

Madison Cartwright\* 

# Historical institutionalism and technological change: the case of Uber

**Abstract:** In recent years, jurisdictions have struggled to address the emergence of “sharing” businesses, such as Uber. These businesses have used technology to avoid the regulations that usually apply to industries, such as taxis. By applying a historical institutionalist analysis, this article explains how authorities have responded to these companies. Through a detailed case study of Uber’s presence in Baltimore, Maryland, in the United States, the article makes an empirical contribution by illustrating how regulatory regimes have responded to “disruptive” technology. Furthermore, by applying an exogenously induced and endogenously mitigated model of change the article addresses the bifurcation in historical institutionalist literature between exogenous and endogenous accounts of change. This helps develop historical institutionalism theoretically, responds to criticisms of agent-based approaches and advances a model that can be applied to the study of technological change more generally.

**Keywords:** historical institutionalism, Uber, sharing economy, regulation, technological disruption

doi:10.1017/bap.2019.23

## Introduction

In recent years, jurisdictions around the world have struggled to address the emergence of “sharing” businesses. These businesses have used the internet and technology to avoid regulations. They have also offered challenges to incumbent businesses, which have long avoided competition. This article argues that historical institutionalism offers a useful approach for analyzing how regulatory regimes have adapted to the “sharing economy.” The innovations of sharing businesses primarily disrupt regulatory frameworks, which can be analyzed as formal and informal institutional rules. Applying a historical institutionalist analysis helps researchers understand how authorities have responded to these companies, and why the companies have been so successful. By doing so, this article not

---

\*Corresponding author: **Madison Cartwright**, postdoctoral fellow, Université Laval, and visiting fellow, The University of Sydney; Email: [madison-karl.cartwright.1@ulaval.ca](mailto:madison-karl.cartwright.1@ulaval.ca)

only explains the case of the sharing economy specifically, but advances an historical institutionalist approach to studying technological change more generally.

However, the study of change in historical institutionalist literature has “bifurcated” into two schools, which explain change in different ways.<sup>1</sup> First, there is the approach that emphasizes exogenous shocks (or “critical junctures”), which create crises in institutions, allowing political actors to radically change and/or undermine the status quo. Second, there is the approach that emphasizes endogenous and incremental change led by political actors within institutions over time. However, this is a false dichotomy, and exogenous and endogenous processes can be combined to account for institutional change.<sup>2</sup> Whilst it may be tempting to analyze sharing businesses as exogenously arising shocks to existing institutional orders that allow companies to carve out institutional concessions for themselves in the ensuing crisis, in reality, existing institutional arrangements are able to address the crisis through endogenous processes.

The historical institutionalist approach used in this article emphasizes the importance of existing institutional arrangements in responding to technological change. The sharing economy has created a crisis in that it is unclear how or if existing regulations apply to the new types of businesses that are emerging. This creates an exogenous shock to the institutional order. However, the regulators, bureaucrats, and courts, which enforce regulations, have been able to work within the institutions as they exist to adapt to the crisis “on the ground,” resulting in endogenously-created change in the short to medium term. This analysis draws on Mahoney and Thelen’s<sup>3</sup> agent-based approach to historical institutionalism and, by doing so, addresses criticisms of this approach from Van der Heijden and Kuhlmann.<sup>4</sup> Overall, the article seeks to analyze the role that institutions play during a critical juncture. This includes examining the role of institutional context—that is, the broader institutional environment actors operate in, beyond the specific rules and regulations affected by the crisis.

The article makes three main contributions. First, by applying an exogenously induced (through a crisis in the status quo) and endogenously mitigated (through existing institutions and their broader context) model of change, the article helps mend the bifurcation in historical institutionalist literature. In particular, it illustrates how change can be pursued endogenously during a critical juncture. Second, the article addresses criticisms that the application of different modes of change in a sequence suggests that agent-based accounts of change are not

---

1 Bell (2017); Cartwright (2018); Streek and Thelen (2005).

2 Bell (2011); Cartwright (2018); Stark (2018).

3 Mahoney and Thelen (2010).

4 Van der Heijden and Kuhlmann (2017).

analytically useful. Rather, the article stresses the importance of time and precedents, which explains why change can happen in a sequence. This is not a weakness of the approach, but a strength. Last, the article illustrates the utility of historical institutionalism in understanding how regulatory regimes respond to technological change, with implications for future research.

