The First Amendment and Online Access to Information About Abortion: The Constitutional and Technological Problems with Censorship

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THE FIRST AMENDMENT AND ONLINE ACCESS TO INFORMATION ABOUT ABORTION: THE CONSTITUTIONAL AND TECHNOLOGICAL PROBLEMS WITH CENSORSHIP

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ABSTRACT—To what extent could an abortion-restrictive state impede access to online information about abortion? After Dobbs, this question is no longer theoretical. This essay engages with this issue from both a legal and technological perspective, analyzing First Amendment jurisprudence as well as the technological implications of state-level online censorship. It concludes that the weight of Supreme Court precedent indicates that state attempts to censor information regarding out-of-state abortion services would violate the First Amendment. That said, the essay also recognizes that as Dobbs itself upended precedent, it is unclear what Supreme Court would do when ruling on questions regarding the extent of state power to limit access to information in this domain. The essay also considers the technological implications of state efforts to censor online access to information about abortion, concluding that these efforts would be mostly, though not completely, unsuccessful.

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I. INTRODUCTION

_Dobbs v. Jackson Women’s Health Organization_,\(^1\) decided in June 2022, returned to states the authority to regulate access to abortion. This Essay addresses two of the many questions created by _Dobbs_ and its aftermath: Should the free speech clause of the First Amendment prevent legislators in an abortion-restrictive state from impeding access to, and provision of, online information about abortion services available in abortion-permissive states?\(^2\) And is such censorship even technologically feasible?

The answer to the first question is “yes,” internet censorship in this manner would contravene the First Amendment.\(^3\) But it will nonetheless be attempted, as demonstrated, for example, by a bill introduced in the South Carolina legislature in June 2022.\(^4\) This Essay therefore aims to engage with some of the key case law and arguments that will likely be presented in the resulting court challenges. It concludes that the weight of Supreme Court precedent indicates that state attempts to impede access to abortion information from out-of-state web sites would violate the First Amendment.

The Essay also explores the technological feasibility of state internet censorship attempts—an issue that is relevant because the legal process to challenge them will take time, and because the Supreme Court may not feel obligated to follow precedent in future First Amendment cases arising as a consequence of _Dobbs_. It explains why, given the availability of multiple workarounds, state attempts to block online access to information about out-of-state abortion services would be largely, but not completely, unsuccessful.

For a First Amendment court challenge over online interstate access to abortion services information to occur, there are two prerequisites: State-to-state variations in laws regarding the circumstances under which abortion is permitted, and state laws that aim to impede access to information about out-

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\(^2\) This Essay uses “abortion-restrictive” to refer to states that have, or will soon have, laws prohibiting most or all abortions, and “abortion-permissive” to refer to states that do not have such laws. For the purposes of this Essay, it is not necessary to identify where the boundary lies between “permissive” and “restrictive.” What matters is that there are state-to-state variations in abortion laws, thereby opening the door to the First Amendment questions explored herein.

\(^3\) While this Essay focuses on free expression, that is not the only First Amendment freedom implicated by state-imposed internet censorship. For example, attempts to limit what online news sites could publish regarding abortion would implicate freedom of the press.

\(^4\) The South Carolina bill would criminalize “hosting or maintaining an internet website, providing access to an internet website, or providing an internet service purposefully directed to a pregnant woman who is a resident of this State that provides information on how to obtain an abortion, knowing that the information will be used, or is reasonably likely to be used for an abortion.” _S. 1373_, Gen. Assemb., 124th Sess. (S.C. 2022). While the bill has a clause providing that it “may not be construed to impose liability or conduct protected by the First Amendment to the United States Constitution or by South Carolina Constitution,” this does little to mitigate the First Amendment concerns raised by the bill.
of-state abortion services. State variations in abortion laws were already in place prior to Dobbs, and are increasing as more state legislatures respond to the post-Dobbs landscape. The second prerequisite could arise either through a) broadly worded antiabortion statutes that do not specifically mention impeding online access to abortion services information but might nonetheless be applied to that end, or b) through statutes that explicitly target access to such information.

For an example of laws pre-dating Dobbs that might be applied to impede online access to information, consider the “bounty” laws enacted in Texas in late 2021 and in Oklahoma in May 2022 that create a cause of civil action against “any person . . . who . . . knowingly engages in conduct that aids or abets the performance or inducement of an abortion.” The laws in both states provide that if the claimant prevails, the court must award statutory damages of at least $10,000 for each abortion “that the defendant aided or abetted.” Does operating a website aimed at providing information regarding out-of-state abortion services to people in states with bounty laws constitute aiding or abetting? A plaintiff might assert that it does. The fact that such an assertion would be constitutionally (and jurisdictionally) suspect would not negate a defendant’s need to contest it.

State legislatures are being asked to consider new criminal laws that would explicitly target the online provision of abortion-related information. In June 2022, the National Right to Life Committee (NRLC) released model legislation that would criminalize knowingly or intentionally hosting or maintaining an internet website, providing access to an internet website, or providing an internet service, purposefully directed to a pregnant woman who is a resident of this state, that provides information on how to obtain an abortion.

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5 TEX. HEALTH & SAFETY CODE ANN. § 171.201–12 (West 2021).
7 HEALTH & SAFETY § 171.208(a)(2); tit. 63 § 1-745.35.
8 HEALTH & SAFETY § 171.208(b)(2); tit. 63 § 1-745.35.
9 Also potentially relevant here is a July 2022 decision from the Tenth Circuit (which includes Oklahoma) contrasting “aiding” or “abetting” on the one hand with the potentially (depending on the statutory language and context) broader “encouraging” or “inducing” on the other. See United States v. Hernandez-Calvillo, 39 F.4th 1297, 1303–09 (10th Cir. 2022).
10 Both the Texas and Oklahoma statutes contain language stating that there is no liability created by speech protected under the First Amendment. See HEALTH & SAFETY § 171.208(b)(2); tit. 63 § 1-745.35. However, that statutory language will accomplish little in disputes where a central question is whether speech that allegedly aids or abets an abortion is protected under the First Amendment.
11 In addition to the First Amendment question, such an assertion would raise important jurisdictional issues. While this Essay briefly comments on some of those issues, it is primarily focused on the First Amendment question.
illegal abortion, knowing that the information will be used, or is reasonably likely to be used, for an illegal abortions.\textsuperscript{13} This language is clearly problematic from a First Amendment standpoint, but it could still make its way into a state law, thereby setting the stage for a court challenge. Notably, in the days immediately following the \textit{Dobbs} decision, legislators in South Carolina introduced a bill titled the “Equal Protection at Conception – No Exceptions – Act” that contains language nearly identical to the above-cited excerpt from the NRLC model legislation.\textsuperscript{14}

These developments make it clear that in addition to enacting and enforcing laws prohibiting physicians from performing abortions, some abortion-restrictive states will attempt to limit the online flow of information about abortion services. In exploring the resulting First Amendment and technological questions, the remainder of this Essay proceeds as follows: Part II reviews some key Supreme Court free expression precedents. In light of those precedents, it presents arguments that proponents and opponents of state attempts to impede interstate access to abortion information will likely make. Part III explores the technological and logistical issues that would accompany state attempts to censor access to information about abortion services. As explained in that section, even if abortion-restrictive states had the legal authority (which, due to the First Amendment, they should not) to restrict access to out-of-state websites providing abortion information, as a technological matter these censorship attempts would be largely though not completely ineffective. Conclusions are offered in Part IV.

