information processing capabilities [of modern software] will expand the various models of private ordering and even, at times, allow public law models to emerge.”). Not everyone believes that ODR is ready for prime time. See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 5 (“ODR is not appropriate for all classes of dispute but, on the face of it, is best placed to help settle high volumes of relatively low value disputes”); Nikola Balvin & Melissa Conley Tyler, *Emotions in Cyberspace: The Advantages and Disadvantages of Online Communication*, ORGANISATIONAL PSYCHOLOGIST, Sept. 2006, at 5, 6 (“ODR applications seem most appropriate for business, low-emotion situations while sensitive issues are best negotiated in person.”); Julio César Betancourt & Elina Zlatanska, *Online Dispute Resolution (ODR): What Is It, and Is It the Way Forward?*, 79 ARB. 256, 258 (2013) (“[T]he idea of banishing offline dispute settlement and dispute resolution methods—in the near future—is extremely unlikely ever to come true.”); Bulinski & Prescott, *supra* note 1, at 228 (“Many cases are of course too complicated to be resolved with . . . OCR systems.”).

¹² See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 3, 9–10 (describing “The economic case” for ODR); Raymond & Shackelford, *supra* note 2, at 486 (describing ODR as an answer to the long delays faced in court systems across the country as a result of financial shortfalls); *id.* at 488 (“Our focus here is on . . . accessibility and cost.”); *id.* at 514 (describing how ODR systems can reduce costs “by removing the most costly element [from dispute resolution] . . . the human neutral decision maker.”); Rule, *supra* note 2, at 5 (“People now believe that they should be able to report a problem at any time of day and get quick, round-the-clock support to resolve it transparently and effectively.”); Trent & Rule, *supra* note 9 (“Business has gone virtual, but the resolution of disputes is still primarily a face-to-face endeavor. To stay relevant to the challenges presented by global business we need to adapt our resolution systems to the new realities of a networked world.”). The debate over ODR is a subset of the debate over the role of technology in lowering the cost of legal services generally, see Remus, *supra* note 6, at 6, n.19 and discussions therein, which in turn is a subset of the debate over Neoliberalism based social reform. *Id.* at 12–16. In addition to saving money, many ODR programs are designed to remove lawyers from the dispute resolution process in the hope that disputing will be less frequent and less adversarial if that is done. See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 17–19.

like),¹³ and it is no surprise that courts eventually have become a target for a makeover. Attracted by the possibility of faster, cheaper, and more convenient dispute resolution, companies, states of the union, and countries around the world now have begun to create ODR programs on a scale that makes the process, along with outsourcing, AI-based practice management software, and non-traditional legal service providers, one of the principal forces redefining the traditional practice of law.¹⁴

Often overlooked in this cost and convenience *über alles* perspective is whether resolving disputes is the same as providing housing, transportation, and banking. There are reasons to ask, as Owen Fiss did about plea-bargaining in the 1980s,¹⁵ if the cheap and efficient processing of disputes is a capitulation to the conditions of modern society more than a superior system for administering justice.¹⁶ For example, most ODR programs require parties

¹³ See Bulinski & Prescott, *supra* note 1, at 206, 238 (describing the use of online systems for a wide variety of economic transactions that once were conducted in person, using banking-related services as a principal example); *Gref Predicts Russia's Sberbank Will Computerize 80% of Decisions by 2021*, MOSCOW TIMES (Sept. 9, 2016), <https://themoscowtimes.com/news/sberbank-to-computerize-80-of-decisions-by-2021-55278> (noting that CEO of Sberbank, Russia's largest bank, says within five years "80% of all [lending] decisions will be made using artificial intelligence," and that such decisions will be of a "significantly better quality" than decisions made by humans).

¹⁴ See Julie Sobowale, *How Artificial Intelligence Is Transforming the Legal Profession*, ABA ONLINE J. (Apr. 1, 2016), http://www.abajournal.com/magazine/article/how_artificial_intelligence_is_transforming_the_legal_profession (describing how expectations for artificial intelligence's contributions to law practice management "have changed significantly over the past several decades"); David Allen Larson, *Artificial Intelligence: Robots, Avatars, and the Demise of the Human Mediator*, 25 OHIO ST. J. ON DISP. RESOL. 105, 110 (2010) ("Artificial intelligence devices are proliferating and, like it or not, increasingly will become a greater part of dispute resolution and problem solving processes."); *id.* at 146–62 (describing artificial intelligence applications in dispute settlement); Andrea M. Braeutigam, *What I Hear You Writing Is . . . Issues in ODR: Building Trust and Rapport in the Text Based Environment*, 38 U. TOL. L. REV. 101, 116 (2006) (describing how "[p]eople are comfortable with Textual Communication . . . [because] the culture has changed"); Anna Stolley Persky, *supra* note 8 (describing the Michigan Matterhorn program for resolving disputes over traffic ticket, failure to pay outstanding warrants, and driving with a suspended license, online).

¹⁵ See Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073 (1984). See also Raymond & Shackelford, *supra* note 2, at 498 (asking if the Indian online "Lok Adalats [i.e., People's Courts] are merely a by-product of a failed and overburdened judicial system, or an alternative, bottom-up justice delivery system?").

¹⁶ The question of whether ODR produces just results is different for software controlled systems than it is for systems controlled by humans (working either by themselves or with software), and my comments in this article are limited to systems controlled, either exclusively or principally, by software, since those systems are the ones most widely in use and the ones touted to have the greatest potential. See Davide Carneiro et al., *Using Genetic Algorithms to Create Solutions for Conflict Resolution*, 109 NEUROCOMPUTING 16 (2013) (describing the potential uses of predictive algorithms in dispute resolution). But see Shackelford & Raymond, *supra* note 3,

to describe their claims in fixed, pre-defined, component parts that may or may not capture all of the dimensions of the claims, and may or may not permit parties to recover all that the claims are worth. ODR programs also limit the opportunity to argue the substantive merits of the claims in dispute, even though uncoupling disputes from their substantive merits can undermine the fairness of individual outcomes and, if widespread, threaten the legitimacy of dispute resolution systems themselves.¹⁷ When not based on normative standards, dispute resolution is just another form of bureaucratic processing, the resolution of disagreements according to a set of tacit, often biased, intra-organizational, administrative norms (e.g., seller is always correct), that are defined by repeat players who “capture” the system and use it for their private ends.¹⁸

at 627–28 (describing the argument that ODR systems can be fully automated as “going to extremes”); *id.* at 628 (“software is designed to support, and in certain instances replace live neutrals [in ODR, and] this technology will undoubtedly include some level of automation and will likely use predictive negotiation algorithms as some portion of the dispute resolution process. But the question again is: how much is too much?”); *id.* at 645 (asking “Is it possible to regulate ODR so as to harmonize the interests of justice and commerce?”); Bulinski & Prescott, *supra* note 1, at 228 (“Many cases are of course too complicated to be resolved with . . . OCR systems.”).

¹⁷ See Robert J. Condlin, *The Nature of Dispute Bargaining*, 17 CARDOZO J. CONFLICT RESOL. 393, 405–24 (2016) (explaining how humans are predisposed by evolution and natural selection to resolve disputes in accordance with normative standards). See also Raymond & Shackelford, *supra* note 2, at 521–22 (“[L]ittle regulation exists to prevent [ODR] providers from focusing on cost and efficiency over due process.”); Bulinski & Prescott, *supra* note 1, at 212 (describing how a participant in an online dispute resolution system should have the opportunity “to explain his side of the story to [a] judge.”); *id.* at 231 (“Individuals tend to have more faith in systems when they feel they have had an opportunity to speak.”); BERKMAN CENTER FOR INTERNET & SOCIETY, *Disputes: Criteria for Selection of ODR Provider*, in E-COMMERCE: AN INTRODUCTION, <http://cyber.law.harvard.edu/olds/ecommerce/disputes.html#odr> (last visited Nov. 14, 2016) (“The [ODR] procedure should provide a reasonable opportunity for all parties to present their viewpoints before the ODR professional and to hear the arguments and facts put forward by the other party.”).

¹⁸ On the nature of “regulatory capture” generally, see Richard A. Posner, *Natural Monopoly and Its Regulation*, 21 STAN. L. REV. 548, 624 (1969) (“Because regulatory commissions are of necessity intimately involved in the affairs of a particular industry, the regulators and their staffs are exposed to strong interest-group pressures. Their susceptibility to pressures that may distort economically sound judgments is enhanced by the tradition of regarding regulatory commissions as ‘arms of the legislature,’ where interest-group pressures naturally play a vitally important role.”); George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3, 3 (1971) (“[A]s a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.”); Mark Green & Ralph Nader, *Economic Regulation vs. Competition: Uncle Sam the Monopoly Man*, 82 YALE L.J. 871, 876 (1973) (“[A] kind of regular personnel interchange between agency and industry blurs what should be a sharp line between regulator and regulatee, and can compromise independent regulatory judgment. In short, the regulated industries are often in clear control of the regulatory process.”). For evidence of the

ODR's use of software algorithms to resolve the substantive differences underlying disputes also raises fairness issues not present in dispute resolution systems run exclusively or even principally by humans. For example, it is not difficult to understand how routine, standardized, and uncomplicated disputes could be reduced to single issues and resolved acceptably by algorithms, or how parties to disputes could choose software-driven systems over human ones when the stakes are small, the issues routine, and cost and convenience are the overriding concerns.¹⁹ But when disputes require complicated legal, moral, and political judgments to determine outcome, as they often do in modern civil litigation, it is difficult to understand how software algorithms can make the reasonableness determinations needed to make and justify such judgments. Software is logical, not reasonable, and legal judgments often require both qualities in equal measure. The attraction of ODR depends upon the accuracy of the "wave of the

"capture" problem in ODR, *see, e.g.*, Katsh & Rule, *supra* note 8, at 336–37 ("Statistics show that [the World Intellectual Property Organization and National Arbitration Forum] rule in favor of trademark holders approximately 85% of the time," in domain name dispute decisions); Raymond & Shackelford, *supra* note 2, at 519–20 (describing how Insurance Services Inc. purchase of sixteen percent of ClickNsettle.com could be expected to "raise concerns about the objectivity and impartiality" of the business to handle "conflicts that inevitably exist when close business associates decide cases or run businesses that dispense justice."); Dusty Bates Farned, *A New Automated Class of Online Dispute Resolution: Changing the Meaning of Computer-Mediated Communication*, 2 FAULKNER L. REV. 335, 342 (2011) ("[W]e know of many biases within ODR providers which undermine neutrality . . ."); Shackelford & Raymond, *supra* note 3, at 617 ("one can imagine the conflict of interest issues that emerge" when major clients of an ODR provider own a portion of the provider); *id.* at 652 (describing why it is important to ensure that ODR platform developers do not stack the deck in favor of sophisticated participants); Bulinski & Prescott, *supra* note 1, at 218 ("[W]e know that knowledge of court proceedings is one of the primary advantages that repeat players have over individuals who only attend a single proceeding," (citing Marc Galanter, *Why the Haves Come Out Ahead: Speculations on the Limits of Legal Change*, 9 L. & Soc'y REV. 95, 97–103 (1974))). The ABA Task Force on Best Practices for ODR was concerned enough about the problem to recommend that ODR providers disclose "the number of cases resolved in favor of businesses [and] the number of cases resolved in favor of the consumer" in "regular periodic statistical reports . . . published online that permit a meaningful evaluation" of the provider's services, *see* ABA BEST PRACTICES REPORT, *supra* note 3, at 3, as well as "disclosure of all matters that might raise a reasonable question about the impartiality of the ODR Provider," based on contractual relationships with merchants, trade associations, businesses, and personal relationships, financial interests, and the like. *Id.* at 6.

¹⁹ The reason is a variation of the punchline to an old joke about academic politics: because "the stakes are so low." Many court dockets consist of small stakes, routine, standardized disputes (e.g., civil infraction citations, failure-to-appear warrants, traffic tickets, and the like) that ODR systems can resolve as easily as judges. *See* Bulinski & Prescott, *supra* note 1, at 208. ODR becomes problematic only when it moves into the realm of moderate to complex civil disputes.

future”²⁰ claim, however, because the savings generated by online systems will be quite modest if the systems resolve only disputes that would not have required much judicial intervention to begin with; and a wave of the future must reach the beach, not break on the rocks.

I discuss the foregoing issues in the following manner. In Part II, I provide a brief overview of ODR systems, describing the largest, most well-known, and most sophisticated platforms now in place, to give the reader a sense of the richness, variety, and benefits of online disputing, and a hint of developments still to come. In Part III, I describe certain legal, political, and moral concerns that have yet to be addressed in the ODR literature, and identify some of the unintended consequences the widespread adoption of ODR systems might produce. And in Part IV, I describe ODR’s unfinished agenda, the questions proponents of the process must answer, and the refinements they must make to existing models, if online systems are to satisfy the demands of state-sanctioned, public dispute resolution.

II. VARIETIES OF ONLINE DISPUTE RESOLUTION

The concept of online dispute resolution encompasses a broad array of systems, platforms, and programs, ranging from education, outreach, and feedback on one end, to mediation, conciliation, arbitration, and adjudication on the other,²¹ and not everyone using the expression has the same thing in mind.²² A short description of a few prominent and representative systems will help.²³ Early

²⁰ See DINTY W. MOORE, *THE EMPEROR’S VIRTUAL CLOTHES: THE NAKED TRUTH ABOUT INTERNET CULTURE* xiv (1995) (speculating, erroneously as it turned out, that every person on the planet will be networked by the year 2003). Some “waves of the future” break on the rocks instead of the beach.

²¹ See ABA TASK FORCE ON ELECTRONIC COMMERCE AND ALTERNATIVE DISPUTE RESOLUTION, *ADDRESSING DISPUTES IN ELECTRONIC COMMERCE* 16 (2002), <http://www.americanbar.org/content/dam/aba/migrated/dispute/documents/FinalReport102802.authcheckdam.pdf> [hereinafter ABA ELECTRONIC COMMERCE REPORT]; Ponte, *supra* note 2, at 66–87 (describing the various dispute resolution services available online).

²² See ABA ELECTRONIC COMMERCE REPORT, *supra* note 21, at 1 (“ODR is a broad term that encompasses many forms of alternative dispute resolution that incorporate the use of the Internet, websites, email communications, streaming media and other information technology as part of the dispute resolution process.”), *id.* at 15 (“the term ODR is a relatively new phrase and may convey different things to different people.”); Betancourt & Zlatanska, *supra* note 11, at 259–63 (describing E-Negotiation, E-Mediation, and E-Arbitration forms of ODR).