The article begins by examining historical institutionalist literature, and how it can be applied to the study of technological change. It also develops an exogenously induced and endogenously mitigated model of change, whilst addressing criticisms of agent-based historical institutionalist approaches. The article then applies the endogenously mitigated model of change to the case of Uber in state of Maryland in the United States. Uber has been chosen as it is one of the most iconic sharing businesses to emerge in recent years. The article looks specifically at Maryland, an early-mover in addressing Uber and ridesharing. The article ends with some concluding remarks of the implication of the research for historical institutionalism.

## Historical institutionalism: endogenous versus exogenous change

Institutions are rules, including both formal and informal rules, which shape the strategic behavior of political actors and their ability to participate in a given political process.<sup>5</sup> Formal institutional rules are defined as rules that are “obligatory and subject to third-party enforcement.”<sup>6</sup> Therefore, legislated regulations constitute formal institutions as they “embody legally enforceable rules, create new organisations with state-backed decision-making, or both.”<sup>7</sup> Reforms to existing rules, such as new legislation, therefore, constitutes formal institutional change. Informal rules are the impact institutions actually have “on the ground”—that is, at the point of enforcement and compliance. Informal institutional change thus occurs when policy enforcers, such as regulators, bureaucrats, and courts, interpret and apply formal rules in a new way.

However, historical institutionalist literature on change has suffered from a “bifurcation.”<sup>8</sup> On the one hand is a scholarship that has been accused of largely ignoring change. Instead, it researches how rules lock in power asymmetries between political actors, creating institutions that favor some over others.

---

<sup>5</sup> Steinmo (2008), 123–24.

<sup>6</sup> Hacker, Pierson, and Thelen (2015), 183.

<sup>7</sup> Ibid.

<sup>8</sup> Bell (2017).

Favored political actors are better able to defend institutional arrangements from rivals by creating institutional stasis, or “path dependency.”<sup>9</sup> Change under conditions of path dependency usually comes in the form of a critical juncture: an exogenous shock that creates a crisis in the current institutions. The crisis weakens the institutions, freeing actors to exert more agency and ultimately initiate radical formal institutional change.<sup>10</sup> On the other hand are so called agent-based approaches, focusing on endogenous processes of policy change and how policies evolve over time in incremental ways.<sup>11</sup> Agent-based approaches focus on smaller scale, usually informal change.

Agent-based accounts of change focus on two variables: veto possibilities and discretion. Veto possibilities are high when actor(s) are able to block changes to rules or the practical affects they can have. Discretion relates to how the rules of the institution are interpreted, enforced, and observed. There are four modes of institutional change Mahoney and Thelen build from these two variables<sup>12</sup>:

- Displacement—new formal rules replace existing formal rules. Displacement occurs when veto possibilities are low and discretion is low.
- Layering—new formal rules are created to coexist with or complement existing formal rules. Layering occurs when veto possibilities are high and discretion is low.
- Drift—new *informal* rules emerge as changes to external conditions impact how formal rules apply. Drift occurs when veto possibilities are high and discretion is high.
- Conversion—new *informal* rules emerge as formal rules are reinterpreted. Conversion occurs when veto possibilities are low and discretion is high.

Both drift and conversion are similar in that they describe situations where formal institutional rules remain the same but their consequences change. Given the similarities between the two modes of change, they are often conflated, and therefore it is important to distinguish between them in more detail. According to Hacker, Pierson, and Thelen,<sup>13</sup> drift has four core elements. Drift begins, first, with a change in the circumstances around institutions in a way that also changes the actual real-world impact policies have “on the ground.” Second, this change must be acknowledged by policy makers. Third, there must be options for preventing this *de facto* policy change from happening. However, fourth, these options are either not

<sup>9</sup> Pierson (2015), 130.

<sup>10</sup> Capoccia and Kelemen (2007), 352; Bell (2011), 885; Capoccia (2015), 165–66.

<sup>11</sup> Steinmo and Thelen (1992); Peters, Pierre, and King (2005); Mahoney and Thelen (2010).

<sup>12</sup> Mahoney and Thelen (2010), 15–18.