\section*{II. Considering the Arguments}

While the Supreme Court’s free expression jurisprudence is voluminous,\textsuperscript{15} there are a handful of cases that are particularly relevant to the question at issue in this Essay. This section reviews some of those cases and then considers how they are likely to be invoked. It also briefly considers

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{14} S. 1373, Gen. Assemb., 124th Sess. (S.C. 2022). The South Carolina bill was introduced on June 28, 2022, four days after the Supreme Court ruled on \textit{Dobbs}. The language addressing “hosting or maintaining an internet website” closely tracks the language in the NRLC model legislation. \textit{Id.} The bill also has a clause providing that it “may not be construed to impose liability or conduct protected by the First Amendment to the United States Constitution or by South Carolina Constitution,” though this does little to mitigate the First Amendment concerns raised by the “hosting or maintaining” language.
\item \textsuperscript{15} See, e.g., the list of cases in the First Amendment Encyclopedia provided by the Free Speech Center at Middle Tennessee State University, \textit{All Cases}, THE FIRST AMENDMENT ENCYC. https://www.mtsu.edu/first-amendment/encyclopedia/case-all [https://perma.cc/NY4S-VTC2]. Many of the hundreds of cases listed are Supreme Court decisions addressing free speech. \textit{Id.}
\end{itemize}
\end{footnotesize}
how attempts to limit the interstate exchange of online information would implicate the dormant Commerce Clause.

A. Supreme Court Jurisprudence

1. Bigelow v. Virginia

Bigelow v. Virginia, decided in 1975, addressed attempts by an abortion-restrictive state to block access to information about abortion services available in an abortion-permissive state. After the Virginia Weekly published an advertisement in early 1971 for abortion services available in New York, managing editor Jeffrey C. Bigelow was charged with violating a Virginia statute that outlawed the “sale or circulation of any publication” that would “encourage or prompt the procuring of abortion.” He was convicted in a county court, and his conviction was subsequently upheld by the Virginia Supreme Court. After Roe v. Wade in 1973, the Virginia Supreme Court then considered the case a second time and reaffirmed Bigelow’s conviction.

In 1975, the U.S. Supreme Court reversed Bigelow’s conviction, writing “[w]e conclude that Virginia could not apply [the statute at issue] . . . to appellant’s publication of the advertisement in question without unconstitutionally infringing upon his First Amendment rights.” In reaching this conclusion, the Court considered whether the commercial nature of the speech in question meant that it was unprotected by the First Amendment. The Court answered this question in the negative, writing “the fact that the particular advertisement in [Bigelow’s] newspaper had commercial aspects or reflected the advertiser’s commercial interests did not negate all First Amendment guarantees.” This foreshadowed the Court’s holding a year later in Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc. that “commercial speech, like other varieties, is protected.”

17 Id. at 811–13.
18 Id. at 813–14.
19 Bigelow v. Commonwealth, 200 S.E.2d 680 (Va. 1973). In reaffirming the conviction, the Virginia Supreme Court wrote the intervening U.S. Supreme Court jurisprudence which included not only Roe v. Wade, 410 U.S. 113 (1973), but also Doe v. Bolton, 410 U.S. 179 (1973), did not address abortion advertising, and therefore that its earlier conclusion that “government regulation of commercial advertising in the medical-health field was not prohibited by the First Amendment,” Bigelow, 200 S.E.2d at 342, was not affected.
20 Bigelow, 421 U.S. at 829.
21 Id. at 818.
The Bigelow Court also noted that the advertisement contained phrases such as “Abortions are now legal in New York” and thus conveyed information “not only to readers possibly in need of the services offered, but also to those with a general curiosity about, or genuine interest in, the subject matter or the law of another State.” The Court concluded that a state “may not, under the guise of exercising internal police powers, bar a citizen of another State from disseminating information about an activity that is legal in that State.”

A comparison of the preceding two quotations shows that the Bigelow Court recognized the interests of both speakers in New York wishing to convey information and listeners in Virginia with a “genuine interest in” that information. The Court’s rebuke is directed at Virginia’s attempt to interfere with the First Amendment rights of New York speakers as well as Virginia’s attempt to interfere with the First Amendment rights of Virginia listeners.

2. United States v. Edge Broadcasting Co.

Proponents of the constitutionality of restrictions on interstate provision of information on abortion access will point to United States v. Edge Broadcasting Co., decided in 1993. At that time, Virginia had a state-sponsored lottery but North Carolina did not. Edge Broadcasting owned a radio station that broadcast from a transmitter located in North Carolina about three miles from the Virginia border and reached an audience whose members were mostly in Virginia.

Federal law at the time (and today) provided that it was, subject to certain exceptions, unlawful to broadcast “by means of any radio or television station for which a license is required by any law of the United States . . . any advertisement of or information concerning any lottery.” The law, 18 U.S.C. § 1304, did not apply to broadcasts by stations licensed to

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23 Bigelow, 421 U.S. at 812.
24 Id. at 822.
25 Id. at 824–25. While the core holding of Bigelow related to the First Amendment, in dicta the Court also addressed the issue of travel, noting that Virginia could not “prevent its residents from traveling to New York to obtain [abortion] services or . . . prosecute them for going there.” Id. at 824 (internal citation omitted).
26 Id. at 822.
28 Id. at 423.
29 Id. The Court wrote that “[a]lthough Edge was licensed to serve the Elizabeth City area, it chose to broadcast from a more northerly position, which allowed its signal to reach into the Hampton Roads, Virginia, metropolitan area.” Id. at 429.
locations in states that have lotteries.\(^{31}\) Edge Broadcasting did not benefit from this exception, as it was located in a state without a lottery.

Edge Broadcasting filed a claim in a Virginia federal district court seeking a declaratory judgement that 18 U.S.C. § 1304 was unconstitutional.\(^{32}\) In assessing the claim, the district court applied the four-factor \textit{Central Hudson} test,\(^{33}\) which is used to evaluate whether a law burdening commercial speech violates the First Amendment. The district court concluded that 18 U.S.C. § 1304 did not satisfy the \textit{Central Hudson} factor requiring that it directly advance the asserted government interest and was thus unconstitutional.\(^{34}\)

After the Fourth Circuit affirmed,\(^{35}\) the Supreme Court reversed, writing that “the statutes challenged here regulate commercial speech in a manner that does not violate the First Amendment.”\(^{36}\) The Court rejected the lower courts’ conclusions regarding government interest under \textit{Central Hudson}, writing “[w]e have no doubt that the statutes directly advanced the governmental interest at stake in this case.”\(^{37}\) The Court then explained that 18 U.S.C. §1304 reflected Congress’ goal of supporting each state’s regulatory approach with respect to lotteries:

Instead of favoring either the lottery or the nonlottery State, Congress opted to support the antigambling policy of a State like North Carolina by forbidding stations in such a State to air lottery advertising. At the same time it sought not to unduly interfere with the policy of a lottery-sponsoring State such as Virginia. Virginia could advertise its lottery through radio and television stations licensed to Virginia locations, even if their signals reached deep into North Carolina.\(^{38}\)

\(^{31}\) See 18 U.S.C. § 1307(a)(1)(B), stating that the provisions of § 1304 do not apply to “broadcast by a radio or television station licensed to a location in that State or a State which conducts such a lottery.”