²³ See ABA ELECTRONIC COMMERCE REPORT, *supra* note 21, at 17 n.36 (providing lists of ODR providers.); Raymond & Shackelford, *supra* note 2, at 501–04 (distinguishing between

ODR programs were created to resolve disputes arising out of simple, small-stakes, high-volume, standardized, commercial transactions over the Internet, and the ODR platforms designed to resolve these disagreements were equally simple. The best example is the blind-bidding system of companies like Smartsettle²⁴ and Cybersettle.²⁵ In Blind Bidding, parties submit offers for settlement to a central computer and do not reveal the offers to one another. The system's computer software determines if the offers are within a proximity range set ahead of time by the software or the parties, and if they are, the dispute is resolved by splitting the difference between the offers. If the offers are not within the specified range, they are not disclosed and the offer-making process continues, either for a set number of rounds or indefinitely, depending upon the system. In effect, the system collapses the advocacy and inquiry dimensions of bargaining into offer making, and reduces negotiation to the exchange of proposals.²⁶ It is a system adapted to

"self-contained" and "full service" providers); Goodman, *supra* note 2, at 2–6 (describing the third party ODR systems of Cybersettle, clickNsettle, SettlementOnline, SmartSettle, Internet Neutral, Square Trade, One Accord, and WebMediate). ODR programs come and go on a regular basis, *see* Ethan Katsh & Leah Wing, *Ten Years of Online Dispute Resolution (ODR): Looking at the Past and Constructing the Future*, 38 U. TOL. L. REV. 19 (2006) (describing the large number of ODR programs that no longer exist), but for a relatively current list of active programs, along with brief descriptions of how each program operates, *see* CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 11–16 (describing eleven ODR programs "up and running around the world"); Del Duca et al., *supra* note 2, at 59 ("trac[ing] the birth of the internet, expansion of e-commerce, and the resulting evolution of ODR systems in the past two decades."); Katsh & Rule, *supra* note 8, at 332 (brief history of "the first few years of ODR"); Noam Ebner & Jeff Thompson, @ Face Value? *Nonverbal Communication & Trust Development in Online Video-based Mediation*, 1 INT'L J. ONLINE DISP. RESOL., no. 2, at 19 (2014), http://www.elevenjournals.com/tijdschrift/ijodr/2014/2/IODR_2352-5002_2014_001_002_001 (listing global and regional surveys that describe how the "number and spread of ODR providers has fluctuated over the past fifteen years."). Ironically, given its claim to be economical, cost is one of the principal reasons ODR systems fail. *See* Shackelford & Raymond, *supra* note 3, at 628–29 ("most, if not all, of the prior providers [of ODR services] have ultimately failed . . . due to cost [sic] associated with the maintenance, upkeep, and service of the [ODR] platform . . . [and] for those that understand and build [ODR] platforms the solution is simple: reduce costs by automating as much of the system as possible.").

²⁴ *See* SMARTSETTLE, <https://www.smartsettle.com/>. *See also* CIVIL JUSTICE REPORT, *supra* note 4, at 11–16 (describing the Smartsettle ODR program). Smartsettle has moved well beyond the blind-bidding model to provide algorithm driven negotiation and mediation services for small claims, family disputes, and the like.

²⁵ *See* Diane Levin, *Cybersettle Makes the Case for Resolving Disputes Online*, MEDIATION CHANNEL (Feb. 20, 2008), <https://mediationchannel.com/2008/02/20/cybersettle-makes-the-case-for-resolving-disputes-online/> (describing the Cybersettle blind bidding system).

²⁶ *See* Robert J. Condlin, "Cases on Both Sides": *Patterns of Argument in Legal Dispute-Negotiation*, 44 MD. L. REV. 65, 67–70 (1985) (describing the three-part nature of negotiation as "assessment, persuasion, and exchange."). Proponents of ODR seem to think of dispute resolu-

resolving disputes about damages more than liability,²⁷ and cases that involve single, uncomplicated, standardized issues that are not cost effective to litigate. Claims under insurance policies of various types are the most common examples.²⁸

More advanced ODR models were quick to emerge. Square Trade,²⁹ for example, offered a platform for resolving delivery, warranty, billing, and misrepresentation disputes between one-time actors in online, commercial transactions. A party filed a claim by choosing from a set of pull-down menus, filled in open-text boxes, and ranked solutions from a set of choices suggested by the Square Trade software. Square Trade would email the party's responses to the other party in the dispute and ask her to fill in the same boxes and make the same selections. If the dispute was not resolved through this automated process, it would be referred to an online mediator who, communicating privately with both sides through asynchronous email, would help the parties identify common ground using strategies and practices similar to those used in face-to-face mediation.³⁰ In effect, Square Trade combined features of blind bidding with those of in-person mediation to offer an online version of facilitated mediation.

tion as exchanging information, believing that disputes will dissolve themselves if parties are fully informed.

²⁷ Cf. Goodman, *supra* note 2, at 10 ("full-automated cyber mediation can . . . only handle disputes where the amount of the settlement is the only unresolved issue . . . [this] leaves out the possibility for innovative, interest-oriented, out-of-the-box negotiating that is the hallmark of many successful negotiations.").

²⁸ See ABA ELECTRONIC COMMERCE REPORT, *supra* note 21, at 17 n.35; Larson, *supra* note 14, at 160 (describing the "limited form of artificial intelligence available in Blind Bidding systems," and the Smartsettle system's particular attempt "to integrate optimization algorithms into negotiation" in "a very real attempt to create a system that is intelligent."); Goodman, *supra* note 2, at 2-3 (describing the blind bidding systems of Cybersettle, SettlementOnline, clickNsettle).

²⁹ Although Square Trade developed in combination with eBay, it offered its services to more than eBay users. See Orna Rabinovich-Einy, *Technology's Impact: The Quest for a New Paradigm for Accountability in Mediation*, 11 HARV. NEGOT. L. REV. 253 (2006). Square Trade now offers an extended warranty service for consumer electronic appliances, and is no longer in the dispute resolution business. See SQUARE TRADE, <https://www.squaretrade.com/>. See also PABLO CORTES, *ONLINE DISPUTE RESOLUTION FOR CONSUMERS IN THE EUROPEAN UNION* 149 (2010) (describing how Square Trade's original dispute resolution service has been discontinued). Professor Katsh credits Square Trade with "realizing that if dispute resolution was to be effective in an environment of eBay's scale, . . . technology needed to be a resource that provided at least some of the expertise of a trained third party." See Katsh, *supra* note 11.

³⁰ I have taken this description of the Square Trade program principally from Rabinovich-Einy, *supra* note 29, at 257-60.

The eBay dispute resolution program represents the next major level of development.³¹ Designed to resolve disputes arising out of auction-related transactions on the eBay website, it adopted a shuttle diplomacy form of mediation in which a mediator³² carried on all communication via asynchronous email with each side individually.³³ A party would commence a dispute by clicking a link on the eBay customer service page and filling out a complaint. Upon receiving the complaint, the mediator would email it to the adverse party, provide information about the mediation process, solicit the party's responses, and inquire about her willingness to mediate the dispute. If both parties agreed to participate, each would be given an opportunity to present an email narrative of her or his claims, demands, and desires. The mediator would identify the basic differences in dispute (sometimes after additional communication with the parties), present his synopsis of the problem, describe the decisions that needed to be made, solicit reactions, and leave it to the parties to choose a resolution. If the parties could not agree, the dispute would be considered at an impasse and made inactive.

Modria, a spin-off from the eBay program,³⁴ took the development of online programs to a new level of sophistication, promising dispute resolution methods and procedures that could resolve disputes fairly as well as economically and efficiently,³⁵ both high-

³¹ The University of Massachusetts Group designed the eBay program to run jointly with PayPal in 1998. See Ethan Katsh et al., *E-Commerce, E-Disputes, and E-Dispute Resolution: In the Shadow of "eBay Law,"* 15 OHIO ST. J. ON DISP. RESOL. 705, 708–12 (2000) (describing the design of a single mediator—shuttle diplomacy system for resolving eBay disputes). Like many in the mediation world, the UMass group seems to believe that most disagreements in life would dissolve if parties just kept talking with one another, that disputes are based on mistaken perceptions of interest more often than on opposing conceptions of the good, and that successful dispute resolution is just a matter of managing feelings, temper, and tone. *Id.* at 714–15. See also Del Duca et al., *supra* note 2, at 65–66 n.32 (describing the operation of the eBay dispute resolution program).

³² See Katsh et al., *supra* note 31, at 709 (describing how a mediation format was adopted to make it easier to obtain the participation of adverse parties. Online arbitration programs such as Virtual Magistrate had found that respondents in disputes often were unwilling to consent to the decision-making authority of an arbitrator.).

³³ The system designers would have preferred to use other communication software but chose email because the parties were most comfortable with it. See Katsh et al., *supra* note 31, at 709–10.

³⁴ Modria was the creation of Colin Rule, the first director of the eBay program. See Raymond & Shackelford, *supra* note 2, at 503 (“Colin Rule was . . . the creator of the original eBay/PayPal dispute resolution system.”).

³⁵ The “fairness” claim seems to be based on “satisfaction survey” research showing that parties continue to use eBay, PayPal, and other such dispute resolution systems even when they have been unsuccessful in using them in the past. See Barton, *supra* note 9, at 3 (citing <http://>

stakes, substantively complicated disputes (e.g., patent, car insurance, property tax) as well as low-dollar, routine ones.³⁶ The heart of the Modria system was a custom-designed “Fairness Engine” made up of a diagnosis module for gathering relevant information, a negotiation module for summarizing areas of agreement and disagreement and making suggestions for settlement,³⁷ a mediation module for third-party assistance in settling, and an arbitration module to impose a resolution when all else failed.³⁸ The system, according to its proponents, was “superior to anything run by

modria.com/blog/lessons-in-customer-support-at-ebay-the-birth-of-autmated-resolutions-part-2/). This makes the familiar mistakes of equating continuing use with satisfaction, and satisfaction with fairness. Continuing use is evidence of fairness only if participants in the systems were fully informed of the substantive norms governing their disputes, and the norms protected the participants’ legal rights fairly and fully. If participants thought they were treated fairly but were mistaken, the system was not fair even if participants said it was. Since the algorithms that drive ODR systems are secret, however, participants in such systems rarely are in a position to know whether they have been treated fairly, and their statements that they have been must be treated with skepticism. eBay makes a similar “fairness” claim for its system. See Bulinski & Prescott, *supra* note 1, at 208 (“eBay currently advertises its online approach to dispute resolution as ‘a new, unbiased method that can help you resolve disputes that may arise involving eBay transactions.’”) (citing *Dispute Resolution Overview*, EBAY, <http://pages.ebay.com/services/buyandsell/disputeres.html>).

³⁶ See Raymond & Shackelford, *supra* note 2, at 503 (“Modria is designed to be a full-service private provider of dispute resolution services in that it allows parties to bring any dispute to the online platform.”) See also Emilia Bellucci & John Zeleznikow, *AI Techniques for Modeling Legal Negotiation*, 1999 PROC. OF THE 7TH INT’L CONF. ON ARTIFICIAL INTELLIGENCE & THE L. 108; Agnar Aamodt & Enric Plaza, *Case-based Reasoning: Foundational Issues, Methodological Variations, and System Approaches*, 7 ARTIFICIAL INTELLIGENCE COMM. 39, 40–45 (1994).

³⁷ See Raymond & Shackelford, *supra* note 2, at 515 (noting that within systems that employ logarithms and other types of technology based metrics “parties rank and value each issue within the dispute by allocating a sum amongst all issues. The platform then uses the number to optimize each other’s desires and to make suggestions of a fair outcome.”).

³⁸ Modria claims that the vast majority of disputes brought to it are settled in the first two stages of the process. Its goal is to resolve about 90% of the cases brought to it through software alone. See Raymond & Shackelford, *supra* note 2, at 514.

humans,”³⁹ and “the online small-claims court for the 21st century.”⁴⁰

For some, the foregoing text-based ODR systems are just the beginning of the story. In a short time, many believe, video-based systems using teleconferencing,⁴¹ intelligent robots, avatars, and holograms will supplant these early models altogether, and when that happens resolving disputes over the Internet will be virtually the same as resolving them in person.⁴² A few even see machines taking the task of resolving disputes out of the hands of humans altogether.⁴³ After all, the argument goes, if “machines already

³⁹ See Barton, *supra* note 9, at 2–3. Not everyone warmed to Modria. Scott Greenfield’s reaction (on his blog Simple Justice) is representative of the criticisms. He found fault with the program (and *eQuibbly*, a Canadian counterpart that has since folded), for its lack of transparency on such basic issues as who decides a dispute when the parties are unable to resolve it for themselves; what qualifications such people have for making such decisions; how one knows if the decision makers are truly neutral; what law governs decisions; how parties submit and test evidence for trustworthiness and accuracy; whether there is an appeal process; whether the parties could compel the production of evidence; and other such issues. See Scott H. Greenfield, *Online Dispute Resolution (Or Why You Can’t Have Nice Things)*, SIMPLE JUST. (June 8, 2014), <https://blog.simplejustice.us/2014/06/08/online-dispute-resolution-or-why-you-cant-have-nice-things/>; see also ABA BEST PRACTICES REPORT, *supra* note 3, at 8–9 (“ODR Providers should disclose . . . the minimum qualifications required for inclusion on the ODR Provider’s panel of neutrals, such as education level, lawyer/non-lawyer, prior ADR experience [and] the qualifications (including ADR training, degrees or certificates, level of experience and areas of expertise) of individual neutrals.”) For a description of the similar Facebook online dispute resolution program, see Mary Novak, *Facebook’s User Conflict Resolution System: An Illustrated Walkthrough*, JUST COURT ADR (Aug. 27, 2014), <http://blog.aboutrsi.org/2014/uncategorized/facebook-user-conflict-resolution-system-an-illustrated-walkthrough/>.

⁴⁰ See William Tremain, *The Daily Start-Up: Modria Launches to Become the Online ‘Small Claims Court for the 21st Century’*, WALL ST. J.: VENTURE CAPITAL DISPATCH BLOG (Nov. 19, 2012), <http://blogs.wsj.com/venturecapital/2012/11/19/the-daily-start-up-modria-launches-to-become-the-online-small-claims-court-for-the-21st-century/>.