<sup>13</sup> Hacker, Pierson, and Thelen 2015, 184.

pursued or are blocked by other political actors. Conversion is similar in that policies remain formally the same whilst having their informal impact on the ground change. However, conversion differs from drift primarily in that this change is due to active reinterpretation of the rules, not simply inaction. Conversion takes place when, first, institutions and rules are flexible enough to be open to interpretation. Second, reinterpreting the rules allows them to be used towards multiple, politically contested ends. Third, political actors are actually able to direct the interpretation of rules in their favor, whilst, fourth, leaving the formal institutions intact.<sup>14</sup>

Therefore, “[t]he two ‘bifurcated’ historical institutionalist schools ... rely on two different mechanisms of change, one exogenous (critical junctures) and one endogenous (agent-based change).”<sup>15</sup> This weakens historical institutionalism, as it means the literature lacks a coherent understanding of the role of agency *within* institutional contexts, and how this relates to accounts of institutional stability and change. Whilst path dependency marginalizes agency—stressing the continuity of institutions—change through exogenous critical junctures marginalizes institutions in favor of agency. That is, the reliance of critical junctures to account for change means that “institutions explain everything until they explain nothing.”<sup>16</sup> Agent-based approaches, meanwhile, stress the role of agency in creating change, however, neglect the role of institutions in creating stability.<sup>17</sup>

But this dichotomy is by no means necessary. Historical institutionalist analysis is capable in incorporating both endogenous and exogenous modes of change into research.<sup>18</sup> For example, Cartwright<sup>19</sup> has recently applied such an historical institutionalist analysis to copyright reform in the United States. His analysis has three key elements. First, new technologies trigger a critical juncture as it is unclear how existing institutional rules apply to the technology’s use. Second, there is a legal response whereby authorities responsible for administering and enforcing the institutional rules “on the ground” attempt to apply existing rules to regulate the use of the new technology. This creates informal institutional change in the short to medium term. Third, there is a political response whereby new formal institutional changes are implemented via new legislation. However new formal institutional rules generally take a long time to emerge (if at all), as legislative processes involve high veto possibilities. This creates an exogenously induced and endogenously mitigated process of change, as shown in figure one.

---

<sup>14</sup> Ibid, 185.

<sup>15</sup> Cartwright (2018), 388.

<sup>16</sup> Thelen and Steinmo (1992), 15.

<sup>17</sup> Bell (2017).

<sup>18</sup> Ibid. (2011); Stark (2018).

<sup>19</sup> Cartwright (2018).

Institutional status quo → Critical juncture → Informal institutional change through enforcement (drift and/or conversion) → Formal institutional change through legislative reform (usually in the form of layering).

**Figure 1:** Exogenously induced and endogenously mitigated model of change

However, what role can institutions actually play during a critical juncture? After all, a critical juncture is generally defined as a period of time during which the ability of institutions to effect outcomes is severely weakened.<sup>20</sup> However, whilst a critical juncture triggers a crisis in existing institutions, this does not mean these institutions are rendered irrelevant. The trajectory of institutional change will nevertheless depend on the existing institutions and how they are interpreted. This is because those who must respond to a crisis in the short to medium term operate in an institutional context, which helps determine their objectives and preferences.<sup>21</sup> Whilst regulators, bureaucrats, and courts will have specific formal institutional rules that they must work within, they will be also applying and interpreting these within a broader institutional context, which extends beyond the specific institutions affected by the critical juncture. That is, policy makers and policy enforcers are institutionally situated, interpretive actors that will seek to respond to an exogenous shock in a way that is consistent with their conception of their institutional and political environments.<sup>22</sup>

Therefore, following an exogenous shock, the actors responsible for enforcing rules will work within existing institutions as best they can and attempt to adapt them where possible—creating change along the way. Informal change can follow a critical juncture until more formal change is implemented. This informal change is important, because how existing laws are actually applied to address the crisis will inform how policy makers approach reforming the institutions at a later date. Actors need to adapt to informal change as it occurs. This impacts their preferences and behavior. The makeup of existing institutions is once again important in this process, even during a critical juncture. For example, if existing rules are flexible, they are better able to be reinterpreted by actors. This means that regulators, bureaucrats, and courts can pursue institutional conversion; reinterpreting them in a way that can address an unfolding crisis. Hacker, Pierson, and Thelen refer to this variable as “precision” (2015, 189). However, even flexible rules will

<sup>20</sup> Capoccia and Kelemen (2007); Capoccia (2015).

<sup>21</sup> Bell and Feng (2013).

<sup>22</sup> Bell (2005); Bell and Feng (2013; 2014); Thurbon (2016).

become less flexible (or more “precise”) over time as they are applied and interpreted.