\(^{32}\) Edge Broad., 509 U.S. at 424.

\(^{33}\) See \textit{Cent. Hudson Gas & Elec. Corp. v. Public Serv. Comm’n of N.Y.}, 447 U.S. 557 (1980). The Court articulated the test as follows: “At the outset, we must determine whether the expression is protected by the First Amendment. For commercial speech to come within that provision, it at least must concern lawful activity and not be misleading. Next, we ask whether the asserted governmental interest is substantial. If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest asserted, and whether it is not more extensive than is necessary to serve that interest.” \textit{Id.} at 566.

\(^{34}\) Edge Broad., 509 U.S. at 425.

\(^{35}\) \textit{Id.}

\(^{36}\) \textit{Id.} at 436.

\(^{37}\) \textit{Id.} at 428.

\(^{38}\) \textit{Id.}
3. Reno v. ACLU

Reno v. ACLU\(^{39}\) was decided in 1996 and arose from a challenge to two provisions of the Communications Decency Act of 1996\(^{40}\) (CDA) that respectively addressed communications of “obscene or indecent” and “patently offensive” content.\(^{41}\) Congress enacted the CDA in response to the rapid growth of the internet,\(^{42}\) and with it concerns among legislators regarding the increasing availability of online content inappropriate for minors.\(^{43}\) The Court found both of the statutes at issue to be unconstitutional, explaining that “the CDA lacks the precision that the First Amendment requires when a statute regulates the content of speech,” and that “[i]n order to deny minors access to potentially harmful speech, the CDA effectively suppresses a large amount of speech that adults have a constitutional right to receive and to address to one another.”\(^{44}\)

More fundamentally, the Reno Court specifically distinguished the internet from traditional over-the-air broadcasting, observing that “unlike the conditions that prevailed when Congress first authorized regulation of the broadcast spectrum, the Internet can hardly be considered a ‘scarce’ expressive commodity. It provides relatively unlimited, low-cost capacity for communication of all kinds.”\(^{45}\) The Court recognized that the scarcity that had been used as the basis to justify lower First Amendment protections in broadcasting did not apply to the internet, writing that “our cases provide no basis for qualifying the level of First Amendment scrutiny that should be applied to this medium.”\(^{46}\)


\(^{41}\) Reno, 521 U.S. at 859. One of the challenged provisions was codified at 47 U.S.C. § 223(a) and criminalized transmitting “obscene or indecent” interstate or foreign communications to an underage person. Id. The second challenged provision was codified at 47 U.S.C. § 223(d) and criminalized using an “interactive computer service” in interstate or foreign communications to send “patently offensive” content to an underage person, or to display such content in a manner available to an underage person. Id. at 859–60.

\(^{42}\) Id. at 850.

\(^{43}\) Id. at 856.

\(^{44}\) Id. at 874.

\(^{45}\) Id. at 870.

\(^{46}\) Id. The Reno Court also noted what it viewed as an additional difference between the internet and traditional broadcast media, writing “the Internet is not as ‘invasive’ as radio or television. The District Court specifically found that ‘[c]ommunications over the Internet do not invade an individual’s home or appear on one’s computer screen unbidden. Users seldom encounter content “by accident.”’ Id. at 869 (citing Am. C.L. Union v. Reno, 929 F. Supp. 824, 844 (E.D. Pa. 1996), aff’d, 521 U.S. 844 (1997)).
4. **McCullen v. Coakley**

*McCullen v. Coakley,* decided in 2014, considered a Massachusetts law that made it unlawful, with some exceptions, to “knowingly enter or remain on a public way or sidewalk adjacent to a reproductive health care facility within a radius of 35 feet of any portion of an entrance, exit or driveway of a reproductive health care facility.” The Supreme Court struck down the law on First Amendment grounds, writing that Massachusetts has taken “extreme step of closing a substantial portion of a traditional public forum to all speakers” and that the “Commonwealth may not do that consistent with the First Amendment.” Notably, the Court had reached the opposite conclusion in *Hill v. Colorado* in 2000 in relation to a similar law, and while *McCullen* acknowledged *Hill v. Colorado,* it stopped short of explicitly overturning it.

5. **Giboney v. Empire Storage & Ice Co.**

While the Supreme Court decisions discussed above relate to the internet, abortion, and to communications involving activities that are lawful in one state but not in another, there is also an additional category of relevant cases: those addressing the breadth of the First Amendment exception for speech integral to criminal conduct. In 1949 in *Giboney v. Empire Storage & Ice Co.,* the Court considered the constitutionality of an injunction issued to prevent “union members from peaceful picketing” the premises of Empire Storage and Ice Company, a wholesale ice distributor that refused to agree not to sell to non-union vendors.

A Missouri statute at the time made it unlawful to “participate in any pool, trust, agreement, combination, confederation or understanding with any person or persons in restraint of trade or competition in the importation, transportation, manufacture, purchase or sale of any product or commodity in this state.” Empire’s options included continuing to sell to non-union vendors at the cost of seeing its business reduced by 85% due to the picketing, or ceasing its sales to non-union vendors, thereby violating the Missouri

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48 Id. at 471.
49 Id. at 497.
51 As one commentator noted, “[t]he question is whether the reasons the majority gives [in McCullen] would effectively render buffer zones like Colorado’s unconstitutional, despite the result in Hill. There’s a good argument that they would.” Kevin Russell, *What is Left of Hill v. Colorado?*, SCOTUSBLOG (Jun. 26, 2014, 4:34 PM), https://www.scotusblog.com/2014/06/what-is-left-of-hill-v-colorado/ [https://perma.cc/DB9L-KK4E].
53 Id. at 492.
54 Id. at 491 n.1.
statute. Empire instead pursued legal relief, seeking and obtaining an injunction against the picketers.

In rejecting the contention that the injunction violated the First Amendment, the Court found that the picketing was part of a collection of activities that “constituted a single and integrated course of conduct, which was in violation of Missouri’s valid law.” The Court held that “it has never been deemed an abridgment of freedom of speech or press to make a course of conduct illegal merely because the conduct was in part initiated, evidenced, or carried out by means of language, either spoken, written, or printed.”

In a 2016 article, Volokh described Giboney as the “leading case cited as support for [the speech integral to criminal conduct] exception,” and noted that it “hadn’t been cited by the Court at all from 1991 to 2005,” and then was cited multiple times by the Court starting in 2006. In addition to the six post-2005 decisions citing Giboney noted by Volokh, there have since been several others. This resurgence signals the Court’s interest in the speech integral to criminal conduct exception—a point that is directly relevant to this Essay because of how it might apply to the online provision of information regarding abortion to people in states where abortion is unlawful.

B. Applying the Precedents

The application of the foregoing precedents depends in part on the location of the website providing the information at issue. Before proceeding further, it is important to flag the complexities that arise when referring to the “location” of a website.

1. Website “Location”

As used herein, the location of a website is deemed to be the place where the organization that runs it is located. For instance, if a New York-based abortion rights advocacy group creates and maintains a website that provides abortion services information, that website can be considered to be

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55 Id. at 493.
56 Id. at 494.
57 Id. at 498.
58 Id. at 502.
60 Volokh, supra note 60, at 983.
61 Id.
located in New York. The physical location of the computers (more precisely, the servers63) used to host the website may be elsewhere.