⁴¹ Video-based ODR programs are not completely without problems of their own. See pages *infra*.

⁴² See Ethan Katsh, *Bringing Online Dispute Resolution to Virtual Worlds: Creating Processes Through Code*, 49 N.Y.L. SCH. L. REV. 271, 286 (2004) (predicting that over time avatars will become skillful and intelligent at making judgments about dispute outcomes). Video technology already is in widespread use in bail bond hearings, depositions, and routine business meetings, though even business people still seem to prefer face-to-face meetings when it comes time to seal the deal. See Steven J. Thompson, *Why Leaders Avoid Virtual Meetings*, LINKEDIN (2013), <https://www.linkedin.com/pulse/20130730175229-37102839-why-leaders-avoid-virtual-meetings> (describing how videoconferencing “doesn’t allow you to build a trusting, influential relationship.”). As of 2011, videoconferencing was not yet the medium of choice for ODR. See Arthur Pearlstein et al., *ODR in North America*, in ABDEL WAHAB ET AL., *supra* note 2, at 431, 438 (“[A]s of 2011 the age of video [in ODR] clearly has not arrived in North America.”).

⁴³ Professor Larson is the most enthusiastic of these commentators, though his views seem based on several “if-then” arguments that contain the same logical mistake. See, e.g., Larson, *supra* note 14, at 116 (“If the health sciences, for instance, find it productive to use robots when a patient’s life, or at least his or her health and well-being, literally may be at risk, then certainly

can “acknowledge distress,”⁴⁴ “touch humans in an empathetic manner,”⁴⁵ “use eye contact to guide the flow of conversation,”⁴⁶ “establish rapport,”⁴⁷ “communicate emotion,”⁴⁸ and carry on conversations “without any loss of attentiveness,”⁴⁹ and if “lifeless, non-judgmental avatars and robots” can communicate “shameful and intimate information” in a “less painful and frightening” manner than humans,⁵⁰ then it is only a short step to machines being able to break impasses in contentious conversations, and move bargaining forward in a cooperative and productive manner.⁵¹ One

there is a role for robots in ADR.”); *id.* at 134 (“If individuals can learn to rely on artificial intelligence in the form of prosthetic technology to perform functions that are extremely important, personal, and intimate, then there is no reason why we cannot learn to rely on artificial intelligence to perform functions that are communicative in nature.”). The problem with the argument, of course, is that it does not follow from the fact that machines are capable of performing physical tasks that they are equally capable of performing intellectual or communicative ones, or that because machines can make contributions to one important field of work that they are equally capable of making contributions to another different important field of work. These arguments have the logical structure, as John Oliver once put it, of the statement: “I am a vegan, therefore I know karate.” See also John Markoff, *Scientists Worry Machines May Outsmart Man*, N.Y. TIMES, Jul. 26, 2009, at A1 (“[S]mart machines will develop even more smart machines until we reach the end of the human era.”). When machines evolve from the CHNOPS elements (i.e., carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur) into fully functioning entities on their own, without human intervention at any stage of the process, it will be time to see them as fellow human travelers, but until then it seems safe to say that machines depend upon humans more than humans depend upon machines. See also JANNA QUITNEY ANDERSON & LEE RAINIE, PEW INTERNET & AMERICAN LIFE PROJECT: THE FUTURE OF THE INTERNET II 21 (2006) (“[U]ntil someone finds a way for a computer to prevent anyone from pulling its power plug . . . it will never be completely in control.”). The real test, of course, would be to find a computer capable of plugging itself back in after someone has pulled its plug.

⁴⁴ See Larson, *supra* note 14, at 135.

⁴⁵ See *id.*

⁴⁶ See *id.* at 137 (“By observing human eye movements and then programming a robot to replicate those movements, the scientists created a social robot that could use eye contact to ‘guide the flow of a conversation effectively . . . about 97 percent of the time.’”).

⁴⁷ See *id.* at 113 (“[T]he more realistic and lifelike a social robot appears and behaves, the more easily it will be able to establish rapport with human beings.”).

⁴⁸ See *id.* (“Researchers are developing computational theories of emotion that allow robots and avatars to interact emotionally with humans.”).

⁴⁹ See *id.*

⁵⁰ See Larson, *supra* note 14, at 155. The mistake in this, of course, is the failure to distinguish between mimicking human physical behavior and communicating feelings and states of mind. A machine does not convey empathy or understanding even when its plastic brow furrows. Empathy and understanding are emotional and intellectual states of human existence, not machine existence.

⁵¹ See *id.* at 158. Professor Larson may even endorse the claim made by “technological singularity” adherents that smart machines will trigger runaway technological growth, developing even smarter machines, until we reach the end of the human era. See David J. Chalmers, *The Singularity: A Philosophical Analysis*, 17 J. CONSCIOUSNESS STUD. 7, 11–22 (2010) (describing the argument for the technological singularity).

true believer even foresees the day when it will be possible to “look into a robot’s eyes and see a gateway to his soul.”⁵²

The foregoing programs both real and imagined, and the claims made for them, are impressive indeed, and if true, they signal the impending reconfiguration of the dispute-settlement world. It is difficult to find detailed illustrations of these programs in actual operation anywhere in the scholarly literature, however, and thus it is difficult to determine how seriously to take the claims made for them. Most descriptions of the various programs are general and conclusory, and lack the transcript-based evidence needed to test their accuracy. The following description of the WebMediation program is typical:

Once the parties’ data is entered into the website, the One Accord software uses it to develop settlement packages for the parties to consider. The facilitator continues to *work with* the parties *to evaluate settlement packages* and to *refine preferences*. If the parties choose the same settlement package or “solution,” the software attempts to *generate improvements* in order to *maximize the benefits* to both parties.⁵³

The terms “work with,” “evaluate,” “refine,” “generate,” and “maximize” do all of the heavy lifting in a description like this, but the terms are far from self-explanatory, often are self-serving, and call for detailed illustrations of what they look like in actual opera-

⁵² See Larson, *supra* note 14, at 136 (quoting George W. Bush’s statement upon meeting Vladimir Putin for the first time: “I looked the man in the eye. I found him to be very straightforward and trustworthy and we had a good dialogue I was able to get a sense of his soul.”) A more sophisticated observer might have looked deeper. See, e.g., Will Englund, *Putin and the Russians: Duty and Betrayal*, WASH. POST (May 23, 2013), https://www.washingtonpost.com/world/europe/putin-and-the-russians-duty-and-betrayal/2013/05/23/2776d302-c254-11e2-8c3b-0b5e9247e8ca_story.html (providing on interview of Natalia Gevorkyan, co-author of an authorized Putin biography, describing the complicated set of messages one would find looking President Putin “in the eye”). Professor Larson seems to recognize the problem of thinking of machines as “intelligent” agents, since at some points in his discussion he limits the claim to what he calls “physical intelligence.” Larson, *supra* note 14, at 131–34. At other points he describes machines as only “simulating human intelligence,” *id.* at 141, and at still other points he describes them as “behaving intelligently [rather than] being intelligent.” *Id.* at 155. He seems to hold out hope, however, that one day machines will be able to “replicate the learning process of the human brain,” and that when that happens it will be possible to “‘subcontract’ an increasing amount of a human responsibility” to them. *Id.* at 151.

⁵³ See Goodman, *supra* note 2, at 4, 7 n.50 (describing the WebMediation system as giving “each party ample opportunity to present arguments and to rebut positions taken by the other side,” without showing what that “opportunity” looks like from the perspective of one caught up in it).

tion. Sadly, detailed illustrations are hard to come by.⁵⁴ The scholarly literature is devoid of transcripts and richly detailed ethnographies, and full of self-serving generalities and self-sealing conclusions.⁵⁵

Until now, the arguments for ODR have focused principally on the practical concerns of cost, time, and convenience.⁵⁶ Online systems, so the arguments go, permit parties to resolve disputes from the confines of their homes,⁵⁷ in front of computer screens, without the help (or interference as ODR proponents see it) of lawyers,⁵⁸ and under the guidance of “intelligent” optimization algorithms capable of identifying the correct result in individual cases. Proponents acknowledge that this is true for only uncomplicated, standardized disputes at the present time, but they see that as a temporary condition and believe that soon, settling disputes online will become the ordinary case rather than the exceptional one.⁵⁹ “Our children,” say some, “are already there.”⁶⁰ The enthu-

⁵⁴ See, e.g., Katsh et al., *supra* note 31, at 710 (arguing that ODR systems permit parties to “present narratives and make claims, demands, or desires known,” without providing illustrations of these processes in operation).

⁵⁵ Professors Katsh and Rifkin provide a notable exception to this general pattern in their transcript of a discussion in a Online Ombuds Office managed dispute. KATSH & RIFKIN, *supra* note 2, at 185. Unfortunately, the discussion they describe does not approach the level of sophistication found in even the simplest of face-to-face conversations. It is little more than a variation on the “salvo-salvo-truce” style of argument common in the halcyon days of adversarial bargaining. See Condlin, *supra* note 26, at 102 n.81 (describing “salvo-salvo-truce” argument), and does not give one much reason to be confident about the ability of online programs, even at their best, to promote and support sophisticated substantive discussion. See also Ray Friedman et al., *The Positive and Negative Effects of Anger on Dispute Resolution: Evidence from Electronically Mediated Disputes*, 89 J. APPLIED PSYCHOL. 369, 369 (2004) (“the first large-scale, quantitative study” [based on a sample of] real disputes taken from SquareTrade); Braeutigam, *supra* note 14, at 117–22 (sample of mediator interventions to build rapport taken from actual Square Trade cases).

⁵⁶ See, e.g., CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 9–10 (making the “economic case for ODR”).

⁵⁷ See Bulinski & Prescott, *supra* note 1, at 219–20 (describing the “emotionally daunting” nature of “[w]alking into a courthouse to resolve an outstanding legal issue,” and explaining why it is valuable to be able to resolve disputes in familiar and comfortable surroundings).

⁵⁸ Removing lawyers from the dispute resolution process is one of the principal objectives of ODR. See note 12, *supra*.

⁵⁹ Not everyone makes such grand claims. See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 5 (“ODR is not appropriate for all classes of dispute but, on the face of it, is best placed to help settle high volumes of relatively low value disputes”); Bulinski & Prescott, *supra* note 1, at 228 (“Many cases are of course too complicated to be resolved with . . . OCR systems.”).

⁶⁰ See David A. Larson, *Online Dispute Resolution: Do You Know Where Your Children Are?*, 19 NEGOT. J. 199, 199 (2003) (concluding that “our children already have developed effective online relational behaviors and can establish trust and intimacy online.”); Larson, *supra* note 14, at 139 (describing how children playing in *Second Life* and the *World of Warcraft* “are more comfortable engaging in technology mediated communication than they are interacting face to

siasm of ODR proponents can be infectious, and perhaps it is justified, but before signing off on it completely, it is worth asking whether ODR's "reach exceeds its grasp."⁶¹

III. THE LIMITATIONS AND UNINTENDED CONSEQUENCES OF ODR

Private ODR systems are created by contract and rely on the agreement of the participants for their legitimacy.⁶² Public systems, on the other hand, are created by law and rely on the ability to protect the broad range of interests law serves—distributive justice, substantive equality, political freedom, and democratic participation—for their legitimacy.⁶³ A private system is free to take the

face"); *id.* at 163 ("[E]ighty-four percent of respondents aged 19-29 [to a survey conducted by the German Broadband Association] reported that they would rather do without their current partner or an automobile than forego their connection to the Web . . ."). See also Noam Ebner, *ODR and Interpersonal Trust*, in ABDEL WAHAB ET AL., *supra* note 2, at 234 ("[T]rust building [in online communication] might become easier as the medium's novelty fades over the course of the next generation."); Rule, *supra* note 2, at 6 ("The younger generation, in particular, is comfortable with online communication in a way their parents may never be."). Touting the ability of children to form "intimate and trusting" relationships online seems quaint in the wake of the epidemic of teenage Cyberstalking and Cyberbullying that postdates the above articles, but the idea must have seemed strange even at the time. Childhood has not been considered an advanced stage of social development in most societies since at least the Industrial Revolution, and most societies expect (and hope) that their children will grow up.

⁶¹ See Robert Browning, *Andrea del Sarto*, in *MEN AND WOMEN AND OTHER POEMS* (1998) ("Ah, but a man's reach should exceed his grasp, Or what's a heaven for?"). See also Shackelford & Raymond, *supra* note 3, at 619 ("While ODR can serve a productive purpose and increase efficiency for the resolution of low-value disputes, questions need to be asked now about how robust these systems should become and how policy makers can best harmonize the interests of governments in promoting justice and business in the bottom line.").

⁶² See Raymond & Shackelford, *supra* note 2, at 512 ("In the United States, [private] dispute resolution is a creature of contract."). Participating in a private ODR system typically does not relinquish a party's right to bring suit in an appropriate forum to recover consequential damages. ODR provides remedies only for the online transaction itself, typically the purchase price and shipping costs. See Del Duca et al., *supra* note 2, at 65.

⁶³ See Jeremy Waldron, *The Concept and the Rule of Law*, 43 GA. L. REV. 1, 5 (2008) (describing the "importance of the procedural and argumentative aspects of legal practice."); Schmitz, *supra* note 3, at 259–60 (arguing that "government regulators . . . must play a role in ensuring the fairness of . . . privately created [ODR] processes . . . to promote enforcement of . . . laws and other public rights," and describing the "trigger mechanisms" that would alert regulators of potential problems); Shackelford & Raymond, *supra* note 3, at 624–27 (describing how "public ODR providers are distinct from private providers . . . [and] exist to handle a narrow[er] range of disputes"); *id.* at 632 ("[A]n effective [online] justice system must be impartial, without improper influence, and ensure the protection of rights."); Thomas Schultz, *Does Online Dispute Resolution Need Governmental Intervention? The Case for Architectures of Control and Trust*, 6 N.C. J.L. & TECH. 71, 89–90 (2004) ("To a large extent, government is the ideal host for dispute

interests of only the parties to a dispute into account, but a public system must consider the interests of third parties, the legal system as a whole, and the background set of moral, social, political, and legal norms that make contract-based relationships possible.⁶⁴ A public dispute resolution system must produce outcomes that are fair and just, not just convenient, efficient, and cheap. It also must enforce the expressive dimension of law,⁶⁵ serve the therapeutic ends of disputing, and accommodate the attitudes, feelings, and beliefs of the participants, as much as protect their money, time, and convenience. Whether ODR systems can do all of this will depend in major part on whether the algorithms used to run the systems can be programmed to be reasonable, caring, and fair. The issues are different for different kinds of systems, but since hybrid⁶⁶ systems using text-based communication formats are the most popular, I will focus on them.