The exogenously induced and endogenously mitigated approach to analyzing change thus applies endogenous modes of change in a sequence (moving from drift/conversion to layering). Such an approach has been criticized by Van der Heijden and Kuhlmann,<sup>23</sup> who have argued that “transitioning or sequencing of modes makes it difficult for scholars to capture a concrete case of incremental change in the confined modes provided by Thelen and her collaborators.” They also criticize the argument that the modes should be understood as “a transitional stage of institutional development, not a final result.”<sup>24</sup> However, the error made by Van der Heijden and Kuhlmann is that they seemingly assume that the modes of change are to be applied statically. But historical institutionalist research explains change *over time*. As modes of change are applied, institutions change. This has an impact on veto possibilities and discretion—the two causal variables in the model.

For example, a court making a ruling will interpret formal institutional rules, creating informal institutional change. However, this creates precedents that must be respected by other courts—meaning that their discretion over how to interpret the formal institutional rules is diminished. As the courts make more rulings, discretion will continue to decrease, leading to a different mode of change. Whilst Van der Heijden and Kuhlmann<sup>25</sup> may argue that a move from drift to conversion to layering illustrates that these modes of change are ill-defined, this is only the case if these are analyzed as static, independent events. Mahoney and Thelen<sup>26</sup> have contributed to this misconception themselves through their inclusion of a static typology of change-agents in their analysis. The static nature of their change-agent typology is one of the reasons why it has not been utilized by scholars as much as their mode of change.<sup>27</sup> However, time, of course, remains central to historical institutionalist analysis.

This article develops the exogenously induced and endogenously mitigated model of change by using it to analyze the regulatory responses to technological change. It argues that endogenous change following a critical juncture occurs as institutionally-situated actors seek to enforce existing formal institutional rules to a new and disruptive technology. How and why this occurs is informed by A) how well existing rules are able to be adapted and reinterpreted (i.e., their level

---

<sup>23</sup> Van der Heijden and Kuhlmann (2017), 544.

<sup>24</sup> Barnes in *ibid*.

<sup>25</sup> Van der Heijden and Kuhlmann (2017).

<sup>26</sup> Mahoney and Thelen (2010).

<sup>27</sup> Van der Heijden and Kuhlmann (2017).

of flexibility or “precision”), and B) the institutional context the actors operate in. Furthermore, the article illustrates the importance of the *precedents* set as rules are interpreted and applied. The way that rules are interpreted in the short to medium term alters the actions of political actors, which helps determine the trajectory of future reform. This addresses the criticism of Van der Heijden and Kuhlmann by explaining why modes of change often occur in a sequence. Precedents are not an addition of a new variable to patch up deficiencies in Mahoney and Thelen’s analysis. Rather, it arises as a consequence of the fact that historical institutionalism analyses events over time.

The article will now examine the case of Uber. Uber is a so-called “ridesharing service,” which connects paying passengers with drivers. Using a mobile application (“app”), passengers can “hail” a nearby driver, who will be using their own personal car. Payments are also handled directly through the app. Uber has applied new technology in a way that undermines the regulations and laws that governed its markets. In fact, the main innovation of Uber and similar companies is how they apply technology to avoid regulations.<sup>28</sup> As Cortez<sup>29</sup> has argued, companies like Uber are “regulatory disrupters,” as their “innovation ‘disrupts’ the regulatory framework, not necessarily industry incumbents ... ‘Regulatory disruption’ occurs, then, when the ‘disruptee’ is the regulatory framework itself”—i.e., they initiate a critical juncture. Therefore, Uber is an ideal case for applying the exogenously induced and endogenously mitigated model of change.

Through this study, the article illustrates how a unified approach to historical institutionalism can be applied to research, proposing a pathway to overcome its current bifurcation. It also addresses the criticisms of agent-based approaches from Van der Heijden and Kuhlmann by stressing the role of time and precedents in explaining change. Specifically, it argues that it is correct to say that modes of change under Mahoney and Thelen’s model are transitional and not a final result, however this is a strength of the approach not a weakness. Because the agent-centered approach of Mahoney and Thelen explains change as occurring endogenously, it can be used to illustrate how institutional change is an ongoing process. Last, the article illustrates the utility of historical institutionalism in accounting for regulatory responses to technological change at a time when a number of emerging technologies, such as automation, artificial intelligence, and robotics promise to disrupt existing regulatory regimes.

---

<sup>28</sup> Miller (2016), 153.

<sup>29</sup> Cortez (2014), 183.