To take one example of a company offering hosting services, Amazon Web Services (AWS) has servers throughout the United States (and the world), corresponding to dozens of “availability zones.”64 Using servers that are relatively near to the people accessing them has efficiency advantages. This is one reason why music streaming service Spotify (which uses Google Cloud65) has servers in multiple countries,66 as this facilitates more efficient delivery of content to a geographically distributed user base. There can also be country-level jurisdictional considerations that inform server location choice. Amazon offers AWS GovCloud for customers that, for national security reasons, need to maintain their data within the United States.67

Suffice it to say that server location is a complex topic involving an essentially endless list of topologies and possibilities. For simplicity and brevity, as noted above, this Essay assumes that a website is “located” at the same place as the organization that runs it.68 The subsequent discussion generally assumes that a website located in an abortion-permissive state is used to convey information about abortion services available in that state to people in abortion-restrictive states, though other geographic configurations are also briefly considered.

2. Bigelow and the Internet

Adjusted for half a century of technology advances, Bigelow is the case most directly analogous to the present-day online provision of information about out-of-state abortion laws and services. Notably, in concluding that Virginia could not “bar a citizen of another State from disseminating information about an activity that is legal in that State,” the Court underscored the right of people in New York to convey information to

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63 A server is a computer that sends information to a “client” computer in response to requests from the client. See Server, BRITANNICA, https://www.britannica.com/technology/server [https://perma.cc/HHG6-CME8]. A web server is a server that delivers web pages to computers that request those web pages.


68 Even this does not fully simplify matters, because there can also be ambiguity about the “location” of an organization (e.g., an abortion rights advocacy group) that runs a website. The organization might have offices in multiple states, or have no offices at all and be purely virtual, or be based outside the United States. This Essay assumes that the organization will have an identifiable location.
Virginians about lawful activities in New York. Bigelow and his newspaper served to relay speech that people in New York had a First Amendment right to convey—and state authorities in Virginia had no right to prevent Virginians from receiving that information.

Mapped to the present era and the provision of online information from an out-of-state location, the argument against censorship becomes even stronger. In *Bigelow*, Virginia could easily identify a specific person in Virginia (Bigelow) who was allegedly responsible for providing the information in contravention of Virginia law. By contrast, consider what happens today when a person in an abortion-restrictive state accesses a website run by an entity in an abortion-permissive state. What party could authorities in the abortion-restrictive state assert is unlawfully disseminating information?

To attempt to avoid jurisdiction hurdles, the state could try to target the local internet service provider (ISP) that a person in the abortion-restrictive state uses to access the out-of-state website. But an ISP is just an intermediary, and does not determine the content its customers choose to access on the internet. Alternatively, the state might try to target persons at the organization running the out-of-state website for knowingly conveying the information at issue to people in the abortion-restrictive state. Attempts to assert control over the information conveyed by people in a different state would not only run counter to *Bigelow*, but would also raise important jurisdictional issues.

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70 It is nonetheless worth noting that in a different context, net neutrality, the Ninth Circuit in January 2022 declined to preliminarily enjoin California’s net neutrality law. See ACA Connects v. Bonta, 24 F.4th 1233 (9th Cir. 2022). The Ninth Circuit upheld the district court’s denial of a motion for a preliminary injunction that would have barred enforcement of California’s net neutrality law. Id. at 1237. This decision turned on the question of whether, in classifying broadband internet services as “information services” rather than “telecommunications services,” the FCC had lost its authority to preempt the California law. The Ninth Circuit wrote that “the FCC no longer has the authority to regulate in the same manner that it had when these services were classified as telecommunications services. The agency, therefore, cannot preempt state action, like SB-822, that protects net neutrality.” Id. (internal citation omitted). See also Kim Lyons, *Appeals Court Upholds California’s Net Neutrality Law*, VERGE (Jan. 28, 2022, 5:28 PM), https://www.theverge.com/2022/1/28/22906856/court-upholds-california-net-neutrality-law [https://perma.cc/4Z94-F3SQ].

71 There are also other portions of the internet infrastructure that a state might attempt to target, including web hosting services, domain name system servers, and so on.

72 In addition, to the extent that the speech at issue was commercial, *Central Hudson* would be a consideration. Censorship opponents would point to the portion of the *Central Hudson* test stating “[f]or commercial speech to come within that provision, it at least must concern lawful activity and not be misleading.” *Central Hudson Gas & Elec. Co. v. Public Serv. Comm. of N.Y.*, 447 U.S. 557, 566 (1980). Censorship proponents would emphasize the aspects of the test relating to “governmental interest.” See id. at 563.
Bigelow is a powerful precedent to protect the interstate flow of information regarding abortion.

While the discussion above focuses mostly on the case where a website is located in the same abortion-permissive state where the abortion services it describes are available, other geographic configurations are also possible. A website could be located in a third state that is neither where the services it describes are offered nor in the abortion-restrictive state attempting to impede information access. A website could be located in the abortion-restrictive state whose residents are visiting the website. A website could be located abroad.³³

These scenarios not only raise different jurisdictional issues, but in relation to the First Amendment question they could lead to disputes regarding what in Bigelow is dicta and what is holding.⁷⁴ An opponent of censorship could argue that the Bigelow Court clearly articulated a First Amendment right for people in one state to receive information about "the subject matter or the law of another State."⁷⁵ Under that interpretation, it does not matter where in the United States the website is hosted, as its operators have a right to inform people anywhere in the United States regarding abortion laws in abortion-permissive states. A censorship proponent seeking to classify that text as dicta might argue that any Bigelow holding regarding interstate information access was narrower—i.e., that a state "may not, under the guise of exercising internal police powers, bar a citizen of another State from disseminating information about an activity that is legal in that State."⁷⁶

The narrower interpretation would place the three-state configuration—e.g., a website in Illinois that provides information to people in an abortion-restrictive state about abortion services available in New York—outside the scope of Bigelow. Or, the censorship proponent might argue that Bigelow’s core holding had nothing to do with flow of information between states, but rather was that commercial speech, when accompanied by additional

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³³ If the website is located outside the U.S., the question of who is operating the site becomes relevant, and in particular whether or not they are U.S. persons.

⁷⁴ Distinguishing between dicta and holding, and whether a binary classification is even appropriate, has long been the subject of legal scholarship. See, e.g., Dictum Revisited, 4 STAN. L. REV. 509 (1952); Michael Abramowicz & Maxwell Stearns, Defining Dicta, 57 STAN. L. REV. 953 (2005); and Andrew Michaels, The Holding-Dictum Spectrum, 70 ARK. L. REV. 661 (2017).


⁷⁶ Bigelow, 421 U.S. at 824–25 (emphasis added). Bigelow was in Virginia, where abortion was unlawful. Id. at 830–31. However, this sentence from the ruling is referring to the right of "a citizen of another State" (i.e., New York) to disseminate information about an activity that was lawful in New York. Id. at 824–25.
information, merits First Amendment protection. This would also put the three-state configuration outside the Bigelow holding. The same conclusion would hold for a website hosted in the same abortion-restrictive state that is trying to censor that information.