A. *Typcasting Disputes*—“*Little Boxes*”⁶⁷

Most text-based ODR systems collect information, categorize claims, organize evidence, and manage substantive conversations in what might be described as a “little boxes” format.⁶⁸ The proposed English Online Court provides a representative example. In a

resolution, because government has a strong incentive to resolve disputes to keep society functioning smoothly. Government is also a good host for dispute resolution because it usually has no vested interest in the outcome of most of the matters it is in charge of deciding.”).

⁶⁴ See EMILE DURKHEIM, *THE DIVISION OF LABOR IN SOCIETY* 162 (1984) (“The contract is not sufficient by itself, but is only possible because of the regulation of contracts which is of social origin.”). See also Joel M. Ngugi, *Policing Neo-Liberal Reforms: The Rule of Law as an Enabling and Restrictive Discourse*, 26 U. PA. J. INT’L ECON. L. 513, 516 (2005) (“[T]he rule of law [is] the underlying discourse that facilitates and justifies the shift of power and discretion within government to technocrats who are less responsive to popular demands and politics.”).

⁶⁵ See Deborah Hellman, *The Expressive Dimension of Equal Protection*, 85 MINN. L. REV. 1, 13–39 (2000) (describing the concept of the “expressive dimension” of law and illustrating its application).

⁶⁶ Hybrid systems are those controlled by humans using software, as opposed to stand-alone systems controlled exclusively by software.

⁶⁷ I have taken the expression from a well-known song of cultural commentary from the Nineteen-Sixties. See MALVINA REYNOLDS, *LITTLE BOXES* (Schroder Music Company 1962). As the story goes, Malvina Reynolds and her husband Bud were on their way from Berkeley to La Honda, where Reynolds was to sing at a Friends Meeting, and as they drove through Daly City she said “Bud, take the wheel,” and wrote the “Little Boxes” song. See *Little Boxes*, YOUTUBE: MALVINA REYNOLDS SONGS AND LYRICS, <http://people.wku.edu/charles.smith/MALVINA/mr094.htm>; see also https://www.youtube.com/watch?v=2_2lGkEU4Xs.

⁶⁸ For a similar format, see the discussion of the Square Trade ODR program earlier. See *supra* notes 29–30 and accompanying text.

claim by a homeowner against a builder,⁶⁹ the homeowner would enter the Court's online portal, provide his name, and identify the general nature of his claim by checking a series of boxes that would include such options as "bank, holiday company, next door neighbor, merchant (with the subcategory of builder)," and the like.⁷⁰ Having checked "Merchant/Builder," he then would be presented with a new set of boxes designed to elicit a description of the dispute. He would be asked, for example, to check whether his claim was about the quality of a builder's work, the amount charged, delays in completion, and the like.⁷¹ When he had finished with one page of boxes a new page would open, asking for more details (e.g., the builder's identity, her contact information, whether the project was covered by a written agreement, and the like), until the process was complete.⁷² At that time, the homeowner would be asked to approve or edit the document he had generated and certify that it was true. Once he had done this, the Online Court would transmit the document to the builder, and she would go through the same process to generate a response.⁷³

Throughout this process the parties would have access to telephone assistance to help navigate the Court's website, be provided with information about the law governing their dispute (framed as general legal rules and principles rather than an application of those rules and principles to the facts of the dispute), and have access to the advice of "online facilitators" who would "review [the parties'] papers and statements and help [them reconcile their differences] through mediation and negotiation."⁷⁴ The parties would be free to settle at any time, or opt out of the Online Court alto-

⁶⁹ The illustration is a slightly modified version of one used in the Briggs Report. See BRIGGS, *supra* note 4, at 75–82. See also CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 19–21 (describing the structure and operating procedures of the Online Court); Del Duca et al., *supra* note 2, at 65 (listing the "little boxes" for filing a claim under the eBay Buyer Protection Policy); Bulinski & Prescott, *supra* note 1, at 211–12 (describing the features of a typical online system). The template of dispute categories found on most ODR websites appears to be a collection of types of claims that have been filed in the past.

⁷⁰ See BRIGGS, *supra* note 4, at 76.

⁷¹ *Id.* at 76.

⁷² *Id.* at 77.

⁷³ *Id.* at 77. All ODR systems are alike in this respect, even if the boxes change. Compare the eBay system, for example: eBAY RESOLUTION CENTER, <http://resolutioncenter.ebay.com/>. Using such systems is not unlike signing in at a health provider facility or motor vehicle administration, preparing an online tax return, ordering lunch at a self-serve kiosk, or using any of the hundreds of other automated information processing systems that populate modern life.

⁷⁴ See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 6. Only some ODR systems have all of these features. The English Online Court is an exemplar of the process more than a typical example.

gether if the dispute turned out to be more complex, legally or factually, than either had anticipated. If the parties did not reach an agreement, the Online Court judge would make a decision for them based on the documents generated and any other information gathered during the course of the proceeding, whether by telephone, face-to-face meeting, video transmission, or the like. There would be no default assumption of a trial, though the judge would be free to schedule one if she thought it would help. Both parties could take an appeal from the Online Court's decision.

There are obvious practical advantages to a dispute resolution system of this type, but also some disadvantages. The first problematic feature is the system's reliance on a pleading and discovery method that bears more than a passing resemblance to the English common law Forms of Action, a pleading and discovery system so famously unworkable that it provoked the creation of the Courts of Equity.⁷⁵ A partitioning approach to stating a claim, in which the claim is subdivided into discrete component parts and described piecemeal,⁷⁶ lacks the flexibility and sophistication of a narratological approach, where a party need not draw hard and fast lines between facts, theories, impressions, surmises, beliefs and the like, and is permitted to describe events and arguments in essay fashion as if telling a story. The limits of partitioning and the advantages of storytelling are two of the insights that provoked the creation of the Federal Rules of Civil Procedure, and it would be ironic if a twenty-first century dispute resolution reform reinstated a failed thirteenth century pleading system under the guise of making dispute resolution cheaper, more efficient, and fairer.⁷⁷

⁷⁵ See Stephen N. Subrin, *How Equity Conquered Common Law: The Federal Rules of Civil Procedure in Historical Perspective*, 135 U. PA. L. REV. 909 (1987). The Forms of Action worked acceptably in simple cases that could be reduced to a single legal or factual issue, but they produced real injustices in complicated cases. *Id.* at 917–18 (describing the virtues of the common law writs and pleading rules). Messrs. Bulinski and Prescott describe some of the difficulties associated with having to partition claims in order to state them. See Bulinski & Prescott, *supra* note 1, at 209–14.

⁷⁶ See Geoffrey C. Hazard, Jr., *Forms of Action Under the Federal Rules of Civil Procedure*, 63 NOTRE DAME L. REV. 628, 636–38 (1988) (describing the how the Forms of Action “forced all out-of-court transactions, simple or not, into simple molds.”). *Cf.* Rule, *supra* note 2, at 7 (“ODR is pushing practitioners to break down some of the silos we have constructed Instead of bright lines between diagnosis, negotiation, mediation, arbitration, and ombuds . . . many online disputants prefer a seamless progression from communication to evaluation, perhaps within hours.”).

⁷⁷ Irony is alive and well in modern life. In a sympathetic treatment of Dmitri Shostakovich's accommodation to the Soviet State, Julian Barnes describes irony as born “in the gap between how we imagine, or suppose, or hope life will turn out, and the way it actually does. [It is] a defence of the self and the soul; it lets you breathe on a day-to-day basis . . . [by] allow[ing]

Requiring parties to describe their claims and defenses in fixed linguistic and conceptual categories also revives the practice, criticized extensively in the early clinical legal education literature,⁷⁸ of forcing clients to tell their stories in the often arcane language and alien conceptual categories of the law, rather than the ordinary language and concepts they use to understand and explain the stories to themselves. Forcing parties to adjust linguistically, emotionally, and analytically to a dispute resolution system, rather than the other way around, was criticized for demeaning citizens, failing to understand and respect their grievances, and undermining the legitimacy of dispute resolution generally,⁷⁹ and the “little boxes” feature of ODR runs the risk of reviving those criticisms.⁸⁰ Experience with the Criminal Sentencing Guidelines⁸¹ also demonstrates the risks in reducing real life events to mutually exclusive, reductionist, factual, boxes. Life experiences are not so easily packaged, subdivided, and valorized, and decision-making systems that operate on the opposite assumption can do as much harm as good.⁸²

None of this would be troublesome if the “little boxes” format were an optional feature of ODR systems, or if there was a narratological complement to the format, but in most ODR programs the “little boxes” are a necessary part of the system, and narrato-

you to parrot the jargon of power [A]s long as you [can] rely on irony, you [are] able to survive. [I]rony has its limits. For instance, you [cannot] be an ironic torturer; or an ironic victim of torture [And] if you turn your back on irony, it curdles into sarcasm. And what good is it then? Sarcasm is irony which has lost its soul.” See JULIAN BARNES, *THE NOISE OF TIME* 189–91 (2016).

⁷⁸ David M. Hunsaker, *Law, Humanism and Communication: Suggestions for Limited Curricular Reform*, 30 J. LEGAL EDUC. 417 (1980).

⁷⁹ See Bulinski & Prescott, *supra* note 1, at 231 (“If OCR systems can ensure that . . . citizens who might otherwise be unable or unwilling to speak in open court are able to take the time to coherently say what they want to say . . . confidence in the judicial system may well increase.”).

⁸⁰ Online systems also often fail to take into account the personal and professional expectations clients have of their lawyers, that they (the lawyers) will understand the client’s interests and work single-mindedly to advance them. See Clark D. Cunningham, *What Do Clients Want from Their Lawyers?*, 2013 J. DISP. RESOL. 143 (describing clients’ wants and needs in the attorney-client relationship).

⁸¹ See Bulinski & Prescott, *supra* note 1, at 241–42 (illustrating the similarities between ODR little boxes and the Sentencing Guidelines).

⁸² For critical examinations of the Sentencing Guidelines, see KATE STITH & JOSÉ A. CABRANES, *FEAR OF JUDGING: SENTENCING GUIDELINES IN THE FEDERAL COURTS* (1998); Charles J. Ogletree, Jr., *The Death of Discretion? Reflections on the Federal Sentencing Guidelines*, 101 HARV. L. REV. 1938 (1988); Daniel J. Freed, *Federal Sentencing in the Wake of Guidelines: Unacceptable Limits on the Discretion of Sentencers*, 101 YALE L.J. 1681 (1992); Albert W. Alschuler, *The Failure of Sentencing Guidelines: A Plea for Less Aggregation*, 58 U. CHI. L. REV. 901 (1991).

logical add-ons are either nonexistent or inadequate.⁸³ As a consequence, the format does not always permit parties to describe all of the dimensions of their claims and proposals in even a moderately complex dispute, or respond to the claims and proposals of adversaries in a fully satisfactory fashion. A system that must be programmed to categorize and partition information before it can recognize, organize, and evaluate the information⁸⁴ always will be a step behind in processing disputes of any complexity or distinctiveness.⁸⁵

B. *Substantive Conversation as Texting*

Text-based ODR systems also provide limited opportunities to examine and discuss the substantive merits of claims and defenses raised by a dispute.⁸⁶ Parties must make their arguments and re-

⁸³ I describe the difficulty of carrying on substantive conversation in a little boxes format in the next section. See *infra*.

⁸⁴ See, e.g., Shackelford & Raymond, *supra* note 3, at 635–36 (describing the difficulties and consequences of programming ODR platforms to understand even mundane communications). In one of the more ambitious anthropomorphic moves in the ODR literature, Professors Katsh and Rule describe dispute settlement software as a “Fourth Party” in an ODR proceeding. See Katsh & Rule, *supra* note 8, at 331 (“As ODR has grown in use, the ADR model in which a human mediator alone manages the flow of information between the parties has gradually been supplanted by a model in which technology is looked at as a ‘Forth Party,’ something that can be of value in both online and offline disputes.”); Katsh, *supra* note 11 (“It is this new relationship between the human and the machine that is likely as well to shape the relationship between the state and virtual.”). For anthropomorphizing about machines in general, however, no one (unless it is a robot) can hold a candle to Professor Larson. See Larson, *supra* note 14, at 130–46 (describing the capacity of machines to interact intellectually and emotionally with humans, and to form relationships that are almost indistinguishable from relationships with other humans).

⁸⁵ Nick Bostrom & Eliezer Yudkowsky, *The Ethics of Artificial Intelligence*, in CAMBRIDGE HANDBOOK OF ARTIFICIAL INTELLIGENCE 316 (William Ramsey & Keith Frankish eds., 2014).

⁸⁶ See ABA BEST PRACTICES REPORT, *supra* note 3, at 4 (to “meet basic standards of due process [ODR] disputants should be given a reasonable and fair opportunity to be heard.”) The ODR literature focuses almost exclusively on the structural properties of dispute resolution systems and very little on the substantive bases for deciding disputes. With few exceptions, it is a literature of form over substance. Some scholars acknowledge that “legal doctrine and substantive law” are “not totally irrelevant” to online dispute resolution, and that online resolution operates “in the shadow of the law,” but most see informal resolution as a way of avoiding “the need to apply existing rules,” and do not seem to recognize that this can make dispute resolutions “lawless” in both the metaphorical and real senses of the term. See Katsh et al., *supra* note 31, at 707–08. The British seem quicker than the Americans to recognize the importance of substantive standards in ODR. See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 9 (recommending the creation of a court based online dispute resolution service that affords “an opportunity for citizens to present their cases to an impartial expert delivering outcomes that parties feel are just . . . [one] underpinned by clear rules of procedure and fully implements the law of the

spond to their adversaries' replies by typing their comments in dialogue boxes (often with word limitations), as if they were emailing, texting, or instant messaging one another. This text-based format denies them the use of pace, tone, inflection, emphasis, gesture, and other nonverbal data commonly available in face-to-face conversation to refine and shape meaning,⁸⁷ but its asynchronous nature provides some noticeable advantages as well. For one, not having to respond immediately to an adversary's comments allows parties to think carefully about what they want to say,⁸⁸ to formulate responses privately, slowly, and non-defensively, accepting some arguments and proposals and rejecting others, and avoid having to make "debaters' points" to buy time to examine and evaluate what has been said in more detail (as is often the case in face-to-face conversation). This, in turn, may result in more substan-

land."). *But see* Raymond & Shackelford, *supra* note 2, at 511 ("some commentators are quietly asking if technology will be able to adequately apply applicable local law in an appropriate manner," citing "the authors' own first-hand knowledge of discussions.").