## Case study: Uber

In the United States, the taxi industry is governed by the medallion system. Medallions are regulated and issued by local authorities, with most jurisdictions capping the amount available and applying conditions on medallion holders. Thus, regulatory responses to Uber have differed between state and even local jurisdictions in the United States. The following case study examines the response of the state of Maryland. Maryland has been chosen because it was an early-mover in addressing Uber and ride sharing, not only through its bureaucracy, but also through passing new legislation. By examining the response to Uber in Maryland, the article argues that it is a regulatory disruptor. Uber initiated institutional change, through a critical juncture, to accommodate its presence in the market. As regulators responded in the short to medium term, they initiated informal institutional change. This was informed by their institutional context and ability to reinterpret and adapt existing institutional rules.

### Institutional context

Uber is part of the broader “sharing economy.” Katz<sup>30</sup> defines a business in the “sharing economy” as “(A) an online intermediary that (B) acts as a market for P2P [peer-to-peer] services and (C) facilitates exchanges by lowering transaction costs.” That is, sharing businesses connect consumers with individual service providers. They run peer-to-peer (P2P) services whereby someone can “share” their car or home, et cetera, at a cost with someone who demands that service. The sharing businesses themselves do not own the assets, such as the car or property, but merely connect the two parties.

Sharing businesses like Uber have targeted industries that have a “common law special relationship” with their customers, such as landlords and tenants; common carriers (i.e., taxis, chauffeured cars, et cetera) and passengers; hotels and guests; and lessors and lessees. Because of their special relationship, landlords, taxis, and hotels have been targeted with “various common law doctrines [which] establish heightened duties.”<sup>31</sup> For example, as discussed above, drivers need a medallion to legally operate a taxi. However, taxi medallions are not property, they are government-granted privileges to provide services others are legally excluded from providing.<sup>32</sup> This privilege comes with numerous obligations and

---

<sup>30</sup> Katz (2015), 1070.

<sup>31</sup> *Ibid.*, 1077.

<sup>32</sup> Bell (2014), 803–09.

regulatory requirements, including background and language checks for drivers and regular safety assessments of vehicles. Authorities will also regulate fares, with many jurisdictions requiring standard rates and clearly displayed meters. Drivers are also required to not discriminate when picking up passengers.<sup>33</sup> As a result, taxi fleets will often have to include vehicles accessible to those with disabilities, including passengers using wheelchairs. The additional costs borne by these vehicles are generally shared across the whole fleet.<sup>34</sup>

In addressing the special relationship in industries like taxis, regulators have to balance freedom of contract with the public interest.<sup>35</sup> The special relationship and the tension between private contract and public good constitutes the institutional context that taxi regulators operate in. There are three assumptions that inform the institutional context of these industries<sup>36</sup>:

1. That their services pose unique health, safety, and financial concerns for consumers.
2. That the service provider has a comparatively strong bargaining position vis-à-vis consumers.
3. That the service provider is the “least-cost avoider,” i.e., it is able to push risk onto the consumer, at little cost (for example, a hotel knows more about the safety conditions of its rooms than its guests do).

Whilst the regulatory regimes in special relationship industries exist to protect the public whilst assigning service providers with heightened duties, these regulations have also harmed the public interest by protecting incumbent market actors from competition.<sup>37</sup> Advocates of the sharing economy have argued that “[o]ne goal of regulation isn’t to protect consumers. It is to entrench current providers.”<sup>38</sup> As such, these advocates view certain efforts to capture sharing services under existing regulations merely as attempts to protect incumbent businesses, not necessarily to protect the public interest.<sup>39</sup> However, on the other hand, sharing businesses often provide services that would be illegal if it were provided by existing market actors. Incumbent firms are “just as interested in participating in the ‘sharing economy’ as the ‘sharing economy’ is in taking away market share from ... incumbent[s].”<sup>40</sup> However, the illegality of the services sharing platforms

---

<sup>33</sup> Elliott (2015), 731–32.

<sup>34</sup> Edelman and Geradin (2015), 320.

<sup>35</sup> Katz (2015), 1077.

<sup>36</sup> Ibid, 1077–79.

<sup>37</sup> Edelman and Geradin (2015), 306–09.

<sup>38</sup> Mastracci (2015), 191.

<sup>39</sup> Mastracci (2015); Posen (2015).

<sup>40</sup> Miller (2016), 176.

enable prevents incumbent firms from competing directly with them.<sup>41</sup> Thus, in addressing sharing businesses, such as Uber, regulators must also contend with the tension between freedom of contract and the public interest, as well as ensuring that regulations do not unduly protect incumbents or unduly benefit challengers.

