Notes

Dropping the Other Shoe: Personal Jurisdiction and Remote Technology in the Post-Pandemic World

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As the question of how new technology factors into the personal jurisdiction analysis remains unresolved, the vast increase in the reliance on remote technology that the COVID-19 pandemic spurred urges a definitive answer. Even when the pandemic comes to its end, the shift it caused towards remote interactions and the question of how these interactions affect personal jurisdiction will continue as society enters the post-pandemic world. The now-outdated Internet-specific test that lower courts created more than twenty years ago has caused more confusion than clarity and no longer suits the technology of a rapidly evolving society. As the new norm, remote interactions and virtual contacts can fit within the traditional personal jurisdiction doctrines on the same—even surer—footing as physical contacts.

This Note argues that virtual contacts should support a finding of personal jurisdiction and offers a solution that uses the familiar tools from International Shoe *and its progeny to analyze technology-based connections in the post-pandemic world and beyond. Through three approaches, this Note posits a more coherent doctrine that combines its traditions with the realities of an ever-evolving society and provides an answer as courts, commentators, and civil procedure enthusiasts wait for the Internet-jurisdiction shoe to drop.*[1]

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1. *See Wait for the Other Shoe to Drop*, DICTIONARY.COM, https://www.dictionary.com/browse/wait-for-the-other-shoe-to-drop (last visited Mar. 21, 2022) ("Await a seemingly inevitable event . . . .").

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INTRODUCTION

Imagine an Illinois company with its principal place of business in Illinois wishes to gain insight on its upcoming business ventures. As part of this goal, the company hires two consultants from Connecticut to work on separate projects but has no other contacts with the state. One consultant is quite comfortable with technology and so can work completely remotely. All of the company's contacts with him—communications, documents and video sharing, and the like—are virtual. The other consultant prefers to work in person, so she often flies to Illinois to visit with the company face-to-face, while the company mails physical documents to her in Connecticut and, occasionally, sends company representatives to participate in in-person meetings at the consultant's Connecticut office. Ultimately, however, the business ventures fall through, and the company fails to pay either consultant for work on either project. Both consultants sue the company for breach of contract in their home state of Connecticut. The second consultant likely can do so because the company routinely had physical contacts with Connecticut in connection with her project, so the courts in Connecticut will likely have personal jurisdiction over the company. But the first consultant may have a more difficult time suing the company in Connecticut, even for similar work and for a similar harm, because the company's contacts with Connecticut in his case were all virtual.[2] Courts in Connecticut may refuse to exercise jurisdiction over the company based on the company's use of technology to connect with its remote worker,[3] a practice that

2. This hypothetical is loosely based on *Callahan v. Wisdom*, No. 3:19-CV-00350, 2020 WL 2061882 (D. Conn. Apr. 29, 2020), which dealt with only one consultant—the remote worker. Comparing the remote worker's difficulty establishing personal jurisdiction with a hypothetical in-person worker highlights the unfairness of lower courts' tendency to treat differently similar plaintiffs with similar contacts and similar harms, where the only difference is the virtual or physical nature of the contacts. This comparison reveals that, currently, courts do not view virtual contacts on the same footing as physical contacts. This Note argues that they should.

The court in *Callahan* concluded that "the evidence fails to demonstrate that the Company purposefully availed itself of the privilege of conducting business in Connecticut such that it might reasonably anticipate being haled into court in Connecticut merely by engaging a consultant, who, purely incidental to his work for the Company, was located in Connecticut." *Callahan*, 2020 WL 2061882, at *12. However, the company's engagement with the remote worker in his home state was not necessarily "purely incidental." Rather, as this illustration shows, the virtual contacts a company shares with its worker in his home state can be just as meaningful as physical contacts and can be sufficient for exercising jurisdiction.

3. Several recent lower court cases illustrate this misguided approach that some courts have taken to personal jurisdiction based on remote work. *See, e.g.*, *Callahan*, 2020 WL 2061882, at *12; Picot v. Weston, 780 F.3d 1206, 1213 (9th Cir. 2015); Fields v. Sickle Cell Disease Ass'n of Am., Inc., 376 F. Supp. 3d 647, 654 (E.D.N.C. 2018), *aff'd*, 770 F. App'x 77 (4th Cir. 2019); TorcUP, Inc. v. Aztec Bolting Servs., Inc., 386 F. Supp. 3d 520, 526–27 (E.D. Pa. 2019); Pederson v. Frost, 951 F.3d 977, 978 (8th Cir. 2020); Perry v. Nat'l Ass'n of Home Builders of U.S., No. CV TDC-20-0454, 2020 WL 5759766, at *6 (D. Md. Sept. 28, 2020); Gonzalez v. U.S. Hum. Rts. Network, 512 F. Supp. 3d 944, 958–59 (D. Ariz. 2021).

By contrast, other courts have found that defendant employers' virtual contacts with their remote employees were sufficient to exercise personal jurisdiction, each demonstrating a plausible way out of the virtual contacts tangle. *See, e.g.*, Williams v. Preeminent Protective Servs., Inc., 81 F. Supp. 3d 265, 273 (E.D.N.Y. 2015); Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *3–12 (S.D. Cal. Feb. 26, 2016); Winner v. Tryko Partners, LLC, 333 F. Supp. 3d 250, 256 (W.D.N.Y. 2018); Ouellette v. True Penny People, LLC, 352 F. Supp. 3d 144, 155 (D. Mass. 2018); Hall v. Rag-O-Rama, LLC, 359 F. Supp. 3d 499, 513 (E.D.

is becoming increasingly prevalent in an advancing society and one that has seen the myriad effects of a pandemic. This dissonance between cases with substantially similar harms and conduct but different jurisdictional outcomes poses real concerns regarding advancing fundamental fairness and maintaining a coherent doctrine in light of evolving societal norms.

Courts and commentators have followed a misguided approach to technology's role in the personal jurisdiction inquiry. Faced with the difficult problem of assessing jurisdiction in the unfamiliar cyberworld, some lower courts initially embarked on an ill-fated journey, following an Internet-specific test into a maze of disjointed results and a muddled doctrine that tends to discount the import of virtual contacts. These courts viewed the Internet and the contacts that arose from it as so different from the physical contacts that existing personal jurisdiction doctrines contemplated that they required a special test. However, not only has technological innovation outmoded this special test but the underlying premise that virtual contacts cannot be put on par with physical contacts is incorrect. The new norm, virtual contacts can fit within the traditional personal jurisdiction doctrines without a change in doctrine at all.

This Note argues that the virtual nature of contacts should support—not undermine—a finding of personal jurisdiction. Discounting virtual contacts as insufficient contacts misapprehends the role that technology and remote connection play in the daily lives of Americans today. The COVID-19 pandemic, and the vast increase in the reliance on remote technology that has followed and will continue, has shown that virtual contacts are the new norm and can create meaningful connection between forum states. This new step—rather, leap—towards an increasingly technological society therefore should lead courts to adopt a unified and corrected approach to virtual contacts in the personal jurisdiction inquiry. This Note proposes that courts discard the now-outdated Internet-specific test and instead use the familiar tools from *International Shoe* and its progeny to assess the new remote-technology era and the future innovations sure to come. Through three approaches, this Note offers a more consistent personal jurisdiction doctrine that reflects both the doctrine's traditions and the realities of an ever-evolving society increasingly reliant on virtual contacts.

Part I examines the existing problem of virtual contacts in the personal jurisdiction analysis and how the COVID-19 pandemic, and the increase in remote technology, complicate and exacerbate this problem. Without court and commentator consensus on how to deal with virtual contacts and without the flexibility to encompass inevitable technological evolution, lower court precedent is disjointed, increasingly inapplicable to today's ever-evolving

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Ky. 2019); Stuart v. Churn LLC, No. 1:19-CV-369, 2019 WL 2342354, at *6 (M.D.N.C. June 3, 2019); King v. Prodea Sys., Inc., 433 F. Supp. 3d 7, 16 (D. Mass. 2019); Liqui-Box Corp. v. Scholle IPN Corp., No. 19 C 4069, 2020 WL 5593755, at *10 (N.D. Ill. Sept. 18, 2020); Wallens v. Milliman Fin. Risk Mgmt. LLC, 509 F. Supp. 3d 1204, 1216 (C.D. Cal. 2020).

virtual world, and ultimately unfair to the technology user. The COVID-19 pandemic has forced a seismic shift towards reliance on remote technology, altering how society and courts view the fairness of placing virtual contacts on the same footing as physical contacts in the personal jurisdiction analysis and making the need for an adjusted approach more pressing.

Part II proposes a solution: applying the traditional personal jurisdiction doctrines and principles to ever-evolving technology and an ever-evolving society. Under three approaches, the traditional doctrines can accommodate consideration of remote technology and can shift the analysis towards a finding of personal jurisdiction in virtual contacts cases.

First, the virtual nature of virtual contacts does not preclude courts from determining whether these contacts with a forum state are meaningful. In particular, out-of-state defendants can still purposefully avail themselves and seek and obtain the benefits and protection of forum states through the use of remote technology. Causes of action may also arise out of or relate to virtual activities. Further, the increase in reliance on technology makes it reasonably foreseeable that some defendants may be haled into court in a forum state based on these virtual contacts. Additionally, because remote technology is becoming more widespread, virtual contacts may increase the overall number of contacts defendants have with a particular forum state, fortifying the analysis.

Second, these virtual contacts may comport with an increasingly interconnected society's traditional notions of "fair play and substantial justice." With roots in society's changing business and social practices and increased interactions across state lines, the "fair play and substantial justice" standard can accommodate modern changes, such as the widespread use of remote technology following a norm-shifting pandemic.

Third, the fairness factors provide an effective framework for assessing the fairness of exercising jurisdiction, even over out-of-state remote-technology users. The expanded reliance on and use of technology affects each of the factors. In particular, by lessening the burdens on out-of-state defendants, increasing the forum's interest in adjudicating the dispute, increasing the plaintiffs' interest in effective relief, and increasing the several states' shared interest in furthering fundamental social policies, incorporating remote technology into the analysis will often tilt the scale towards finding personal jurisdiction in virtual contacts cases.

I. THE PROBLEM OF PERSONAL JURISDICTION IN THE POST-PANDEMIC WORLD

Currently and in recent years, courts have tended to treat virtual contacts as insufficient, discounting them as nonmeaningful connections with the forum state, or so foreign to the traditional personal jurisdiction inquiry that they require a special test. With the advent of the Internet came excitement about the seemingly endless possibilities it provided, awe at the increased accessibility of

information previously unavailable, and confusion regarding how to treat it under the law.[4] In their efforts to avoid creating universal jurisdiction in cases involving Internet activities, courts opted for Internet-specific tests. The leading Internet-specific test that courts crafted, however, has created more confusion than clarity, and new technology has already proven this special test outdated and a poor fit for an increasingly interconnected society. The COVID-19 pandemic, and the seismic shift to the virtual world it spurred, urge an answer to the question of virtual contacts. The lower courts' disjointed and misguided attempts at an answer, and the Supreme Court's silence on—yet recent interest in—the issue make the question even more pressing.

A. THE EXISTING QUESTION OF VIRTUAL CONTACTS AND THE PITFALLS OF A SPECIAL TEST

The increased prevalence and social acceptance of remote technology for all kinds of interstate contacts have outpaced the evolution of personal jurisdiction doctrine, leaving court precedent confused, outdated, and unfair. The Supreme Court, which has recently noted that "internet transactions . . . may raise doctrinal questions of their own,"[5] so far has avoided deciding a virtual contacts case, explicitly "leav[ing] questions about virtual contacts for another day."[6] Although this day has not yet come, lower courts have attempted their own solutions.[7] These solutions have resulted in disjointed precedent and a misguided approach to the evolving problem of virtual contacts in a way that tends to discount the import of these contacts. Now that lower courts have offered solutions and technology has become an even more dominant—and continuously changing—aspect of everyday life, it is time to identify a more

4. *See, e.g.*, Reno v. Am. C.L. Union, 521 U.S. 844, 851 (1997) ("Taken together, these tools constitute a unique medium—known to its users as 'cyberspace'—located in no particular geographical location but available to anyone, anywhere in the world, with access to the Internet."); Dennis T. Yokoyama, *You Can't Always Use the* Zippo *Code: The Fallacy of a Uniform Theory of Internet Personal Jurisdiction*, 54 DEPAUL L. REV. 1147, 1156 (2005) ("[J]udges initially faced with personal jurisdiction issues intertwined with Internet activities were awed with the universal accessibility of information available on the Internet.").

5. Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1028 n.4 (2021); *see also* Transcript of Oral Argument at *57, *Ford*, 141 S. Ct. 1017 (No. 19-368), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2020/19-368_m648.pdf (showing Mr. Deepak Gupta, the attorney on behalf of the Respondents, stating, "You know, on the Internet, again, I just think that is probably the most vexing issue in personal jurisdiction").

6. Walden v. Fiore, 571 U.S. 277, 290 n.9 (2014) (stating that "whether and how a defendant's virtual 'presence' and conduct translate into 'contacts' with a particular State" would be "very different questions"); *see also* J. McIntyre Mach., Ltd. v. Nicastro, 564 U.S. 873, 887 (2011) (Breyer, J., concurring) ("I do not doubt that there have been many recent changes in commerce and communication, many of which are not anticipated by our precedents. But this case does not present any of those issues. So I think it unwise to announce a rule of broad applicability without full consideration of the modern-day consequences.").

7. In particular, courts have adopted and used the sliding scale established in *Zippo* to assess Internet contacts. *See* Zippo Mfg. Co. v. Zippo Dot Com, Inc., 952 F. Supp. 1119, 1124 (W.D. Pa. 1997). *Zippo*'s sliding scale is the leading Internet-specific test. Before *Zippo*, courts took a broad approach to Internet activities in the personal jurisdiction inquiry, resulting in what began to look like universal jurisdiction for the Internet. *See infra* note 11.

flexible approach to technology-based contacts in the personal jurisdiction analysis.

An approach that gained early traction amongst courts—courts which were undoubtedly relieved to have a solution to the vexing problem of the Internet in personal jurisdiction[8]—was the oft-discussed *Zippo* sliding scale.[9] *Zippo*'s sliding scale was a welcome initial answer to a puzzling question.[10] Avoiding the problem of creating universal jurisdiction with Internet activities,[11] *Zippo* tied personal jurisdiction in Internet cases to the nature and quality of the Internet activities in question.[12] It made practical sense: generally, the more interactive the website, the more an out-of-state defendant website owner could be said to be contacting the forum state.[13] However, its flaws quickly surfaced.

Confusion arose as lower courts applied the sliding scale differently, resulting in disjointed caselaw and unpredictable outcomes.[14] Accordingly, despite high hopes for a simple test for Internet jurisdiction, *Zippo*'s sliding scale ultimately did more to complicate the question than to answer it. Left lingering is the question of how *Zippo*'s special test for Internet activities fits with existing doctrines.[15] The existence of a special test may mean that this test replaces

8. *Zippo* provided a simple solution to a complex problem, and courts quickly embraced its proposal. *See* Yokoyama, *supra* note 4, at 1149 ("In *Zippo*'s wake, many courts, in their zealous and understandable quest to adopt a single standard for all Internet jurisdiction issues, have improvidently chosen to apply a unitary test based on *Zippo* to all Internet jurisdiction issues."); *see also* Patriot Sys., Inc. v. C-Cubed Corp., 21 F. Supp. 2d 1318, 1324 (D. Utah 1998) (finding the *Zippo* analysis "helpful in this relatively new and changing area of law"); Arthur R. Miller, *The Emerging Law of the Internet*, 38 GA. L. REV. 991, 996 (2004) (calling the judge in *Zippo* "very, very forward thinking" for crafting this Internet-specific test). *Zippo* also provided an answer early in the age of the Internet. *See Zippo*, 952 F. Supp. at 1123 ("With this global revolution looming on the horizon, the development of the law concerning the permissible scope of personal jurisdiction based on Internet use is in its infant stages.").

9. *See Zippo*, 952 F. Supp. at 1124.

10. In fact, most circuit courts have adopted *Zippo*'s sliding scale in some manner. *See, e.g.*, Toys "R" Us, Inc. v. Step Two, S.A., 318 F.3d 446, 452 (3d Cir. 2003); UMG Recordings, Inc. v. Kurbanov, 963 F.3d 344, 352 (4th Cir. 2020), *cert. denied*, 141 S. Ct. 1057 (2021); Mink v. AAAA Dev. LLC, 190 F.3d 333, 336 (5th Cir. 1999); Neogen Corp. v. Neo Gen Screening, Inc., 282 F.3d 883, 890 (6th Cir. 2002); Johnson v. Arden, 614 F.3d 785, 796 (8th Cir. 2010); Mavrix Photo, Inc. v. Brand Techs., Inc., 647 F.3d 1218, 1227 (9th Cir. 2011).

11. Before *Zippo*, some courts started down this ultimately unworkable path. *See, e.g.*, Heroes, Inc. v. Heroes Found., 958 F. Supp. 1, 5 (D.D.C. 1996) (finding personal jurisdiction with Internet page accessible by individuals in the forum state); Maritz, Inc. v. Cybergold, Inc., 947 F. Supp. 1328, 1334 (E.D. Mo. 1996) (same); Inset Sys., Inc. v. Instruction Set, Inc., 937 F. Supp. 161, 162 (D. Conn. 1996) (finding personal jurisdiction with Internet advertisements accessibly by individuals in the forum state). "[T]he search for a uniform test encompassing the whole of Internet jurisdiction issues is ultimately a misguided exercise, and one that has caused much of the disarray in Internet jurisdiction jurisprudence." Yokoyama, *supra* note 4, at 1150.

12. *Zippo*, 952 F. Supp. at 1124.

13. *Id.*

14. *See* Susan Nauss Exon, *A New* Shoe *Is Needed to Walk Through Cyberspace Jurisdiction*, 11 ALB. L.J. SCI. & TECH. 1, 25 (2000) ("Although all of the courts seem to enunciate the same basic rules of law, they do not appear to apply them with any sense of uniformity.").

15. *See* Alan M. Trammell & Derek E. Bambauer, *Personal Jurisdiction and the "Interwebs*,*"* 100 CORNELL L. REV. 1129, 1132 (2015) ("Most courts to confront the problem of Internet-based jurisdiction have relied favorably on *Zippo*, even though the test's supposed virtues are chimerical. It distorts the doctrine and its guiding principles . . . . And it has proved conspicuously indeterminate. Yet it endures.").

existing doctrines entirely when the case involves Internet activities.[16] In the alternative, it may simply add to the tools available to courts assessing jurisdiction.[17] Either way, it is not clear how courts should proceed in this analysis—by applying *Zippo* as a stand-alone test that replaces the traditional doctrines or as a gloss on top of them. *Zippo* therefore added an unpredictable sliding scale to the available tools for assessing personal jurisdiction without clarifying its role in the analysis, leaving courts without a way to reconcile longstanding doctrines with a new test for a new technology, all without clear guidelines.[18]

This confusion only increased with websites that fell in the middle of the sliding scale, so-called "interactive" websites.[19] In this middle ground, *Zippo* "offer[ed] little guidance,"[20] and as more websites fit into this wide classification, the question of personal jurisdiction further troubled courts and led to variance amongst the lower courts.[21] With such little guidance, anything or nothing could fit within this classification. Paradoxically, *Zippo* then paradoxically has led to both the expansion of personal jurisdiction in some cases because many websites could fit within its wide classification,[22] and an unfair denial of it in others because courts have tended to discount the import of

16. *See* A. Benjamin Spencer, *Jurisdiction and the Internet: Returning to Traditional Principles to Analyze Network-Mediated Contacts*, 2006 U. ILL. L. REV. 71, 72 (2006) ("Welcome to the world of Internet-based jurisdiction, a realm in which courts have created new jurisdictional principles for analyzing contacts mediated through cyberspace that depart from the traditional jurisdictional principles articulated in cases involving contacts made in real space. In this world, new considerations such as a Web site's 'interactivity' and 'target audience' are the essential concepts courts use to determine whether to treat virtual contacts as minimum contacts. The courts believe that these new concepts, which seem to be more suited to the Internet, have supplanted traditional considerations.").

17. *See* David Swetnam-Burland & Stacy O. Stitham, *Back to the Future: Revisiting* Zippo *in Light of "Modern Concerns,"* 29 J. MARSHALL J. COMPUTER & INFO. L. 231, 237 (2011) ("[T]he additional gloss provided by *Zippo*—the three-pronged (and now outdated) shorthand to determine the likelihood of jurisdiction over an Internet operator—might, in the end, be nothing more than a confusing distraction from the jurisdictional analysis.").

18. *Zippo* therefore no longer offers the insights courts and commentators initially considered it to provide. *See id.* at 232 ("While *Zippo*, the case, contained a significant insight into the role of the Internet in personal jurisdiction, *Zippo*, the test, has strayed from that insight, becoming an impediment rather than an aid to jurisdictional analysis.").

19. *See* Zippo Mfg. Co. v. Zippo Dot Com, Inc., 952 F. Supp. 1119, 1124 (W.D. Pa. 1997).

20. Roblor Mktg. Grp., Inc. v. GPS Indus., Inc., 645 F. Supp. 2d 1130, 1141 (S.D. Fla. 2009) ("We share in the criticism of over-reliance on the sliding scale of interactivity analysis. The sliding scale offers little guidance in the case of a defendant running a website that falls in the middle ground.").

21. *Compare* Kindig It Design, Inc. v. Creative Controls, Inc., 157 F. Supp. 3d 1167, 1175 (D. Utah 2016) (finding that the *Zippo* approach is "particularly troubling" in light of the "the exponential growth in the number of interactive websites" at the time the case was decided and in the future "as more individuals and businesses create interactive websites"), *with* Mink v. AAAA Dev. LLC, 190 F.3d 333, 336 (5th Cir. 1999) (finding that "the reasoning of *Zippo* is persuasive").

22. *See* Swetnam-Burland & Stitham, *supra* note 17, at 242 ("The 'modern concern' . . . is not that a contacts-based jurisprudence cannot adequately deal with Internet-based contacts, but rather that a *Zippo*-based jurisprudence will swallow the doctrine of personal jurisdiction whole. If every business with a virtual presence can be sued anywhere, and virtually every business is online, then virtually every business can be sued virtually anywhere.").

virtual contacts.[23] This wide classification has thus "created a black hole of doubt and confusion."[24]

Kindig It Design, Inc. v. Creative Controls, Inc.[25] provides a salient illustration and discussion of the problems with Internet-specific tests, with particular focus on *Zippo*. The case involved copyright and patent infringement claims by a Utah company against a Michigan company.[26] The defendant company maintained and advertised its products on a website on which customers, including those from Utah, could make purchases.[27] However, there was no evidence that the website or advertisements specifically targeted Utah customers.[28] In assessing the defendant company's Internet contacts, the court found that, on *Zippo*'s sliding scale, the website would fall into the "highly interactive" classification because it "allowed users to place orders for products" and the "defendant clearly [did] business over the internet, ..."[29] Therefore, under *Zippo*, the court would have personal jurisdiction over the defendant company "based solely on the existence of its website."[30] The court noted that "[t]his would be the case even though [the plaintiff] has not pled any facts to suggest that any Utah resident *actually* viewed or interacted with [the defendant's] website, ..."[31] The court found that this result—a finding of personal jurisdiction despite a lack of any actual contact, physical or virtual, with the forum state—demonstrated *Zippo*'s fatal flaw:

> The lack of any specific instances of [the defendant's] physical or digital contacts with Utah demonstrates why the *Zippo* sliding scale should not replace traditional personal jurisdiction analysis. Specifically, it highlights *Zippo*'s primary defect. The *Zippo* test effectively removes geographical limitations on personal jurisdiction over entities that have interactive websites. And because the number of entities that have interactive websites continues to grow exponentially, application of the *Zippo* framework would essentially eliminate the traditional geographic limitations on personal jurisdiction.[32]

Further issues arise with considerations of the increasingly "digital age."[33] The court noted that almost anyone can create a website and that almost all of

23. *See* Spencer, *supra* note 16, at 72 ("[C]ourts have improperly altered traditional analysis in a way that results in an overly restrictive view of when virtual contacts may support jurisdiction.").