In addition to debating the dicta/holding issue in Bigelow, the censorship opponent could point out that states where gambling is generally unlawful do not attempt to impede access to the websites of Las Vegas casinos, or to prohibit billboards and other forms advertising by those casinos. In that context, it is a common and widely accepted practice for states to avoid impeding the free flow of online information about activities that are unlawful in-state but lawful in a different state.

3. Broadcasting: A Separate Domain

Finding little useful in Bigelow, proponents of censoring such information may instead focus on Edge Broadcasting. They might argue that under Edge Broadcasting, it does not violate the First Amendment for the government to restrict speech that travels from one state to another when that speech promotes activities that are lawful in only one of the states. Therefore, they might conclude, without violating the First Amendment, a state government can act to impede the online flow of information regarding abortion services from websites in abortion-permissive states to people in abortion-restrictive states.

There are multiple problems with this argument. As an initial matter, Edge Broadcasting addressed broadcasting, a domain in which the government has substantially greater power to regulate content than in other domains. The classic case in this regard is Red Lion Broadcasting v. FCC, in

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77 As noted earlier, the Bigelow Court wrote that “the fact that the particular advertisement in [Bigelow’s] newspaper had commercial aspects or reflected the advertiser’s commercial interests did not negate all First Amendment guarantees.” Id. at 818.

78 “Generally,” because there can be exceptions for state lotteries, and because a separate framework applies to casinos operated by Native American tribes. See, e.g., Indian Gaming Regulatory Act, Pub. L. No. 100-497, 102 Stat. 2467 (1988).


which the Supreme Court held that the FCC’s now-repealed Fairness Doctrine, which required that broadcasters give fair coverage to differing viewpoints on public issues, did not violate the First Amendment.\textsuperscript{81} The weaker nature of First Amendment protections in broadcasting arises from the government’s role in granting licenses to broadcasters, and to the related fact that radio and television channels in the 20th century were a very limited resource.\textsuperscript{82}

This is further underscored by the contrast provided by \textit{Miami Herald Publishing Co. v. Tornillo},\textsuperscript{83} in which the Court in 1974 struck down as unconstitutional a Florida statute mandating that newspapers allot space for political candidates to reply to criticism levied at them by the newspaper.\textsuperscript{84} This outcome is notable given the analog between the Fairness Doctrine at issue in \textit{Red Lion Broadcasting} and the Florida statute addressed in \textit{Tornillo}.

\textsuperscript{85} Both frameworks aimed to compel the owners of a platform for disseminating information to host content that they might not otherwise choose to host. Further, in both frameworks the government was attempting to compel a platform to offer space for counterpoints.

Yet in \textit{Red Lion Broadcasting} the Court wrote that “[t]here is nothing in the First Amendment which prevents the Government from requiring a licensee to share his frequency with others and . . . to present those views and voices which are representative of his community,”\textsuperscript{86} while in \textit{Tornillo} the Court concluded that “the Florida statute fails to clear the barriers of the First Amendment because of its intrusion into the function of editors.”\textsuperscript{87} In


\textsuperscript{82} As the Court wrote in \textit{Red Lion Broadcasting}, “[i]t does not violate the First Amendment to treat licensees given the privilege of using scarce radio frequencies as proxies for the entire community, obligated to give suitable time and attention to matters of great public concern.” 395 U.S. at 394. \textit{Edge Broadcasting} does not explicitly mention scarcity, but it does refer multiple times to licensing, which is made necessary specifically due to scarcity. See, e.g., 509 U.S. at 429 (“Although Edge was licensed to serve the Elizabeth City area, it chose to broadcast from a more northerly position, which allowed its signal to reach into the Hampton Roads, Virginia, metropolitan area.”).

\textsuperscript{83} 418 U.S. 241 (1974).

\textsuperscript{84} In \textit{Tornillo} the Court underscored a newspaper’s right to the “exercise of editorial control and judgment,” concluding that “[i]t has yet to be demonstrated how governmental regulation of this crucial process can be exercised consistent with First Amendment guarantees of a free press as they have evolved to this time.” Id. at 258.

\textsuperscript{85} The analog is close but not perfect. For instance, while \textit{Red Lion Broadcasting} addressed speech and press freedoms, see 395 U.S. at 375, \textit{Tornillo} focused mostly (though not only) on press freedom, see 418 U.S. at 258.

\textsuperscript{86} \textit{Red Lion Broad.}, 395 U.S. at 389.

\textsuperscript{87} \textit{Tornillo}, 418 U.S. at 258.
addition, Tornillo did not even cite Red Lion Broadcasting, which the Court had decided only five years earlier.

This contrast illustrates the unique nature of First Amendment jurisprudence in broadcasting, and supports an argument that Edge Broadcasting is inapplicable (or at best, weakly applicable) in other domains, including the internet. This argument is further bolstered by Reno v. ACLU, which specifically drew a contrast between the scarce spectrum available to traditional broadcasters and the internet, which “provides relatively unlimited, low-cost capacity for communication of all kinds.”

Another problem with relying on Edge Broadcasting to justify interstate censorship is that it involved information flow in the opposite direction from what is at issue here. Under the fact pattern in Edge Broadcasting, the federal government was able to prevent a radio station in North Carolina from broadcasting information about an activity that was unlawful in North Carolina, though lawful in Virginia. States trying to block the interstate flow of information regarding abortion would be doing the reverse: they would be attempting to stop a speaker (i.e., an organization in an abortion-permissive state that runs a website) from conveying information to website visitors about activities that are lawful at the speaker’s location. Edge Broadcasting simply didn’t address this fact pattern.

It is also worth noting that Edge Broadcasting addressed federal law, and thus did not need to engage with the problems that would arise if a state were to act to impede the interstate flow of information. The upshot is that while Edge Broadcasting is the best precedent for advocates of internet censorship of abortion information to cite, the pro-censorship arguments still fall flat.

4. McCullen

In some respects, McCullen is less pertinent, as it did not consider interstate communication or the internet. In addition, while a sidewalk is a public forum in the legal sense, the internet is not, as private actors provide the infrastructure for the internet and mediate access to it. But the internet is nonetheless a space where the public can speak and hear others speak. Social media companies can, subject to a narrow list of exceptions, make their

90 That said, a specific online space can be converted into a public forum through the manner in which it is used by a government official. For example, in 2019 the Second Circuit held that President Trump, through the manner in which he used his Twitter account, “created a public forum.” Knight First Amend. Inst. at Columbia Univ. v. Trump, 928 F.3d 226, 237 (2d Cir. 2019).
91 For instance, for sites that convey content provided by third parties, one exception is for content that allegedly violates copyright. Cf. 17 U.S.C. § 512(c)(1)(C) (requiring that, upon receiving notification
own decisions regarding what content to carry or prohibit.\textsuperscript{92} Thus, given that under \textit{McCullen} it was deemed unconstitutional for a state to close down a public forum (the sidewalks\textsuperscript{93} near facilities where abortions were performed) in order to restrict all expression, it would certainly be problematic for the government to attempt to impose a content-based restriction regarding information about abortion conveyed on privately owned social media networks.\textsuperscript{94}

5. \textit{Giboney and Speech Incident to Criminal Conduct}

Interpretations of \textit{Giboney} will be central to disputes regarding whether the provision of online information regarding abortion is speech incident to criminal (or civilly actionable) conduct. Consider again the \textit{Giboney} Court’s oft-cited\textsuperscript{95} holding that “it has never been deemed an abridgment of freedom of speech or press to make a course of conduct illegal merely because the