## Uber as a critical juncture

Uber drivers rarely have taxi medallions. Uber has argued that its drivers do not need medallions, as the service they provide is no different than a friend giving another a lift.<sup>42</sup> However, even if regulators were to determine that individual Uber drivers are in violation of the law by operating without a medallion, Uber also asserts that it cannot be held responsible for this. This is because whilst Uber facilitates a similar service to a taxi, it does not actually deliver this service itself. Instead, Uber argues that it is only an intermediary that connects drivers (which it claims are independent contractors, not employees) with passengers.<sup>43</sup> Targeting individual drivers is an inefficient means of enforcing taxi regulations. Authorities would prefer to target Uber itself, if they can find the means to do so.<sup>44</sup> However, by acting as an intermediary it has not always been clear how this can be achieved. As such, Uber and ridesharing have triggered a critical juncture in the institutions that regulate taxis.

Whilst Uber has been popular with the public, regulators have had a number of issues with the company. First, by avoiding taxi regulations, Uber has an unfair competitive advantage over taxis. From the consumer's perspective, much of the appeal of Uber, in terms of accessibility and convenience, can be and, indeed, has been replicated by mobile applications from traditional taxi services.<sup>45</sup> Where taxi services have consistently been unable to compete with services like Uber is on price. This is in part due to Uber and other ridesharing apps' ability to shirk regulations, which drive up costs. The cost of complying with regulations can compromise up to 40 percent of a taxi company's operational costs.<sup>46</sup>

Second, there are numerous consumer protection and public interest issues that Uber's non-compliance raises. For example, whilst Uber voluntarily offers insurance for its drivers, this only covers them for when they are actually

---

<sup>41</sup> Ibid, 180–81.

<sup>42</sup> Elliott (2015), 739.

<sup>43</sup> Rassman (2014), 83–84; Edelman and Geradin (2015), 325; Elliott (2015), 739.

<sup>44</sup> Edelman and Geradin (2015), 324–25; Elliott (2015), 739.

<sup>45</sup> Christensen, Raynor, and McDonald (2015); Edelman and Geradin (2015); Miller (2016).

<sup>46</sup> Elliott (2015), 735.

transporting a passenger. Uber has encouraged drivers to claim on their personal insurance for accidents that take place when they are either logged onto the app and waiting for a fare, or when they are on their way to pick a passenger up. However, insurance companies have refused to cover these periods, arguing that the car was being used for commercial purpose during this time. This creates an “insurance gap”: a period when drivers are not covered by any insurance, including for public liability.<sup>47</sup> Uber’s use of “surge pricing” has also been controversial. This entails Uber drastically increasing its fares to encourage more drivers to work during odd hours, holidays, crises, et cetera. Taxis, meanwhile, are not allowed to increase their fares in this way and will often have their fares set or pre-approved by regulators.<sup>48</sup> Finally, Uber and other ridesharing companies generally do not preform background checks on their drivers or safety checks on their driver’s vehicles.<sup>49</sup> The following examines how the state of Maryland addressed these issues.

## Regulatory response to Uber in Maryland

Uber launched in Baltimore, Maryland’s largest city, on 1 February 2013. At this time, Uber offered two premium services, UberBLACK and UberSUV, which used luxury cars. These competed not with taxis as much as passenger-for-hire companies: non-taxi transportation services that are not allowed under the regulations to pick up street hails, but offer pre-booked services instead. Whilst drivers for UberBLACK and UberSUV already had passenger-for-hire licenses, Uber itself did not have a motor carrier permit, which is required for passenger-for-hire companies. Uber’s entrance into the market was challenged immediately by Maryland’s major taxi company, Yellow Transportation (“Yellow”). It requested that the Maryland Public Service Commission (“the Commission”) intervene and prevent Uber from operating in Baltimore until it could determine the legality of ridesharing under current regulations. The Commission denied this request, however did direct its staff to conduct an investigation of Uber to determine if the company fell under the Commission’s regulatory jurisdiction.<sup>50</sup> Three months later, the Commission’s staff concluded their inquiry, finding that Uber was a “common carrier” according to the law and thus was subject to the Commission’s regulatory powers. They argued that Uber needed to apply for

<sup>47</sup> Rassman (2014), 88–91; Edelman and Geradin (2015), 311–13; Mitchell (2015), 79–80.

<sup>48</sup> Mitchell (2015), 80–82.

<sup>49</sup> Edelman and Geradin (2015), 310–11.