24. Yokoyama, *supra* note 4, at 1166.

25. 157 F. Supp. 3d 1167 (D. Utah 2016).

26. *Id.* at 1170. The court ultimately found that it did not have personal jurisdiction over the patent claim, but it did over the copyright claim based on other contacts. *Id.*

27. *Id.* at 1170–71.

28. *Id.* at 1171.

29. *Id.* at 1174 (citing Zippo Mfg. Co. v. Zippo Dot Com, Inc., 952 F. Supp. 1119, 1124 (W.D. Pa. 1997)) (alteration in original).

30. *Id.*

31. *Id.*

32. *Id.*

33. *Id.*

these websites will be interactive.[34] "Given the exponential growth in the number of interactive websites, the *Zippo* approach—which would remove personal jurisdiction's geographical limitations based on the mere existence of those those [sic] websites—is particularly troubling. And the problem would grow more acute every year as more individuals and businesses create interactive websites."[35] Based on these considerations, the court ultimately found the *Zippo* approach "unpersuasive" and instead found that "[t]he traditional tests are readily adaptable to the digital age, just as they were to technological advances like the telegraph, radio, television, and telephone."[36]

The sliding scale's usefulness further decreased as technology evolved beyond the three classifications in the sliding scale.[37] It was no longer so easy—if it ever were[38]—to fit Internet contacts into *Zippo*'s paradigm examples. More than ever, and as the court in *Kindig It Design* explained,[39] *Zippo* does not fully answer the question. Rather, it addresses only some types of websites, while virtual contacts today include a much wider range of conduct. For example, virtual contacts include not only contacts through a website but also contacts through email, video calls, social media pages, and all kinds of interactive technology. As technology evolves, this list of modes of interaction that do not fit neatly into *Zippo*'s sliding scale will only grow. The even newer rise in remote technology, including its ubiquity in daily life, reveals the need for a better answer on how to treat these contacts in the personal jurisdiction inquiry. In short, "[a]s technology has continued to evolve, the *Zippo* test has failed to evolve with it."[40] The result has been a tendency to discount the meaningfulness of virtual contacts as courts forge ahead without a clear consensus or coherent approach.[41]

The confusion and ill fit that inevitably accompany new tests based on new technology are the strongest arguments for fitting such technology into existing tests. Instead of crafting another *Zippo*-esque test that addresses the specific challenges of today's virtual world, courts should note that technology evolves faster than courts can create new tests, despite their best efforts. Accordingly,

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34. *Id.*

35. *Id.* at 1175.

36. *Id.* at 1175–76.

37. *See* Celia Kaechele, Note, *Traditional Notions of Fair Play and Substantial Justice in the Age of Internet Interconnectivity: How Masking an IP Address Could Constitute Purposeful Availment*, 21 YALE J.L. & TECH. 59, 59 (2019) ("The confusion resulting from this lack of consensus over the doctrine's application has been further compounded by advances in technology. Technology has enabled people to connect in new ways and the Court has struggled to reconcile this with the traditional minimum contacts analysis it first employed in *International Shoe v. Washington*.").

38. *See* Allan R. Stein, *Personal Jurisdiction and the Internet: Seeing Due Process Through the Lens of Regulatory Precision*, 98 NW. U. L. REV. 411, 430 (2004) ("This passive/interactive test represents an egregious failure of legal imagination.").

39. 157 F. Supp. 3d at 1174–75.

40. Kevin F. King, *Personal Jurisdiction, Internet Commerce, and Privacy: The Pervasive Legal Consequences of Modern Geolocation Technologies*, 21 ALB. L.J. SCI. & TECH. 61, 79 (2011).

41. *See infra* Part I.C.

they should adopt an approach that allows for both a coherent doctrine and the flexibility to accommodate current and future technological innovations. Some courts, like the court in *Kindig It Design*,[42] have already favored an analysis that hews closer to traditional personal jurisdiction doctrines than a new test specially crafted for the Internet.[43] These traditional doctrines can encompass new ways of looking at new technology.[44] Therefore, when assessing personal jurisdiction in an increasingly virtual world, the traditional tests should prevail as the best path forward.[45]

B. THE INCREASED RELIANCE ON REMOTE TECHNOLOGY IN THE PANDEMIC AND POST-PANDEMIC WORLDS

The COVID-19 pandemic exacerbates the issue. The current pandemic has increased many Americans' reliance on remote technology,[46] and this reliance

42. 157 F. Supp. 3d at 1176.

43. *See, e.g.*, Gorman v. Ameritrade Holding Corp., 293 F.3d 506, 510–11 (D.C. Cir. 2002), *overruled by* Erwin-Simpson v. AirAsia Berhad, 985 F.3d 883, 886 (D.C. Cir. 2021) ("Just as our traditional notions of personal jurisdiction have proven adaptable to other changes in the national economy, so too are they adaptable to the transformations wrought by the Internet."); GTE New Media Servs. Inc. v. BellSouth Corp., 199 F.3d 1343, 1350 (D.C. Cir. 2000) ("We do not believe that the advent of advanced technology, say, as with the Internet, should vitiate long-held and inviolate principles of federal court jurisdiction."); Illinois v. Hemi Grp. LLC, 622 F.3d 754, 759 (7th Cir. 2010) ("[W]e think that the traditional due process inquiry . . . is not so difficult to apply to cases involving Internet contacts that courts need some sort of easier-to-apply categorical test."); Best Van Lines, Inc. v. Walker, 490 F.3d 239, 252 (2d Cir. 2007); Louis Vuitton Malletier, S.A. v. Mosseri, 736 F.3d 1339, 1355 n.10 (11th Cir. 2013).

44. *See* Emily Ekland, Comment, *Scaling Back* Zippo*: The Downside to the* Zippo *Sliding Scale and Proposed Alternatives to Its Uses*, 5 ALB. GOV'T L. REV. 380, 396 (2012) ("Courts should refocus on traditional principles and forget interactivity . . . . [T]raditional concepts are adaptable to evolving technology.").

45. *See* 4 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 1073 (4th ed. West 2020) ("[T]he [*Zippo*] approach should be understood at best as a jurisprudential heuristic, and at worst as potentially misleading. Ultimately, personal jurisdiction over a defendant that maintains a website must, like personal jurisdiction over all other defendants, satisfy the jurisdictional constraints placed upon the federal court by the forum state or any applicable federal statute and the due process analysis established by *International Shoe Company v. State of Washington* and its progeny."). *But see* Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1032 (2021) (Alito, J., concurring) ("[T]here are grounds for questioning the standard that the Court adopted in *International Shoe Co. v. Washington*, . . ."); *id.* at 1036 (Gorsuch, J., concurring) ("With the old *International Shoe* dichotomy looking increasingly uncertain, it's hard not to ask how we got here and where we might be headed.").

46. *See, e.g.*, Rita Zeidner, *Coronavirus Makes Work from Home the New Normal*, S.H.R.M. (Mar. 21, 2020), https://www.shrm.org/hr-today/news/all-things-work/pages/remote-work-has-become-the-new-normal.aspx. The successes of technology companies, in particular, during the pandemic evidence this increased reliance on technology. *See, e.g.*, Kari Paul & Dominic Rushe, *Tech Giants' Shares Soar as Companies Benefit from Covid-19 Pandemic*, THE GUARDIAN (July 30, 2020, 5:27 PM), https://www.theguardian.com/business/2020/jul/30/amazon-apple-facebook-google-profits-earnings; Rani Molla, *As Covid-19 Surges, the World's Biggest Tech Companies Report Staggering Profits*, VOX: RECODE (Oct. 30, 2020, 10:35 AM), https://www.vox.com/recode/2020/10/30/21541699/big-tech-google-facebook-amazon-apple-coronavirus-profits; Shannon Bond, *Zoom Turns Record Profit Thanks to Coronavirus Shutdowns*, N.P.R. (Aug. 31, 2020, 7:05 PM), https://www.npr.org/sections/coronavirus-live-updates/2020/08/31/908089517/zoom-turns-record-profit-thanks-to-coronavirus-shutdowns; Aaron Tilley, *Microsoft's Earnings Continue to Ride Pandemic-Fueled Demand for Cloud, Videogaming*, WALL ST. J. (Oct. 27, 2020, 7:18 PM), https://www.wsj.com/articles/microsofts-earnings-continue-to-ride-pandemic-fueled-demand-for-cloud-videogaming-11603831078.

is expected to continue in the post-pandemic world.[47] These seismic changes will impact how society—and courts—look at contacts and the fairness of exercising jurisdiction over defendants who enter forum states via remote technology.

"The COVID-19 pandemic will likely have generational consequences across most aspects of society, from the everyday to the existential."[48] Indeed, it is no news at this point that the COVID-19 pandemic dramatically altered the way Americans work, study, shop, socialize, and connect with others, in some cases upending and reshaping how these activities are done.[49] Spreading through interpersonal contact,[50] the virus left corporations, organizations, employers, and individuals shifting to socially distant and quarantined life.[51] For many, this meant a "renewed interest in remote working, as businesses face[d] a bleak set of options: continue business as usual but with the risk of grave illness, shut

47. *See, e.g.*, John Kamensky, *The Future of Work Post-Pandemic: We're Not Going Back*, GOV'T EXEC. (Oct. 26, 2020), https://www.govexec.com/management/2020/10/future-work-post-pandemic-were-not-going-back/169556; David Ignatius, *There's No Question We'll Be Living in a Different World Post-Pandemic*, WASH. POST (Oct. 8, 2020), https://www.washingtonpost.com/opinions/theres-no-question-well-be-living-in-a-different-world-post-pandemic/2020/10/08/7e66e234-09a4-11eb-a166-dc429b380d10_story.html; Craig Timberg, Drew Harwell, Laura Reiley & Abha Bhattarai, *The New Coronavirus Economy: A Gigantic Experiment Reshaping How We Work and Live*, WASH. POST (Mar. 21, 2020), https://www.washingtonpost.com/business/2020/03/21/economy-change-lifestyle-coronavirus; Rani Molla, *10 Ways Office Work Will Never Be the Same*, VOX: RECODE (Mar. 23, 2021, 8:20 AM), https://www.vox.com/recode/22331447/10-ways-office-work-pandemic-future-remote-work.

48. J.P. MORGAN INT'L COUNCIL, PREPARING FOR THE POST-COVID WORLD 2 (2021), https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/documents/jpmc-preparing-post-covid.pdf.

49. *See, e.g.*, Alex Bartik, Zoe Cullen, Edward Glaeser, Michael Luca & Christopher Stanton, *How the COVID-19 Crisis Is Reshaping Remote Working*, VOXEU: CEPR (July 19, 2020), https://voxeu.org/article/how-covid-19-crisis-reshaping-remote-working; Amanda Barroso, *About Half of Americans Say Their Lives Will Remain Changed in Major Ways When the Pandemic Is Over*, PEW RSCH. CTR. (Sept. 17, 2020), https://www.pewresearch.org/fact-tank/2020/09/17/about-half-of-americans-say-their-lives-will-remain-changed-in-major-ways-when-the-pandemic-is-over. A shared experience, this sudden and widespread shift often left people bonding over the common, humorous mistakes with remote technology individuals made during this shift. *See, e.g.*, Samantha McLaren, *4 Humorous Remote Work Moments for When You Need a Break*, LINKEDIN: TALENT BLOG (July 29, 2020), https://www.linkedin.com/business/talent/blog/talent-acquisition/humorous-remote-work-moments.

50. *How COVID-19 Spreads*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html (last updated July 14, 2021).

51. *See* Bartik et al., *supra* note 49; *see also Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19)*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html (last updated Mar. 8, 2021) (advising businesses on responding to COVID-19); *How to Protect Yourself & Others*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html (last updated Jan. 20, 2022) (advising, among other things, that social distancing helps prevent the spread of COVID-19); *Activities and Gatherings*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/index.html (last updated Dec. 9, 2021) (advising on how to safely interact with others).

down the business, or transition to working from home."[52] Life in quarantine required using remote technology in greater amounts than ever before.[53]

As technology has evolved, its adoption has accelerated over time.[54] Though the increased use of technology was likely inevitable in some areas of daily life, the increase that came with and will likely follow the pandemic is exponential.[55] In fact, "[d]igitization, artificial intelligence, remote work, automation, and other advancements are accelerating as a result of the crisis and revolutionizing the way we learn and do business."[56] Specifically, the "[u]nprecedented restrictions on travel, physical interactions, and changes in consumer behavior since COVID-19 took hold has forced companies and consumers to change the way they operate. This has spurred digital transformations in a matter of weeks rather than months or years."[57]

In particular, at least one aspect of daily life that struggled to shift to remote technology before the pandemic required it has done so: work.[58] Before a virus

52. Bartik et al., *supra* note 49.

53. "The abrupt closure of many offices and workplaces [in the spring of 2020] ushered in a new era of remote work for millions of employed Americans and may portend a significant shift in the way a large segment of the workforce operates in the future." KIM PARKER, JULIANA MENASCE HOROWITZ & RACHEL MINKIN, PEW RSCH. CTR., HOW THE CORONAVIRUS OUTBREAK HAS—AND HASN'T—CHANGED THE WAY AMERICANS WORK 4 (2020), https://www.pewresearch.org/social-trends/2020/12/09/how-the-coronavirus-outbreak-has-and-hasnt-changed-the-way-americans-work.

54. *See* Louisa Fitzgerald, *How Emerging Tech Adoption Is Evolving and Accelerating*, COMPTIA (Aug. 6, 2020), https://www.comptia.org/blog/how-emerging-tech-adoption-is-evolving-and-accelerating. The adoption of new technologies has been particularly quick in the pandemic and post-pandemic worlds. *See id.* ("For many companies, the COVID-19 pandemic has changed the pace at which technology is being implemented—from the move away from on-premise infrastructure to the cloud to the increase in conversations around implementing technologies that can help businesses evolve.").

55. *See* Laura LaBerge, Clayton O'Toole, Jeremy Schneider & Kate Smaje, *How COVID-19 Has Pushed Companies Over the Technology Tipping Point—And Transformed Business Forever*, MCKINSEY (Oct. 5, 2020), https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever (showing the "quantum leap" that digital technology has taken during the pandemic); Ella Koeze & Nathaniel Popper, *The Virus Changed the Way We Internet*, N.Y. TIMES (Apr. 7, 2020), https://www.nytimes.com/interactive/2020/04/07/technology/coronavirus-internet-use.html (showing Americans' use of different remote and other technologies graphically).

56. J.P. MORGAN INT'L COUNCIL, *supra* note 48.

57. Susan Lund, Wan-Lae Cheng, André Dua, Aaron De Smet, Olivia Robinson & Saurabh Sanghvi, *What 800 Executives Envision for the Postpandemic Workforce*, MCKINSEY GLOB. INST. (Sept. 23, 2020), https://www.mckinsey.com/featured-insights/future-of-work/what-800-executives-envision-for-the-postpandemic-workforce; *see also* Molla, *supra* note 47 (quoting Nicholas Bloom, a Stanford University professor, who stated, "One of the few great upsides of the pandemic is we've accelerated 25 years of drift toward working from home in one year[]").

58. COVID-19 reduced this struggle, pushing employers and employees towards acceptance of remote work. *See, e.g.*, Kamensky, *supra* note 47; Daniella Silva, *Coronavirus Has Lifted the Work-From-Home Stigma. How Will That Shape the Future?*, N.B.C. NEWS (May 13, 2020, 5:53 AM), https://www.nbcnews.com/news/us-news/coronavirus-has-lifted-work-home-stigma-how-will-shape-future-n1205376 ("Even as dozens of states have begun to partly reopen months after the initial shutdowns, experts said that past stigma around working from home has largely been lifted and that they expected much more remote work to be incorporated into office life for the foreseeable future."); Lund et al., *supra* note 57 ("[T]he crisis may accelerate some workforce trends already underway, such as the adoption of automation and digitization, increased demand for contractors and gig workers, and more remote work.").

that spread through interpersonal contact plagued the workplace, remote work was highly stigmatized. The stigma arose from notions that remote work meant decreased efforts, productivity, and dedication.[59] As a result, pre-pandemic, "the adoption of [telework] arrangements was slow, and industry observers predicted it would take years to transition. However, in mid-March [of 2020], the coronavirus pandemic struck and much of the U.S. pivoted to a new workplace—home."[60] In fact, "[b]efore the pandemic Americans spent 5% of their working time at home. By spring 2020 the figure was 60%."[61] Following this abrupt shift to remote work that COVID-19 necessitated, "[m]any employers were made to confront what they had neither fully embraced nor believed: that large-scale remote working is both possible and effective."[62] Crucially, "[t]he rationale for telework quickly pivoted from being seen as family-friendly policy to a vital element for the continuity of operations in both public and private sector organizations[,]"[63] helping reduce the stigma around remote work. Now that COVID-19 has forced society to more or less clear this hurdle,[64] make strides towards removing this stigma,[65] and see the benefits and

59. *See* Lund et al., *supra* note 57 ("Before the pandemic, remote work had struggled to establish much of a beachhead, as companies worried about its impact on productivity and corporate culture."); Nicholas Bloom, *Op-Ed: Work Life Will Never Be the Same. We Need Some In-person Days and Some Remote*, L.A. TIMES (Feb. 8, 2022, 3:30 AM), https://www.latimes.com/opinion/story/2022-02-08/remote-work-pandemic-working-from-home-return-to-office-hybrid-diversity-commute-pollution ("Before the pandemic, few people took remote work seriously. Researching the phenomenon for almost 20 years, I frequently heard disparaging comments like 'working from home, shirking from home' and 'working remotely, remotely working.'").

60. Kamensky, *supra* note 47.

61. *The Rise of Working from Home*, THE ECONOMIST (Apr. 8, 2021), https://www.economist.com/special-report/2021/04/08/the-rise-of-working-from-home.

62. J.P. MORGAN INT'L COUNCIL, *supra* note 48.

63. Kamensky, *supra* note 47.

64. However, it should be noted that some of the same groups stigmatized by remote work pre-pandemic continue to struggle during the pandemic. *See* Alisha Haridasani Gupta, *Why Some Women Call This Recession a 'Shecession,'* N.Y. TIMES (May 9, 2020), https://www.nytimes.com/2020/05/09/us/unemployment-coronavirus-women.html; Katherine Riley & Stephanie Stamm, *Nearly 1.5 Million Mothers Are Still Missing from the Workforce*, WALL ST. J. (Apr. 27, 2021, 10:14 AM), https://www.wsj.com/articles/nearly-1-5-million-mothers-are-still-missing-from-the-workforce-11619472229; Tomas Chamorro-Premuzic, Julia Gillard & Herminia Ibarra, *Why WFH Isn't Necessarily Good for Women*, HARV. BUS. REV. (July 16, 2020), https://hbr.org/2020/07/why-wfh-isnt-necessarily-good-for-women; Rebecca Greenfield, *Work from Home Has the Power to Advance Equality—or Set It Back*, BLOOMBERG (Jan. 27, 2021, 3:00 AM), https://www.bloomberg.com/news/articles/2021-01-27/work-from-home-remote-work-could-advance-or-set-back-equality; *see also* Justin Baer, Theo Francis & Eric Morath, *The Covid Economy Carves Deep Divide Between Haves and Have-Nots*, WALL ST. J. (Oct. 5, 2020, 11:09 AM), https://www.wsj.com/articles/the-covid-economy-carves-deep-divide-between-haves-and-have-nots-11601910595 (discussing the adverse effects of the pandemic on "workers with historic disadvantages"). Additionally, this stigma may creep back as employees feel pressured to return to in-person work, even in hybrid work environments. *See* Kathryn Vasel, *The Pandemic Forced a Massive Remote-Work Experiment. Now Comes the Hard Part*, CNN BUS. (Mar. 11, 2021), https://www.cnn.com/2021/03/09/success/remote-work-covid-pandemic-one-year-later/index.html (quoting Andrew Hewitt, a senior analyst at Forrester, who stated, "We've been playing remote work on easy mode. We've all been doing the same thing, everybody has had equal access to information and promotions, . . . It will get harder in 2021 with hybrid").

65. Some disagree about whether this stigma is truly gone. *Compare* Silva, *supra* note 58 (arguing that, by forcing millions of Americans to work from home, COVID-19 has eliminated the work-from-home stigma), *with*

feasibility of remote work, remote work will likely find its way into some employees' futures.

Surveys predict that the post-pandemic workforce will involve more remote work than in the pre-pandemic world.[66] The shift to remote work that was necessary during the pandemic revealed positive aspects of working from home that some employees realized they want to continue even without this necessity.[67] Some of these aspects include saving time on their commutes,[68] gaining flexibility in their schedules,[69] moving to less populated and less expensive areas,[70] and, for some, even a feeling of "getting back to their lives."[71]

Chamorro-Premuzic et. al., *supra* note 64 (challenging the conclusion that the changed attitudes about working from home following COVID-19 will "be a big equalizer for women").

66. *See, e.g.*, Lund et al., *supra* note 57; PARKER ET AL., *supra* note 53, at 4. Other commentators have made similar predictions. *See, e.g.*, Kamensky, *supra* note 47; Ignatius, *supra* note 47; Timberg et al., *supra* note 47; Katherine Guyot & Isabel V. Sawhill, *Telecommuting Will Likely Continue Long After the Pandemic*, BROOKINGS: BLOG (Apr. 6, 2020), https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic; *Work-at-Home After Covid-19—Our Forecast*, GLOB. WORKPLACE ANALYTICS, https://globalworkplaceanalytics.com/work-at-home-after-covid-19-our-forecast (last visited Mar. 13, 2022); Kathryn Vasel, *How Google, Microsoft and Others Plan to Work Post-Pandemic*, CNN BUS. (Dec. 22, 2020), https://www.cnn.com/2020/12/22/success/companies-future-of-work/index.html; Alexander W. Bartik, Zoë Cullen, Edward L. Glaeser, Michael Luca & Christopher Stanton, *What Jobs Are Being Done at Home During the COVID-19 Crisis? Evidence from Firm-Level Surveys* 4 (Harv. Bus. Sch. Working Paper No. 20-138, 2020), https://www.hbs.edu/ris/Publication%20Files/20-138_ec6ff0f0-7947-4607-9d54-c5c53044fb95.pdf.

67. *See* PARKER ET AL., *supra* note 53, at 17 ("[A] majority of those who say their job can be done from home say they'd like to telework all or most of the time post-pandemic . . . ."); Johanna Weststar, Carolyn Troup, David Peetz, Ioana Ramia, Sean O'Brady, Shalene Werth, Shelagh Campbell & Susan Ressia, *Working from Home During COVID-19: What Do Employees Really Want?*, THE CONVERSATION (Nov. 4, 2021, 1:10 PM), https://theconversation.com/working-from-home-during-covid-19-what-do-employees-really-want-148424 ("People vary a lot in how much they want to work from home, but one thing is clear — most want to do some of their paid work from home, but few want to work at home all the time.").

68. *See* Bryan Walsh, *The Many Benefits of Commute-Free Remote Work*, AXIOS (Aug. 29, 2020), https://www.axios.com/commute-remote-work-benefits-fe55566b-af80-4a2f-95ce-2140ca6b358c.html ("Commuting was costing American workers an increasing amount of time, money and life satisfaction. After a glimpse of life without the daily slog, workers may not want to go back to normal, ...").

69. *See* Cyril Bouquet, *How COVID-19 Caused the Future of Work to Arrive Early*, INST. FOR MGMT. DEV. (June 2020), https://www.imd.org/research-knowledge/articles/How-COVID-19-caused-the-future-of-work-to-arrive-early (discussing workers that are "enjoying the increased freedom that comes with working fewer hours and/or being able to adjust their schedules according to family needs"); Guyot & Sawhill, *supra* note 66 ("[I]t helps people (especially women) balance work and family roles."). *But see* Michelle F. Davis & Jeff Green, *Three Hours Longer, the Pandemic Workday Has Obliterated Work-Life Balance*, BLOOMBERG (Apr. 23, 2020), https://www.bloomberg.com/news/articles/2020-04-23/working-from-home-in-covid-era-means-three-more-hours-on-the-job ("With many living a few steps from their offices, America's always-on work culture has reached new heights. The 9-to-5 workday, or any semblance of it, seems like a relic of a bygone era. Long gone are the regretful formalities for calling or emailing at inappropriate times. Burnt-out employees feel like they have even less free time than when they wasted hours commuting.").