\textsuperscript{92} This assertion assumes that the largest social media companies cannot be regulated as common carriers—an issue on which a circuit split has emerged between the Fifth Circuit and the Eleventh Circuit. In \textit{NetChoice, LLC v. Paxton}, 49 F.4th 439 (5th Cir. 2022), while the majority of the three-judge panel stopped short of explicitly stating that the largest social media companies can be regulated as common carriers, it nonetheless endorsed Texas’ right to enact a law that does so. The majority wrote that “we reject the idea that corporations have a freewheeling First Amendment right to censor what people say” (\textit{id. at 445}) and that “the State can regulate conduct in a way that requires private entities to host, transmit, or otherwise facilitate speech. Were it otherwise, no government could impose nondiscrimination requirements on, say, telephone companies or shipping services” (\textit{id. at 455}). In addition, the majority quoted with approval a 2021 concurrence from Justice Thomas, writing that the largest social media companies are “‘unlike newspapers’ in that they ‘hold themselves out as organizations that focus on distributing the speech of the broader public’” (\textit{id. at 460} (quoting Biden v. Knight First Amend. Inst., 141 S. Ct. 1220, 1224 (2021) (Thomas, J., concurring))). By contrast, the Eleventh Circuit in \textit{NetChoice, LLC v. Att’y Gen., Fla.}, 34 F.4th 1196 (11th Cir. 2022) wrote that “[i]n short, because social-media platforms exercise—and have historically exercised—inherently expressive editorial judgment, they aren’t common carriers. . . .” (\textit{id. at 1222}).

\textsuperscript{93} Sidewalks are “quintessential public forums.” \textit{Perry Educ. Ass’n v. Perry Educators’ Ass’n}, 460 U.S. 37, 45 (1983); see also \textit{Hague v. Comm. for Indus. Org.}, 307 U.S. 496, 515–16 (1939) (“The privilege of a citizen of the United States to use the streets and parks for communication of views on national questions may be regulated in the interest of all; it is not absolute, but relative, and must be exercised in subordination to the general comfort and convenience, and in consonance with peace and good order; but it must not, in the guise of regulation, be abridged or denied.”).

\textsuperscript{94} If the content is purely advertising, without any accompanying information, the arguments become more complex. An additional question would be how to apply the \textit{Central Hudson} requirement that the expression “at least must concern lawful activity,” \textit{Cent. Hudson Gas & Elec. Co. v. Pub. Serv. Comm. of N.Y.}, 447 U.S. 557, 566 (1980), given that the activity in question (abortion services) would be lawful where the expression originated but unlawful where it was received.

\textsuperscript{95} A search on Lexis across all U.S. jurisdictions shows that this quotation appears in over two dozen opinions since 2010.
conduct was in part initiated, evidenced, or carried out by means of language, either spoken, written, or printed.”

This holding was quoted by the Massachusetts Supreme Court in 2014 in Commonwealth v. Johnson, a decision upholding the constitutionality of the state’s criminal harassment statute. It was also quoted by the North Carolina Supreme Court in 2016 in State v. Bishop, a decision that struck down as unconstitutional the state’s anti-cyberbullying statute. These divergent outcomes foreshadow what will likely be divergent court interpretations of Giboney in response to disputes arising from state attempts to censor access to online information regarding abortion.

Advocates of censoring online abortion information will point out that there are many circumstances under which the government can target expressive conduct without violating the First Amendment. For example, the government criminalizes extortion and the communication of criminal threats. They will argue that the provision of online information regarding out-of-state abortion services is aiding and abetting murder, which is a crime that the state has the highest interest in preventing. They will assert that, just like the picketing in Giboney, the provision of online information about abortion is not an isolated expressive act but rather a component of an unlawful “integrated course of conduct,” and that the government can therefore proscribe it.

In response, censorship opponents will note that they are providing information regarding abortion services that are lawful and not murder under the law of the abortion-permissive states where those services are available. They will also argue that providing information regarding abortion services in abortion-permissive states is not speech incident to criminal conduct, but is instead simply the provision of factual information about locally lawful services—and thus a form of expression solidly within the zone of protected expression. And, they will assert that it makes no sense to analogize

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98 Id. (“[T]he conduct in question was not protected speech, but rather a hybrid of conduct and speech integral to the commission of a crime”).
100 Id. (“[T]he statute [at issue] ‘violates the First Amendment’s guarantee of the freedom of speech.’”).
102 See 18 U.S.C. §875(c); see also Elonis v. United States, 575 U.S. 723, 738 (2015) (holding that conviction under this statute requires consideration of mens rea, even though no specific mens rea requirement is explicitly recited in the statute).
103 An additional case likely to be cited in this regard, at least in the Fourth Circuit, and probably beyond, is Rice v. Paladin Enter., Inc., 128 F.3d 233 (4th Cir. 1997).
providing online information about abortion to the picketing in *Giboney*. The ecosystem for providing this information will be highly distributed, and thus the opposite of the “integrated course of conduct” of the union’s actions in *Giboney*.

It is difficult to predict how courts—and eventually the Supreme Court—will respond to these sorts of arguments. The scope of the speech integral to criminal conduct exception is unclear, and particularly so in relation to how it might apply to interstate internet communications containing content that one state deems criminal (or, with respect to civil actions, tortious) but another state does not.

6. *The Dormant Commerce Clause*

   While free expression is the constitutional issue most directly implicated by state attempts to censor access to online information about abortion, it is not the only one. There is also the “dormant” Commerce Clause (sometimes called the “negative” Commerce Clause), under which, as the Supreme Court explained in a 1970 decision, “[w]here [a state] statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.”

   It would be profoundly unhealthy for the online information ecosystem to require website operators to create many different versions of webpages, with each to be made available to users in only one or a few states. This would involve not only the burden of creating a multiplicity of versions and ensuring that geographically-appropriate versions were provided to internet users, but would also involve the burden of tracking evolving state laws and

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105 While *Giboney* addressed criminal liability, Volokh wrote that “Rumsfeld v. FAIR makes clear that the Court views the exception as also applicable to speech integral to civilly actionable conduct.” Volokh, supra note 66, at 983 n.1. Furthermore, at a time when even the scope of the First Amendment exception for defamation is under renewed scrutiny, see, e.g., Andrew Chung, U.S. Justices Thomas, Gorsuch Question Libel Protections for Media, REUTERS (July 2, 2021, 1:33 PM), https://www.reuters.com/world/us/us-justices-thomas-gorsuch-question-libel-protections-media-2021-07-02/ [https://perma.cc/P35R-658Z], there will almost certainly be disputes regarding the role of the First Amendment in determining whether the provision of information about out-of-state abortion services is civilly actionable under the Texas and Oklahoma bounty laws discussed infra.

106 See, e.g., Ore. Waste Sys., Inc. v. Dep’t of Env’t Quality, 511 U.S. 93, 99 (1994) (describing “judicial scrutiny under the negative Commerce Clause”).

updating website content accordingly. While initially this customization might happen only in relation to information regarding abortion services, once the infrastructure was created to implement it, there would be pressure to apply it in other domains as well.