⁸⁷ See Ebner, *supra* note 60, at 213 (describing the lack of "contextual clues" to meaning in a text based medium, using email as an example). This is not a problem if one believes in the communicative power of emoticons. See Braeutigam, *supra* note 14, at 116 (describing how emoticons can be a useful way of communicating emotions in text-based conversations).

⁸⁸ See Balvin & Tyler, *supra* note 11, at 6 ("Electronically delivered performance allows raters to focus on task content more objectively and decreases the influence of social biases"); Friedman et al., *supra* note 55, at 374 ("The process of having to write to describe a claim or defend the rejection of a claim requires cognitive processing. Disputants presumably think about what they should say."); Ebner, *supra* note 60, at 213 ("Communicating through lean media, negotiators focus on the actual *content* of messages, lending much more importance to the words that are chosen, and their interpretation."); Braeutigam, *supra* note 14, at 114 ("[T]he asynchronous nature of ODR creates 'cooling distance' [that] allows disputants time to check their responses instead of reacting impulsively."); Bulinski & Prescott, *supra* note 1, at 230 ("An OCR system would allow litigants to take time to respond thoughtfully to questions and to make sure they convey all the points they wish to make"); Goodman, *supra* note 2, at 9 ("more thoughtful, well-crafted contributions result from the ability of the parties to edit messages prior to sending them" in asynchronous Internet communications); Noam Ebner et al., *You've Got Agreement: Negotiating Via Email*, in *RETHINKING NEGOTIATION TEACHING* 89, 95 (Christopher Honeyman et al. eds., 2009) ("because negotiators are physically isolated and the social presence of others is diminished, they can take time to 'step out' of the discussion and thoughtfully respond rather than merely react to the other party's behavior"); *id.* at 101 ("The slower pace allows negotiators to fashion and frame their responses thoughtfully and productively. It enables them to verify details instead of giving off-the-cuff responses that may later turn out to be inaccurate . . . [and] creates a searchable thread of exchanged email messages so that they can hold others accountable for representations and commitments. And, they also can check their own past communications if determine if adversaries over-claim something they have allegedly promised. They can read received messages twice, or ask colleagues to take a look at them and tell them what they think before replying to it . . . and they can do the same with messages they have written, before sending them.").

tively sophisticated conversations and more fully informed⁸⁹ and lasting agreements.

Because it is substantively focused, text-based communication also may help crystalize issues and clarify points of disagreement, minimize redundancy, repetition, and irrelevancy, and shorten discussions, more effectively than face-to-face conversation. It also may reduce the influence of certain emotional states and personal qualities that should have little or no role to play in resolving disputes. A party who does not have access to nonverbal data about an adversary's angst, hesitation, uncertainty, pain, confusion, and the like, for example, will not be able to take that information into account in determining how to proceed, and often this will be a good thing.⁹⁰ Similarly, qualities like sex, gender, status, ethnicity, and race are harder to know in a transcript and monitor driven world, and thus also less likely to play a major role in determining outcome. Collectively, these and other such anonymizing features of text-based communication can increase the chances that disputes will be resolved on the basis of what is said, rather than how it is said, or who says it.⁹¹

Text-based communication also permits the use of "charts, figures, graphs, scales, tables, diagrams, pictures, images, maps and

⁸⁹ See Ebner et al., *supra* note 88, at 96 ("[W]hen used properly, email could increase information exchange . . . by promoting more equal participation among negotiators"); Balvin & Tyler, *supra* note 11, at 7 (describing the research finding that "online anonymity 'appears to facilitate honest self-presentation, permitting users to reveal themselves in ways more truthful than in the offline world,'" (quoting Andrea Chester, *The Real Me Online: Identity Play on the Internet*, in PROCEEDINGS OF THE THIRD ANNUAL FORUM ON ONLINE DISPUTE RESOLUTION (Melissa Conley Tyler et al. eds., 2004); Braeutigam, *supra* note 14, at 115 (describing text based communication in dispute settlement as "a tactile, interactive experience that focuses communicants on acknowledging statements and being understood . . . [as] steps in the process of earning rapport-based trust.")).

⁹⁰ See Ebner et al., *supra* note 88, at 95 ("Used properly, lean media may facilitate better processing of social conflict exactly because these media do not transmit visual and verbal clues"); Balvin & Tyler, *supra* note 11, at 6 ("Inability to observe the body language, facial expressions, and tone of voice of the other communicator may assist in focusing on the issue at hand.").

⁹¹ See Ebner et al., *supra* note 88, at 95 ("[M]asking or deemphasizing gender, race, accent, or national origin may actually reduce the impact of unconscious bias on negotiation."); Balvin & Tyler, *supra* note 11, at 7 ("The removal of social cues such as attractiveness and ethnicity disrupt hierarchies characteristic of the offline world, creating opportunities for offline disadvantaged individuals to communicate on fairer ground."); Braeutigam, *supra* note 14, at 114–15 ("The online experience blinds communicants to age, social status, gender, and race. Without these cues, they are free of preconceived notions about one another because they are anonymous."); Bulinski & Prescott, *supra* note 1, at 210–11 (OCR "systems also have the potential to eliminate illegitimate considerations like race, gender, and appearance from the adjudication process, directing the judge's attention only to the facts relevant to the case.").

colorful and animated graphics . . . to present information in ways that” will enable parties to explain their views more fully, accurately, and efficiently than if using just words.⁹² It also may make it easier to understand and appreciate opposing views, since for some, negative messages from machines are less emotionally charged and less threatening than negative messages from humans.⁹³ Finally, text-based dispute resolution systems usually will be less expensive to implement, operate, and maintain than face-to-face ones, and practical concerns of this kind often can be the most important considerations in designing a dispute resolution system.⁹⁴

Notwithstanding the foregoing advantages, email, texting, and online chat are not famous categories of in-depth conversation, and the reasons for this may outweigh the formats’ advantages. Arguments in disputes can be long and complicated, for one thing, and typing them in dialogue boxes can be slow, tedious, annoying, and tiring (particularly if one proofreads, edits, and revises—as one should).⁹⁵ This will cause some to give up on points, or ignore them altogether, even if important, out of exhaustion, impatience, distraction, boredom (particularly if the texting drags on for days or weeks), or just the desire to get on to other things. When discussions are fragmented and truncated in this way, however, they are more likely to produce confusion, misunderstanding, and impasse,

⁹² See Katsh et al., *supra* note 31, at 723–24.

⁹³ See Balvin & Tyler, *supra* note 11, at 5 (“When feedback is provided objectively through a computer system [the listener’s] emotions are private and do not pose the threat of public face loss.”).

⁹⁴ See *id.* at 6 (“One of the reasons for the popularity of online communication is its ability to cross continents and time zones, allowing 24-hour global communication access. Economically, this is a great advantage.”). But see Bulinski & Prescott, *supra* note 1, at 236 (“In implementing [an ODR] system, courts and policymakers must take care not to exclude people for whom Internet access is less available.”).

⁹⁵ See Leigh Thompson & Janice Nadler, *Negotiating via Information Technology: Theory and Application*, 58 J. SOC. ISSUES 109, 112 (2002) (because “People talk faster than they type” the same amount of information that could be communicated in ten minutes face-to-face could take several hours or even days by email. “We found that the face-to-face negotiators exchanged more than three times the amount of information, on average, than the e-negotiators.”). Typing long text messages also can have advantages. See Braeutigam, *supra* note 14, at 115 (“participants . . . actively involved in typing, reading and reviewing their messages . . . must focus on and refine their thoughts to communicate them clearly in writing. Doing so is a visual and tactile exercise . . . [that] creates a shared sensation of involvement. Thus, an online exchange is interactive, focuses on acknowledgment, and builds understanding.”); Ebner et al., *supra* note 88, at 97 (“Parties can bundle multiple points so that adversaries can consider them simultaneously rather than sequentially, and this can promote log-rolling, a classic method of reaching integrative outcomes.”). Overdone, however, bundling can produce information overload and confuse rather than clarify the topics under discussion. *Id.* at 105.

and resulting agreements are less likely to be satisfying and stable.⁹⁶

In an age accustomed to instant access to anything and everyone, asynchronous text-based communication can also increase suspicion and mistrust when access is delayed or denied. For example, when someone does not respond immediately to an email or text message some will think of this as sinister and respond defensively and combatively.⁹⁷ When both sides react in this way, it can lead to a downward spiral of suspicion and mistrust and make a mutually acceptable middle ground more difficult to find. This risk can be exacerbated by text-based communication's lack of nonverbal data and social cues that could be used to clarify motives and explain meaning,⁹⁸ as well as the absence of ceremonial moments, banter, schmoozing, and other sorts of rapport-building practices that do not fit easily into the "get-to-the-point" nature of email and text messaging.⁹⁹ Parties must devote time and attention to the

⁹⁶ See Thompson & Nadler, *supra* note 95, at 111 ("[N]egotiators who communicate face-to-face or via telephone are more likely to converge on a single offer . . . compared to those who communicate only via written offer."). Fifteen years ago Professor Katsh and his colleagues predicted that the cumbersomeness of text-based ODR programs ultimately would result in their demise, see Katsh et al., *supra* note 31, at 722, but that has not happened. I suppose, as Keynes might put it, "Ultimately, we all are dead."

⁹⁷ See Ebner et al., *supra* note 88, at 100 (describing practices that can be used to manage one's own and an adversary's anxiety in email communication); Ebner, *supra* note 60, at 231 (when text "messages are not read, nor answered, instantly, parties frequently find themselves waiting for responses from their opposites. This duality of instant and asynchronous gives rise to expectations between negotiators that cannot be met, which breeds anxiety and then suspicion, as distrust of the channel blends with distrust of the other."); Thompson & Nadler, *supra* note 95, at 117 (text based communication "can lead to frustration and . . . negative attributions" because negotiators have a 'tennis game' mental model of negotiations; that is, they expect the other party to 'volley back' offers much faster than is actually possible using asynchronous media. Indeed, in our research we found less turn-taking behavior in negotiations conducted via email than in face-to-face negotiations."); Balvin & Tyler, *supra* note 11, at 7 ("Synchrony bias occurs when one person sends an email and expects that its receiver will respond immediately. If this presumption is not fulfilled, the sender may feel that they [sic] are being ignored, resulting in increased uncertainty and negativity.").

⁹⁸ See Thompson & Nadler, *supra* note 95, at 120 (describing the role of social cues in interpreting communications and forming impressions of people); Balvin & Tyler, *supra* note 11, at 5-6 (while the lack of social clues may cause parties to misinterpret computer mediated communication, research has "shown that integrative outcomes are . . . highest in the [synchronous computer conferencing] condition . . . [perhaps because] the lack of non-verbal cues . . . allows negotiating parties to focus on the message content and reduces the influence of additional distracters"); Betancourt & Zlatanska, *supra* note 11, at 261 ("[W]ritten language does not 'always convey the complete meaning of what an individual is trying to communicate.'" (quoting Joseph B. Stulberg, *Mediation, Democracy, and Cyberspace*, 15 OHIO ST. J. ON DISP. RESOL. 641 (2000))).

⁹⁹ See Thompson & Nadler, *supra* note 95, at 111 (describing how "Empirical investigations reveal that rapport enhances the quality of social interaction . . ." and that face-to-face contact

“social lubrication process”¹⁰⁰ if they are to deflate suspicions about one another’s good faith, truthfulness, and candor,¹⁰¹ but such efforts often will seem forced or out of place in the flat, two-dimensional world of words on a screen. When this happens, suspicion and mistrust can linger below the surface and come back into play later in the conversation to subvert agreement.¹⁰² Finally, when algorithms dictate outcome and conversation is conducted by text, the rhetorical skills of conventional oral advocacy become less important than the ability to write,¹⁰³ and this in turn provides less of an opportunity for skillful, face-to-face negotiators to produce

produces more rapport and leads to more favorable outcomes because it provides access to “nonverbal cues, such as body orientation, gestures, eye contact, head nodding and paraverbal speech, such as fluency, use of fillers, such as ‘uh-huhs.’”); *id.* at 115 (“starkly absent from e-mail negotiation is communication with others that is non-task-related and is more relationship focused, which we call ‘schmoozing’ . . . [we found that] Negotiators who schmoozed developed more realistic goals, resulting in a larger range of possible outcomes, and were less likely to develop impasse compared to nonschmoozers.”); *id.* at 121 (describing techniques for rapport and trust building in text based communication); Balvin & Tyler, *supra* note 11, at 6 (describing the tradeoffs between building relationships and focusing on the content of the issues at hand); Ebner, *supra* note 60, at 224–25 (describing text-based techniques for “building a positive rhythm of interaction”); Braeutigam, *supra* note 14, at 116–17 (describing text based techniques for conveying emotion).

¹⁰⁰ See Thompson & Nadler, *supra* note 95, at 116 (“[B]rief personal disclosure over e-mail reduces the likelihood of impasse.”); Braeutigam, *supra* note 14, at 103 (“[N]egotiators who engaged in pre-negotiating ‘small talk’ over the phone were more likely to reach agreement . . . than those who did not”); *id.* at 117–22 (illustrating language based techniques for building rapport).

¹⁰¹ See Thompson & Nadler, *supra* note 95, at 112–13 (explaining the importance of non-task oriented, social behavior in negotiation for its “social contagion” effects); Balvin & Tyler, *supra* note 11, at 7 (describing “symbols and norms” invented by email, chat, and instant messaging services “to reduce misinterpretation of feelings communicated online”); Janice Nadler, *Rapport in Legal Negotiation: How Small Talk Can Facilitate E-Mail Dealmaking*, 9 HARV. NEGOT. L. REV. 223, 229 (2004) (describing how rapport is strongly related to the degree of trust present in the negotiation relationship).