70. *See, e.g.*, Nellie Bowles, *They Can't Leave the Bay Area Fast Enough*, N.Y. TIMES (Jan. 14, 2021), https://www.nytimes.com/2021/01/14/technology/san-francisco-covid-work-moving.html ("Remote work offered a chance at residing for a few months in towns where life felt easier. Tech workers and their bosses realized they might not need all the perks and after-work schmooze events. But maybe they needed elbow room and a yard for the new puppy. A place to put the Peloton. A top public school.").

71. Molla, *supra* note 47 (quoting Ali Rayl, Slack's VP of customer experience, who stated, "A lot of our employees said, 'I'm getting more sleep,' 'I'm exercising more,' 'I'm making myself healthier food,' 'I know my neighbors more,'[] . . . . And people are really digging that kind of getting back to their lives").

Employers also saw benefits to remote work, including enjoying the fruits of a wider talent pool without geographic restrictions[72] and the potential to save money on office space and business travel.[73] Although many have experienced the dreaded "Zoom fatigue,"[74] flexibility in work arrangements through remote technology will likely be a common path forward in the post-pandemic world.[75] In fact, "[m]ost workers welcome the option to work remotely one or more days per week[,]"[76] and some believe "[w]e have moved beyond the theme of remote

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A survey even showed that sixty-four percent of employees would prefer to work from home permanently instead of receiving a thirty-thousand dollar pay raise. *See* Andy Medici, *Work from Home or a $30k Raise? Employees Said It Wasn't Even Close*, BUS. JS. (May 13, 2021, 1:40 PM), https://www.bizjournals.com/bizjournals/news/2021/05/13/wfh-work-from-home-raise-salary-google-facebook.html (quoting Kyum Kim, Blind co-founder and head of U.S. Operations, who stated, "[Remote work] became the new norm, and I don't think people would want to go back. Covid forced people to stay out of the office but you can't force people to go back to the office because there are alternative jobs that offer working from home[.] . . . Even if you are willing to pay them $30,000 more a year, that's not even enough reason to make people come back to the office").

72. *See 5 Predictions for Talent Markets After the Pandemic*, CIELO (May 2020), https://www.cielotalent.com/insights/5-predictions-for-talent-markets-after-the-pandemic ("If hiring managers are more willing to allow remote working, the number of potential candidates for any given job increases. Geography becomes less of a qualifier if working remotely is an option.").

73. *See* Vivienne Walt, *COVID-19 Will Change the Entire Notion of Offices: Companies Eye Rental Savings After Working from Home*, FORTUNE (Apr. 19, 2020), https://fortune.com/2020/04/19/coronavirus-going-back-to-work-from-home-commercial-real-estate-offices; Mark Bergen, *Google Is Saving Over $1 Billion a Year by Working from Home*, BLOOMBERG (Apr. 28, 2021, 12:21 PM), https://www.bloomberg.com/news/articles/2021-04-28/google-is-saving-over-1-billion-a-year-by-working-from-home; *Work-at-Home After Covid-19—Our Forecast*, *supra* note 66 ("We also estimate work-from-home initiatives will save U.S. employers over $30 Billion dollars *a day* during the Covid-19 crisis. This may be the tipping point for remote work.").

74. "Zoom fatigue" is a term coined during the pandemic to describe "the exhaustion you feel after any kind of video call or conference." *'Zoom Fatigue' Is Real—Here's How to Cope (and Make It Through Your Next Meeting)*, HEALTHLINE (Feb. 22, 2021), https://www.healthline.com/health/zoom-fatigue; *see also* Chip Cutter, *Even the CEO of Zoom Says He Has Zoom Fatigue*, WALL ST. J. (May 4, 2021, 5:17 PM), https://www.wsj.com/articles/even-the-ceo-of-zoom-says-he-has-zoom-fatigue-11620151459 ("Though some [executives] said they expect more flexible work arrangements to endure going forward, they say there are clear signs of burnout in an era of nonstop video calls.").

75. *See, e.g.*, PwC's U.S. Remote Work Survey, *It's Time to Reimagine Where and How Work Will Get Done*, PWC (Jan. 12, 2021), https://www.pwc.com/us/remotework (finding that, although "[e]mployees and employers don't see eye to eye on the optimal schedule for remote work[,]" "[h]ybrid workplaces [are] likely to become the norm"); Ashira Prossack, *4 Changes to Expect in the Post-Covid Workplace*, FORBES (Apr. 12, 2021, 3:30 PM), https://www.forbes.com/sites/ashiraprossack1/2021/04/12/4-changes-to-expect-in-the-post-covid-workplace (predicting that "[h]ybrid work becomes the norm[,]" and asserting that "[t]he evolution of the workplace is far from over. As we collectively figure out what a post-Covid world looks like, it's likely that we'll see workplaces change policies at lease [sic] once more this year. The best thing that companies can do is continue to be flexible and try to create a workplace that balances both employee and employer needs"); Dina Gerdeman, *COVID Killed the Traditional Workplace. What Should Companies Do Now?*, HARV. BUS. SCH.: WORKING KNOWLEDGE (Mar. 8, 2021), https://hbswk.hbs.edu/item/covid-killed-the-traditional-workplace-what-should-companies-do-now ("Should companies do away with Zoom and return the workplace to its pre-COVID ways? The answer, in a word: No.").

76. Jose Maria Barrero, Nicholas Bloom & Steven J. Davis, *Why Working from Home Will Stick* 2 (Becker Friedman Inst., Working Paper No. 2020-174, 2021), https://bfi.uchicago.edu/wp-content/uploads/2020/12/BFI_WP_2020174.pdf.

work being a temporary thing[.]"[77] This type of hybrid work environment offers remote work in moderation, thus allowing workers to continue to enjoy the flexibility and sense of balance that remote work can provide while avoiding the fatigue of endless availability and endless Zoom meetings. For many, remote work—in some form—is the future.[78]

Other aspects of daily life will likely remain virtual as well. While some see the pandemic's shift to remote activities as a necessary but temporary evil,[79] the increased use of remote technology will likely remain, though perhaps to a lesser degree or for only some activities. Zoom happy hours, for example, may cease to exist post-pandemic,[80] but virtual meetings in place of daily commutes to the office or business travel are more likely to remain.[81] Even with the eventual—and welcome—return to "normal," the post-pandemic world will likely include the continuation of some pandemic-era necessities, including the shift towards remote work, activities, and interactions.[82] In short, following its quick, necessity-borne adoption, remote technology is here to stay.

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77. Michael Liedtke & Barbara Ortutay, *Silicon Valley Finds Remote Work Is Easier to Begin Than End*, AP NEWS (Sept. 8, 2021), https://apnews.com/article/lifestyle-technology-business-software-san-francisco-9e49f60362702a18dc7180e6294599b4 (quoting Laura Boudreau, a Columbia University professor).

78. *See* GITLAB, 2021 REMOTE WORK REPORT 5 (2021), https://about.gitlab.com/resources/downloads/remote-work-report-2021.pdf (indicating that 82% of respondents "believe that remote work is the future, and that they have the tools and processes now that they need to communicate with their teams").

79. In particular, some predict that the long-term isolation of pandemic life may increase people's desires to connect with others in person. *See* Timberg et al., *supra* note 47 (discussing the possibility that "other forays into living and working online will convince many to return to routine human contact once they can"); Vasel, *supra* note 64 (quoting Coveo CEO Louis Tetu, who stated, "Slack and Zoom are great, but there is no equivalent of getting people together and fostering a common culture").

80. Some hope to see this particular remote activity become a mere distant memory. *See* Ashley Fetters, *We Need to Stop Trying to Replicate the Life We Had*, THE ATLANTIC (Apr. 10, 2020), https://www.theatlantic.com/family/archive/2020/04/why-your-zoom-happy-hour-unsatisfying/609823.

81. *See* Timberg et al., *supra* note 47 ("Any traditional face-to-face encounter—going to an accountant's office, sending children to class, traveling for a business meeting—could someday seem less necessary as more remote options become publicly acceptable and widespread."); *see also Work-at-Home After Covid-19—Our Forecast*, *supra* note 66 ("Covid-19 will also likely cause executives to rethink the need for travel to meetings, conferences, etc. They will learn that while virtual meetings may not have *all* the same benefits of being face-to-face, the savings may outweigh the costs much of the time."); Bonnie Marcus, *What Will It Take for Companies and Employees to Succeed in the Post-Pandemic Workplace?*, FORBES (Aug. 11, 2020, 1:32 PM), https://www.forbes.com/sites/bonniemarcus/2020/08/11/what-will-it-take-for-companies-and-employees-to-succeed-in-the-post-pandemic-workplace/?sh=61e157c71593 ("The post-pandemic workplace will be a blend of virtual and on-premise work. Virtual will likely end up being two-thirds of interaction given macro-trends accelerated by pandemic. A culture built around taking this into account is one that embraces technology including its limitations and one that treats in-person connections as more intentional and precious.").

82. *See* Molla, *supra* note 47 ("Someday, perhaps someday soon, when vaccination rates are high enough and the coronavirus relents, the world will return to normal. But in its wake, something as massive and meaningful as a global pandemic will leave many things different, including how we work."); *see also* Christoph Hilberath, Julie Kilmann, Deborah Lovich, Thalia Tzanetti, Allison Bailey, Stefanie Beck, Elizabeth Kaufman, Bharat Khandelwal, Felix Schuler, & Kristi Woolsey, *Hybrid Work Is the New Remote Work*, BCG (Sept. 22, 2020), https://www.bcg.com/en-us/publications/2020/managing-remote-work-and-optimizing-hybrid-working-models ("Our surveys over the past months indicate that employees and employers alike have little interest in returning to pre-pandemic work models.").

Because activities ranging from conducting business to attending law school[83] occurred virtually during the pandemic period, the reliance on technology that made these remote activities possible will likely continue in post-pandemic society. Specifically, the pandemic period saw a substantial increase in the "digital intensity of workers' days."[84] According to Microsoft's data, between February 2020 and February 2021, weekly meeting times increased by 148%, the number of emails delivered increased by 40.6 billion, and weekly chats per-person increased 45%,[85] showing an overall increase in virtual connection amongst remote workers. Additionally, "[p]eople spend an additional hour—for a total of 10 hours—connected to Slack than they did pre-pandemic. The amount of time people spend actively working in or communicating on Slack jumped 30 percent to 110 minutes a day, according to the company."[86] These data indicate that remote-technology tools increasingly exist "in the background and the foreground of our lives."[87] As this "digital intensity" and fluency with remote-technology tools have increased, the technology has adapted and will continue to adapt to the post-pandemic world's needs,[88] easing the transition to a permanent or hybrid remote workplace and increasing remote activities.

Ultimately, "[t]he repercussions of the shift are potentially far-reaching. Not only has it already transformed the workdays of millions, it could create a self-perpetuating cycle, as more workers become familiar with the virtual tools needed to work remotely and organizations change to accommodate those working out of the office."[89] Importantly, the pandemic forced many to confront any barriers to adopting new technology and realize how useful remote technology can be.[90] The result has been, and will be, a vast increase in the use of remote technology, a shift in how individuals connect with one another, and a new way of thinking about virtual contacts in an advancing society. "'This is

83. This activity is of particular relevance for this author. *See* Chancellor & Dean's Off., *COVID-19 Community Updates*, U.C. HASTINGS L., https://www.uchastings.edu/chancellordean/covid-19-community-updates (last visited Mar. 13, 2022).

84. MICROSOFT, 2021WORK TREND INDEX: ANNUAL REPORT, THE NEXT GREAT DISRUPTION IS HYBRID WORK: ARE WE READY? 8 (2021), https://ms-worklab.azureedge.net/files/reports/hybridWork/pdf/2021_Microsoft_WTI_Report_March.pdf.

85. *Id.* at 9.

86. Molla, *supra* note 47.

87. *Id.*

88. *See* Joanna Stern, *From Remote Work to Hybrid Work: The Tech You'll Need to Link Home and Office*, WALL ST. J. (Mar. 14, 2021, 9:00 AM), https://www.wsj.com/articles/from-remote-work-to-hybrid-work-the-tech-youll-need-to-link-home-and-office-11615726801?mod=article_inline ("Not only did we prove our tech resilience when we embarked on the Great Work-From-Home Experiment a year ago but the makers of our most depended-upon products are paying attention and adapting for this next phase.").

89. Alvin Powell, *What Will the New Post-Pandemic Normal Look Like?*, HARV. GAZETTE (Nov. 24, 2020), https://news.harvard.edu/gazette/story/2020/11/our-post-pandemic-world-and-whats-likely-to-hang-round.

90. *See, e.g.*, *id.* ("'What people have feared in the past is the technology aspects of it. And what we have seen is that the technology part is the easiest thing that people have taken up . . . . I think that's what's going to break this open for many, many people . . . .'").

an inflection point, and we're going to look back and realize this is where it all changed . . . .'"[91]

This dramatic shift—the increased and widespread use of remote technology that arose out of the pandemic era—therefore makes more pressing the question of personal jurisdiction in an increasingly technological society. As society enters the post-pandemic world with this influx of remote-technology use, the number of personal jurisdiction cases in which virtual contacts are the only or primary contacts will continue to rise.[92] A definitive answer on how to deal with virtual contacts is now more pressing and needed than ever.[93]

C. AN UNSETTLED PROBLEM: THE RISE IN REMOTE TECHNOLOGY AND THE MISGUIDED APPROACH

Remote technology's increased use and acceptance only adds fuel to the fire of an unclear, undefined answer on how to deal with virtual contacts. The disjointed caselaw and confusion around virtual contacts will only compound in the post-pandemic personal jurisdiction jurisprudence without a definitive approach.

Even beyond *Zippo*'s limited purview,[94] the confusion does not abate. Some courts have considered virtual contacts in cases involving different modes of virtual contact. However, there still is no uniformity in analysis or outcome. For instance, some courts found personal jurisdiction where the plaintiff worked remotely for the defendant employer.[95] However, some did not.[96] In particular,

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91. Timberg et al., *supra* note 47 (quoting Jared Spataro, a Microsoft executive).

92. In fact, litigants are filing cases involving remote technology and remote work across various legal claims. "Analysis of American legal filings in state and federal courts finds that the number of cases mentioning 'work from home' is running at twice pre-pandemic levels." *The Rise of Working From Home*, *supra* note 61. How courts will treat these virtual activities is a pressing question.

93. *See* Martin H. Redish, *Of New Wine and Old Bottles: Personal Jurisdiction, the Internet, and the Nature of Constitutional Evolution*, 38 JURIMETRICS J. 575, 577 (1998) ("The modern development of the Internet represents just the type of technological change that calls for the doctrinal modification traditionally characterizing both the common law process of constitutional interpretation in general and the law of personal jurisdiction in particular.").

94. *See supra* Part I.A.

95. *See, e.g.*, Williams v. Preeminent Protective Servs., Inc., 81 F. Supp. 3d 265, 273 (E.D.N.Y. 2015) (finding personal jurisdiction with remote work); Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *3–12 (S.D. Cal. Feb. 26, 2016) (same); Winner v. Tryko Partners, LLC, 333 F. Supp. 3d 250, 256 (W.D.N.Y. 2018) (same); Ouellette v. True Penny People, LLC, 352 F. Supp. 3d 144, 155 (D. Mass. 2018) (same); Hall v. Rag-O-Rama, LLC, 359 F. Supp. 3d 499, 513 (E.D. Ky. 2019) (same); Stuart v. Churn LLC, No. 1:19-CV-369, 2019 WL 2342354, at *6 (M.D.N.C. June 3, 2019) (same); King v. Prodea Sys., Inc., 433 F. Supp. 3d 7, 16 (D. Mass. 2019) (same); Liqui-Box Corp. v. Scholle IPN Corp., No. 19 C 4069, 2020 WL 5593755, at *10 (N.D. Ill. Sept. 18, 2020) (same); Wallens v. Milliman Fin. Risk Mgmt. LLC, 509 F. Supp. 3d 1204, 1215–16 (C.D. Cal. 2020) (same).

96. *See, e.g.*, Picot v. Weston, 780 F.3d 1206, 1213 (9th Cir. 2015) (finding no personal jurisdiction with remote work); Fields v. Sickle Cell Disease Ass'n of Am., Inc., 376 F. Supp. 3d 647, 652–54 (E.D.N.C. 2018), *aff'd*, 770 F. App'x 77 (4th Cir. 2019) (same); TorcUP, Inc. v. Aztec Bolting Servs., Inc., 386 F. Supp. 3d 520, 526–27 (E.D. Pa. 2019) (same); Pederson v. Frost, 951 F.3d 977, 980 (8th Cir. 2020) (same); Perry v. Nat'l Ass'n of Home Builders of U.S., No. CV TDC-20-0454, 2020 WL 5759766, at *6 (D. Md. Sept. 28, 2020) (same); Gonzalez v. U.S. Hum. Rts. Network, 512 F. Supp. 3d 944, 958–59 (D. Ariz. 2021) (same).

when employers sue their remote employees, some courts have exercised jurisdiction.[97] Before exercising jurisdiction over former remote employees, one court noted in dicta the increase in remote work "particularly during COVID-19 migration."[98] Another found that, even before the pandemic, "[t]he recent increase in employees working out of their homes at some distance from their employers' business locations has presented novel issues for courts considering personal jurisdiction."[99] This court applied a "fact-specific" analysis that "require[d] a close examination of the intended relationship between the parties"[100] and ultimately found that it could exercise jurisdiction over the defendant employer.[101] In addition, one court exercised personal jurisdiction over a defendant who sent malware to devices using the plaintiff's system.[102] Other courts refused to exercise jurisdiction over defendants who sent mass emails and who used plaintiffs' trademark in emailed newsletters, respectively.[103] Computer hacking was enough to find jurisdiction in one case.[104] In another, some tweets gave rise to personal jurisdiction, while others did not.[105] And one court found that out-of-state actions gave rise to personal jurisdiction, where those actions "were a response to the breakdown of a . . . relationship" based out of the forum state.[106] These varied analyses and outcomes show the need for a unified approach.

Moreover, courts tend to discount virtual contacts in their entirety, determining jurisdiction by looking at physical contacts alone.[107] Even when

97. *See, e.g.*, Vizant Techs., LLC v. Whitchurch, 97 F. Supp. 3d 618, 630–31 (E.D. Pa. 2015) (finding personal jurisdiction over remote employees); Numeric Analytics, LLC v. McCabe, 161 F. Supp. 3d 348, 356 (E.D. Pa. 2016) (same for some claims); ScaleMP, Inc. v. TidalScale, Inc., No. 18-cv-04716-EDL, 2019 WL 7877939, at *14 (N.D. Cal. Mar. 6, 2019) (same); Bride Ministries, NFP v. DeMaster, No. 4:20-CV-00402, 2020 WL 6822836, at *7 (E.D. Tex. Nov. 20, 2020) (same); M3 USA Corp. v. Hart, 516 F. Supp. 3d 476, 493–98 (E.D. Penn. 2021) (same for most claims).

98. *M3 USA*, 516 F. Supp. 3d at 483 (recognizing the increase in remote work "particularly during COVID-19 migration" and finding personal jurisdiction over remote employees).

99. *Stuart*, 2019 WL 2342354, at *3.

100. *Id.*

101. *Id.* at *6.

102. *See, e.g.*, WhatsApp Inc. v. NSO Grp. Tech. Ltd., 472 F. Supp. 3d 649, 673–78 (N.D. Cal. 2020) (finding personal jurisdiction with malware sent using plaintiff's system).

103. *See, e.g.*, XMission, L.C. v. Fluent LLC, 955 F.3d 833, 850 (10th Cir. 2020) (finding no personal jurisdiction with mass emails); Axiom Foods, Inc. v. Acerchem Int'l, Inc., 874 F.3d 1064, 1071 (9th Cir. 2017) (finding no personal jurisdiction with emailed newsletters).

104. *See, e.g.*, Christie v. Nat'l Inst. for Newman Studs., 258 F. Supp. 3d 494, 507 (D.N.J. 2017) (finding personal jurisdiction with computer hacking).

105. *See, e.g.*, Vangheluwe v. Got News, LLC, 365 F. Supp. 3d 850, 859–64 (E.D. Mich. 2019) (finding personal jurisdiction with some tweets but not others).

106. Clean Coal Tech., Inc. v. Leidos, Inc., 377 F. Supp. 3d 303, 313–14 (S.D.N.Y. 2019) (finding personal jurisdiction with out-of-state actions that "were a response to the breakdown of a New York-based relationship").

107. The Supreme Court recently suggested at least a preference for physical contacts in the forum state. *See, e.g.*, Bristol-Myers Squibb Co. v. Superior Ct. of Cal., 137 S. Ct. 1773, 1781 (2017) (explicitly requiring "principally, [an] activity or an occurrence that takes place *in* the forum State") (alteration in original) (emphasis added) (citing Goodyear Dunlop Tires Ops., S.A. v. Brown, 564 U.S. 915, 919 (2011)); *see also* Trammell & Bambauer, *supra* note 15, at 1129 (arguing "that courts should dispense with the fiction that purely virtual conduct creates any meaningful contact with a particular forum").

courts look at virtual contacts, they tend to place less import on them than on physical contacts.[108] This effect may be the result of courts viewing virtual contacts as less meaningful—or more puzzling—than physical contacts. However, as the vast increase in remote-technology use in the pandemic and post-pandemic worlds shows,[109] virtual contacts can create connections that are just as meaningful as physical contacts. Courts, in the personal jurisdiction analysis, should treat them as such.

While the Supreme Court has not spoken decisively on the Internet in the personal jurisdiction analysis,[110] it has shown interest in resolving the matter.[111] In its most recent personal jurisdiction case, *Ford Motor Co. v. Montana Eighth Judicial District Court*,[112] the Court addressed the Internet's role in the personal jurisdiction analysis, despite the fact that the case did not turn on Internet contacts.[113] Specifically, during oral argument, Chief Justice Roberts posed a hypothetical about "a retired guy in a small town up in Maine who carves decoys" and whose friends encourage him to sell them on the Internet.[114] The Chief Justice wondered if this decoy seller can "be sued in any state if some harm arises from the decoy? You know, say it—you know, it has lead paint or something. By putting something . . . an advertisement on the Internet, is he exposing himself to suit anywhere in the country?"[115] The majority responded to the Chief Justice's question in a footnote: "The differences between that case

108. *See, e.g.*, Toys "R" Us, Inc. v. Step Two, S.A., 318 F.3d 446, 453 (3d Cir. 2003) (considering related non-Internet contacts, in addition to analysis of the Internet contacts, in the personal jurisdiction inquiry); Groop Internet Platform Inc. v. Psychotherapy Action Network, No. CV 19-1854 (BAH), 2020 WL 353861, at *7 (D.D.C. Jan. 21, 2020) (requiring a showing of "'substantial' non-internet contacts" in addition to Internet contacts); *see also* Trammell & Bambauer, *supra* note 15, at 1173 ("Many lower courts already recognize that Internet activity, by itself, is ambiguous for purposes of determining the propriety of personal jurisdiction. Thus, they already take account of non-Internet, physical contacts.").

109. *See supra* Part I.B.

110. *See supra* notes 5–6 and accompanying text.