<sup>50</sup> Public Service Commission of the State of Maryland (2013e), 1–2.

authorization from the Commission in order to operate as a passenger-for-hire company in the state.<sup>51</sup>

Uber objected to the staff's report, arguing that it "would harm the public interest by increasing consumers' transportation costs, eliminating competitive choice, and generally making transportation service in Maryland less convenient and below the standard available in other major U.S. cities and in cities around the world."<sup>52</sup> More substantively, it argued that the Commission's findings had no grounding in law or fact. Objecting to the finding that it was a "common carrier," Uber instead described itself as a software technology company, which "does not own, lease or charter vehicles or employ drivers."<sup>53</sup> Uber also asserted that the recommendations would protect the taxi industry from competition at the expense of the public interest. It criticized the Commission's report for failing to provide any consumer protection grounds for its findings.<sup>54</sup>

To support their objection, Uber cited the Federal Trade Commission (FTC), which had intervened in a similar decision by the Colorado Public Utilities Commission to classify ridesharing companies as motor carriers and impose regulations on them. In this case, the FTC had urged the Colorado officials to reconsider, arguing that its proposed regulations were too restrictive and would harm consumers. Instead, they called on the regulators to find alternatives that could "allow for flexibility and adaptation in response to new and innovative methods of competition."<sup>55</sup> However, the FTC had no authority over the Colorado Public Utilities Commission, it merely provided feedback. Nevertheless, Uber sought to use the FTC's recommendations to discourage the Commission from applying regulations.

The Commission met on 16 May 2013 to consider both the report and Uber's objections. It set a hearing for the matter before Public Utility Law Judge Division.<sup>56</sup> The Commission's staff began seeking information from Uber about its operations, including how it verifies that Uber drivers are properly licensed, insurance of Uber drivers' vehicles, and how Uber determines its rates. The staff of the Commission also sought a complete list of Uber drivers in Maryland. Uber stonewalled these efforts, insisting that it was not a common carrier and had no drivers and did not charge rates for transportation services, but rather only operated a software service.<sup>57</sup> Efforts by the staff to compel and subpoena information from Uber

---

<sup>51</sup> *Ibid*; 6.

<sup>52</sup> Uber Technologies (2013), 2.

<sup>53</sup> *Ibid*, 4.

<sup>54</sup> *Ibid*, 11–12.

<sup>55</sup> Federal Trade Commission in *Ibid*, Exhibit B 1.

<sup>56</sup> Public Service Commission of the State of Maryland (2013a).

<sup>57</sup> *Ibid*. (2013b).

were likewise resisted and appealed repeatedly.<sup>58</sup> Meanwhile, Uber continued its expansion in the state, launching its UberX service in October 2013. UberX targeted the lower end of the market, competing directly with taxis. UberX drivers, unlike UberBLACK and UberSUV drivers, did not have the required passenger-for-hire licenses. Another ridesharing company, Lyft, also launched in October 2013.

On 11 December 2013, the staff of the Commission released a public brief on Uber, once again arguing that Uber was a common carrier, which met the statutory definition of “owning” the vehicles provided by its service.<sup>59</sup> The definition of “own” under Maryland law included “control” and “manage” as well. This was the case for Uber, which determined fares, dispatched drivers by matching them with customers, ran a star rating system for drivers, collected fares and distributed payment to drivers, and enforced some requirements on drivers, such as what make of car they could use. This was reinforced by Uber’s marketing and branding, which clearly communicated to consumers that they received a service from Uber rather than an individual driver. However, the brief went further than the staff’s initial recommendations, arguing that the Uber app “blurs the distinction between prearranging transportation and hailing a taxicab.”<sup>60</sup> As such, the staff argued that Uber constituted a taxi service, that the Uber app for drivers constituted a taxi meter, and that the Uber app for consumers constituted a “hail.” Whilst initially arguing that Uber was a passenger-for-hire company, the staff of the Commission now maintained that:

The smartphone enabled service provided through the use of Uber App is a taxicab service under the statutory definition and the carriers providing service through the App should be required to comply with the statutory and regulatory provisions applicable to taxis, including holding taxicab permit and charging only authorized taxi rates.<sup>61</sup>

The position of the Commission’s staff was, essentially, that Uber and similar services were no different than traditional taxis under the law, and needed to comply with the same regulations. In response, both Uber and Lyft began an aggressive political campaign to pursue legislation that would pre-empt the work of the Commission. Having initiated a critical juncture, the ridesharing companies were attempting write their own regulations in the crisis that followed. The two rivals joined their lobbying efforts in support of legislation introduced in March 2014.<sup>62</sup> The reforms would create a new category of common carriers, called a Transportation Network Company (TNC), to be regulated separately to

<sup>58</sup> Ibid. (2013c), 1–4.