¹⁰² See Thompson & Nadler, *supra* note 95, at 115 (describing how negotiator memories of prior dealings are based principally on perceptions of past relationships and not the economic consequences of those dealings). At least one study has found that text based communication can diminish the ability to assess an adversary’s preferences and identify possible joint gains. Parties in the computer-mediated negotiation study were less accurate in judging one another’s interests than parties in face-to-face negotiations. Ebner et al., *supra* note 88.

¹⁰³ See Ebner et al., *supra* note 88, at 99–100 (“[A] central skill set for effective email negotiation may be to improve the clarity and emotional power of writing.”); Balvin & Tyler, *supra* note 11, at 7 (in online communication “new hierarchies are formed according to internet connection speed of typing skills, with higher levels of speed earning higher status.”); Frank G. Evans et al., *Enhancing Worldwide Understanding Through ODR: Designing Effective Protocols for Online Communications*, 38 U. TOL. L. REV. 423, 424–25 (2006) (“In essence, a party’s written word, when properly expressed, can be the most persuasive way to transmit that person’s true intent and feelings. If the writing clearly and forcefully sets forth the writer’s conclusions and reasoning, the document itself tends to hold the reader’s attention. A carefully crafted document con-

non-standard results. Text-based communication changes the nature of dispute resolution skill, in other words, and this too can have adverse effects on the legitimacy of dispute resolution outcomes.

C. *The Limits of Algorithmic Expertise*

The most ambitious part of the case for ODR is what one might characterize as its theory of justice for a virtual age. Many ODR proponents are not troubled by the fact that it is difficult to argue substantive claims online because they believe that the “expert” algorithms underlying ODR systems can be trusted to identify the correct outcome in individual cases.¹⁰⁴ While the origin of this algorithmic “expertise” sometimes is mysterious, most of the time it seems to come from patterns in Big Data¹⁰⁵ about dispute resolution outcomes in similar cases, and crowdsourced data about the proper outcome in individual cases in dispute.¹⁰⁶ This tacit ju-

veys the essence of the other person without the distraction of visual cues that may or may not be relevant to the information conveyed.”).

¹⁰⁴ See Katsh & Rule, *supra* note 8, at 343 (“Eventually ODR may be the way we resolve most of the problems in our lives, with algorithmic approaches even more trusted than human powered resolutions.”); Katsh, *supra* note 11 (describing how algorithms can “identify common interests, brainstorm options, evaluate solutions, and reach agreement.”); CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 5 (“On occasions the assessment of a legal problem or the negotiation itself might be enabled by the ODR service without much or any [human] expert intervention.”); Raymond & Shackelford, *supra* note 2, at 516 (describing how the ability to resolve massive numbers of disputes efficiently and fairly will lead to an increased use of automation technology and optimization algorithms in ODR). Algorithm-run systems are an unavoidable feature of modern life. Reducing online job applications to a manageable size is a particularly common use. See Kevin McGowan, *Big Bad Data May Be Triggering Discrimination*, BLOOMBERG L. (Aug. 15, 2016), <https://bol.bna.com/big-bad-data-may-be-triggering-discrimination/> (describing the use of algorithms to search online applications for candidate “credentials, skills, and abilities”).

¹⁰⁵ Daniel Rainey provides the most common, albeit somewhat elusive, definition of Big Data. See Daniel Rainey, *supra* note 9, at 21–22 (“Big Data . . . refers to data sets that are so large and so complex that traditional means of analyzing and understanding the information contained in them are inadequate to the task.”). See also Robert J. Condlin, *Assessing Experiential Education, Jobs and All: A Response to the Three Professors*, 2015 WIS. L. REV. FORWARD 65, 67 (describing how Big Data analysis relies on correlations more than cause and effect reasoning depending upon the questions asked, the problems examined, and the objectives pursued; how more data trumps better data; how inexactitude is acceptable; and how knowing what and not why is good enough) (citing VICTOR MAYER-SCHONBERGER & KENNETH CUKIER, *BIG DATA: A REVOLUTION THAT WILL TRANSFORM HOW WE LIVE, WORK, AND THINK* 39–72 (2014)).

¹⁰⁶ The ODR literature is long on general statements about the capacity of ODR expertise and short on details about how it is constituted. See, e.g., Katsh et al., *supra* note 31, at 723

risprudential premise of ODR—that outcomes dictated by algorithms based on Big Data and crowdsourced data will produce just results¹⁰⁷—isn't grounded in any well-known political or jurisprudential theory of procedural fairness or substantive justice, and it is based on somewhat of a contradiction. The algorithms in question are proprietary in nature and thus known only to their owners and creators.¹⁰⁸ But a system of public dispute resolution must be based on substantive standards and procedural rules that are transparent and known equally to all. The conception of fair outcome underlying public dispute resolution cannot be private.¹⁰⁹

(“The software allows the machine to assimilate the information presented by the parties and calculate resolutions that may provide each side with more than they themselves might be able to negotiate.”); Katsh & Rule, *supra* note 8, at 330 (“ODR processes . . . rely on the intelligence and capabilities of machines . . . that can . . . collect large amounts of data on disputing patterns . . . and algorithms . . . that can now analyze that data quickly and efficiently, glean patterns and lessons that a human would not be able to discern.”). If the conception of fairness on which ODR operates is mysterious, and it is, this is in part because “the large scale and private eCommerce and social networking sites have not allowed empirical studies of their dispute resolution efforts.” Katsh & Rule, *supra* note 8, at 332. Even the English Reports, which recognize the importance of normative standards, fall short in this regard. *See, e.g., CIVIL JUSTICE COUNCIL REPORT*, *supra* note 4, at 19–20. *See also* Del Duca et al., *supra* note 2, at 70 (describing the OAS dispute resolution program as providing parties “the opportunity to exchange information and proposals, and negotiate—through electronic means—a binding settlement,” without saying more about how this “negotiation” proceeds); Rainey, *supra* note 9, at 22 (suggesting that “for any type of dispute for which there is a large database, we could ask and answer questions about what kind of issues prompt disagreement, the range of common approaches to the dispute, and the most common resolutions accepted by the parties [T]his type of information could [then] be used to direct parties toward ‘normal’ outcomes.”).

¹⁰⁷ *See* Raymond & Shackelford, *supra* note 2, at 516–18 (examining whether “the increasing use of technology [is] a challenge to the legitimacy of the alternative justice system”). A shift from individualist to collectivist conceptions of justice can be found in the law generally. In personal jurisdiction doctrine, for example, forum selection clauses situating litigation in the home jurisdictions of merchants now routinely are enforced as objectively fair because everyone benefits from them, buyers and sellers alike, *see* *Carnival Cruise Line v. Shute*, 499 U.S. 585, 593–94 (1991) (enforcing an un-negotiated forum selection clause in a standard form contract because it was objectively reasonable), and in torts the concept of a collective tort is a subject of increasing scholarly discussion. *See, e.g.,* Donald G. Gifford, *The Challenge to the Individual Causation Requirement in Mass Products Torts*, 62 WASH. & LEE L. REV. 783, passim (2005). The shift in focus from individual to group objectives permeates other parts of modern life as well. The movement for MOOCs in higher education, for example, subordinates the interest in teaching individuals to think critically, to the interest of disseminating information to the masses, though some places try to combine the two goals in programs that provide personalized learning in limited enrollment online classes. *See, e.g.,* HARVARDXPLUS, <https://courses.harvardxplus.harvard.edu/>.

¹⁰⁸ *See* McGowan, *supra* note 104, at 3 (“Discovering the elements of the algorithm could be difficult because vendors might claim trade secret protection for their proprietary formulas.”).

¹⁰⁹ *See* Daniel Rainey & Alma Abdul-Hadi Jadallah, *The Culture in the Code*, MEDIATE.COM (Mar. 2009), http://www.mediate.com/articles/culture_in_code.cfm (arguing that developers of ODR applications will imbed their cultures, perspectives, preferences, and ethical views on dis-

ODR proponents have responded to this jurisprudential objection in different ways.¹¹⁰ Professor Post, for example, describes ODR expertise as based on the “law of the internet . . . emerging, not from the decision of some higher authority, but as the aggregate of the choices made by individual system operators about what rules to impose, and by individual users about which online communities to join.”¹¹¹ The “ability to move unhindered into and out of [different communities] with distinct rule sets,” he argues, “is a powerful guarantee that the resulting distribution of rules is a just one.”¹¹² Indeed, as he puts it, “our very conception of what constitutes justice may change as we observe the kind of law that emerges from uncoerced individual choice.”¹¹³

pute resolution into the applications they create); Shackelford & Raymond, *supra* note 3, at 634 (“The ability to capture [the] legal principle [of *stare decisis*] within an AI algorithm, or if this principle should even be present in the ODR context, is a serious ethical and legal issue that will need to be addressed and managed. . . . Capturing these legal principles requires both transparency and predictability for those impacted by the system.”).

¹¹⁰ See Raymond & Shackelford, *supra* note 2, at 516–19 (discussing the balance to be struck in ODR between efficiency and justice). A number of ODR proponents argue that Cyberspace is a sovereign jurisdiction in its own right, and that the terms and conditions of online transactions are a form of Cyberspace law. Some even use the expression “eBay Law” in more than a metaphorical sense to describe the rules that govern transactions on the web. The University of Massachusetts group is perhaps the most well-known proponent of this view. See Katsh et al., *supra* note 31, at 707–08, 724–28; Katsh, *supra* note 11 (“It can be expected that many activities in the future will be governed not by the law of the state but by processes in which trust and dispute prevention are software generated, where standards of behavior are embedded in code, and where dispute resolution processes are also guided by software.”). Still others see computer code as law in its own right. See, e.g., LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 82 (1999) (“[C]yberspace is not a place; it is many places. Its places don’t have a nature; the places of cyberspace have many different “natures.” These natures are not given they are made. They are set (in part at least) by the architectures that constitute these different spaces. These architectures are themselves not given; these architectures of code are set by the architects of cyberspace—code writers.”); Anjanette H. Raymond & Scott J. Shackelford, *Jury Glasses: Wearable Technology and its Role in Crowdsourcing Justice*, 17 CARDOZO J. CONFLICT RESOL. 115, 142–46 (2015) (“A Brief Introduction to Regulating Cyberspace”). See also WILLIAM MITCHELL, CITY OF BITS: SPACE, PLACE, AND THE INFOBAHN 111 (1993) (“The rules governing any computer-constructed microworld—of a video game, your personal computer desktop, a word processor window, an automated teller machine, or a chat room on the network—are precisely and rigorously defined in the text of the program that constructs it on your screen.”). Website click-through agreements are legally enforceable as contracts no doubt, but under the substantive law of the geographical jurisdictions governing the formation of the contracts, and not some law in the cyber firmament. This is not to deny that choices of law issues in such a world are complex and difficult.

¹¹¹ See David Post, *Governing Cyberspace*, 43 WAYNE L. REV. 155, 167 (1992).

¹¹² *Id.*

¹¹³ See Katsh & Rule, *supra* note 8, at 330 (“Once a process moves online, it’s very nature begins to change The goal of ODR is not simply to digitize inefficient offline processes. Technology changes the nature of the interaction between the parties and introduces new pos-

The difficulty with this argument, of course, is that the choice of a dispute resolution system often is based on considerations of cost, time, and convenience more than conceptions of justice, and a system can be acceptable even when it is not just if the amount involved is too small to make it worth looking for a fairer alternative.¹¹⁴ It also often is the case that parties do not have unilateral control over the choice of a dispute resolution system and cannot “move unhindered into and out of communities” on their own, or that even when they have such control, they do not have evidence about outcome patterns in the various systems needed to make informed choices about which system to use.¹¹⁵ The decision to move from one system to another also simply could create a new dispute of its own and start the system selection process all over again. Drawing broad jurisprudential conclusions about the justice of ODR from forum selection patterns based on considerations as varied as these is premature at best.

Professors Raymond and Shackelford offer a different kind of jurisprudential grounding for ODR, one based on a crowdsourced conception of a “jury of one’s peers” and the theory of “polycentric governance.”¹¹⁶ An ODR jury, as they see it, would function as a collection of individuals reviewing evidence, making decisions, and communicating with decision-makers in isolation from one another through wearable technology (i.e., thus the “jury glasses” of the title).¹¹⁷ In their view, “jurors” would not assemble and deliberate

sibilities for helping them achieve resolution.”); Schmitz, *supra* note 3, at 250 (“[T]he urge to cling to the familiar is even stronger when it comes to what we consider justice.”).

¹¹⁴ Most e-commerce disputes, the staple of online systems, fall into this category.

¹¹⁵ The ABA Task Force on Best Practices for ODR recommends that ODR providers disclose the information needed to make “meaningful evaluations” of ODR service providers in “regular periodic statistical reports.” See ABA BEST PRACTICES REPORT, *supra* note 3, at 3.

¹¹⁶ See Raymond & Shackelford, *supra* note 110, at 131 (“A Jury of Your Peers is a Dead Concept”). The theory of polycentric governance is based on a “recognition of the multi-level, multi-purpose, multi-functional, and multi-sectorial regulatory relationships at work in complex arenas, including cyberspace.” *Id.* at 143. Some think of it as “non-statist law,” while “others consider it to be ‘the enterprise of subjecting human conduct to the governance of external controls whether state or non-state, intended or unintended.’” *Id.* See also Raymond & Shackelford, *supra* note 2, at 522–24 (describing “Polycentric Regulation”); Shackelford & Raymond, *supra* note 3, at 648–53 (“Applying Polycentric Governance to ODR”).