111. *See, e.g.*, Transcript of Oral Argument at *11, *39–40, *47–48, *55–57, Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017 (2021) (No. 19-368), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2020/19-368_m648.pdf (showing Chief Justice Roberts, Justice Thomas, Justice Alito, and Justice Gorsuch posing hypotheticals involving the Internet and personal jurisdiction); Transcript of Oral Argument at *17–18, *61, Walden v. Fiore, 571 U.S. 277 (2014) (No. 12-574), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2013/12-574_cb48.pdf (showing Justice Sotomayor's questions about whether and how the Internet may be implicated in the personal jurisdiction analysis); Transcript of Oral Argument at *53, J. McIntyre Mach., Ltd. v. Nicastro, 564 U.S. 873 (2011) (No. 09-1343), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2010/09-1343.pdf ("JUSTICE BREYER: . . . then . . . everyone with an Internet site who also sells to a buyer who says anywhere in the world, perhaps—I don't know how far that reaches—seems pretty filled with implications.").

112. 141 S. Ct. 1017.

113. *See id.* at 1028 n.4 ("[W]e do not here consider internet transactions, which may raise doctrinal questions of their own . . . . The differences between [the Internet-based hypothetical posed in oral argument] and the ones before us virtually list themselves. (Just consider all our descriptions of Ford's activities outside its home bases.) So we agree with the plaintiffs' counsel that resolving these cases does not also resolve the hypothetical.").

114. Transcript of Oral Argument at *39, *Ford*, 141 S. Ct. 1017 (No. 19-368), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2020/19-368_m648.pdf.

115. *Id.*

and the ones before us virtually list themselves. (Just consider all our descriptions of Ford's activities outside its home bases.) So we agree with the plaintiffs' counsel that resolving these cases does not also resolve the hypothetical."[116] But Justice Gorsuch's concurrence arrived at a different answer—or rather, more questions:

> The majority says this hypothetical supplies a useful study in contrast with our cases. On the majority's telling, Ford's "continuous" contacts with Montana and Minnesota are enough to establish an "affiliation" with those States; by comparison, the decoy seller's contacts may be too "isolated" and "sporadic" to entitle an injured buyer to sue in his home State. But if this comparison highlights anything, it is only the litigation sure to follow. For between the poles of "continuous" and "isolated" contacts lie a virtually infinite number of "affiliations" waiting to be explored. And when it comes to that vast terrain, the majority supplies no meaningful guidance about what kind or how much of an "affiliation" will suffice. Nor, once more, does the majority tell us whether its new affiliation test supplants or merely supplements the old causation inquiry.[117]

These considerations reiterate the lack of a consensus and clear answer to, not only the Chief Justice's hypothetical, but also the broader question of how to approach personal jurisdiction in the Internet age.

Adding to this uncertainty, some Justices, in separate concurring opinions, questioned *International Shoe*'s position as personal jurisdiction's guiding star.[118] The majority, however, rejected these arguments and "resolve[d] these cases by proceeding as the Court has done for the last 75 years—applying the standards set out in *International Shoe* and its progeny, with attention to their underlying values of ensuring fairness and protecting interstate federalism."[119] In short, the question of how to analyze virtual activities, including whether *International Shoe* is up to the task, is on the Justices' minds, highly relevant, and ready for resolution.

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116. *Ford*, 141 S. Ct. at 1028 n.4.

117. *Id.* at 1035 (Gorsuch, J., concurring). Justice Gorsuch then wondered whether *International Shoe* should resolve the Chief Justice's hypothetical:

> Perhaps this is the real reason why the majority introduces us to the hypothetical decoy salesman. Yes, he arguably availed himself of a new market. Yes, the plaintiff's injuries arguably arose from (or were caused by) the product he sold there. Yes, *International Shoe*'s old causation test would seemingly allow for personal jurisdiction. But maybe the majority resists that conclusion because the old test no longer seems as reliable a proxy for determining corporate presence as it once did. Maybe *that's* the intuition lying behind the majority's introduction of its new "affiliation" rule and its comparison of the Maine retiree's "sporadic" and "isolated" sales in the plaintiff's State and Ford's deep "relationships" and "connections" with Montana and Minnesota.

Id. at 1038 (Gorsuch, J., concurring).

118. *See id.* at 1032 (Alito, J., concurring) ("T]here are grounds for questioning the standard that the Court adopted in *International Shoe Co. v. Washington*, ... And there are also reasons to wonder whether the case law we have developed since that time is well suited for the way in which business is now conducted."); *id.* at 1036 (Gorsuch, J., concurring) ("With the old *International Shoe* dichotomy looking increasingly uncertain, it's hard not to ask how we got here and where we might be headed.").

119. *Id.* at 1025 n.2.

What, then, to make of these indecisive, scattered, and sometimes conflicting cases? A simple, though insufficient, answer is that, in some cases involving virtual contacts, some courts may find personal jurisdiction, and in other cases, other courts may not. In other words, there seems to be case-by-case consideration of virtual contacts but without clear guiding principles for future courts to follow. This is no answer for the out-of-state virtual actor who wants predictability, the litigants who want to either get to the merits or quickly dispose of their case, or the curious law student. As the preceding Parts have shown,[120] the issue of technology in the personal jurisdiction analysis is not only misguided and lacking a clear consensus but also becoming increasingly important as the reliance on remote technology increases. Currently, there is no lodestar approach to the problem of virtual contacts in the personal jurisdiction inquiry, and an answer is long overdue.

II. FLEXIBLE APPLICATION OF TRADITIONAL PERSONAL JURISDICTION DOCTRINES AS A SOLUTION

This Note argues that the existing frameworks for personal jurisdiction are flexible enough to accommodate even the broad set of technological innovations that permeate social and commercial relationships. The problem is, as shown above,[121] that courts have not treated personal jurisdiction as flexible and evolving. Rather, they have hewed to a physical-based approach and relegated Internet contacts to a separate, quickly outdated test, all of which has led to confusion when confronted with virtual contacts and remote technology. The reality is that virtual contacts support the exercise of personal jurisdiction on the same and even surer footing as physical contacts, which can lead to a more updated, uniform, and coherent doctrine. Virtual contacts can support personal jurisdiction in three areas of the doctrine: minimum contacts, general notions of fairness, and the fairness factors.

A. MINIMUM CONTACTS

Virtual contacts should count towards minimum contacts on the same footing as physical contacts. Courts can analyze virtual contacts just as they would physical contacts: out-of-state defendants can purposefully avail themselves and seek and obtain the benefits and protection of forum states through virtual contacts, causes of action can arise out of or relate to virtual activities, and it can be reasonably foreseeable that defendants would be haled into court in a forum state by virtue of their virtual contacts. This approach accords with the flexibility inherent in the minimum contacts test.

120. *See supra* Parts I.A. and I.B.
121. *See supra* Parts I.A. and I.C.

1. Current Doctrine and Development

When there is no consent, citizenship, or in-state service of the out-of-state defendant, the test for exercising personal jurisdiction is the "minimum contacts" test.[122] Under this test, a court may exercise jurisdiction over a defendant that has "minimum contacts" with the forum state.[123] This test is not "mechanical or quantitative," and "[w]hether due process is satisfied must depend rather upon the quality and nature of the activity in relation to the fair and orderly administration of the laws which it was the purpose of the due process clause to insure."[124] The contacts on which personal jurisdiction has been based were often, though need not be, physical.[125] Despite their lack of physical form, virtual contacts can and should fit into this test.

Through several cases, the Supreme Court has developed the minimum contacts test to include several considerations: a defendant's "purposeful[] avail[ment]" of the forum state,[126] the "benefits and protection" that a defendant sought and obtained from the forum state,[127] causes of action that "arise out of or relate to" contacts with the forum state,[128] and the reasonable foreseeability

122. *See* Int'l Shoe Co. v. Washington, 326 U.S. 310, 316 (1945) ("[D]ue process requires only that in order to subject a defendant to a judgment in personam, if he be not present within the territory of the forum, he have certain minimum contacts with it such that the maintenance of the suit does not offend 'traditional notions of fair play and substantial justice.'").

123. *Id.*

124. *Id.* at 319.

125. From early on, "[t]he foundation of jurisdiction [was] physical power . . . ." McDonald v. Mabee, 243 U.S. 90, 91 (1917). As the doctrine developed, the notions of physical power and physical connection as foundational aspects of personal jurisdiction remained. *See* Burnham v. Superior Ct. of Cal., 495 U.S. 604, 619 (1990) ("[J]urisdiction based on physical presence alone constitutes due process because it is one of the continuing traditions of our legal system that define the due process standard of 'traditional notions of fair play and substantial justice.' That standard was developed by *analogy* to 'physical presence,' and it would be perverse to say it could now be turned against that touchstone of jurisdiction."). However, the Court has clarified that the contacts need not be physical to satisfy the minimum contacts test. *See* Burger King Corp. v. Rudzewicz, 471 U.S. 462, 476 (1985) ("Jurisdiction . . . may not be avoided merely because the defendant did not *physically* enter the forum State.").

126. Hanson v. Denckla, 357 U.S. 235, 253 (1958) ("[I]t is essential in each case that there be some act by which the defendant purposefully avails itself of the privilege of conducting activities within the forum State, thus invoking the benefits and protections of its laws.") (citing *Int'l Shoe*, 326 U.S. at 319); J. McIntyre Mach., Ltd. v. Nicastro, 564 U.S. 873, 880 (2011) ("[I]t is the defendant's purposeful availment that makes jurisdiction consistent with 'traditional notions of fair play and substantial justice.'"); *see also* Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1025 (2021) ("[The contacts] must show that the defendant deliberately 'reached out beyond' its home—by, for example, 'exploi[ting] a market' in the forum State or entering a contractual relationship centered there.") (citing Walden v. Fiore, 571 U.S. 277, 285 (2014)).

127. *Int'l Shoe*, 326 U.S. at 319 ("But to the extent that a corporation exercises the privilege of conducting activities within a state, it enjoys the benefits and protection of the laws of that state. The exercise of that privilege may give rise to obligations; and, so far as those obligations arise out of or are connected with the activities within the state, a procedure which requires the corporation to respond to a suit brought to enforce them can, in most instances, hardly be said to be undue."); *see, e.g.*, *Ford*, 141 S. Ct. at 1029 ("In conducting so much business in Montana and Minnesota, Ford 'enjoys the benefits and protection of [their] laws'—the enforcement of contracts, the defense of property, the resulting formation of effective markets.") (citing *Int'l Shoe*, 326 U.S. at 319).

128. *Ford*, 141 S. Ct. at 1025 (citing Bristol-Myers Squibb Co. v. Superior Ct. of Cal., 137 S. Ct. 1773, 1780 (2017)); *see also Int'l Shoe*, 326 U.S. at 319 ("[S]o far as those obligations arise out of or are connected with the

that a defendant would be haled into court in the forum state.[129] The Supreme Court has also emphasized that it is the defendant's contacts with the forum state that matter, not the plaintiff's.[130] These factors permit consideration of virtual contacts in the minimum contacts analysis.

The minimum contacts test is flexible enough to encompass virtual contacts. Since its announcement in *International Shoe*, this test has permitted non-physical ties to the forum state to give rise to personal jurisdiction.[131] By announcing the test in broad terms, the Court left open the possibility that "minimum contacts" could mean even those modes of contact that did not exist at the time of its inception.[132] Thus, applying the minimum contacts test can seem like "a black art."[133] However, the benefit of a broad standard is its flexibility and applicability to an ever-evolving society. Furthermore, the assumptions underlying the minimum contacts test are grounded in this

activities within the state, a procedure which requires the corporation to respond to a suit brought to enforce them can, in most cases, hardly be said to be undue."); Shaffer v. Heitner, 433 U.S. 186, 204 (1977) ("[T]he relationship among the defendant, the forum, and the litigation, rather than the mutually exclusive sovereignty of the States on which the rules of *Pennoyer* rest, became the central concern of the inquiry into personal jurisdiction."); *Bristol-Myers Squibb*, 137 S. Ct. at 1781 (2017) ("In order for a court to exercise specific jurisdiction over a claim, there must be an 'affiliation between the forum and the underlying controversy, principally, [an] activity or an occurrence that takes place in the forum State.'") (alteration in original) (citing Goodyear Dunlop Tires Ops., S.A. v. Brown, 564 U.S. 915, 919 (2011)).

129. World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 297 (1980) ("[T]he foreseeability that is critical to due process analysis . . . is that the defendant's conduct and connection with the forum State are such that he should reasonably anticipate being haled into court there."); *Nicastro*, 564 U.S. at 903 (Ginsburg, J., dissenting) ("The modern approach to jurisdiction over corporations and other legal entities, ushered in by *International Shoe,* gave prime place to reason and fairness.").

130. *Walden*, 571 U.S. at 284 ("[T]he relationship must arise out of contacts that the 'defendant *himself*' creates with the forum State . . . . Due process limits on the State's adjudicative authority principally protect the liberty of the nonresident defendant—not the convenience of plaintiffs or third parties.") (citing *Burger King,* 471 U.S. at 475).

131. In particular, courts and scholars view *International Shoe* as stepping away from a requirement of physical contacts and towards the possibility of other types of contacts. *See* Burnham v. Superior Ct. of Cal., 495 U.S. 604, 618 (1990) ("As *International Shoe* suggests, the defendant's litigation-related "minimum contacts" may take the place of physical presence as the basis for jurisdiction[.]"); Terry S. Kogan, *A Neo-Federalist Tale of Personal Jurisdiction*, 63 S. CALIF. L. REV. 257, 352 (1990) ("Thus, the Court did not abandon *Pennoyer*'s requirement of presence, but merely said that the concept must be renovated to suit the circumstances of modern society. Physical presence was replaced by minimum contacts."); Kendrick D. Nguyen, Note, *Redefining the Threshold for Personal Jurisdiction: Contact and the Presumption of Fairness*, 83 B.U. L. REV. 253, 257 (2003) ("*International Shoe* affirms that [physical] presence is no longer necessary to 'validate novel, non-traditional assertions of jurisdiction . . . .'") (quoting *Burnham*, 495 U.S. at 619).

132. *See, e.g.*, Christopher W. Meyer, Note, *World Wide Web Advertising: Personal Jurisdiction Around the Whole Wide World?*, 54 WASH. & LEE L. REV. 1269, 1329–30 (1997) ("Constitutional application of the minimum contacts test demands that courts retain the flexibility to exercise personal jurisdiction over those defendants who purposefully avail themselves of the forum, while denying requests for jurisdiction over defendants whose advertisements fortuitously reach the forum.").

133. Dan L. Burk, *Federalism in Cyberspace*, 28 CONN. L. REV. 1095, 1109 (1996).

flexibility of meaningful contacts and fairness.[134] Therefore, a flexible standard comports with the test's origins and with due process.[135]

Additionally, virtual contacts are not different enough from physical contacts to warrant a new test. In fact, virtual contacts are qualitatively similar to the physical contacts that currently satisfy the minimum contacts test. Virtual activities "involve real people in one territorial jurisdiction either (i) transacting with real people in other territorial jurisdictions or (ii) engaging in activity in one jurisdiction that causes real-world effects in another territorial jurisdiction."[136] While the technology that creates these activities is new and different, the substance and effects of the activities can be the same as those of physical activities. Moreover, the effects of out-of-state conduct that are felt in the forum state can be just as significant as the effects of conduct that occurred

134. *See* Ryne H. Ballou, Note, *Civil Procedure—Be More Specific: Vague Precedents and the Differing Standards by Which to Apply "Arises Out of or Relates to" in the Test for Specific Personal Jurisdiction*, 35 U. ARK. LITTLE ROCK L. REV. 663, 685 (2013) (noting the "flexibility" of the minimum contacts test and arguing that the "primary purpose" of the test is "to ensure fairness"). It is therefore not true that "the network's structural indifference to geographic position is incongruous with the fundamental assumptions underlying the *International Shoe* test." Burk, *supra* note 133, at 1109. Geography and territorial connection, after all, lost their rigid applicability to the personal jurisdiction analysis when *International Shoe* replaced *Pennoyer v. Neff* as the seminal personal jurisdiction case. *See* Int'l Shoe Co. v. Washington, 326 U.S. 310, 319 (1945); WRIGHT & MILLER, *supra* note 45, § 1067 ("The new 'field theory' established by *International Shoe* held out the possibility that notions of territoriality and state sovereignty would disappear entirely from the analysis of personal jurisdiction questions, opening the doors to nationwide service of process limited only by the requirements of 'minimum contacts' and 'fair play and substantial justice.'"); William M. Richman, *Understanding Personal Jurisdiction*, 25 ARIZ. ST. L.J. 599, 599 (1993) ("[I]n *International Shoe Co. v. Washington,* the Court rejected the rigid territorialism of *Pennoyer v. Neff* . . . ."); Wesley M. Bernhardt, Note, *A Clash of Principles: Personal Jurisdiction and Two-Level Utilitarianism in the Information Age*, 11 WASH. U. JURIS. REV. 113, 135 (2018) ("Personal jurisdiction doctrine has not remained static over time. Instead, the doctrine has evolved from a rigid formula to the relatively more flexible doctrine exhibited by *International Shoe* and its progeny."). *But see* Richman, *supra*, at 613 (arguing that "the contacts requirement is simply a vestige of the Court's territorial power theory and has no modern, functional justification").

135. "The 'minimum contacts' inquiry is 'flexible.'" N.C. Dep't of Revenue v. Kimberley Rice Kaestner 1992 Fam. Tr., 139 S. Ct. 2213, 2220 (2019). This inherent flexibility helps the inquiry conform with the Due Process Clause. *See* Michael E. Allen, Note, *Analyzing Minimum Contacts Through the Internet: Should the World Wide Web Mean World Wide Jurisdiction?*, 31 IND. L. REV. 385, 411 (1998) ("[C]ertain adaptations of the minimum contacts test, if applied properly, are capable of fairly and efficiently handling jurisdictional issues involving the Internet . . . . [W]hen a court focuses on the defendant's contacts with the forum through the Internet, personal jurisdiction decisions are much more likely to comport with the requirements of the Due Process Clause. By contrast, when a court becomes sidetracked and focuses on the boundless limits of the Internet, the defendant's due process rights will often be lost in the confusion.").

However, Justice Gorsuch remains curious about the original meaning of the Due Process Clause and its role in the personal jurisdiction analysis. *See* Transcript of Oral Argument at *28–29, *56–57, Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017 (2021) (No. 19-368), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2020/19-368_m648.pdf (showing Justice Gorsuch twice asking about the original meaning of the Due Process Clause).

136. Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199, 1239–40 (1998); *see also* TiTi Nguyen, Note, *A Survey of Personal Jurisdiction Based on Internet Activity: A Return to Tradition*, 19 BERKELEY TECH. L.J. 519, 539–40 (2004) ("[F]or the purposes of determining minimum contacts, activities conducted via the Internet are no different than activities conducted in real space . . . . Since cyberspace does not exist separate and apart from the physical world, traditional personal jurisdiction tests are not so outmoded that they cannot be applied to the Internet.").

in the forum state.[137] Forum states then must be able to protect their citizens from harmful effects intentionally directed at the forum state, even if the conduct giving rise to the harm originated in a different forum.[138] Virtual activities are therefore "functionally identical" in both substance and effect to other interstate activities that have traditionally given rise to personal jurisdiction, including "mail or telephone or smoke signal."[139]

Of course, virtual contacts in the modern world are also different from contacts arising from mail, telephone, and smoke signal. For example, unlike physical contacts, virtual contacts lack clear boundaries.[140] As a result, it is difficult to determine which virtual contacts give rise to personal jurisdiction and which do not.[141] Virtual contacts can also arise from activity all over the world in much greater numbers than physical contacts do.[142] These differences and complications with virtual contacts, however, do not require a new test. Even the long-accepted physical contacts analysis was never so simple.[143] Rather, the personal jurisdiction inquiry has always required a case-by-case analysis and has always evaded an easy test.[144] The wrinkle that virtual contacts add therefore

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137. *See, e.g.*, Calder v. Jones, 465 U.S. 783, 789 (1984) (holding that "[j]urisdiction over petitioners is . . . proper in California based on the 'effects' of their Florida conduct in California").

138. *See, e.g.*, Keeton v. Hustler Mag., Inc., 465 U.S. 770, 777 (1984) (finding that "New Hampshire has clearly expressed its interest in protecting such persons from libel, as well as in safeguarding its populace from falsehoods" and that this interest is sufficient to find jurisdiction).

139. Goldsmith, *supra* note 136, at 1240.

140. *See* Digit. Equip. Corp. v. AltaVista Tech., Inc., 960 F. Supp. 456, 462 (D. Mass. 1997) ("[A]s far as the Internet is concerned, not only is there perhaps 'no there there,' the 'there' is *everywhere* where there is Internet access."); *see also* Adam R. Kleven, Note, *Minimum Virtual Contacts: A Framework for Specific Jurisdiction in Cyberspace*, 116 MICH. L. REV. 785, 787 (2018) ("The internet has blurred territorial lines. Originally, the jurisdictional question was answered by the territorial power of a sovereign state, which was deemed to have jurisdiction over all persons and things within its geographic boundary. But changes in commerce and technology have challenged prior conceptions of territory and accompanying jurisdictional rules. More recent changes raise a new jurisdictional question: When a user engages in activity online, *where* is that activity occurring?"); Dan L. Burk, *Jurisdiction in A World Without Borders*, 1 VA. J.L. & TECH. 1, 2 (1997) ("[T]he advent of global computer networks has rendered geographic boundaries increasingly porous and ephemeral.").

141. This idea, along with the question of how to fit virtual contacts into the analysis that naturally follows, is the crux of the puzzling question of virtual contacts in the personal jurisdiction analysis. *See supra* Part I.C.

142. *See* Zoe Niesel, *#personaljurisdiction: A New Age of Internet Contacts*, 94 IND. L.J. 103, 104 (2019) ("Difficulties in applying personal jurisdiction are manifest—the internet does not respect territorial boundaries, is accessible anytime and anyplace, and allows users from all parts of the globe to access and contribute.").

143. The subject of complaint of many first-year law students, personal jurisdiction is notoriously complex:

> Issues regarding personal jurisdiction have tortured law students and practitioners alike; the topic and its bag of rhetoric, including such phrases as "fundamental fairness," "minimum contacts," and "purposeful availment," often amount to no more than an ad hoc judgment that the law attempts to implement as a post hoc black letter rule, to ensure that similar factual circumstances command the same "fair" result.

Richard S. Zembek, Note, *Jurisdiction and the Internet: Fundamental Fairness in the Networked World of Cyberspace*, 6 ALB. L.J. SCI. & TECH. 339, 366–67 (1996). Indeed, "[c]yberspace has further clouded the jurisdictional inquiry by obscuring the fundamental questions of who? what? and where?" *Id.* at 367. However, it is clear that the personal jurisdiction analysis has always been somewhat cloudy.

144. See, for example, the Supreme Court's personal jurisdiction jurisprudence from *International Shoe* to the present, which includes individual assessment of contacts. Even as it avoided cases with virtual contacts, the

does not render unworkable the existing frameworks.[145] Virtual contacts fit within the same, flexible minimum contacts test because they are substantially similar to the physical contacts that have required individualized consideration and nuanced analysis from courts and first-year law students alike.