For example, states with strict firearm laws could attempt to restrict in-state access to online information about firearms that are not lawful to purchase in that state. In the aggregate, these changes would have far-reaching impacts on the nature of the U.S. internet and its vital role in expression. As Huq has observed, the resulting geographically determined fragmentation of U.S. online discourse could result in substantive harms to the economy. However, Goldsmith and Volokh make a federalism-based argument regarding state internet regulation, writing that its constitutionality should turn on “the extent to which web sites or other internet services can determine, reliably and inexpensively, which states users are coming from, so that the sites can then apply the proper state law to each user.”

III. TECHNOLOGICAL CONSIDERATIONS

While a state law purporting to require censorship of information about out-of-state abortion services should be found unconstitutional, that finding may take time. To block it from taking effect, the law’s opponents would seek a preliminary injunction. As it is uncertain that they would be successful in obtaining an injunction (and further, one that survives appellate and potentially Supreme Court review), there is a need to engage with the question of what would happen if the law were to go into effect. The bottom line is that censorship measures imposed by a U.S. state (or a group of states), regardless of the mechanisms used, would be largely, but not completely, ineffective. In exploring why, it is helpful to consider how censorship might be implemented and the steps people would take to defeat it.

A. Geographically Differentiated Content

Putting aside the legal questions, as a technical matter, could a website deliver geographically differentiated content customized according to the

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108 E-mail from Aziz Huq, Frank and Bernice J. Greenberg Prof. of L., Univ. of Chi. L. Sch., to author (Aug. 9, 2022, 20:05 PDT) (on file with author).


110 An additional complication is that Supreme Court review of a preliminary injunction would likely occur through the Court’s “shadow docket,” which, as Vladeck explains, is “the significant volume of orders and summary decisions that the Court issues without full briefing and oral argument.” Steve Vladeck, The Solicitor General and the Shadow Docket, 133 HARV. L. REV. 123, 125 (2019).
U.S. state where a website visitor is located? With important caveats, yes. Approximate location information is routinely collected and used by websites in order to deliver location-customized services and advertising. It is also used at the level of countries in relation to copyright restrictions; e.g., a website operator might make a video available to internet users in its own country but not to internet users in other countries. This is termed “geoblocking.”

1. IP Geolocation

Whenever a device such as a laptop computer or smartphone connects to the internet, it is associated with a public Internet Protocol (IP) address that is sent to each visited website. Often, though not always, through a process known as IP geolocation, the IP address can be used to infer the city and state where the device is located. This is most easily explained using an example.

Consider a person who connects a laptop computer to the WiFi hotspot in a coffee shop in Dallas, and enters “nytimes.com” in the address bar at the top of an internet browser. This will send a request to a New York Times server, which will respond by sending the computer code representing the home page of the New York Times to the laptop computer. The browser running on the laptop will receive this code, process it, and display the current home page on the screen. In order for this to occur, the New York Times server must know where to send the information—in this example to an IP address associated with the coffee shop’s network. The coffee shop’s

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111 There are also important privacy considerations and related regulations that place limits on the use of geolocation data. For instance, under the European General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA), location data is considered personal data and is subject to the associated data protection requirements. See, e.g., Personal Data Definitions: Comparing GDPR vs CCPA vs CDPA vs CPA, Wirewheel (Oct. 7, 2021), https://wirewheel.io/blog/personal-data-dsar-privacy/ [https://perma.cc/B4LX-GX33].

112 See, e.g., Geoblocking, TECHOPEDIA, https://www.techopedia.com/definition/32362/geoblocking [https://perma.cc/W8HH-QYGW] (explaining that geoblocking “the process of limiting user access to the internet based on their physical location”).

113 See, e.g., Eric Griffith, How to Find Your IP Address, PC MAG. (Mar. 7, 2021), https://www.pcmag.com/how-to/how-to-find-your-ip-address [https://perma.cc/Y8HU-QTDZ]. The IP address sent to a visited website is a public IP address, e.g., the address of a local network that a laptop computer is connected to. The laptop computer itself will have a private IP address that it uses to communicate within the local network, and that will not be externally visible. The discussion of IP addresses herein refers to public IP addresses.

114 Because an ISP acts as an intermediary between a user and the internet, sometimes a local network’s public IP address will geolocate to a city different from the city where the user’s computer connected to that network is located. See generally How Accurate is IP-Based Geolocation Lookup?, IPLocation.NET (Dec. 20, 2018) https://www.iplocation.net/geolocation-accuracy [https://perma.cc/4UNQ-LLK4].
router will then ensure that the information is relayed to the specific laptop computer that sent the request.

Like physical postal addresses, IP addresses identify a destination to which something should be conveyed. However, there is a key difference: A postal address directly and publicly identifies a specific location such as a home, apartment, or office suite. Anyone in possession of a postal address can easily identify which building, and often which part of a building (e.g., a specific office suite or apartment) it corresponds to. By contrast, while there are widely available tools\textsuperscript{115} that can be used to find the approximate geographic location—such as a city and state—of an IP address seen by a website server,\textsuperscript{116} associating that IP address with a more specific location such as a particular residence, and then a particular device within that residence, is difficult.\textsuperscript{117}

The relationship between any particular laptop computer or smartphone (or any other internet-connected device) and the public IP address associated with that device as seen by the server hosting a website it is accessing can be complex, as it typically involves the interaction among multiple networks. If a laptop computer that accessed nytimes.com from a coffee shop WiFi network is subsequently used to access nytimes.com from a home network, the IP address presented to the New York Times server will change. This is because the IP addresses seen by the servers that run websites are associated with the local networks to which a laptop computer is connected rather than being permanently tied to the laptop computer itself.

2. Defeating IP Geolocation

In addition to the approaches described above, websites can also be accessed through mechanisms such as VPNs (Virtual Private Networks) and Tor that mask user locations. VPNs render a user’s true IP address (and therefore, approximate geographic location) invisible to a visited website, replacing it instead with the IP address of a server that sits between the user and the visited web site. It is common for VPNs to allow users to specify a particular location (e.g., a country) where the user will appear to be located.

\textsuperscript{115} An example of an IP lookup tool is WHATISMYIPADDRESS, https://whatismyipaddress.com/ip-lookup [https://perma.cc/HN7E-GDNQ].

\textsuperscript{116} In addition to the “public” IP address that will be sent to a server for a website being visited, each device accessing the internet also has a private IP address that is typically visible only within the local network to which the device is connected.

\textsuperscript{117} Identifying a specific computer associated with a particular IP address is possible, but doing so typically requires access to forensic information that is not publicly available, though it is accessible through means such as a subpoena to an internet service provider issued pursuant to a criminal investigation or civil legal proceeding.
VPNs are centralized, meaning that the operator of the VPN has knowledge both of the true IP address of the user, as well as of the IP address of the website the user is visiting. Thus, although using a VPN allows a user to access websites while appearing to be in a different state or country, it leaves digital tracks that could later be examined and tie the user to their website visit history. In addition, VPNs generally (though not always) cost money. This can be a disincentive not only economically, but because the fact of having purchased a VPN just prior to seeking online information on out-of-state abortion services can generate a record that the would-be VPN user might wish not to create.