¹¹⁷ See Raymond & Shackelford, *supra* note 110, at 145 (“the size of virtual juries should be increased as much as is feasible ‘The larger the group, the more reliable its judgment will be,’” (quoting JAMES SUROWIECKI, *THE WISDOM OF CROWDS* 34 (2006)), and at 135 (ODR jurors should be “drawn from a representative segment of the community that best suits the issue at hand.”); Raymond & Shackelford, *supra* note 2, at 502 (quoting Colin Rule as suggesting that “reputation-reporting disputes between buyers and sellers within the eBay platform” be “put in front of a jury of “twenty-one randomly selected eBay community members.”).

as a group, but instead would consider evidence and arguments individually, be linked with fellow jurors electronically in virtual space, and be monitored for bias, error, inattention, and the like by software rather than humans (e.g., lawyers, judges, bailiffs, and fellow jurors).¹¹⁸ In this worldview, being a juror would be a part-time job more than an obligation of citizenship.¹¹⁹ Parties to disputes would not control the marshaling and presentation of evidence, there would be limited adversary testing by cross-examination, limited challenges to juror selection, and limited jury assessment of witness and party credibility. And the Constitutional and statutory demands of the Confrontation Clause, the adversary system, and substantive law, would be of limited influence.¹²⁰ Parties would receive resolutions of their disputes but no explanation of why those particular resolutions were chosen over others (other than that was what the numbers dictated). Taken literally, this conception of jury trial assumes that two hundred years of legal and political history have no continuing force, and that the “wisdom of crowds”¹²¹ is an acceptable substitute for “the judgment of one’s peers.”

¹¹⁸ See Raymond & Shackelford, *supra* note 110, at 140 (“[W]earable technology can help the peer-based dispute resolution participant identify, react to, and possibly adjust to or make corrections should any of [the juror] responses be revealing a hidden bias.”).

¹¹⁹ See Raymond & Shackelford, *supra* note 110, at 132 (“By allowing individuals to participate as their schedules allow, and by paying people appropriate compensation based on actual participation, the decision-making process could be modernized to reward the participation of those who would like to contribute but who could otherwise not practically accommodate the demands.”).

¹²⁰ See Raymond & Shackelford, *supra* note 110, at 134–41 (describing the operation of the jury in crowdsourced online dispute resolution). Juries would “set some of their own rules as to conduct and process along with laying out graduated sanctions for violators. Market leaders could help identify and instill such norms, which could then reach the level of industry standards and perhaps eventually be reinforced through policy.” *Id.* at 145–146. “There are more ways of influencing behavior in cyber space than the heavy hand of black letter law. In fact, that is among the more crude instruments available.” *Id.* at 142.

¹²¹ The “wisdom of crowds,” according to Professors Raymond and Shackelford, was discovered in the mid-twentieth century in a “host of experiments” establishing “the possibilities group intelligence” (notwithstanding that group wisdom and group intelligence seem to be different things). The Professors give as an example of this experimental work a 1906 Francis Galton statistical test of the ability of a crowd of county fair goers to identify the correct answer to a weight-judging competition involving an ox. The professors acknowledge that as evidence of crowd intelligence this experiment is “inauspicious” at best, but claim that subsequent work by American sociologists and psychologists “demonstrated the possibilities of group intelligence,” citing JAMES SUROWIECKI, *THE WISDOM OF CROWDS* 4 (2006). They do not provide examples from that latter work. See Raymond & Shackelford, *supra* note 110, at 144–45. For different takes on the wisdom of crowds, see ELIAS CANETTI, *CROWDS AND POWER* (1978); and Kenneth Shepsle, *Congress is a “They,” Not an “It”: Legislative Intent as Oxymoron*, 12 INT’L REV. L. &

Because the expert algorithms that drive ODR systems are secret and known only to their owners and creators,¹²² participants in such systems have no way of knowing or contesting the conceptions of correct outcome on which the algorithms are based,¹²³ or the accuracy of the information on which the conceptions themselves are based, and there are reasons to be concerned about both.¹²⁴ Big Data is about behavioral patterns in the aggregate and has little to say about individual cases, particularly unusual or idiosyncratic ones (or even whether a case is unusual or idiosyncratic); and crowdsourced data takes its shape from the manner in which it is collected as much as from its insights into the matters about which it is consulted.¹²⁵ The resolution of legal disputes must be

ECON. 239 (1992) (arguing that a collective body cannot be charged with having a single state of mind, wise or otherwise).

¹²² See also Rainey, *supra* note 9, at 22–23 (arguing that there are ethics issues involved in the questions of who owns, and who should have access to, the Big Data sets on which ODR algorithms are based, describing early lawsuits raising some of those questions); Rafal Morek, *The Regulatory Framework for Online Dispute Resolution: A Critical View*, 38 TOL. L. REV. 163, 188–89 (2006) (“[I]n ODR, inefficiency, errors, or bias can be hidden under nicely crafted computer interfaces based on the way the program was constructed.”); Shackelford & Raymond, *supra* note 3, at 643 (“[I]n the online world, individuals will be better able to disengage from others and will be able to hide biases from oversight through the use of coding, algorithms, and inattentive monitoring.”).

¹²³ See McGowan, *supra* note 104, at 3 (“People don’t know that big data has been used on them,” quoting a Title VII plaintiffs’ attorney). See also CATHY O’NEILL, *WEAPONS OF MATH DESTRUCTION* (2016) (explaining “how big data increases inequality and threatens democracy,” based on data and algorithms used for credit scoring, insurance underwriting, and more).

¹²⁴ See ABA ELECTRONIC COMMERCE REPORT, *supra* note 21, at 18 (recommending as a “Best Practice for ODR service providers that they make disclosures “as a means of ensuring that consumers are (a) informed and (b) given a fair opportunity to understand the nature of an ODR Provider’s service before agreeing to participate in an ODR proceeding.”); Schmitz, *supra* note 3, at 250 (“new ODR systems must be transparent and fair to attract customers and convince them of ODR’s efficacy”); Shackelford & Raymond, *supra* note 3, at 633 (“To ensure that [an ODR] system lives up to [Civil Justice] standards—and to improve [its] overall trust—the system, including the internal workings and the outcomes must be transparent.”); Bostrom & Yudkowsky, *supra* note 85, at 317 (“when AI algorithms take on cognitive work with social dimensions—cognitive tasks previously performed by humans—the AI algorithms inherits social requirements”).

¹²⁵ See Shackelford & Raymond, *supra* note 3, at 656 (describing the different way in which crowdsourced data is collected). The Ujui (pronounced “you judge”) platform provides a good example of the process in operation. See *What is Ujui?*, UJUI, <http://www.ujui.org/whatisujui.html>. Parties to a dispute “[p]rovide up to a 50 character description of the claim and enter the amount claimed in the appropriate text boxes,” record arguments for and against the claims on video (three minute time limit), and upload them to the Ujui website for the Internet public to vote on outcome. Registered users of the Ujui site select from a list of open cases, view video arguments in the cases, and vote on the percentage of the claims to be awarded, on a scale of 0% to 100%. After seven days an average percentage is calculated, and that percentage is multiplied by the amount claimed to determine the final award. Parties participating in the system agree ahead of time to be bound by the final vote.

just, however, not just popular or topical, and to be just it must be based on legal and moral reasons identified explicitly, discussed in detail, and applied reasonably.¹²⁶ Algorithms are logical more than reasonable, however, programmed to apply specified standards to a discrete universe of facts rather than identify relevant standards or determine the range of relevant facts in the first instance.¹²⁷ It may be easy to determine what people have done in the past, or what a random assortment of people would do in the present, under identical circumstances, but it is a mistake to think that either of these inevitably is an indicator of a just outcome. Crowd-sourced data can provide helpful alternatives to present proposals, and Big Data can provide helpful benchmarks against which to test tentative resolutions, but neither is a source of legal or political legitimacy in its own right, or necessarily a reflection of a society's principled commitments embodied in its laws.

D. *The Quasi-Hacking Problem*

A software-based system for resolving disputes also is vulnerable to manipulation in a way that human and hybrid systems are not. Consider the following example from the early days of the eBay ODR program.¹²⁸ If a buyer on eBay claimed that the high value item she purchased was not as advertised and wanted to return it, eBay would back charge the seller and return the money to the buyer once tracking on the return shipment indicated that it had been received by the seller. eBay did not verify that the return shipment contained the item, however, so a dishonest buyer could return an empty package, keep the item, and get her money back. eBay would charge the seller a transaction fee no matter what, so that when the dust had settled the seller would be out the item, the

¹²⁶ Legal, political, and moral decisions must be reasonable, based on a consideration of all of the relevant circumstances of a particular case, but Big Data based algorithms are only logical, not reasonable. They take into account what humans tell them to take into account and not everything humans would have told them to take into account had they (the humans) been aware of all of the relevant facts. Algorithms will not decide for themselves what they need to be told. I am grateful to Joanna Bac for this point.

¹²⁷ Professors Katsh and Rule sometimes equate a typical resolution of a dispute with a fair resolution. See Katsh & Rule, *supra* note 8, at 334 (describing resolutions based on “data generated by very large numbers of disputes” as “fair.”) At other points in their discussion, however, they acknowledge that in some Big Data situations “questions of fairness . . . are still present.” *Id.* at 337.

¹²⁸ The example is adapted from a comment by TMJ on Li, *supra* note 8 (posted Mar. 18, 2016, 01:56 PM CDT).

cost of shipping in both directions, the eBay transaction fee, and would have no recourse because he would not be able to prove a negative to eBay, that the buyer had not returned the item. He also would not be able to get a human on the phone to do anything about it.¹²⁹ eBay could tweak its software to prevent this practice once it learned about it, of course,¹³⁰ but the larger point is that software-driven systems always will be vulnerable to manipulation by those who understand how the software works and can find new vulnerabilities to exploit, even in circumstances where a human agent could recognize the problem, investigate it, and resolve it in real time.¹³¹ This may be an acceptable cost in systems for resolving high-volume, small-stakes disputes, but it is a serious flaw in systems for resolving substantively complicated disputes, that involve important legal and political issues, and have significant consequences.

E. *The Rudeness of Cyberspace*

In an ironic twist, ODR also might undo some of the important reforms produced by the Alternative Dispute Resolution (ADR) movement of the past several decades. As early as the 1980s, for example, Howard Raiffa, among others, found that people behave more competitively, adversarially, and self-interestedly when bargaining through the medium of a computer (online, in ef-

¹²⁹ If the buyer in the following story faked the destruction of the violin, the ruse still works. See Chenda Ngak, *Paypal Makes Ebay Customer Destroy \$2,500 Violin, Seller Left Empty Handed*, CBS News (Jan. 4, 2012), <http://www.cbsnews.com/news/paypal-makes-ebay-customer-destroy-2500-violin-seller-left-empty-handed/>.

¹³⁰ It may have done this. See *Returning an Item*, eBay, <http://pages.ebay.com/help/buy/return-item.html> (describing the eBay procedure for determining when an item has been returned to a seller).

¹³¹ Coming up with moves like this is well within the cleverness capacity of most ordinary citizens, and would not require any particular technical skills to carry out. See Shackelford & Raymond, *supra* note 3, at 635 (“[A]ny AI algorithm that seeks to replace even a minor portion of the justice system must be made robust against manipulation”); Katsh et al., *supra* note 31, at 728–31 (describing the way in which eBay uses online reputation building, escrow services, insurance, exclusion from the site, and other such devices and practices to prevent abusive behavior); Friedman et al., *supra* note 55, at 374 (describing how “those with good reputations may act less carefully than those who have bad reputations . . . much to their own detriment” in online disputing); Del Duca et al., *supra* note 2, at 70–72 (describing the eBay chargeback procedures that permit a merchant to re-present a charge, but also permit eBay to charge a separate fee for that re-presentation, and do not permit the recovery of damages).

fect), than in person.¹³² Reducing conversation to electronically transmitted messages seems to suspend, at least in part, the felt obligation to be sociable and this makes it easier to be nasty.¹³³ Research on the subject is mixed,¹³⁴ and the effects are not the same on all people,¹³⁵ but there is considerable evidence to suggest that resolving disputes electronically reduces social cooperation,¹³⁶

¹³² See HOWARD RAIFFA, *THE ART AND SCIENCE OF NEGOTIATION* 266–67 (1982). See also CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 27 (acknowledging that ODR “may encourage litigiousness, promote a more combative culture, and empower vexatious litigants.”); Ebner et al., *supra* note 88, at 94 (describing the “increased contentiousness produced by “communication at a distance via technological means . . . [and how] the lack of social cues in e-communication causes people to act more contentiously than they do in face-to-face encounters, resulting in more frequent occurrences of swearing, name-calling, insults, and hostile behavior.”); Thompson & Nadler, *supra* note 95, at 119 (describing how email negotiators are more likely to confront one another negatively and engage in “rude, impulsive behavior”); Betancourt & Zlatanska, *supra* note 11, at 260 (research has shown that “the ‘conventions of personal interaction that would apply in a telephone call or a face-to-face [mediation] do not apply in cyberspace.’” (quoting Joel Eisen, *Are We Ready for Mediation in Cyberspace?*, 1998 BYU L. REV. 1305, 1311)).

¹³³ Cf. Harry Chapin, *What Made America Famous*, on VERITIES AND BALDERDASH (Elektra Records 1974) (“It’s funny, when you get that close, it’s kind of hard to hate.”). In a sense, this is a dispute resolution variation of the well-known phenomena of Cyberstalking and Cyberbullying, made possible by the anonymity (partial anonymity in the dispute resolution context) of the Internet. See Ebner, *supra* note 60, at 214, 221 (“Online communication tends to be less inhibited . . . owing to physical distance, reduced social presence, reduced accountability, and a sense of anonymity . . . [because of this] online negotiators have an increased tendency to threaten and issue ultimatums to lie or deceive to confront each other negatively, and to engage in flaming.”). But see Bulinski & Prescott, *supra* note 1, at 233 (praising ODR for allowing the “anonymization or pseudo-anonymization of court proceedings”); Lan Q. Hang, *Online Dispute Resolution Systems: The Future of Cyberspace Law*, 41 SANTA CLARA L. REV. 837, 858 (2001) (arguing that “If there must be face-to-face contact for each dispute resolution, [ODR] is more likely to fail because anonymity is part of the Internet culture. The advantage of [ODR] is that [it] may preserve anonymity and resolve the dispute at the same time.”).

¹³⁴ See Braeutigam, *supra* note 14, at 106–12 (describing the differences between the “task-oriented” (“cues filtered-out”) and “social emotions” theoretical orientations to the study of computer mediated communication, and the different conclusions each body of work reaches on the question of whether online communication is able to create trust and build rapport) (citing Yuliang Liu, *What Does Research Say About the Nature of Computer-Mediated Communication: Task Oriented, Social-Emotion-Oriented, or Both?* 6 ELECTRONIC J. SOC. 1 (2002), <http://www.sociology.org/content/vol006.001/liu.html>; Ethan Katsh, *Bringing Online Dispute Resolution of Virtual Worlds: Creating Processes Through Code*, 49 N.Y.L. SCH. L. REV. 271 (2004-2005)).