2. Application in the Remote-Technology Context

As remote technology becomes more widespread, virtual contacts increasingly resemble the physical contacts that currently satisfy the minimum contacts test. These virtual contacts establish connection between the out-of-state defendant and the forum state, even in the absence of physical contact, as out-of-state defendant technology-users purposefully avail themselves of the forum state and seek and obtain its benefits and protection. Causes of action can also arise out of or relate to virtual contacts with the forum state. It is reasonably foreseeable that these defendants might be haled into court in this state. Virtual contacts also increase the overall number of contacts defendants have with a particular forum state, adding to the analysis. New technology therefore does not require a new test. Rather, virtual contacts fit within the existing minimum contacts test.

a. The Defendant's Purposeful Availment of the Forum State

Out-of-state defendants who engage in virtual activities may purposefully avail themselves of the forum state when they direct their activities towards that state.[146] This purposeful availment can include virtual activities directly aimed at a particular forum state or individual in a forum state[147] as well as the

Supreme Court has decided many personal jurisdiction cases since establishing its current, difficult-to-apply test. These cases include, among others, *International Shoe Co. v. Washington*, 326 U.S. 310 (1945), *McGee v. International Life Insurance Co.*, 355 U.S. 220 (1957), *Hanson v. Denckla*, 357 U.S. 235 (1958), *Shaffer v. Heitner*, 433 U.S. 186 (1977), *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286 (1980), *Insurance Corp. of Ireland v. Compagnie des Bauxites de Guinee*, 456 U.S. 694 (1982), *Calder v. Jones*, 465 U.S. 783 (1984), *Keeton v. Hustler Magazine, Inc.*, 465 U.S. 770 (1984), *Burger King Corp. v. Rudzewicz*, 471 U.S. 462 (1985), *Asahi Metal Industry Co., Ltd. v. Superior Court of California*, 480 U.S. 102 (1987), *Burnham v. Superior Court of California*, 495 U.S. 604 (1990), *J. McIntyre Machinery, Ltd. v. Nicastro*, 564 U.S. 873 (2011), *Walden v. Fiore*, 571 U.S. 277 (2014), *Bristol-Myers Squibb Co. v. Superior Court of California*, 137 S. Ct. 1773 (2017), and *Ford Motor Co. v. Montana Eighth Judicial District Court*, 141 S. Ct. 1017 (2021).

145. Technology and the Internet are not so foreign to personal jurisdiction's traditional frameworks to render these frameworks unusable. *See* Gorman v. Ameritrade Holding Corp., 293 F.3d 506, 510–11 (D.C. Cir. 2002), *overruled by* Erwin-Simpson v. AirAsia Berhad, 985 F.3d 883, 886 (D.C. Cir. 2021) ("'Cyberspace,' however, is not some mystical incantation capable of warding off the jurisdiction of courts built from bricks and mortar. Just as our traditional notions of personal jurisdiction have proven adaptable to other changes in the national economy, so too are they adaptable to the transformations wrought by the Internet.").

146. When a defendant's "efforts are 'purposefully directed' toward residents of another State, [the Supreme Court] ha[s] consistently rejected the notion that an absence of physical contacts can defeat personal jurisdiction there." *Burger King*, 471 U.S. at 476.

147. *See, e.g.*, Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *9 (S.D. Cal. Feb. 26, 2016) (finding personal jurisdiction because the virtual contacts, which included email, phone, and text, were "direct . . . contacts," "for the purpose of Plaintiff performing work for the benefit of Defendants," and "deliberate actions on the part of Defendants purposely directed" at the forum state); Wallens v. Milliman Fin. Risk Mgmt. LLC, 509 F. Supp. 3d 1204, 1216 (C.D. Cal. 2020) (finding personal jurisdiction because the virtual

knowledge or intent that the activities will or may give rise to harm in a forum state.[148] Purposeful availment "ensures that a defendant will not be haled into a jurisdiction solely as a result of 'random,' 'fortuitous,' or 'attenuated' contacts."[149] Just like with physical contacts, therefore, virtual contacts will not always reach this standard.[150] Only the virtual contacts that reach this standard will result in a finding of personal jurisdiction. Purposeful availment therefore supplies a functional standard by which to measure virtual contacts and to include them in the minimum contacts analysis.

In particular, some lower courts have found that hiring and enlisting the services of a remote worker purposefully avails an employer of the worker's forum due to meaningful remote contacts such as recruiting the worker, negotiating the employment contract, and maintaining a close business relationship with the worker through email, telephone, and snail mail.[151] Additional virtual contacts, such as Zoom contacts in the remote-technology era,[152] could similarly evince purposeful availment and satisfy the minimum contacts test as these activities increasingly take place over Zoom and as employers use Zoom to establish meaningful and purposeful connections with their remote employees.

In its own words, Zoom "provide[s] a video-first communications platform that delivers happiness and fundamentally changes how people interact. [Zoom] connect[s] people through frictionless video, voice, chat and content sharing and enable[s] face-to-face video experiences for thousands of people in a single

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contacts were "direct" with the plaintiff, "directed toward" the forum state, and "for the purpose of [plaintiff] performing work for the benefit of Defendants").

148. *See, e.g.*, Vangheluwe v. Got News, LLC, 365 F. Supp. 3d 850, 861 (E.D. Mich. 2019) (finding that defendant's tweet "was intended to cause some action in Michigan or catch the eye of those most able to make contact with the [plaintiffs], i.e., Michiganders" and therefore concluding that the "tweet was contact with Michigan that satisfie[d] the constitutional minimum").

149. *Burger King*, 471 U.S. at 475.

150. In these cases, just like with physical contacts, personal jurisdiction is properly denied. *See, e.g.*, Viasystems, Inc. v. EBM-Papst St. Georgen GmbH & Co., KG, 646 F.3d 589, 594 (8th Cir. 2011) (finding that defendant's "incidental [virtual] contacts" with the forum state "[did] not constitute a 'deliberate' and 'substantial connection' with the state such that [defendant] could 'reasonably anticipate being haled into court there'").

151. *See, e.g.*, King v. Prodea Sys., Inc., 433 F. Supp. 3d 7, 15 (D. Mass. 2019); Hall v. Rag-O-Rama, LLC, 359 F. Supp. 3d 499, 510 (E.D. Ky. 2019); Ouellette v. True Penny People, LLC, 352 F. Supp. 3d 144, 154 (D. Mass. 2018); Williams v. Preeminent Protective Servs., Inc., 81 F. Supp. 3d 265, 272 (E.D.N.Y. 2015).

152. Zoom has become the go-to remote-technology tool with which remote workers and other users have become familiar during the pandemic and will likely continue to use post-pandemic. *See* Maria Armental, *Zoom Foresees Robust Growth Even as Pandemic Pressures Ease*, WALL ST. J. (Mar. 1, 2021, 6:36 PM), https://www.wsj.com/articles/zoom-foresees-robust-growth-even-as-pandemic-pressures-ease-11614637492 ("Zoom Video Communications Inc. said its growth would continue at a rapid pace amid the vaccine rollout, after pandemic lockdowns turned the company into a household name and an investor darling."). The same applies to other videoconferencing platforms as well. *See supra* notes 66–92 and accompanying text (arguing that the reliance on remote technology for remote work and other aspects of remote life will continue in the post-pandemic world).

meeting across disparate devices and locations."[153] Zoom and other videoconferencing platforms "bring[] people together wherever they are, mimicking the nuances of face-to-face interactions in a convenient, digital space."[154] By offering technology that permits individuals to virtually meet, interact, and conduct business in substantially the same manner as in-person meetings, Zoom allows employers and other remote-technology users to connect with individuals in other locations, including in other states. These users then "Zoom" into other states and purposefully avail themselves of those other states through their virtual connections. Zoom, along with other videoconferencing tools, is therefore functionally like existing teleconferencing tools and in-person interactions, and they should be seen on the same footing as earlier technologies and physical contacts. After all, Zoom aims to "make Zoom meetings better than"—and functionally similar to—"in-person meetings"[155] and even more personal than earlier forms of meaningful remote contacts such as email, telephone, or snail mail.

b. The Benefits and Protection That a Defendant Seeks and Obtains of the Forum State

Similarly, remote-technology users seek out and use the benefits and protection of the forum state when their use of such technology allows them to connect with and benefit from the connection in that state.[156] These benefits and protection can include, among other things, "the enforcement of contracts, the defense of property, [and] the resulting formation of effective markets."[157] Just as the International Shoe Company benefited from its employees' sales in the forum state in *International Shoe*,[158] the remote-technology user benefits from connection with others—whether for work, social, or malicious purposes—in the forum state through the use of remote technology. With the remote worker, for example, the defendant employer seeks out and obtains the benefit of having the remote worker in the forum state and reaping the fruits of the worker's

153. *Our Goal Is to Make Zoom Meetings Better Than In-Person Meetings*, ZOOM: INV. RELS. https://investors.zoom.us/static-files/f74354f8-d7de-46fa-a519-c41d6733886a (last visited Mar. 13, 2022).

Despite Zoom's aims, many have discovered the ways in which Zoom differs from in-person interactions. *See* Stephen Noonoo, *Is Learning on Zoom the Same as In Person? Not to Your Brain*, EDSURGE (Sept. 15, 2020), https://www.edsurge.com/news/2020-09-15-is-learning-on-zoom-the-same-as-in-person-not-to-your-brain ("[P]eople began realizing that all these video calls were making them tired—exhausted even—more so than a day of in-person class or all-day meetings. The phenomena [sic] even has a name: Zoom fatigue."). For better or worse, however, the use of the technology will likely not end when the pandemic does, and the virtual connections may constitute purposeful availment of the state into which the individual "Zooms."

154. Rob Scott, *Must Have Video Conferencing Statistics 2020*, UC TODAY (July 27, 2020), https://www.uctoday.com/collaboration/video-conferencing/video-conferencing-statistics.

155. *Our Goal Is to Make Zoom Meetings Better Than In-Person Meetings*, *supra* note 153.

156. *See* Int'l Shoe Co. v. Washington, 326 U.S. 310, 319 (1945) (stating that "to the extent that a corporation exercises the privilege of conducting activities within a state, it enjoys the benefits and protection of the laws of that state").

157. Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1029 (2021).

158. 326 U.S. at 320.

labor.[159] Even though it is the plaintiff remote worker who has the strongest contacts with the forum state, the defendant employer still seeks and obtains these benefits and protection by virtue of its own close contacts and relationship with its remote worker.[160] These benefits, despite the defendant's physical location, "create[] reciprocal obligations."[161] Requiring these remote-technology users to defend suits in the forum state, therefore, can "hardly be said to be undue."[162]

c. A Cause of Action That Arises Out of or Relates to Contacts With the Forum State

Additionally, just as with physical contacts, remote activities that give rise or relate to a cause of action can support a finding of jurisdiction. The "relate to" prong of the "arise out of or relate to" standard "contemplates that some relationships will support jurisdiction without a causal showing."[163] While "[t]hat does not mean anything goes[,]"[164] this relation need not derive from physical contacts—virtual contacts may also provide bases for causes of action in or relation to the forum state.[165]

While this inquiry will depend on the particular virtual contacts and causes of action involved, courts have found causes of action that relate to virtual contacts with the forum state. For example, some courts found that employment-related causes of action related to employers' virtual contacts with their remote worker's forum state.[166] Contract and tort claims also related to an employer's

159. *See, e.g.*, Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *9 (S.D. Cal. Feb. 26, 2016) (finding that the "virtual contacts were for the purpose of Plaintiff performing work for the benefit of Defendants, and Defendants knew that Plaintiff was performing the work in California"); Wallens v. Milliman Fin. Risk Mgmt. LLC, 509 F. Supp. 3d 1204, 1216 (C.D. Cal. 2020) (similar).

160. *See, e.g.*, King v. Prodea Sys., Inc., 433 F. Supp. 3d 7, 15 (D. Mass. 2019) (finding that, although the plaintiff's request to work remotely was for his own benefit, the defendants "nonetheless purposefully and intentionally engaged with" the plaintiff through its virtual contacts and concluding that "[s]uch conduct cannot reasonably be described as involuntary or unilateral").

161. *Ford*, 141 S. Ct. at 1030.

162. *Int'l Shoe*, 326 U.S. at 319.

163. *Ford*, 141 S. Ct. at 1026. *But see id.* at 1033 (Alito, J., concurring) ("[I]t is apparent that 'arise out of' and 'relate to' overlap and are not really two discrete grounds for jurisdiction. The phrase 'arise out of or relate to' is simply a way of restating the basic 'minimum contacts' standard adopted in *International Shoe*.").

164. *Id.* at 1026. In fact,

> [i]n the sphere of specific jurisdiction, the phrase "relate to" incorporates real limits, as it must to adequately protect defendants foreign to a forum. But again, we have never framed the specific jurisdiction inquiry as always requiring proof of causation—*i.e.,* proof that the plaintiff's claim came about because of the defendant's in-state conduct.

Id.

165. Further, the "relate to" prong may take on an increased importance in the virtual world as conduct giving rise to a cause of action in the remote-technology era will often include related virtual activities. However, without yet seeing how lower courts will interpret and apply *Ford*, this result is not certain.

166. *See, e.g.*, Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *8 (S.D. Cal. Feb. 26, 2016) (finding that employer's virtual contacts "entailed numerous deliberate contacts by Defendants with California related to [Plaintiff's] employment claims"); King v. Prodea Sys., Inc., 433 F. Supp. 3d 7, 15 (D. Mass. 2019) (finding that "plaintiff's claim for unpaid wages arises directly from the contacts of the Corporate

virtual contacts.[167] Ultimately, the inquiry is more focused on the relation between the contacts and the cause of action than on the physical location of the harm or the physical presence of the defendant.[168] In fact, "[t]he proper question is not *where* the plaintiff experienced a particular injury or effect but *whether* the defendant's conduct connects him to the forum in a meaningful way."[169] The focus of this inquiry and the Court's recent explanation of the separate "relate to" prong suggest that, where a sufficient connection exists, virtual contacts can give rise and relate to a cause of action and thus provide the basis for jurisdiction in that forum state, just as physical contacts can.[170]

d. The Reasonable Foreseeability That a Defendant Will Be Haled Into Court in the Forum State

It is also reasonably foreseeable that a remote-technology user's virtual activities may cause harm in another state. Accordingly, it is reasonably foreseeable that this user may be haled into court in this state. Even though the law is disjointed on this point,[171] the possibility of having to answer a lawsuit based on virtual causes of action is foreseeable because reasonable people today generally know that their actions may give rise to legal consequences regardless of state boundaries. Generally, their understanding of this concept is not contingent on territorial lines.[172] Additionally and importantly, reasonable

Defendants with [plaintiff] and, as a result, with Massachusetts"); Wallens v. Milliman Fin. Risk Mgmt. LLC, 509 F. Supp. 3d 1204, 1216 (C.D. Cal. 2020) (finding that "several of [Plaintiff]'s claims against [Defendant] arise out of [Defendant]'s contact with" the forum state).

167. *See, e.g.*, Ouellette v. True Penny People, LLC, 352 F. Supp. 3d 144, 153 (D. Mass. 2018) (finding that the contract and tort claims were "based on, and causally linked to, the same underlying conduct by Defendant").

168. "The relatedness inquiry 'serves the important function of focusing the court's attention on the nexus between a plaintiff's claim and the defendant's contacts with the forum.'" *Id.* at 152 (citation omitted).

169. Walden v. Fiore, 571 U.S. 277, 290 (2014) (emphasis added).

170. Though it does not contemplate virtual contacts, *International Shoe* states the proposition broadly. *See* Int'l Shoe Co. v. Washington, 326 U.S. 310, 319 (1945) ("[S]o far as those obligations arise out of or are connected with the activities within the state, a procedure which requires the corporation to respond to a suit brought to enforce them can, in most cases, hardly be said to be undue."). *But see* Bristol-Myers Squibb Co. v. Superior Ct. of Cal., 137 S. Ct. 1773, 1781 (2017) (explicitly requiring "'principally, [an] activity or an occurrence that takes place *in* the forum State'") (alteration in original) (emphasis added) (citing Goodyear Dunlop Tires Ops., S.A. v. Brown, 564 U.S. 915, 919 (2011)).

171. *See supra* Parts I.A. and I.C.

172. Society's view today and in the future involves a national perspective, rather than a perspective limited by state borders, particularly in the virtual world. *See* JANNA ANDERSON, KATHLEEN STANSBERRY & LEE RAINIE, PEW RSCH. CTR., EXPERTS OPTIMISTIC ABOUT THE NEXT 50 YEARS OF DIGITAL LIFE 77 (2019), https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2019/10/PI_2019.10.28_The-Next-50-Years-of-Digital-Life_FINAL.pdf ("[T]here will not be as many borders as today; this new information society is a society with flexible borders.").

Some scholars have considered the role of this nationalized perspective in the personal jurisdiction analysis and development. *See*, *e.g.*, Ray Worthy Campbell, *Personal Jurisdiction and National Sovereignty*, 77 WASH. & LEE L. REV. 97, 100 (2020) (arguing that the personal jurisdiction analysis "should take into account that states are members of a shared sovereignty," "rather than looking at states as unconnected sovereigns"); Hayward D. Reynolds, *The Concept of Jurisdiction: Conflicting Legal Ideologies and Persistent Formalist Subversion*, 18 HASTINGS CONST. L.Q. 819, 824–25 (1991) (noting that "[t]he United States moved inexorably

people today know that technology is widely used[173] and therefore may increasingly view connections arising out of such technology as tantamount to physical connections. They are also aware of technology's ability to extend an individual's reach,[174] including an individual's ability to use technology to cause harm in faraway places.[175]

Just as with in-person meetings, for example, individuals in Zoom meetings may subject themselves to employment discrimination claims,[176] privacy claims,[177] or even criminal charges for the intrusive "Zoombomber."[178] It would

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toward social, economic, and political unity" and that "*International Shoe* . . . w[as] [a] manifestation[] of the new legal thinking and should be seen in this context").

173. "Technology has infiltrated every aspect of our lives[.]" *The Role of Technology*, KNIGHT FOUND., https://knightfoundation.org/digitalcitizenship/technology (last visited Mar. 13, 2022).

174. Technology allows people to connect with others all over the world:

> Telecommunication systems are a very crucial part of any advanced society. From using bird messages and smoke signals, to the faster, more efficient, more effective, and more global system of email, phone calls, and app messaging allows for people to stay connected in a globalized world. From Skype to VOIP to global telecom carriers, it is highly feasible for people to travel the world and stay connected, and even possible for remote workers or international businesses to utilize video calls and conference calls via the Internet to keep their businesses going without interruption.

D.J. Wardynski, *Technology and Society: How Technology Changed Our Lives*, BRAINSPIRE: BLOG (Oct. 24, 2019), https://www.brainspire.com/blog/technology-and-society-how-technology-changed-our-lives.

175. *See* Austen Parrish, *Personal Jurisdiction: The Transnational Difference*, 59 VA. J. INT'L L. 97, 104 (2019) ("Changes in technology, including the expansion of the internet, have meant localized conduct can have far-reaching impact."). For example, a lot of crime occurs over the Internet. In 2020, complaints of Internet crime increased by sixty-nine percent. FED. BUREAU OF INVESTIGATION, INTERNET CRIME REPORT 2020, at 3 (2021), https://www.ic3.gov/Media/PDF/AnnualReport/2020_IC3Report.pdf ("In 2020, while the American public was focused on protecting our families from a global pandemic and helping others in need, cyber criminals took advantage of an opportunity to profit from our dependence on technology to go on an Internet crime spree. These criminals used phishing, spoofing, extortion, and various types of Internet-enabled fraud to target the most vulnerable in our society—medical workers searching for personal protective equipment, families looking for information about stimulus checks to help pay bills, and many others.").

176. *See* Steven Pearlman, *Zoom Doom: Avoiding Liability and Embarrassment in the Virtual Workplace*, FORBES (Nov. 19, 2020, 1:32 PM), https://www.forbes.com/sites/stevenpearlman/2020/11/19/zoom-doom-avoiding-liability-and-embarrassment-in-the-virtual-workplace/?sh=6ef032c8ebca ("Indeed, we could be nearing an inflection point where behavior in the virtual meetings to which employees are adapting that may seem just boorish may escalate and start to form the basis of new litigation.").

177. Companies and employees that mishandle sensitive information, in particular, may face privacy claims. *See* Jeffrey M. Stefan II, *Health Crisis Puts Video Conferencing in the Spotlight – What to Know to Avoid Risk*, 10 NAT'L L. REV. 1 (2020), https://www.natlawreview.com/article/health-crisis-puts-video-conferencing-spotlight-what-to-know-to-avoid-risk. Relatedly, Zoom itself has faced lawsuits over privacy claims. *See In re* Zoom Video Commc'ns Inc. Priv. Litig., 525 F. Supp. 3d 1017, 1023 (N.D. Cal. 2021) (class action suit claiming that "Zoom violated California law by (1) sharing Plaintiffs' personally identifiable information with third parties; (2) misstating Zoom's security capabilities; and (3) failing to prevent security breaches known as 'Zoombombing'").

178. "Zoombombing"—the conduct of the "Zoombomber"—refers to "video-teleconference hijacking," or "the uninvited entry into and disruption of a videoconference call, often by means of obscene, hateful, or threatening language or images. A compound drawing on the name of San Jose-based platform Zoom, the term is colloquially applied to disruption carried out across videoconference platforms." Rachel Bercovitz, *Prosecuting Zoom-Bombing*, LAWFARE (Apr. 24, 2020, 10:42 AM), https://www.lawfareblog.com/prosecuting-zoom-bombing.

Criminal charges quickly attached to "Zoombombing." *See* Press Release, Dep't of Justice, Federal, State, and Local Law Enforcement Warn Against Teleconferencing Hacking During Coronavirus Pandemic (Apr. 3, 2020), https://www.justice.gov/usao-edmi/pr/federal-state-and-local-law-enforcement-warn-against-

be incongruous with reasonable expectations to conclude that defendants who cause harm virtually should be free from a court's reach by mere virtue of their use of remote technology. In the remote-work context, the employer foresees being haled into court in its remote worker's state no less than it does for the worker to whom it sends mail and occasionally visits.[179] Even though "mere knowledge" of an employee's remote work in another state alone is not enough to give rise to personal jurisdiction,[180] defendant employers who have sufficient contacts with their remote employees through their working relationship should reasonably foresee that any harm they cause to their remote employee may result in a lawsuit in the employee's forum state. "As COVID-19 has now made clear, the workplace is not limited to the physical building, plant, or office. It also includes the broader environment that workers operate in—their home environments as well as their work environments—and even the spaces and coffee shops in between."[181] With this expansion in what constitutes the workplace, employers should know that their potential liability extends beyond the office building, even to remote workers' forum states. The defendant employer then should reasonably foresee that it may be haled into its remote employee's forum state just as it may be for harm to an in-person employee. Without a difference in the reasonable foreseeability of being haled into court, virtual contacts should be viewed in the same manner as physical contacts.

* * *

Additionally, virtual contacts can increase the overall number of contacts defendants have with a particular forum state. While some commentators doubt that virtual contacts will ever be enough to satisfy the minimum contacts test,[182] this doubt proves untrue. Some courts and commentators have argued, correctly, that physical contacts are merely one way to satisfy the minimum contacts test.[183] In reality, the contacts that an out-of-state defendant has with a forum

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teleconferencing-hacking-during; Bercovitz, *supra*; Nick Statt, *'Zoombombing' Is a Federal Offense that Could Result in Imprisonment, Prosecutors Warn*, THE VERGE (Apr. 3, 2020, 3:13 PM), https://www.theverge.com/2020/4/3/21207260/zoombombing-crime-zoom-video-conference-hacking-pranks-doj-fbi.

179. *See supra* Introduction (illustrating different jurisdictional results for a defendant employer sued by its remote worker and by its worker that shares some physical contacts with the employer).

180. "In remote-work cases, . . . a defendant's mere knowledge that an employee happens to reside in the forum state and conduct some work from home does not constitute purposeful availment." Perry v. Nat'l Ass'n of Home Builders of U.S., No. CV TDC-20-0454, 2020 WL 5759766, at *5 (D. Md. Sept. 28, 2020).

181. STEVE HATFIELD, NICOLE SCOBLE-WILLIAMS & ERICA VOLINI, DELOITTE, FROM SURVIVE TO THRIVE: THE FUTURE OF WORK IN THE POST-PANDEMIC WORLD 6 (2021), https://www2.deloitte.com/content/dam/Deloitte/global/Documents/HumanCapital/gx-the-future-of-work-post-covid-19-poc.pdf.

182. *See, e.g.*, Trammell & Bambauer, *supra* note 15, at 1129 ("We argue that courts should dispense with the fiction that purely virtual conduct creates any meaningful contact with a particular forum.").