Users seeking a greater degree of obfuscation can turn to Tor, which is a browser commonly used by privacy advocates. Tor relays internet communications through a series of computers that sit between the user’s computer and the server for the website the user is visiting. When a person using Tor accesses nytimes.com, the New York Times server will know only the IP address of the last computer in this chain of intermediate nodes, i.e., the one the New York Times server is directly communicating with. Using IP geolocation, the New York Times server could identify where that computer is located, but that would merely be one node in a chain of nodes that leads to the user’s computer, which would generally be in a different location. The result is that the New York Times server would not obtain information about the Tor user’s actual location. The decentralized nature of Tor means that it is much harder to tie a particular internet user to the history of websites they have visited using Tor. However, no mechanism for accessing information online is completely anonymous.

B. Why Censorship (Mostly) Won’t Work

It is instructive to run a thought experiment to see how things would play out, in technological terms, if an abortion-restrictive state were to try to compel website operators in abortion-permissive states to censor the content delivered to persons in the abortion-restrictive state. First of all, many website operators would simply refuse to comply, thereby quickly defeating

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119 *Id.*

120 See, e.g., Paul Ducklin, *Tor and Anonymous Browsing – Just How Safe Is It?*, NAKED SECURITY (Aug. 13, 2020), https://nakedsecurity.sophos.com/2020/08/13/tor-and-anonymous-browsing-just-how-safe-is-it/ [https://perma.cc/RB4T-ZE68]. An uptick in Tor usage can serve as a signal to authorities that there are internet users who wish to mask their activity. This could spur investigations aimed at uncovering the identity of the users.
this approach to censorship. In addition, many people would mirror the relevant information on social media, quickly overwhelming any attempt at control by a state government. (This assumes, of course, that the social media companies themselves would not elect to censor this information based on user location, and that Section 230 would block any attempts by a state government to compel them to do so.)

In a country like the United States with a robust ecosystem for the open exchange of online information, there are so many ways for digital information to get posted, re-posted, forwarded, screen-captured, etc., that there is simply no technologically feasible way—to say nothing of the civil liberties violations that would be involved—for a U.S. state to censor online information that is easily and lawfully available outside that state. As a result, interested persons in an abortion-restrictive state would generally retain access to online information about out-of-state abortion laws and services.

But, to pursue the thought experiment, suppose that a significant number of operators of out-of-state websites providing online content regarding abortion services were somehow compelled to implement geoblocking, and were able to do so. Suppose further that the operators of the websites were able to tackle the logistically onerous task of tracking the latest abortion laws in every state, and to customize their content delivery accordingly.

Very quickly, an ecosystem of VPN mobile phone apps and VPN browser extensions would be widely publicized and adopted by some people in abortion-restrictive states seeking access to abortion information from out-

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121 A refusal by websites to engage in geoblocking would ensure the information on the website is available to anyone visiting the website. It would not, however, provide visitors with anonymity.


123 Section 230, or more formally, 47 U.S.C. § 230, provides that “[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider,” § 230(c)(1), and that “[n]o provider or user of an interactive computer service shall be held liable” for content moderation decisions made in “good faith,” § 230(c)(2). The statute contains an explicit exception for federal criminal law, § 230(c)(1), but not for state criminal law. It also preempts state laws that are “inconsistent with” the statute, though does not define what that means. § 230(c)(3). In addition to the statutory protections offered by Section 230, social media companies have First Amendment rights.

124 It might be suggested that this logic is contradicted by the existence of a statute and the resulting very active ecosystem, employed to compel social media companies (and other entities that host online content) to take down content posted in alleged violation of copyright rights. See 17 U.S.C. § 512 (2020). However, online copyright enforcement is only partially effective, and it occurs at a national, not state, level.
of-state websites.\textsuperscript{125} Using the location-spoofing\textsuperscript{126} capabilities of a VPN, a person in an abortion-restrictive state would appear to a website as if they were in an abortion-permissive state, rendering ineffective any geoblocking performed by the site.\textsuperscript{127} Some users, aiming to reduce the likelihood of after-the-fact reconstruction of their website visit history that is possible when using a VPN, would instead turn to Tor.

However, not everyone seeking access to online information regarding out-of-state abortion services would use a VPN or Tor, or would even be aware that doing so is an option. In contrast with people in authoritarian countries, people in the United States are not generally accustomed to the need to circumvent government censors. Knowledge regarding censorship circumvention approaches is not widespread among U.S. internet users. A resident of an abortion-restrictive state seeking access to online out-of-state abortion services information may not be in a position to quickly learn about and install tools to allow them to access the internet while obfuscating their location and identity. In addition, people in abortion-restrictive states who are socio-economically disadvantaged would be less likely to receive information that would help enable them to securely access online abortion information provided by out-of-state websites. This inequity is yet another reason why state-level internet censorship would be so concerning.

In sum, state authorities misguided enough to attempt to implement an internet censorship regime would find themselves engaged in a game of whack-a-mole. The information they were seeking to block would be quickly replicated at far too many internet sites and social media sites for them to block. Many internet users would find ways to circumvent censorship measures. But while state censorship authorities would not win the whac-a-mole game, they would not completely lose. Their efforts, though ineffectual in many respects, would nonetheless have some effect on reducing access to online information about abortion services.

\section*{IV. CONCLUSION}

This Essay has explored the legal and technological landscape that would accompany state attempts to restrict access to online information about out-of-state abortion services. Supreme Court precedent, particularly

\textsuperscript{125} See, e.g., Max Eddy & Kim Key, \textit{The Best iPhone VPNs for 2022}, PC MAGAZINE, https://www.pcmag.com/picks/the-best-iphone-vpns [https://perma.cc/V4BU-WMYR].

\textsuperscript{126} In this context, location-spoofing refers to presenting an IP address that indicates a different location than where the user actually is. As a result, websites visited by the user do not know the user’s true location.

\textsuperscript{127} VPNs provide a significant improvement in privacy and in terms of masking an internet user’s location. However, because they are generally centralized, they do not provide anonymity. Internet users wanting more anonymity often use Tor instead of VPNs.
Bigelow, provides a strong basis to argue that such attempts would be unconstitutional. That said, Dobbs itself undid longstanding precedent. It would be naive to assume that the Supreme Court will necessarily hew to precedent in adjudicating future First Amendment disputes regarding the scope of state authority to regulate online access to abortion information.

Another important source of uncertainty is Giboney and the extent to which courts will be sympathetic to claims by abortion-restrictive states that the provision of online information about abortion is speech incident to criminal conduct. In addition, while this Essay has focused on actions by states, it is also possible that the federal government, either through legislation or through agency actions, could attempt to impede provision of or access to online information about abortion services. That would raise many of the same First Amendment concerns discussed herein.

Constitutional violations aside, from a technological standpoint state-level attempts to censor online information about out-of-state abortion services would largely but not completely unsuccessful. The information ecosystem in the United States is far too big, diverse, quickly evolving, and distributed for any state (or a group of states) to effectively construct what amounts to a digital wall around its residents. But even an ineffectively constructed digital wall would still provide some degree of impediment to the interstate flow of information about abortion services. The burden of that impediment, and the enforcement actions against people seeking to circumvent state-imposed internet censorship, would fall disproportionately on the socio-economically disadvantaged. State-level censorship aimed at preventing the interstate flow of online information about abortion services would be unconstitutional, undemocratic, inequitable, and mostly ineffective.