¹³⁵ See Braeutigam, *supra* note 14, at 122 (“Some people are more comfortable communicating in person while others are stronger online.”).

¹³⁶ See Friedman et al., *supra* note 55, at 370, 373 (expressions of anger, accusations of wrongdoing, and an aloof and arrogant stance are more likely to produce angry responses when communicated by email), and at 374 (“The online asynchronous format for exchanges . . . may be more conducive to the expression of anger than face-to-face interchanges. There is substantial evidence that people are less emotionally inhibited in electronic than face-to-face formats.”); Ebner et al., *supra* note 88, at 96–97 (“[I]n e-negotiation . . . one is less likely to encounter cooperation . . . less likely to achieve integrative outcomes . . . and the potential for impasse appears to be greater.”); *id.* at 98–99 (“The lack of social presence and of contextual cues lends a

and reduced social cooperation is a substantial impediment to effective dispute resolution. ODR could have the unintended consequence of reinstating the dispute resolution world of threat, posturing, and power that the ADR movement worked hard to neutralize and eliminate.¹³⁷

F. *Special Problems of Video Based Systems*

Finally, video-based dispute resolution systems¹³⁸ have limitations of their own that raise questions about the ability of images to efface the differences between appearance and reality.¹³⁹ For example, video interaction does not build trust and rapport to the same extent as in-person interaction,¹⁴⁰ and building trust and rap-

sense of distance and of vagueness to the interaction . . . causing e-negotiators [to be] more likely to suspect their opposite of lying than are face-to-face negotiators, even when no actual deception has taken place.”); *id.* at 98 (“[E]-negotiators ask fewer clarifying questions than face-to-face negotiators do. Instead of gathering information from their counterparts, email negotiators may be more likely to make assumptions [and] if those assumptions later prove unfounded, the negotiators may perceive the other’s inconsistent actions or preferences as a breaking of trust.”); Ebner, *supra* note 60, at 227 (“[E]-negotiation entails lower rates of process cooperation, and lower rates of integrative outcomes when compared to face-to-face negotiation.”); *id.* at nn. 59 & 61 (listing scholarship on effect of online communication on social cooperation); Thompson & Nadler, *supra* note 95, at 113 (“[T]o the extent that situations fail to provide cues for relevant normative behavior, there are fewer constraints on counternormative behavior,” and parties are more likely to attribute sinister motives to adversary communications); Braeutigam, *supra* note 14, at 106 (“Some research suggests that online communicants have a tendency to consciously or unconsciously evaluate people they encounter online . . . [and] attribute sinister motives and trust-eroding personal characteristics to the other communicant, such as bias, incompetence, abrasiveness, prejudice, or deceitfulness.”).

¹³⁷ See Ebner et al., *supra* note 88, at 94–95 ([T]he “weakening of the normative fabric [in email negotiation] translates into an increased tendency to make threats and issue ultimatums to adopt contentious, ‘squeaky wheel’ behavior, to lie or deceive, to confront each other negatively, and to engage in flaming.”); Thompson & Nadler, *supra* note 95, at 112 (“Conflicts are expressed, recognized, and addressed more quickly if negotiators are in physical proximity.”); *id.* at 118 (describing the tendency of email negotiators to exhibit the “Burned bridge bias” and “Squeaky wheel bias—to “engage in risky interpersonal behavior . . . that they would not engage in when interacting face-to-face . . . and that lead to a high probability of failure”).

¹³⁸ See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 24–25 (describing “second generation” video-technology driven ODR systems as “high quality Skype”).

¹³⁹ I have taken the substance of the comments that follow from Professors Ebner and Thompson. See Ebner & Thompson, *supra* note 23, at 24–30.

¹⁴⁰ See Ebner & Thompson, *supra* note 23, at 26–30 (describing the structural properties of video-based communication that make developing trust difficult); Ebner, *supra* note 60, at 211 (“[R]esearch made clear that people communicating at a distance through technological means are likely to experience low levels of interpersonal trust and higher rates of disruption and deterioration than those engage in face-to-face dialogue.”); *id.* at 224 (“[D]istance and remote detachment . . . engender assumptions that one can get away with trust-breaking behavior [and]

port is essential to resolving disputes. Trust building relies on the communication of unfiltered, emotional information, often in the form of nonverbal data,¹⁴¹ as much as it does on the communication of substantive information in words; and non-verbal, emotional information does not always transfer easily over the electronic highway. Video communication makes some such information available. Parties can make a limited form of eye contact,¹⁴² for example, use gestures, orient their bodies in certain ways, and the like, but the perception of this information will be affected by the definition of the parties' webcams, the sensitivity of their microphones, the quality of their Internet connection, the size of their screen windows, and their videographic choices.¹⁴³ A video-conferenced image invariably presents a partial and often manipulated image, and a partial or manipulated image can undercut trust as much as build it.

lowers inhibitions against doing so."); Rebecca Brennan, *Mismatch.com: Online Dispute Resolution and Divorce*, 13 CARDOZO J. CONFLICT RESOL. 197, 219 (2011) (suggesting that videoconferencing does not allow individuals to express themselves more effectively than does asynchronous, text-based communication). *But see* Ebner, *supra* note 60, at 215 n. 61 ("Video conferencing has been found to support trust better than text.").

¹⁴¹ See Thompson & Nadler, *supra* note 95, at 111 (describing how access to "nonverbal cues, such as body orientation, gestures, eye contact, head nodding and paraverbal speech, such as fluency, use of fillers, such as 'uh-huhs'" builds trust and rapport in negotiation); Ebner & Thompson, *supra* note 23, at 15-18 (describing the "nonverbal communication elements of trust"). *But see* Braeutigam, *supra* note 14, at 115-16 (describing how people have adapted to communication without the cues of face-to-face conversation and learned to communicate emotions such as humor, anger, sadness, happiness, and sarcasm through the use of emoticons, ALL CAPS, initialisms, and other text-based techniques).

¹⁴² Ebner and Thompson describe the special problems of making eye contact in video communication. A party looking at an image of another party on the screen, they explain, will appear to be looking elsewhere than into the other party's eyes because the webcam on a computer is usually located at the top of the screen and not directly behind the computer. Looking at a party's eyes on the screen will make it appear as if one is looking downward and not meeting the other's gaze. A party could train himself to look directly into the webcam, but this would inhibit his ability to view nonverbal clues. Or, he could drag the video window showing the other party to a point on the screen as close to the webcam as possible. This way, his eyes would be angled towards the party, giving the impression of eye contact. Or, he could use a computer without an integrated webcam, set the camera on a table below the screen, pointing upwards, and look directly into it. See Ebner & Thompson, *supra* note 23, at 29. Each of these strategies introduces an element of artificiality into the conversation that makes communicating authentically more difficult.

¹⁴³ The most important videographic choice often is the distance between a party and the webcam. If a party is too close to the webcam, for example, the screen will be filled with his face and leave his body and background information invisible. If he is too far from the webcam, on the other hand, expressions on his face can go unnoticed or be misinterpreted, and distracting or confusing background information can play more of a role than is warranted. Ebner and Thompson provide helpful illustrations of these differences. See Ebner & Thompson, *supra* note 23, at 27-28.

Wholly apart from its comparative advantage in communicating non-verbal information, face-to-face interaction shows respect for a person in a way that videoconferencing cannot, by saying, implicitly, “You’re worth the expense and a few days of my time.”¹⁴⁴ Showing respect for others makes one likeable, people trust people they like, and parties reach agreements with people they trust. The exchange of uncontroverted information, the performance of routine tasks, and any other activity in which there is no potential for partisan gain, usually can be conducted over video as effectively as in-person, but the discussion of issues on which the parties have different normative views, or different perceptions of underlying reality, usually will be more productive when conducted face-to-face.

IV. ODR’S UNFINISHED AGENDA

Most would agree that settling disputes at home, by yourself, in your pajamas, in front of a monitor, is better than dressing up and going to court, and if everything else was equal, that would be where all dispute settlement design would be headed. But before that can happen, ODR proponents must show how algorithm-driven systems for resolving disputes can make the complex legal and moral judgments at the heart of substantively complicated disputes in ways that both protect the rights of the parties and communicate messages to the population at large about the nature and limits of acceptable conduct.¹⁴⁵ ODR systems based on Big Data algorithms are here to stay, that much is clear, but if ODR is to take over the civil dispute resolution universe generally, or even a substantial part of it, it will have to explain how it can resolve the legal, political, and moral questions present in disputes of any com-

¹⁴⁴ See Thompson, *supra* note 42, at 2.

¹⁴⁵ See Bulinski & Prescott, *supra* note 1, at 209–10 (“OCR systems are best viewed as tools to supplement traditional courtroom access and are likely to serve the public best when they work in tandem with physical . . . [courts. They are not designed to handle] the paradigmatic murder trial or securities litigation lawsuit.”); *id.* at 228 (“Many cases are of course too complicated to be resolved with one or two rounds of back-and-forth correspondence. These cases may not be candidates for OCR systems.”); Rule, *supra* note 2, at 7 (“ODR is not a good fit with every dispute.”).

plexity,¹⁴⁶ and it will have to do this with substantive arguments, not psychological and technological ones.¹⁴⁷

ODR proponents will have to show how online systems can be configured to permit parties to define and explain their claims fully and fairly, in terms they use to define and explain the claims to themselves, and defend those claims at length (have their “day in court”) in accordance with a set of substantive, evidentiary, and procedural rules that everyone in the process is aware of and accepts as legitimate.¹⁴⁸ The substantive bases on which disputes are resolved (the justice concern), and the procedural rules used to configure, analyze, and resolve the issues in dispute (the fairness concern), are the most important features of a public dispute resolution system, and the case for ODR is still weak on justice and fairness. These concerns are not the same for all types of disputes and all types of systems, of course. Stand-alone systems driven exclusively by optimization algorithms, can provide acceptable redress in simple, routine, disputes where not much is at stake, and cost and convenience are the overriding concerns. But stand-alone systems meet their limits in complicated disputes where case-specific legal and moral reasoning is needed. Software algorithms can think, but they cannot reason.

ODR software also does a better job than humans of collecting, organizing, and processing information and because of this, it will be an important component of a dispute resolution system of any kind, even when it is not used to make or suggest outcomes.¹⁴⁹

¹⁴⁶ See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 26 (acknowledging that “there is some debate in the ODR community as to whether an online dispute handling process . . . would provide a fair trial . . . [or just] economy class justice.”). The Report also expresses the concern that a compulsory online system “could greatly disadvantage those who do not use the Internet.” *Id.*

¹⁴⁷ The British seem quicker than Americans to recognize this. See CIVIL JUSTICE COUNCIL REPORT, *supra* note 4, at 9 (recommending the creation of a court based online dispute resolution service that affords “an opportunity for citizens to present their cases to an impartial expert delivering outcomes that parties feel are just . . . [one] underpinned by clear rules of procedure and fully implements the law of the land.”).

¹⁴⁸ See ABA BEST PRACTICES REPORT, *supra* note 3, at 4 (To “meet basic standards of due process [ODR] disputants should be given a reasonable and fair opportunity to be heard.”). *But see* Betancourt & Zlatanska, *supra* note 11, at 263–64 (“Dispute resolution mechanisms . . . are a means of maintaining social order . . . —on the basis of the rule of law—and it is doubtful that such a function can be fully and effectively performed in cyberspace.”); BERKMAN CENTER FOR INTERNET & SOCIETY, *supra* note 17 (“ODR providers may reach decisions or settlements based on equitable principles, and/or on the basis of codes of conduct, rather than strict legal rules.”).

¹⁴⁹ See Bulinski & Prescott, *supra* note 1, at 240–44 (arguing that ODR methods will help judges resolve small-scale, standardized cases more quickly, and that this in turn will free up judicial time to work on high stakes, complicated cases in greater detail). There always will be

If it wants to go public, however, online dispute resolution, like judicial dispute resolution generally, must serve the substantive ends of the society at large, and not just the convenience interests of the parties to a dispute. It must mediate dispute relationships and shape dispute outcomes in accordance with a society's normative commitments and not just the wealth, power, or familiarity with the system, of the parties involved. Dispute resolution systems run by humans do this now (albeit imperfectly), but the jury is still out on whether algorithm-run systems can do it as well.

V. CONCLUSION

If not a wave of the future, ODR certainly is a rising tide, and that should not surprise anyone aware of the power of electronic communication and familiar with the nature of disputing. All dispute resolution methods involve standardized and routine tasks that can be managed more effectively by software than humans, and thus software has an inevitable role to play in all dispute resolution system of the future. Difficult issues arise, however, when it comes time to determine what parts of the dispute resolution process to assign to software and what parts to assign to humans. Software is not easily programmed to make the reasonableness judgments needed over and over again in managing parties' attempts to defend, compromise, and settle even moderately complicated legal claims.¹⁵⁰ Software does what it is told, and while this includes "thinking" in one sense of the term, the jury is still out on whether it includes legal, moral, and political analysis, and emotional engagement with the interests, values, and feelings of parties to a dispute. Software can mimic the outward appearance of analysis and emotional engagement, but it does not have the sentiments and sensations that drive those processes and give them meaning, and thus it can never understand all that is at stake in a dispute. This does not mean ODR has nothing to contribute to dispute res-

difficult line-drawing problems in determining what kinds of disputes are routine, and what kind are not, as well as issue of whether parties will be permitted to opt out of a system, or take an appeal from its decision, but these problems are no different those involved in defining the jurisdiction of courts generally.

¹⁵⁰ The most common examples include selecting the range of relevant information to take into account, identifying the nature and meaning of governing normative standards, and determining the comparative weight to be given the various, often incommensurable, factors at play in a dispute. The answers to many, if not most, of these questions in even moderately complex disputes cannot be known in advance, and thus cannot be programmed into a decision algorithm.

olution design—it has a great deal to contribute—but it does mean that the nature and extent of that contribution has yet to be defined. And if early signs are any indication, the contribution will be smaller than proponents envision, but larger than opponents fear. We know ODR is convenient, fast, and cheap. What we do not know is whether it can be fair, caring, and just, and to paraphrase Harry Callahan: “A software program’s got to know its limitations.”¹⁵¹

¹⁵¹ *MAGNUM FORCE* (Warner Bros. 1973).