183. *See, e.g.*, uBID, Inc. v. GoDaddy Grp., Inc., 623 F.3d 421, 431 (7th Cir. 2010) ("[T]he geographical relationship between claim and contacts is only one facet of the constitutional inquiry."); Pederson v. Frost, 951 F.3d 977, 980 (8th Cir. 2020) ("To be sure, 'calls, emails, and text messages' directed at a plaintiff can be relevant contacts."); Kogan, *supra* note 131, at 356 ("The requisite relationship between a valid forum and a

state will often include a mix of physical and virtual contacts.[184] The finding that virtual contacts can be sufficient contacts on their own will only fortify the minimum contacts analysis in these mixed-contacts cases, strengthening courts' proper exercise of personal jurisdiction. Virtual contacts alone or in addition to other contacts, therefore, can and should give rise to personal jurisdiction.

It is also not enough to say that including virtual contacts in the minimum contacts analysis results in an overly expanded doctrine.[185] While the number of interstate contacts will likely rise, which will likely expand the personal jurisdictional reach of each court, recent restrictions in the doctrine prevent it from becoming an overly expanded doctrine. Recent trends from the Supreme Court indicate a contraction of personal jurisdiction, as the Court has, case by case, placed limits on the doctrine.[186] Specifically, in *J. McIntyre, Ltd. v. Nicastro*[187] and *Walden v. Fiore*,[188] the Court "tightened the required nexus between the defendant and the forum in ways that reduce the range of plausible litigation forums."[189] In *Bristol-Myers Squibb Co. v. Superior Court of California*,[190] "the Court further narrowed specific jurisdiction by demanding a

defendant is significantly dephysicalized. In addition to the very physical notion of a 'contact,' the Court now contemplates other, more ambiguous 'ties or relations.'"); Nguyen, *supra* note 131, at 257 ("A defendant's presence in the forum is still sufficient to establish personal jurisdiction, though *International Shoe* affirms that such presence is no longer necessary to 'validate novel, non-traditional assertions of jurisdiction . . . .'") (quoting Burnham v. Superior Ct. of Cal., 495 U.S. 604, 619 (1990)); *see also supra* notes 131–35 and accompanying text (demonstrating that, from its inception, *International Shoe* has permitted non-physical contacts).

184. *See*, *e.g.*, Toys "R" Us, Inc. v. Step Two, S.A., 318 F.3d 446, 453 (3d Cir. 2003) (considering related non-Internet contacts, in addition to analysis of the Internet contacts, in the personal jurisdiction inquiry); Groop Internet Platform Inc. v. Psychotherapy Action Network, No. CV 19-1854 (BAH), 2020 WL 353861, at *7 (D.D.C. Jan. 21, 2020) (requiring a showing of "'substantial' non-internet contacts" in addition to Internet contacts).

185. *See* Michael S. Rothman, Comment, *It's A Small World After All: Personal Jurisdiction, the Internet and the Global Marketplace*, 23 MD. J. INT'L L. & TRADE 127, 180–81 (1999) (arguing that, as courts "increasingly find that electronic contacts meet the requirement for minimum contacts[,]" the minimum contacts test will "rapid[ly] expan[d]"); *see also* Philip S. Goldberg, Christopher E. Appel, & Victor E. Schwartz, *The U.S. Supreme Court's Personal Jurisdiction Paradigm Shift to End Litigation Tourism*, 14 DUKE J. CONST. L. & PUB. POL'Y 51, 54 (2019) ("As the world grew more interconnected during the latter half of the twentieth century, particularly with the advent of the Internet, the due process rationale for the minimum contacts standard started to lose its constitutional grounding. This rationale was no longer sufficiently limiting, as companies were subject to litigation in a multitude of states.").

186. "Collectively, the Roberts Court's personal jurisdiction decisions are changing the shape of litigation. New restrictions on jurisdiction make it harder, and in some cases, impossible, for plaintiffs to find available courts." Michael H. Hoffheimer, *The Stealth Revolution in Personal Jurisdiction*, 70 FLA. L. REV. 499, 501–02 (2018). In fact, "[f]ollowing decades during which the Court decided no cases involving constitutional limits on personal jurisdiction, the Court has reviewed six lower court cases on the exercises of personal jurisdiction since 2011. Each time, the Court found that the lower court's exercise of personal jurisdiction violated the Constitution." *Id.* at 501. This statement predated, and thus does not account for, the Supreme Court's most recent decision in 2021, which was the first in decades to hold that exercising personal jurisdiction in a particular case was constitutional. *See* Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1024 (2021).

187. 564 U.S. 873 (2011).

188. 134 S. Ct. 1115 (2014).

189. Scott Dodson, *Jurisdiction in the Trump Era*, 87 FORDHAM L. REV. 73, 76 (2018).

190. 137 S. Ct. 1773 (2017).

close nexus between the forum and the claim."[191] These restrictions offset any expansion in the virtual contacts context of personal jurisdiction, ensuring that including virtual contacts in the analysis will not expand the doctrine beyond its limits.

But even if this approach were characterized as an expansion of the doctrine, such an expansion is justified. Despite the costs of an expanded personal jurisdictional reach, including the potential to overload dockets,[192] increase forum shopping,[193] and result in inconsistent case allocation across states,[194] extending jurisdiction to include virtual contacts comports with society's view of fairness in an increasingly interconnected society because society increasingly views connections as on par with physical connections.[195] Further, the rise of virtual contacts increases the risk of harm in forum states and legitimizes the greater outreach of those states to regulate conduct that causes that harm, even when the conduct can be done from anywhere.[196] Moreover, this is not a change in doctrine. The change, rather, is in society. In a world increasingly reliant on virtual activities, virtual interstate contacts rise as individuals take advantage of the benefits of new technology.[197] The tests remain the same and are merely applied to new types of contacts, which the doctrine was flexible enough to accommodate from the start.[198]

This approach—incorporating virtual contacts in the current minimum contacts test—is promising. From its inception, the minimum contacts test has embraced flexibility. The test, grounded in meaningful contacts and fairness, allows for the types of contacts considered to evolve as society advances and as individuals share meaningful connections across state lines via new modes of contact. A natural solution therefore is to include these types of contacts in the

191. Dodson, *supra* note 189, at 83.

192. An expanded personal jurisdictional reach has the potential to further burden court dockets. *See* Max D. Lovrin, Note, *Virtual Pretrial Jurisdiction for Virtual Contacts*, 85 BROOK. L. REV. 943, 944 (2020) (noting that the "overcomplication [of the personal jurisdiction jurisprudence] often leads to unpredictability, which both increases expenses for litigants and creates additional work for the already overburdened federal civil docket").

193. Because of the "discrepancies" amongst state courts, "parties invest serious resources in manipulating the choice of forum. When the rules 'are neither clear nor coherent,' jurisdiction 'consumes an inordinate amount' of time and resources and 'contributes to the overall inefficiency of the judicial process.'" Stephen E. Sachs, *How Congress Should Fix Personal Jurisdiction*, 108 NW. U. L. REV. 1301, 1306 (2014).

194. This inconsistency across states already exists, and adding virtual contacts may exacerbate this problem. *See* A. Benjamin Spencer, *Nationwide Personal Jurisdiction for Our Federal Courts*, 87 DENV. U. L. REV. 325, 327 (2010) (discussing the "lack of uniformity among the federal courts respecting their own jurisdictional reach").

195. *See infra* Part II.B.

196. *See infra* Part II.C.2.b.

197. Imperatively, while the increase in remote technology is vast, see *supra* Part I.B., currently, "more than 60 percent of workers in the [U.S.] economy cannot work remotely." Lund et al., *supra* note 57. This change in application of the doctrine, therefore, is not so extensive as to alter the personal jurisdictional inquiry in every or even most cases.

198. While the Court in *International Shoe* could not contemplate today's remote-technology era, it did reveal a grounding in fairness and a readiness to shift with changes in society. *See supra* notes 131–35 and accompanying text; *infra* Part II.B.

minimum contacts analysis. This approach accords with existing doctrine and promotes fairness in a society that increasingly relies on virtual activities.

B. TRADITIONAL NOTIONS OF FAIR PLAY AND SUBSTANTIAL JUSTICE

Fairness also supports consideration of virtual contacts in the personal jurisdiction analysis. Grounded in evolving applications of fairness to an advancing society, the "traditional notions of fair play and substantial justice" standard can accommodate even today's monumental changes—from the exponential increase in the use of remote technology to pandemic and post-pandemic shifts in how people in society connect with one another.

1. Current Doctrine and Development

In addition to the minimum contacts test, *International Shoe* announced the "traditional notions of fair play and substantial justice" standard, which requires that exercising personal jurisdiction does "not offend 'traditional notions of fair play and substantial justice'" and acts as a second step following the minimum contacts analysis.[199] The roots of this standard have existed in the personal jurisdiction analysis from early in its development.[200] While the "traditional notions of fair play and substantial justice" standard appears with the "minimum contacts" test, it is a separate analysis that has the potential to drive the outcome.[201]

This standard also represented an important shift in the underlying principles of personal jurisdiction from a territorial approach based on physical contacts to a fairness approach based on "minimum contacts" and general notions of fairness.[202] The Court in *International Shoe* delivered this

199. Int'l Shoe Co. v. Washington, 326 U.S. 310, 316 (1945) ("[D]ue process requires only that in order to subject a defendant to a judgment in personam, if he be not present within the territory of the forum, he have certain minimum contacts with it such that the maintenance of the suit does not offend 'traditional notions of fair play and substantial justice.'") (citing Milliken v. Meyer, 311 U.S. 457, 463 (1940)). In dissent, however, Justice Black struggled with this "elastic" standard. *Id*. at 324–25 (Black, J., dissenting) ("I think it a judicial deprivation to condition its exercise upon this Court's notion of 'fairplay,' however appealing that term may be.").

200. *See, e.g.*, McDonald v. Mabee, 243 U.S. 90, 91 (1917) ("Subject to its conception of sovereignty even the common law required a judgment not to be contrary to natural justice . . . . And in states bound together by a Constitution and subject to the 14th Amendment, great caution should be used not to let fiction deny the fair play that can be secured only by a pretty close adhesion to fact.").

201. *See* Burger King Corp. v. Rudzewicz, 471 U.S. 462, 477–78 (1985) ("Nevertheless, minimum requirements inherent in the concept of 'fair play and substantial justice' may defeat the reasonableness of jurisdiction even if the defendant has purposefully engaged in forum activities."). This potential, however, may be minimal. *See* Asahi Metal Indus. Co., Ltd. v. Superior Ct. of Cal., 480 U.S. 102, 116 (1987) (Brennan, J., concurring in part) (describing the case as "one of those rare cases" in which the fair play and substantial justice standard "defeat[s]" the minimum contacts test).

202. *See, e.g.*, Kogan, *supra* note 131, at 355–56 ("Under the forward-looking face of *International Shoe*, a litigant's activity is important for jurisdictional purposes only insofar as it satisfies requisites of a nationalized solution to administering justice in a federal nation . . . . [T]he touchstone . . . is whether requiring a defendant to litigate in a state is 'reasonable in the context of our federal system of government' in light of the ultimate goal of 'the fair and orderly administration of the laws.'"); Barbara Surtees Goto, Note, International Shoe *Gets*

"debilitating blow," favoring a flexible standard that allows courts to exercise jurisdiction based on notions of fairness and justice rather than a rigid assessment of physical and geographic location.[203] After *International Shoe*, physical location and territorial boundaries lost their luster as guiding stars for assessing personal jurisdiction.[204] Now, "two sets of values—treating defendants fairly and protecting 'interstate federalism'"[205]—lead the way.

This shift from *Pennoyer v. Neff*'s[206] territorial approach to *International Shoe*'s fairness-based approach developed as a response to a changing national economy and society in tandem with an increase in interstate travel and business.[207] Indeed, "as the United States became a mobile, industrialized society, the doctrine of *Pennoyer* proved to be inadequate and the courts were forced to deviate from its principles and adjust then to the changing times."[208]

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the Boot: Burnham v. Superior Court *Resurrects the Physical Power Theory*, 24 LOY. L.A. L. REV. 851, 856–58 (1991) (discussing the rise of "a more flexible fairness and reasonableness approach" to personal jurisdiction and the decline of the territorial concept after *International Shoe*).

203. David G. Thomas, Note, *Personal Jurisdiction in the Nebulous Regions of Cyberspace: A Call for the Continued Relaxation of Due Process and Another Debilitating Blow to Territorial Jurisdiction*, 31 SUFFOLK U. L. REV. 507, 512–13 (1997) ("Traditional concepts of territorial jurisdiction and federalism seemingly suffered a debilitating blow in 1945 by the Court's *International Shoe Co. v. Washington* decision. Drastically retreating from views that jurisdictional power stemmed from state sovereignty, the Court forged a balancing test out of the auspices of the Due Process Clause to ascertain a state's jurisdictional reach.").

204. *See* Kogan, *supra* note 131, at 262 ("When considered in relation to litigation, a person's prior choice to reside in one state rather than another (that is, his physical location at the moment of a lawsuit's commencement) can no longer be viewed as an immutable, sacrosanct fact entitled to constitutional protection. Rather, the physical locations of both the plaintiff and the defendant must now be viewed as societal resources made possible by the structural nature of our federal system and supported by the federal government. Once we recognize the federal government's role in supporting both a litigant's choice of physical location and opportunity to participate in multistate transactions, one must accept the possibility of redistributing that societal resource, given an appropriate justification. *International Shoe* sets up the parameters for such justifications in terms of 'fair play and substantial justice.'").

205. Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1025 (2021).

206. 95 U.S. 714 (1878).

207. *See* McGee v. Int'l Life Ins. Co., 355 U.S. 220, 222–23 (1957) ("Looking back over this long history of litigation a trend is clearly discernible toward expanding the permissible scope of state jurisdiction over foreign corporations and other nonresidents. In part this is attributable to the fundamental transformation of our national economy over the years."); Reynolds, *supra* note 172, at 824–25 ("American society had moved from a localized, agrarian society where state lines constituted important social and economic boundaries, to an urban industrialized society where modes of living and conducting business transcended state boundaries and made them much less significant. The United States moved inexorably toward social, economic, and political unity. The legal realist's social-functional conception of law and legal institutions provided the Court with a theoretical framework for interpreting and applying constitutional provisions in a way that allowed the social change and growth that had been inhibited by rigid, conservative formalism. *International Shoe* . . . w[as] [a] manifestation[] of the new legal thinking and should be seen in this context."); Douglas M. McFarland, *Drop the* Shoe*: A Law of Personal Jurisdiction*, 68 MO. L. REV. 753, 755 (2003) ("During those years, both the Supreme Court and other courts increasingly struggled to apply this seemingly clear test in individual cases for two primary reasons. First, the test was created at a time in American history when travel from state to state was difficult and meaningful; in the twentieth century, interstate travel became cheap and common. Second, the test was created for natural persons, not for fictional entities such as corporations; in the twentieth century, America's business was becoming the domain of corporations. A court could rather easily determine when a natural person was served within state boundaries, but faced difficulties when dealing with a fictional person without a corporeal body.").

208. WRIGHT & MILLER, *supra* note 45, § 1064.

Even since *International Shoe*, a "fundamental transformation in the American economy" has expanded the scope of personal jurisdiction.[209] Specifically,

> [t]oday many commercial transactions touch two or more States and may involve parties separated by the full continent. With this increasing nationalization of commerce has come a great increase in the amount of business conducted by mail across state lines. At the same time modern transportation and communication have made it much less burdensome for a party sued to defend himself in a State where he engages in economic activity.[210]

In 1980, the Supreme Court noted that these advancements "have only accelerated in the generation since" the Supreme Court first made these observations.[211] The doctrine's evolution thus tracked society's changes in business practices and adoption of technology. Of course, since 1980, an increase in remote technology has contributed to even more advancements. In light of the doctrine's history, personal jurisdiction's flexible, fairness-based standard similarly suits today's evolving technology. Having grown out of a changing society, this standard is flexible enough to continue to contemplate change, more technological advancement, and more interstate connection.

The "traditional notions of fair play and substantial justice" standard encompasses an advancing society's technological changes. Importantly, the "traditional notions" in this standard refer to traditional *notions* of fairness. In other words, the notions of fairness must be traditional, not the contacts that serve as the basis for personal jurisdiction.[212] The standard then does not restrict evolving technology and the new types of conduct and contacts that arise from it from entering the analysis. Rather, even new technologies and virtual contacts can implicate these "traditional notions" and beliefs of fairness, justice, and due process even though the subject matter considered is new.[213]

Just like the changes that led to *International Shoe*'s reconsideration of the doctrine, today's and tomorrow's changes warrant consideration within the traditional doctrines. "If the economy had fundamentally changed between the

209. World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 293 (1980).

210. *McGee*, 355 U.S. at 222–23.

211. *World-Wide Volkswagen*, 444 U.S. at 293.

212. *See* Martin H. Redish, *Tradition, Fairness, and Personal Jurisdiction: Due Process and Constitutional Theory After* Burnham v. Superior Court, 22 RUTGERS L.J. 675, 682 (1991) (criticizing "focusing solely on the word 'traditional'" and thereby "ignor[ing] the words that follow" in the "traditional notions of fair play and substantial justice standard" and explaining that "[t]he *International Shoe* Court did not say that due process dictates adherence to traditional judicial practices of asserting jurisdiction. Rather, it expressly referred to 'traditional notions of fair play and substantial justice.' Far from mindlessly equating traditional jurisdictional practice with due process, the *International Shoe* Court attempted to introduce into jurisdictional analysis the traditional due process concern with fundamental procedural fairness").

213. Justice Gorsuch may disagree with this interpretation of the standard. *See* Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1039 (2021) (Gorsuch, J., concurring) ("New technologies and new schemes to evade the process server will always be with us. But if our concern is with '*traditional* notions of fair play and substantial justice,' not just our personal and idiosyncratic impressions of those things, perhaps we will always wind up asking variations of the same questions.") (citation omitted).

time of *International Shoe* and 1980, it has certainly changed between 1980 and the present day, especially considering the heralding of the information age."[214] As this history shows, "[t]he evolution of personal jurisdiction jurisprudence has historically been closely linked with technology."[215] Specifically, social changes during the twentieth century altered the national economy, commerce, travel, and daily life.[216] Similarly, now "the advent of information technology in the late twentieth century"—as well as the even more recent increased use and reliance on virtual technology in the twenty-first century and post-pandemic world—"has fundamentally rearranged the economic ordering of society."[217] Courts should consider how these changes impact how the economy functions, how business is done, and how people connect with one another in the jurisdictional inquiry. The day-to-day realities that grow out of such changes should factor into the "fair play and substantial justice" analysis. Indeed, "[c]onceiving a notion of 'fair play and substantial justice' that reconciles with the pragmatic realities of the cyber world is absolutely vital."[218]

2. Application in the Remote-Technology Context

What is fair and just is to find personal jurisdiction in cases with sufficient virtual contacts. This flexible approach to virtual contacts and remote activities "further[s] fairness as a matter of due process, respect[s] state sovereignty, and ensur[es] access to the courts."[219] Indeed, "[t]he concepts of Due Process and fairness evolve over time in response to social, economic and technological advancement."[220] Since the Court decided *International Shoe*, society—in particular, its use of and reliance on virtual technology—has evolved. Similarly, what people in society understand to be fair and just has evolved.[221] Now, people

214. Bernhardt, *supra* note 134, at 134 (referencing Justice Brennan's assertion that "[t]he model of society on which the *International Shoe* Court based its opinion is no longer accurate" and arguing that, "[w]ith the advent of the internet, the changes in the national economy are becoming ever more pressing") (citing *World-Wide Volkswagen*, 444 U.S. at 309 (Brennan, J., dissenting)).

215. Julie Cromer Young, *The Online-Contacts Gamble After* Walden v. Fiore, 19 LEWIS & CLARK L. REV. 753, 753 (2015).

216. *See supra* note 207 and accompanying text; *see also* Reynolds, *supra* note 172, at 824 (stating that "[i]n order to fully understand *International Shoe*, one must consider it in the social, economic, and constitutional context that produced this radical change in constitutional jurisprudence").

217. Bernhardt, *supra* note 134, at 134.

218. Jason Green, Note, *Is* Zippo*'s Sliding Scale a Slippery Slope of Uncertainty? A Case for Abolishing Web Site Interactivity as a Conclusive Factor in Assessing Minimum Contacts in Cyberspace*, 34 J. MARSHALL L. REV. 1051, 1074 (2001).

219. Matthew P. Demartini, Comment, *Stepping Back to Move Forward: Expanding Personal Jurisdiction by Reviving Old Practices*, 67 EMORY L.J. 809, 839 (2018).

220. Nguyen, *supra* note 131, at 273.

221. This is true across social issues. For example, society's view of the fairness of the justice system tends to shift as its problems surface. *See* Natalie Anne Knowlton, *Expert Opinion: Trusting the Public's Perception of Our Justice System*, IAALS: BLOG (Aug. 27, 2020), https://iaals.du.edu/blog/expert-opinion-trusting-public-s-perception-our-justice-system. In particular, COVID-19 has raised questions about the fairness of "how to dispense justice." *Id.* ("The pandemic has forced difficult conversations about how to serve the public—how to dispense justice—in an environment that makes the old in-person, on-site model nearly impossible. In a sector

understand their virtual interactions as defined not by rigid and invisible territorial boundaries but by the extent of their contact with that state.[222] Importantly, it may thus be fair to subject the increasing number of remote-technology users who engage in interstate activities to the jurisdiction of other forum states. Accordingly, it is fair and just to consider virtual contacts in the inquiry.

When courts consider the "fair play and substantial justice" standard, they consider general notions of fairness—in addition to the specified fairness factors.[223] Fairness requires a consideration of changes in society, including the new era of conducting business and going about daily life via-à-vis new technologies. For instance, even though it once might have been, "[g]eography is not the touchstone of fairness. In an age when business is routinely conducted by electronic technology, and air travel brings the two national coasts within hours of each other, state boundaries are less relevant to the determination of fairness."[224] The rise in remote work and increased reliance on remote technology then become more relevant to the fairness inquiry. In fact, "the nature of the employment is highly relevant to the analysis of reasonableness. The benefits that flow from e-commerce, such as not having to relocate to accept a position, and the flexibility of work-from-home employment can be tempered with corresponding obligations to the employer."[225] It is therefore more fair to consider such virtual contacts and to find jurisdiction in cases with out-of-state remote-technology users.

Moreover, all this flexible standard requires is consideration of what people in society already know to be true. For example, in the remote work context, remote technology enables remote and in-person employees to do the same work in a substantially similar manner but in different locations.[226] With a fairness analysis that relies less on state boundaries and increasingly on the realities of a new era's technological norms, refusing to exercise jurisdiction in the remote worker's case but exercising it in the in-person worker's case does not comport with society's view of fairness because both perform the same work for the same company with many of the same or similar contacts. As the shift to this remote-

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where the question 'is court a place or a service?' is debated, the pandemic has turned everything on end (and most likely put the debate around that question to bed).").

Imperatively, society cares about the fairness of legal processes. *See* Rebecca Hollander-Blumoff, *The Psychology of Procedural Justice in the Federal Courts*, 63 HASTINGS L.J. 127, 137–38 (2011) ("[T]he empirical evidence suggests that individuals value fairness of process, separate and apart from outcome, because of the special message that fairness of process sends to its recipients: an authority who acts in a fair manner is an authority who is legitimate and cares about the dignity and social standing of those who stand before it.").

222. *See* sources cited *supra* note 172.

223. See *infra* Part II.C.2. for an in-depth discussion of each fairness factor's application in the remote-technology context.

224. Green v. William Mason & Co., 996 F. Supp. 394, 396 (D.N.J. 1998).

225. Numeric Analytics, LLC v. McCabe, 161 F. Supp. 3d 348, 356 (E.D. Pa. 2016).

226. *See supra* Introduction (illustrating the jurisdictional inquiries for a defendant employer sued by two workers—one remote and one with whom the employer shares more physical contacts—doing substantially similar work).

technology era continues, people increasingly view virtual meetings as tantamount to in-person meetings.[227]

Despite obvious differences,[228] virtual meetings are similar to in-person meetings in both function and effect.[229] With each click on a Zoom link, individuals increasingly understand these meetings as meaningful connections.[230] Currently, however, technology and virtual contacts do not inform the personal jurisdiction analysis in the ways that people in society understand these contacts. People generally understand that their online conduct can create effects and harms in other states,[231] and they may find that it would be most fair and just for interstate contacts, virtual or not, to give rise to personal jurisdiction regardless of physical boundaries.[232] But these facts currently do not result in a finding of personal jurisdiction.[233] Rather, including new technologies in the analysis fits better with people's understanding of connections within their society as well as their understanding of what is fair and just.

While a flexible—and thus broad—standard may pose challenges, incorporating these considerations into the personal jurisdiction analysis would not be unduly burdensome or complicated for courts. In fact, "[t]his process of judicial evolution would work . . . well for determining the limits of personal jurisdiction based on Internet contacts."[234] Courts are generally well-equipped to balance fundamental fairness in light of an evolving society.[235] Even as the

227. *See, e.g.*, PARKER ET AL., *supra* note 53, at 7 ("In general, teleworkers view video conferencing and instant messaging platforms as a good substitute for in-person contact—65% feel this way, while 35% say they are not a good substitute.").

228. In addition to differences in the mechanics and technology used, virtual meetings present areas for improvement. *See* Rosemary Ravinal, *Why We Should Stop Pretending Virtual Meetings Are Working—And How to Fix Them*, RAGAN: PR DAILY (Nov. 10, 2020), https://www.prdaily.com/why-we-should-stop-pretending-virtual-meetings-are-working-and-how-to-fix-them.

229. *See* DELOITTE, FUTURE OF WORK: WAYS OF WORKING TO SUSTAIN AND THRIVE IN UNCERTAIN TIMES 6–11 (2020), https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-future-of-remote-work.pdf (discussing how to successfully transition to remote work).

230. "Teleworkers are taking advantage of online tools and platforms to keep in touch with co-workers, and most see them as a good substitute." PARKER ET AL., *supra* note 53, at 15.

231. *See supra* Part II.A.2.d.

232. *See supra* Part II.A.2.d.

233. *See supra* Part I.C.

234. Daniel Steuer, Comment, *The Shoe Fits and the Lighter Is Out of Gas: The Continuing Utility of* International Shoe *and the Misuse and Ineffectiveness of* Zippo, 74 U. COLO. L. REV. 319, 356 (2003).

235. Many important doctrinal tests involve a balancing of interests, including the tiers of scrutiny for determining equal protection and due process violations, see *United States v. Carolene Products Co.*, 304 U.S. 144, 152 n.4 (1938), and the test that grew out of this footnote; the three-part balancing test for determining procedural due process violations, see *Mathews v. Eldridge*, 424 U.S. 319, 335 (1976); and many more.

classic debate[236] over the role of judges rages on,[237] in practice, courts are frequently tasked with applying existing rules to new factual scenarios and do so without trouble.[238] Courts can also apply traditional personal jurisdiction doctrines to new aspects of an advancing society.[239] The Supreme Court itself has indicated that the "fair play and substantial justice" analysis "necessarily requires determinations 'in which few answers will be written in black and white. The greys are dominant and even among them the shades are innumerable.'"[240] The "fair play and substantial justice" standard fits this type of analysis particularly well, as it asks courts to consider whether it would be fair to exercise jurisdiction over a particular out-of-state defendant, while furthering important interests in due process and fairness. Moreover, the Supreme Court has already indicated that this task is not too strenuous for courts, stating that "the fairness standard of *International Shoe* can be easily applied in the vast majority of cases."[241]

Some commentators argue that broad standards, while allowing for judgments based on fairness and justice, also result in "constant litigation and

236. *Compare* Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175, 1187 (1989) ("All I urge is that [totality of the circumstances tests and balancing modes of analysis] be avoided where possible; that the *Rule* of Law, the law of *rules,* be extended as far as the nature of the question allows; and that, to foster a correct attitude toward the matter, we appellate judges bear in mind that when we have finally reached the point where we can do no more than consult the totality of the circumstances, we are acting more as factfinders than as expositors of the law."), *with* Rosenberger v. Rector & Visitors of Univ. of Va., 515 U.S. 819, 847 (1995) (O'Connor, J., concurring) ("Reliance on categorical platitudes is unavailing. Resolution instead depends on the hard task of judging—sifting through the details and determining whether the challenged program offends the [Constitution]. Such judgment requires courts to draw lines, sometimes quite fine, based on the particular facts of each case."); *see also* Kathleen M. Sullivan, *The Supreme Court Term 1991—Foreword: The Justices of Rules and Standards*, 106 HARV. L. REV. 22, 27 (1992) ("The Justices of rules are skeptical about reasoned elaboration and suspect that standards will enable the Court to translate raw subjective value preferences into law. The Justices of standards are skeptical about the capacity of rules to constrain value choice and believe that custom and shared understandings can adequately constrain judicial deliberation in a regime of standards.").

237. *See* Joseph Blocher, *Roberts' Rules: The Assertiveness of Rules-Based Jurisprudence*, 46 TULSA L. REV. 431, 433, 441 (2011) (illustrating "an important and perhaps under-appreciated characteristic of Chief Justice Roberts' legal philosophy: his apparent commitment to rules rather than standards" and finding that the Chief Justice "has generally supported the use of rules on the basis that they constrain judicial discretion and power"); *see also "I Come Before the Committee With No Agenda. I Have No Platform.,"* N.Y. TIMES (Sept. 13, 2005), https://www.nytimes.com/2005/09/13/politics/politicsspecial1/i-come-before-the-committee-with-no-agenda-i-have.html (reporting Chief Justice Roberts' opening statements in his confirmation hearing, including his famous description of his judicial philosophy: "Judges are like umpires. Umpires don't make the rules; they apply them. The role of an umpire and a judge is critical. They make sure everybody plays by the rules. But it is a limited role. Nobody ever went to a ballgame to see the umpire.").

238. *See, e.g.*, Asahi Metal Indus. Co., Ltd. v. Superior Ct. of Cal., 480 U.S. 102, 114–16 (1987) (balancing the fairness factors to determine the Court's ability to exercise personal jurisdiction over defendant manufacturer). Despite the unanimous ruling in *Asahi*, however, the Court was split regarding the proper analysis. *See id.* at 116 (Brennan, J., concurring in part and concurring in judgment); *id.* at 121 (Stevens, J., concurring in part and concurring in judgment).

239. *See* Steuer, *supra* note 234, at 356 (noting that applying traditional doctrines to new aspects of an advancing society is "what courts have always done").

240. Burger King Corp. v. Rudzewicz, 471 U.S. 462, 486 n.29 (1985) (citing Kulko v. Superior Ct. of Cal., 436 U.S. 84, 92 (1978)).

241. Shaffer v. Heitner, 433 U.S. 186, 211 (1977).

seemingly endless reformulations of the minimum contacts test."[242] This uncertainty and unpredictability may lead, it is argued, to "chilling effects."[243] However, "[t]he Due Process Clause, by ensuring the 'orderly administration of the laws,' . . . gives a degree of predictability to the legal system that allows potential defendants to structure their primary conduct with some minimum assurance as to where that conduct will and will not render them liable to suit."[244] The requirement of minimum contacts in conjunction with the "fair play and substantial justice" standard therefore prevents an overly permissive standard and a dramatic reformulation of the doctrine.[245] Rather, this standard merely accommodates developments in how people in society connect with one another in such a way that would make it fair to subject them to personal jurisdiction. Moreover, an overly simplistic rule in place of this broad standard may eliminate important fairness considerations altogether. "[W]hen the existence of jurisdiction in a particular forum under *International Shoe* is unclear, the cost of simplifying the litigation by avoiding the jurisdictional question may be the sacrifice of 'fair play and substantial justice.' That cost is too high."[246]

State sovereignty also still receives its due respect[247] under this approach because allowing virtual contacts into the analysis merely adds new considerations rather than a guarantee of a particular result. In other words, considering virtual contacts and the fairness of subjecting out-of-state remote-technology users to jurisdiction does not require a finding of personal jurisdiction and an exercise of sovereign authority that would conflict with notions of interstate federalism. Rather, it merely allows courts to subject these defendants to jurisdiction only when it would be fair and just to do so based on their connection with the forum state and that state's sovereign interests.[248]

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242. Rex R. Perschbacher, Foreword, 28 U.C. DAVIS L. REV. 513, 529 (1995) ("There are virtues in vagueness and uncertainty—they do allow courts to make individual judgments of what is fair and just and reasonable in ways that bright lines do not. But is the cost of constant litigation and seemingly endless reformulations of the minimum contacts test worth the price? The Symposium's collective judgment is 'no.'").

243. Exon, *supra* note 14, at 48 ("If we continue applying the contemporary notions of personal jurisdiction to Internet activities, the result could be catastrophic, and have chilling effects on everyone.").

244. World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 297 (1980) (citing Int'l Shoe Co. v. Washington, 326 U.S. 310, 319 (1945)).

245. *See Int'l Shoe Co.*, 326 U.S. at 316 (requiring *both* "minimum contacts" *and* a finding that exercising jurisdiction "does not offend 'traditional notions of fair play and substantial justice'" to comply with due process) (citation omitted).

246. *Shaffer*, 433 U.S. at 211.

247. Commentators disagree about the extent to which the personal jurisdiction inquiry should consider state sovereignty. *Compare* Wendy Collins Perdue, *What's "Sovereignty" Got to Do with It? Due Process, Personal Jurisdiction, and the Supreme Court*, 63 S.C. L. REV. 729, 730 (2012) (arguing that state sovereignty considerations add little to the personal jurisdiction analysis), *with* Jeffrey M. Schmitt, *Rethinking the State Sovereignty Interest in Personal Jurisdiction*, 66 CASE W. RES. L. REV. 769, 772 (2016) (arguing that "state sovereignty should be seen as a basic theoretical justification for the constitutional restrictions on personal jurisdiction").

248. Even with these considerations, interstate federalism is protected:

> [A]t times, this federalism interest may be decisive. As we explained in *World-Wide Volkswagen,* "[e]ven if the defendant would suffer minimal or no inconvenience from being forced to litigate before the tribunals of another State; even if the forum State has a strong interest in

Moreover, even though the prevalence of virtual contacts may mean that the personal jurisdiction doctrine will expand,[249] applying the traditional doctrines is consistent with state sovereignty because forum states must have a way to protect themselves and their citizens from virtual conduct that causes real harm. In fact, "[t]he law of specific jurisdiction . . . seeks to ensure that States with 'little legitimate interest' in a suit do not encroach on States more affected by the controversy."[250] These "restrictions on personal jurisdiction 'are more than a guarantee of immunity from inconvenient or distant litigation. They are a consequence of territorial limitations on the power of the respective States.'"[251] This power includes "the sovereign power to try causes in their courts."[252] Further, when "States have significant interests at stake—'providing [their] residents with a convenient forum for redressing injuries inflicted by out-of-state actors,' as well as enforcing their own safety regulations[]"[253]—"principles of 'interstate federalism' support jurisdiction . . . ."[254] Accordingly, this approach's consideration of the forum state's interest in protecting itself from harms aligns with state sovereignty interests.

Including virtual contacts in the personal jurisdiction analysis resolves the problems of plaintiffs losing access to particular courts and forums losing the ability to redress harms based on an out-of-state defendant's use of technology. As opposed to an arbitrary result based on the defendant's location and use of virtual rather than physical contacts,[255] this approach allows plaintiffs to hale into court out-of-state defendants who caused harm through contacts with the forum state. Forum states can exercise jurisdiction over such defendants. Doing

> applying its law to the controversy; even if the forum State is the most convenient location for litigation, the Due Process Clause, acting as an instrument of interstate federalism, may sometimes act to divest the State of its power to render a valid judgment."

Bristol-Myers Squibb Co. v. Superior Ct. of Cal., 137 S. Ct. 1773, 1780–81 (2017) (citing *World-Wide Volkswagen*, 444 U.S. at 294) (second alteration in original).

249. *See supra* notes 185–98 and accompanying text.

250. Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1025 (2021) (citing *Bristol-Myers Squibb*, 137 S. Ct. at 1780).

251. *Bristol-Myers Squibb*, 137 S. Ct. at 1780 (citing Hanson v. Denckla, 357 U.S. 235, 251 (1958)).

252. *Id.* (citing *World-Wide Volkswagen*, 444 U.S. at 293). This power of each state "implie[s] a limitation on the sovereignty of all its sister States." *Id.* (citing *World-Wide Volkswagen*, 444 U.S. at 293) (alteration in original).

253. *Ford*, 141 S. Ct. at 1030 (2021) (citing Burger King Corp. v. Rudzewicz, 471 U.S. 462, 473 (1985)) (first alteration in original).

254. *Id.* (citing *World-Wide Volkswagen*, 444 U.S. at 293).

255. *See supra* Introduction (illustrating a remote worker's potential inability to sue his out-of-state employer in his forum state).

so has been valid,[256] and doing so respects state sovereignty.[257] Injecting fairness into this analysis supports state sovereignty by allowing particular courts to assert their sovereign authority to redress harm that occurs within the state's boundaries. This exercise of authority results in increased access to particular courts and to particular out-of-state defendants and thus increased access to justice.[258]

Even though this approach posits a broad standard as the foundation for personal jurisdiction, this standard is core to personal jurisdiction jurisprudence and due process. It encompasses important traditional and constitutional principles that underlie and justify the doctrine. With roots in societal change, *International Shoe*'s "fair play and substantial justice" standard suits contemporary technological changes. What better standard is there on which to base personal jurisdiction—a doctrine with the power to open and close courthouse doors—than fairness and justice?

C. THE FAIRNESS FACTORS

As extrapolations of the "traditional notions of fair play and substantial justice" standard, the fairness factors accommodate remote activities and, in some cases, weigh towards finding personal jurisdiction. Despite their absence in much of the personal jurisdiction jurisprudence, the fairness factors inject a practical weighing of important interests of and burdens on the parties and institutions involved. As the reliance on virtual contacts becomes more widespread, the fairness factors provide an effective framework and often tip the scale towards finding personal jurisdiction.

1. Current Doctrine and Development

The fairness factors include: "'the burden on the defendant,' 'the forum State's interest in adjudicating the dispute,' 'the plaintiff's interest in obtaining

256. *See* Int'l Shoe Co. v. Washington, 326 U.S. 310, 316 (1945); *see also* John N. Drobak, *The Federalism Theme in Personal Jurisdiction*, 68 IOWA L. REV. 1015, 1039 (1983) ("By judging the adequacy of the contacts with a standard of fairness, *International Shoe* tied the federalism and individual rights branches of personal jurisdiction together. This express joinder of the two branches showed that it is unnecessary to consider federalism in deciding jurisdictional issues. A defendant has a right to be free from a court's authority unless there exist minimum contacts with the forum state. If there are sufficient contacts, judged by a standard of fairness to the defendant, the concern for federalism is satisfied.").

257. *See Ford*, 141 S. Ct. at 1025 ("[The personal jurisdiction] rules derive from and reflect two sets of values—treating defendants fairly and protecting 'interstate federalism.' Our decision in *International Shoe* founded specific jurisdiction on an idea of reciprocity between a defendant and a State: When (but only when) a [defendant] 'exercises the privilege of conducting activities within a state'—thus 'enjoy[ing] the benefits and protection of [its] laws'—the State may hold the company to account for related misconduct.") (citations omitted); Drobak, *supra* note 256, at 1039.

258. Note, however, that a finding of no personal jurisdiction does not close all courthouse doors and thus does not cut off access to justice completely. Generally, the door that closes is the door to the courthouse in the forum in which the plaintiff resides. In most cases, the door to the courthouse in the defendant's home state will still be available. For more detailed discussion on the plaintiff's interest in convenient and effective relief, including access to a convenient court, see *infra* Part II.C.2.c.

convenient and effective relief,' 'the interstate judicial system's interest in obtaining the most efficient resolution of controversies,' and 'the shared interest of the several States in furthering fundamental substantive social policies.'"[259] These factors typically enter the analysis once minimum contacts have been established, and they expand on the "fair play and substantial justice" standard.[260] As an expansion of the "fair play and substantial justice" standard, the fairness factors may also "defeat the reasonableness of jurisdiction," even if minimum contacts exist.[261] Indeed, "although a finding of minimum contacts establishes a presumption of reasonableness, the constitutional inquiry does not end with a conclusion that there are minimum contacts between the defendant and the state forum."[262]

Essentially, "jurisdictional rules may not be employed in such a way as to make litigation 'so gravely difficult and inconvenient' that a party unfairly is at a 'severe disadvantage' in comparison to his opponent."[263] By focusing on the realities of the burdens and interests of the parties involved, the fairness factors inject practicality into the personal jurisdiction analysis, in effect asking: is this a fair forum for this dispute?

Despite their positives, "[t]he fairness factors have done very little work in the Supreme Court's actual decisions."[264] This may be because, "if the defendant has satisfied the minimum contacts prong, then a court's exercise of personal jurisdiction will be fundamentally fair."[265] Therefore, in its recent personal jurisdiction cases, the Court has infrequently explicitly conducted what may be a fairly obvious fairness analysis.[266] However, by not mentioning this analysis or explaining its absence in these opinions, "these opinions leave the vitality of the fairness factors in doubt."[267] After all, this absence may also derive from the

259. Burger King Corp. v. Rudzewicz, 471 U.S. 462, 477 (1985) (citing *World-Wide Volkswagen*, 444 U.S. at 292).

260. *See id*. at 476 (citing *Int'l Shoe*, 326 U.S. at 320) ("Once it has been decided that a defendant purposefully established minimum contacts within the forum State, these contacts may be considered in light of other factors to determine whether the assertion of personal jurisdiction would comport with 'fair play and substantial justice.'").

261. *Id.* at 477–78 ("Nevertheless, minimum requirements inherent in the concept of 'fair play and substantial justice' may defeat the reasonableness of jurisdiction even if the defendant has purposefully engaged in forum activities."). However, courts rarely rest their analysis on the fairness factors. *See* Howard B. Stravitz, *Sayonara to Fair Play and Substantial Justice?*, 63 S.C. L. REV. 745, 755 (2012) (stating that it is "exceedingly rare" for courts to find that the fairness factors "over[i]de a positive finding of minimum contacts"). The Supreme Court has expressed its hesitancy to rest the jurisdictional inquiry on fairness. *See, e.g.*, J. McIntyre Mach., Ltd. v. Nicastro, 564 U.S. 873, 883 (2011) ("[J]urisdiction is in the first instance a question of authority rather than fairness.").

262. Leslie W. Abramson, *Clarifying "Fair Play and Substantial Justice": How the Courts Apply the Supreme Court Standard for Personal Jurisdiction*, 18 HASTINGS CONST. L.Q. 441, 445–46 (1991).

263. *Burger King*, 471 U.S. at 478 (citing M/S Bremen v. Zapata Off-Shore Co., 407 U.S. 1, 18 (1972) and McGee v. Int'l Life Ins. Co., 355 U.S. 220, 2223 (1957)).

264. Trammell & Bambauer, *supra* note 15, at 1138.

265. *Id*.

266. *But see* Asahi Metal Indus. Co., Ltd. v. Superior Ct. of Cal., 480 U.S. 102, 113–16 (1987).

267. Stravitz, *supra* note 261, at 755 n.77.

Court's preference for federalist, rather than fairness, concerns.[268] Regardless of this doubt, the fairness factors remain an effective framework for assessing the fairness of exercising personal jurisdiction.

2. Application in the Remote-Technology Context

Courts can incorporate remote activities in the personal jurisdiction inquiry by revivifying the fairness factors analysis. Indeed, despite their absence in recent opinions, the fairness factors "have been long identified as critical to the personal jurisdiction analysis."[269] With remote activities, which may increase the overall number of contacts an out-of-state defendant has with the forum state,[270] "the fairness factors have an increased role in ensuring the requirements of due process."[271] Each of the fairness factors can accommodate the increased reliance on remote technology and together will often weigh towards finding personal jurisdiction.

a. The Burden on the Defendant

Widespread reliance on remote technology may lessen the burdens on out-of-state defendants, lightening the weight of the fairness factors and shifting the scale towards finding personal jurisdiction in virtual contacts cases. Because the burden on the defendant is "always a primary concern,"[272] lessening this burden with remote technology has a strong impact on the overall fairness calculus.

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268. The Court has vacillated between justifying its personal jurisdiction jurisprudence with concerns over state sovereignty and federalism on the one hand and fairness and justice on the other. *Compare* J. McIntyre Mach., Ltd. v. Nicastro, 564 U.S. 873, 884 (2011) ("[P]ersonal jurisdiction requires a forum-by-forum, or sovereign-by-sovereign, analysis. The question is whether a defendant has followed a course of conduct directed at the society or economy existing within the jurisdiction of a given sovereign, so that the sovereign has the power to subject the defendant to judgment concerning that conduct."), *with* Ins. Corp. of Ir. v. Compagnie des Bauxites de Guinee, 456 U.S. 694, 702 (1982) ("The personal jurisdiction requirement recognizes and protects an individual liberty interest. It represents a restriction on judicial power not as a matter of sovereignty, but as a matter of individual liberty."). In recent years, the Court has hewed towards the federalist theme. *See* Bristol-Myers Squibb Co. v. Superior Ct. of Cal., 137 S. Ct. 1773, 1780 (2017) (noting that "restrictions on personal jurisdiction 'are more than a guarantee of immunity from inconvenient or distant litigation. They are a consequence of territorial limitations on the power of the respective States.' '[T]he States retain many essential attributes of sovereignty, including, in particular, the sovereign power to try causes in their courts. The sovereignty of each State . . . implie[s] a limitation on the sovereignty of all its sister States'") (alterations in original) (citations omitted). However, even more recently, the Court has indicated that both fairness and federalism have a place in the personal jurisdiction analysis. *See* Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1025 (2021) ("These rules derive from and reflect two sets of values—treating defendants fairly and protecting 'interstate federalism.'") (citing World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 293 (1980)).

269. Niesel, *supra* note 142, at 142.

270. *See supra* Part II.A.2.

271. Niesel, *supra* note 142, at 142.

272. *World-Wide Volkswagen*, 444 U.S. at 292. The Ninth Circuit explained why this factor is of such concern. *See* Ins. Co. of N. Am. v. Marina Salina Cruz, 649 F.2d 1266, 1272 (9th Cir. 1981) ("If the burdens of trial are too great for a plaintiff, the plaintiff can decide not to sue or, perhaps, to sue elsewhere. A defendant has no such luxury.").

Remote technology makes it so that defendants can more easily engage in activities in other states across the nation. It may then be less convenient for defendants to travel from those faraway places to defend the suit in the forum state.[273] However, while out-of-state defendants may have farther to travel should their remote activities give rise to a cause of action in a faraway forum, remote technology also makes it easier for these defendants to defend these suits.[274] The Supreme Court in 1958 even noted the alleviating effect of technology on the out-of-state defendant's burden.[275] Like the "progress in communications and transportation"[276] in 1958, the use of email, telephone, and video calls in 2022 enables defendants to defend suits with relative ease and efficiency. For example, out-of-state defendants can work with counsel in the forum state via videoconference, even from their faraway location.[277] The necessity of using these remote-technology tools to conduct client meetings and internal strategy sessions during the pandemic has shown that "the technology works, and the meetings can go on, often more easily arranged and less costly than before."[278] While these defendants may still need to appear in court in the forum state,[279] these appearances may be limited in number and structured to

273. *See* Niesel, *supra* note 142, at 142 (arguing that "convenience to the defendant should serve as a check against possible jurisdictional abuse"). One court identified a burden on the out-of-state defendant due to "the growing concerns surrounding COVID-19 and the national emergency declared due to its continued spread." Bride Ministries, NFP v. DeMaster, No. 4:20-CV-00402, 2020 WL 6822836, at *6 (E.D. Tex. Nov. 20, 2020). However, the COVID-19 pandemic has also revealed possibilities for lessening these burdens through the use of remote technology. *See infra* notes 274–81 and accompanying text. These specific concerns will also dissipate in the *post*-pandemic world.

274. *See* Scott Dodson, Lee H. Rosenthal & Christopher L. Dodson, *The Zooming of Federal Civil Litigation*, 104 JUDICATURE 13, 18 (2020) ("Videoconferencing may not address all of the convenience considerations at stake in these determinations, but it should lessen the weight of those that are based on the difficulties and costs of traveling to one or the other location.").

275. *See* Hanson v. Denckla, 357 U.S. 235, 250–51 (1958) ("As technological progress has increased the flow of commerce between States, the need for jurisdiction over nonresidents has undergone a similar increase. At the same time, progress in communications and transportation has made the defense of a suit in a foreign tribunal less burdensome.").

276. *Id*.

277. "We have learned that we no longer need hordes of attorneys, clients, experts, paralegals, and others—perhaps from distant time zones—to cram into a conference room in a downtown skyscraper for every brainstorming, drafting, and strategy session." Dodson et al., *supra* note 274, at 14.

278. *Id*. This ease may continue post-pandemic. *See* Marilyn Kunstler & Julia Brickell, *Complex Litigation Just Got More Complex: Adapting to a Virtual New Reality*, LAW.COM: N.Y. L.J. (Oct. 7, 2020, 10:22 AM), https://www.law.com/newyorklawjournal/2020/10/07/complex-litigation-just-got-more-complex-adapting-to-a-virtual-reality ("The pandemic has been deeply disruptive, initiating the need to rethink and re-imagine the management of complex litigation. The crisis has forced a dramatic acceleration in the adoption of technological innovations by law firms and the courts, and increased demand may spur further innovation. Forward-thinking counsel, working to mitigate the disruption at multiple levels, will do well to address and enhance workflows, technology skill, and human impacts of the pandemic in adapting to this new reality while recognizing the opportunities it presents.").

279. Despite remote technology's benefits, in-person events may better suit some phases of the litigation:

> [T]he efficiency gains and cost savings of videoconferencing are likely to prevail routinely for internal meetings, witness interviews, court conferences, simple oral arguments, and uncontentious depositions, especially when travel is required. By contrast, when justice strongly favors in-person events, such as for contentious depositions, complex motion hearings, and trials, or when

accommodate the defendant's travel needs. Moreover, with even a portion of the meetings and phases of litigation before trial conducted via remote technology,[280] the overall burdens of litigating in a faraway forum are significantly minimized. Indeed, "given the advances in technology, it is not clear that the burden of litigating is so great as to violate due process."[281] This inquiry will be case-specific based on individual defendants' burdens, but, overall, remote technology reduces these burdens on out-of-state defendants.

Remote technology not only allows an out-of-state defendant to more easily defend a suit in another state, but it also allows the out-of-state defendant to either avoid faraway forums or to attain so many benefits that they outweigh the costs of defending a suit in a faraway forum. It may be true that "societal interests are best served when we require defendants to defend suits in a particular forum only in those instances where the benefits accruing to the defendant from his activity there exceed the costs of forcing him to defend in that forum."[282] With remote activities, however, the benefits the out-of-state defendant obtains will more often outweigh the costs of defending in the forum state. After all, "[i]t is the defendant that has reached out through what it knows to be a globally accessible technology, and it is the defendant who may choose to stop doing so if it does not want to take on the risk of litigation or to customize its online operations to avoid the target forum."[283] With the "fair warning" that "a particular activity may subject [it] to the jurisdiction of a foreign sovereign,"[284] the defendant can then "'structure [its] primary conduct' to lessen or avoid exposure to a given State's courts."[285] Accordingly, the use of remote technology lessens the out-of-state defendant's burdens.

b. The Forum State's Interest in Adjudicating the Dispute

The forum state has an increased interest in adjudicating the dispute because the forum has an interest in redressing harms that occur within its borders, regardless of its virtual source. "[O]ne of the most important factors,"[286] the forum's interest weighs towards finding personal jurisdiction on even surer

> videoconferencing presents its own costs and difficulties, such as for document-intensive proceedings, we think the balance will often—though not always—weigh against videoconferencing.

Dodson et al., *supra* note 274, at 13–14.

280. *See id*. at 13.

281. WhatsApp Inc. v. NSO Grp. Tech. Ltd., 472 F. Supp. 3d 649, 676 (N.D. Cal. 2020).

282. Burk, *supra* note 133, at 1119.

283. Niesel, *supra* note 142, at 142.

284. Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1025 (2021) (alteration in original) (citing Burger King Corp. v. Rudzewicz, 471 U.S. 462, 472 (1985)).

285. *Id.* (alteration in original) (citing World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 297 (1980)).

286. Abramson, *supra* note 262, at 451. In fact, "[a] court's disposition of this factor is generally consistent with the ultimate disposition of the reasonableness equation." *Id*. at 451–52. Further, "[w]hen minimum contacts have been established, often the interests of the plaintiff and the forum in the exercise of jurisdiction will justify even the serious burdens placed on the alien defendant." Asahi Metal Indus. Co., Ltd. v. Superior Ct. of Cal., 480 U.S. 102, 114 (1987).

footing when virtual harms are involved. As remote technology becomes more widespread and as users increasingly engage in activities that give rise to causes of action in other states, consideration of the forum's interest in protecting its residents and its ability to reach faraway defendants becomes heightened.

When harms occur in a state, that state has an interest in redressing those harms.[287] This remains true with the out-of-state defendant remote-technology user, where that user contacted the forum state and that contact was sufficient. In those cases, forums have an interest in protecting individuals within their borders, no matter whether the harm occurred through virtual or physical contacts.[288] Where a forum's residents suffer harm within the forum, "[i]t cannot be denied that [the forum] has a manifest interest in providing effective means of redress for its residents . . . ."[289]

Even where the in-state plaintiff was a "successful, sophisticated corporation," a court found that refusing to subject the out-of-state defendant to its jurisdiction "in a forum it has so thoroughly exploited would create significant barriers to effective relief for similarly situated plaintiffs with more limited resources."[290] Accordingly, the extent to which the out-of-state remote-technology user "exploited" the forum state increases the forum state's interest in adjudicating the dispute. Further, with an out-of-state defendant that had "hundreds of thousands" of online customers, "[t]here is no unfairness in requiring [the defendant] to defend that lawsuit in the courts of the state where, through the very activity giving rise to the suit, it continues to gain so much."[291] Remote technology not only makes it easier for out-of-state defendants to reach and harm faraway plaintiffs, but these defendants can harm many faraway plaintiffs with considerable ease. Therefore, forums have an increased interest in redressing the harms that occur within them and in adjudicating the disputes that arise because of these harms when the harms come from out-of-state remote-technology users.

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287. *See* Abramson, *supra* note 262, at 452 ("The most frequent judicially invoked basis for this interest is that of providing a forum for its own citizens, individual or corporate, who may have suffered some injury within the state, especially by nonresident defendants' acts.").

288. *See, e.g.*, Panavision Int'l, L.P. v. Toeppen, 141 F.3d 1316, 1323 (9th Cir. 1998), *holding modified by* Yahoo! Inc. v. La Ligue Contre Le Racisme Et L'Antisemitisme, 433 F.3d 1199 (9th Cir. 2006) (finding that "California maintains a strong interest in providing an effective means of redress for its residents tortiously injured . . . " through virtual conduct); Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *12 (S.D. Cal. Feb. 26, 2016) (similar); Freestream Aircraft (Bermuda) Ltd. v. Aero L. Grp., 905 F.3d 597, 608 (9th Cir. 2018) (similar); Ouellette v. True Penny People, LLC, 352 F. Supp. 3d 144, 155 (D. Mass. 2018) (similar); M3 USA Corp. v. Hart, 516 F. Supp. 3d 476, 500 (E.D. Penn. 2021) (similar); MaxLite, Inc. v. ATG Elecs., Inc., 193 F. Supp. 3d 371, 392 (D. N.J. 2016) (similar); WhatsApp Inc. v. NSO Grp. Tech. Ltd., 472 F. Supp. 3d 649, 677 (N.D. Cal. 2020) (similar).

289. McGee v. Int'l Life Ins. Co., 355 U.S. 220, 223 (1957).

290. uBID, Inc. v. GoDaddy Grp., Inc., 623 F.3d 421, 432 (7th Cir. 2010).

291. *Id.* at 432–33.

c. The Plaintiff's Interest in Obtaining Convenient and Effective Relief

The plaintiff's interest in obtaining convenient and effective relief increases as out-of-state defendant remote-technology users increasingly cause harm from faraway forums. While the ability to conduct some phases of litigation via remote technology reduces the plaintiff's interest in relief in her forum state, courts may still conclude that "the plaintiff's interest favors maintaining the lawsuit where it was filed."[292]

This factor contemplates the difficulty an individual plaintiff may have in bringing a suit in a faraway forum.[293] Refusing to exercise personal jurisdiction over faraway defendants may be so cost prohibitive to some plaintiffs that they do not bring their cases. "A defendant effectively becomes judgment proof when individuals with small claims cannot afford the cost of bringing an action in an inconvenient forum."[294] However, remote technology can alleviate these costs. Just as the burdens on out-of-state defendants lessen with the use of remote technology,[295] the burdens on plaintiffs to bring a suit in a faraway forum also lessen. The use of videoconferencing for plaintiffs generally is just as efficient and cost-saving as videoconferencing for defendants. Further, "a ready and convenient alternative forum can weigh against jurisdiction in the fairness calculation."[296] An available out-of-state defendant's forum, in combination with the reduced burdens on the plaintiff's ability to bring suit even in a faraway forum, may thus undermine a plaintiff's interest in effective relief in her forum state.[297]

However, plaintiffs' interests in convenient and effective relief may become increasingly relevant as their choice of forum is between their home state—the location of their harm, evidence, and residence—and a faraway forum that may seem arbitrary.[298] Plaintiffs have a particular interest in effective relief *in their state* when they suffered the injury in that state or when their witnesses are also located in that state.[299] A court found that plaintiffs "undoubtedly" had

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292. Abramson, *supra* note 262, at 455–56.

293. *See McGee*, 355 U.S. at 223 (finding that petitioner "would be at a severe disadvantage if [she] were forced to follow [respondent] to a distant State in order to hold it legally accountable").

294. Abramson, *supra* note 262, at 457.

295. *See supra* Part II.C.2.a.

296. Richman, *supra* note 134, at 631; *see also* Asahi Metal Indus. Co., Ltd. v. Superior Ct. of Cal., 480 U.S. 102, 114 (1987) (finding that "[cross-complainant] has not demonstrated that it is more convenient for it to litigate its indemnification claim against [cross-defendant] in California rather than in Taiwan or Japan").

297. A court may assess the plaintiff's interest by comparing it to other available forums:

> If the court finds that the plaintiff's interest is not strong, the court may rule either that the plaintiff has shown little added convenience to herself by litigating in the forum, or that she has not demonstrated that pursuing the claim elsewhere would be less expedient than the forum of choice. The court simply may conclude that the plaintiff could litigate the claim as easily and effectively in another forum.

Abramson, *supra* note 262, at 458–59.

298. "[T]he convenience of the plaintiff should be fully considered." Niesel, *supra* note 142, at 142.

299. *See* McGee v. Int'l Life Ins. Co., 355 U.S. 220, 223 (1957); Abramson, *supra* note 262, at 458.

interests in obtaining convenient and effective relief in their forum state because "[a]ll relevant documents and information are physically stored in [their forum state]. Presumably most, if not all, witnesses for Plaintiffs will be in [their forum state]. These facts strongly indicate that the Plaintiffs have an interest in litigating the case within [their forum state]."[300] While some of these interests may be accommodated through remote meetings and hearings,[301] plaintiffs subject to virtual harms may have no relation to their alternative forum option other than the fortuity of the defendant's physical location in that forum despite the defendant's virtual contacts and virtual harm. This analysis often comes out as follows:

> It will be far easier for Plaintiff, an individual, to litigate this matter in . . . the forum state in which she resides. Conversely, a greater burden would be placed on her if she was forced to litigate her claims in another state. This factor, although given little weight, tilts in Plaintiff's favor.[302]

Overall, this analysis tends to tilt towards the plaintiff only slightly,[303] and the burdens on the plaintiff's interest in convenient and effective relief because of a faraway defendant may also lessen with remote technology. A court, however, may still find that this factor contributes to a finding of personal jurisdiction, even if it is not the factor that ultimately tips the scale.

d. The Interstate Judicial System's Interest in Obtaining the Most Efficient Resolution of Controversies

The judicial system also has an interest in efficiently resolving the controversy. While other forums, such as the out-of-state defendant's forum state, could resolve virtual contacts controversies with similar efficiency, the *most* efficient forum may still be where the harm occurred. However, remote technology presents the possibility that a variety of forums can efficiently resolve virtual contacts controversies.

While this factor is seldom discussed,[304] it includes, similar to other factors, consideration of "(1) the preference for the forum where the injury occurred and/or where the witnesses reside, (2) the avoidance of piecemeal litigation, and (3) the role of choice of law principles."[305] The judicial system's interest in resolution goes, in part, beyond particular location by considering what is

300. Bride Ministries, NFP v. DeMaster, No. 4:20-CV-00402, 2020 WL 6822836, at *6 (E.D. Tex. Nov. 20, 2020).

301. *See* Dodson et al., *supra* note 274, at 14.

302. Alexis v. Rogers, No. 15cv691-CAB-BLM, 2016 WL 11707630, at *12 (S.D. Cal. Feb. 26, 2016).

303. *See, e.g.*, *id.*; Freestream Aircraft (Bermuda) Ltd. v. Aero L. Grp., 905 F.3d 597, 609 (9th Cir. 2018) ("This factor weighs slightly in favor of Plaintiffs, but we generally do not give it much weight."). *But see* Abramson, *supra* note 262, at 455 ("Generally, a court's finding on this factor seems to weigh heavily in the balancing suggested by the Supreme Court. Indeed, it is unusual for a judicial finding on this factor to be at variance with the court's conclusions after balancing all the factors.").

304. *See* Richman, *supra* note 134, at 632 ("Neither the Supreme Court nor the lower courts have said much about this fairness factor.").

305. Abramson, *supra* note 262, at 461.

efficient. The most efficient forum will often be where the out-of-state defendant's contacts reached or the harm occurred because this forum often will be the plaintiff's home and the location of evidence of and witnesses to the harm.[306] With virtual harms, this analysis may hold because the forum state remains the home of these important components of the dispute. Several courts considering virtual harms noted that the "location of the evidence and witnesses" is the focus of this factor.[307] However, these courts also found that "[t]his factor is neutral especially given the advances of modern technology."[308] With the increased efficiency of remote technology and the decreased burdens of litigating in faraway forums,[309] the defendant's forum may also accomplish the system's interest. The defendant's forum is increasingly available due to the deployment of remote technology.[310] The use of remote technology by faraway litigants throughout the litigation may then satisfy the judicial system's interest in effectively resolving any controversy across state lines.

However, if the litigation is particularly complex, as it might be in the virtual contacts context,[311] a court may find that the judicial system's interest in efficiently resolving such a complex controversy militates finding personal jurisdiction in a particular forum.[312] Choice of law considerations may also yield a more efficient result, such as adjudicating the case in the same forum as the applicable substantive law.[313] Ultimately, this analysis will depend on the specifics of the case at hand, but the increased efficiency of remote technology

306. *See id*.

307. *See, e.g.*, WhatsApp Inc. v. NSO Grp. Tech. Ltd., 472 F. Supp. 3d 649, 677 (N.D. Cal. 2020); Panavision Int'l, L.P. v. Toeppen, 141 F.3d 1316, 1323 (9th Cir. 1998), *holding modified by* Yahoo! Inc. v. La Ligue Contre Le Racisme Et L'Antisemitisme, 433 F.3d 1199 (9th Cir. 2006); *Freestream Aircraft*, 905 F.3d at 609.

308. *WhatsApp, Inc.*, 472 F. Supp. 3d at 677; *see also Panavision Int'l*, 141 F.3d at 1323 ("It is no longer weighed heavily given the modern advances in communication and transportation."); *Freestream Aircraft*, 905 F.3d at 609 (same).

309. *See supra* Part II.C.2.a.

310. *See* Dodson et al., *supra* note 274, at 14.

311. *See, e.g.*, Parrish, *supra* note 175 at 106–07 ("As the number of transnational cases have grown, so too have their complexity. From intricate securities and derivatives regulation to transnational class actions, courts struggle not only applying adjudicatory jurisdiction principles—themselves often convoluted—but also to understand the factual circumstances from which the cases arise. A number of unresolved doctrinal questions and thorny conceptual and technical issues (e.g., how to treat the internet and cyberspace in a territorial-based system) also have led to confusion and a degree of uncertainty.").

312. *See* Abramson, *supra* note 262, at 463 ("[A] single adjudication of legal issues pertaining to the same series of events generally serves the 'efficient resolution' of controversies."); Richman, *supra* note 134, at 633 ("The interstate judicial system benefits if all parties and issues are joined in one suit, because repetitious, piecemeal litigation and inconsistent results are avoided."). The Supreme Court has found the efficiency of consolidated litigation persuasive in the fairness analysis. *See* Keeton v. Hustler Mag., Inc., 465 U.S. 770, 777–78 (1984) (finding that "the combination of [the forum]'s interest in redressing injuries that occur within the State and its interest in cooperating with other States in the application of the 'single publication rule' demonstrate the propriety of requiring respondent to answer to a multistate libel action in [the forum]").

313. *See* Abramson, *supra* note 262, at 464 ("If the court determines that the forum state's substantive law applies to the case, then efficiency is served by proceeding in that forum.").

may lead to a finding that jurisdiction would be efficient in a variety of possible forums.

e. The Shared Interest of the Several States in Furthering Fundamental Substantive Social Policies

Allowing plaintiffs to bring cases in forums that comport with society's understanding of a fair forum may advance social policies. "On a case-by-case basis, a court is to examine the substantive policies of other states or nations whose interests are affected by the assertion of jurisdiction by the forum state."[314] This analysis may well include promoting fairness and state sovereignty.

This factor has also not received much attention from courts.[315] Without much guidance, lower courts have often conflated this factor with the other factors.[316] For example, courts found that this interest involves "provid[ing] a convenient forum for its residents to redress injuries inflicted by out-of-state actors,"[317] "protecting residents of its state against tortious conduct,"[318] "ensuring that its citizens achieve fair and even-handed trials,"[319] and "ensuring that its citizens are afforded timely and effective relief."[320] Along these lines, much of the analysis remains the same as the above factors.

One commentator has suggested that different, specific policies should drive this analysis. These policies are that

> (1) another state has no greater interest than the forum in resolving disputes involving harm to the forum's residents, (2) there is no serious conflict with another state's sovereignty even though the subject of the dispute is or can be governed by the law of the other state, or (3) the interest of the several states is best served by resolving claims against all defendants in one forum.[321]

These considerations involve case-by-case assessments, but broadly, they incorporate concern for state sovereignty and interstate federalism. Though it was not expressly discussing this fairness factor, the Supreme Court has indicated that its personal jurisdiction rules "reflect two sets of values—treating defendants fairly and protecting 'interstate federalism[,]'"[322] and that "[t]he law

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314. *Id*. at 465.

315. "Few courts attempt to articulate this 'fair play' aspect of the due process test for personal jurisdiction, instead omitting any reference to this factor." *Id*.

316. *See id.* at 468. ("As interpreted by many courts, the 'shared interest' factor repeats the forum state's interest or efficient resolution rationale with no apparent reference to the substantive social policies furthered by the states' shared interest, ...").

317. King v. Prodea Sys., Inc., 433 F. Supp. 3d 7, 16 (D. Mass. 2019).

318. Christie v. Nat'l Inst. for Newman Studs., 258 F. Supp. 3d 494, 509 (D.N.J. 2017) (citing Formula One Licensing BV v. Valentine, No. CV 14-5812 (JBS/AMD), 2016 WL 7175591 at *7 (D.N.J. Dec. 8, 2016)).

319. Bride Ministries, NFP v. DeMaster, No. 4:20-CV-00402, 2020 WL 6822836, at *6 (E.D. Tex. Nov. 20, 2020).

320. *Id*.

321. Abramson, *supra* note 262, at 468. Yet, even these policies contain similar considerations as those in other factors. *See supra* Parts II.C.2.b. and d.

322. Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct., 141 S. Ct. 1017, 1025 (2021).

of specific jurisdiction . . . seeks to ensure that States with 'little legitimate interest' in a suit do not encroach on States more affected by the controversy."[323] Concerns about state sovereignty and comparison between forums to determine which has the stronger claim for asserting authority, therefore, do have a place in assessing the fairness of exercising personal jurisdiction, whether courts expressly analyze these issues under this factor or not.

Further, some courts "have attempted to define the scope of the 'shared interest' in the context of specific cases."[324] In that vein, social policy may include consideration of general notions of fairness in an evolving society. As the use of remote technology increases, individuals understand that remote activities may give rise to harms in other states and that they may need to defend these harms where they occur.[325] Even if individuals do not understand this logic or foresee the issues it may raise, the states together have an interest in making it so that, in at least some instances, courts can exercise jurisdiction over out-of-state defendant remote-technology users who cause harm there.[326] Exercising jurisdiction over these defendants would promote fairness, support interstate federalism, and further social policy.

* * *

This approach proposes revivifying a lesser-used doctrine in the personal jurisdiction inquiry. The fairness factors accommodate important practical considerations along with the interests and burdens of the particular parties involved, which courts may find compelling. On a question that impacts access to justice and fairness to litigants, it makes sense to consider the individualized implications for the parties, the forum, and the justice system.

CONCLUSION

Technology is rapidly changing and, so far in the personal jurisdiction context, the application of law is not changing with it. It may be true that the Supreme Court is simply not up to the task of updating doctrines in light of evolving technology. However, embarking into the virtual world and assessing its legal implications is no longer the mystifying journey into the unknown it once was. Lower courts have had a chance to work through the issues of virtual contacts, try out their own solutions, and observe the resulting complications. As this Note begins to show, remote work is gaining societal acceptance, and virtual connections are beginning to replace some in-person events. With the vast increase in use and ubiquity of remote technology now and in the post-pandemic world, it is well past time to settle on a doctrinal approach. As some

323. *Id.*
324. Abramson, *supra* note 262, at 467.
325. *See supra* Part II.A.2.d.
326. *See supra* Part II.C.2.b.

Justices show interest in the vexing Internet-jurisdiction question and as some begin to rethink *International Shoe*'s wisdom, this Note offers a familiar answer: rather than abandon *International Shoe*, return to it, with a better appreciation for virtual contacts.

This Note argues that virtual contacts fit in the personal jurisdiction analysis through its traditional doctrines, applying familiar tools to the newest iteration of the problem of virtual contacts. Any of the approaches individually or in combination suffice as the definitive answer to how technological advancements fit into the personal jurisdiction inquiry. First, this Note proposed that virtual contacts fit within the minimum contacts calculus because they serve as constitutionally sufficient connections between the defendant and the forum state. Second, the "fair play and substantial justice" standard can encompass technological advancements and societal trends, incorporating an increasingly interconnected society's ideas of fairness and justice into the personal jurisdiction analysis. Third, the fairness factors provide an effective framework to assess the fairness of exercising personal jurisdiction. In particular, the decreased burdens on defendant remote-technology users, the forum's increased interest in adjudicating a dispute between an out-of-state defendant and an in-state victim, the increased interest of plaintiffs in attaining convenient and effective relief from a faraway defendant, and society's interest in furthering fundamental social policies, such as fairness of available forums and concerns over state sovereignty, will often shift the fairness factors towards a finding of personal jurisdiction.

Fitting new problems into traditional tests—and, by so doing, maintaining a coherent doctrine—is the preferable option to formulating a new test that attempts to address technology that will inevitably continue to evolve. After all, personal jurisdiction's case-by-case analysis and broad tests can, and should, accommodate new circumstances and an evolving society. New technology and a new global event add what seem like intractable complications but are simply one more shift in the nation's economic and day-to-day functions that current personal jurisdiction doctrines are well-equipped to handle. As the Internet-jurisdiction question becomes more pressing in the post-pandemic world and beyond, personal jurisdiction's traditional tests remain the best path forward.

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