<sup>59</sup> Ibid. (2013d).

<sup>60</sup> Ibid, 14.

<sup>61</sup> Ibid, 28.

<sup>62</sup> Zaleski (2014).

existing taxi services.<sup>63</sup> Uber ran an online petition in support of the bills. Despite this, they failed to pass Maryland's General Assembly.

The Public Utility Law Judge finally made a ruling on 24 April 2014, agreeing that Uber was a common carrier. Despite the fact that Uber did not operate a fleet of cars at all, nor did it employ any drivers, the judge agreed with the Commission's staff that Uber "exerts significant influence over the management and policies of its partner carriers and drivers ... to be deemed to 'own' the vehicles" as defined under Maryland law.<sup>64</sup> Whilst acknowledging that Uber's use of technology presented "certain unique facts that may not have been considered previously,"<sup>65</sup> the judge argued that courts and regulators had previously had to rule on whether new businesses practices constituted common carriers. For example, the ruling cited the decision of a Maryland Court in *Restivo v. Public Service Commission* from 1925 which noted that:

courts have not been inclined to excuse the increased numbers of those who earn their livelihood by transporting persons or goods for hire in motor vehicles, from the responsibility of common carriers simply on technical grounds, and they have been particularly slow to excuse them when their plan of operation bore evidence of being a studied attempt to reap the rewards of common carriers without incurring the corresponding liabilities.<sup>66</sup>

That is, the judge rejected that Uber was merely a software company, and saw its business model as a means of acting as a common carrier, whilst trying to avoid regulation. Pervious courts had been able to use existing law to address similar businesses in the past. As such, the judge ruled that Uber *was* a common carrier subject to regulations. Consequently, the judge ordered Uber to apply for a motor carrier permit within sixty days or cease its operations in Maryland. However, this order only affected UberBLACK and UberSUV. UberX, which was launched after the case was referred to the Public Utility Law Judge Division, was not covered by the order. The judge did not rule on whether Uber also constituted a taxi, as the staff of the Commission had argued in its public brief. Nevertheless, Maryland was one of the first jurisdiction in the United States to define Uber as a common carrier. The decision resulted in institutional drift as existing institutional rules were stretched to meet a shifting environment brought about by new technology, in the absence of legislative reform.

Uber lodged its intention to appeal the decision three days later. It continued to insist that it was not a common carrier and that the Public Utility Law Judge, like

---

**63** Many other jurisdictions in the United States have taken this approach of regulating ridesharing companies as TNCs, separate to taxis.

**64** Public Utility Law Judge Division (2014), 2.

**65** *Ibid*, 17.

**66** In *Ibid*, 18.

the staff of the Commission previously, had erroneously concluded that Uber “owns” the vehicles providing the service. It also maintained that regulating Uber was “contrary to the public interest.”<sup>67</sup> However, on 6 August 2014, the Commission rejected the appeal and affirmed the ruling, ordering Uber to apply for a motor carrier permit within sixty days for its UberBLACK and UberSUV services. Once again, the Commission argued that its decision was supported by case law, citing two cases from the 1920s, which addressed companies that used contracts with third parties to shirk regulatory oversight.

First, it cited *Goldsworthy v. Public Service Commission* from 1922, which held that “owners should not too readily be permitted to enter into contracts, or adopt measures, which will enable them to readily evade the letter and spirit of the statutes intended to govern them.”<sup>68</sup> Or, as the Commission summarized, “parties cannot by contract alter what is evident from their actual operations.”<sup>69</sup> Second, it also cited *Restivo*, as the Public Utility Law Judge had. This affirmed the ruling of the judge, who dismissed Uber’s argument that it was merely a software company acting as an intermediary as a ploy to avoid regulation. The Commission argued that *Restivo* set a clear precedent that “entities earning money through the provision of transportation services should not be allowed to skirt the responsibilities otherwise imposed on common carriers.”<sup>70</sup>

The appeal to the precedent set by these two much older cases illustrates that whilst Uber utilizes new mobile and digital technology, the challenge it poses to regulators is not new. Uber’s main innovation was how it uses technology to circumvent regulations that cover taxis while providing a service that is in essence the same. The means it has used to achieve this may be cutting-edge, but the tactic is similar to what other businesses have used in the past. What Uber and these other companies have in common is that they disrupted the regulations that governed their industries, not necessarily the business practices of their incumbent competitors.

By affirming the ruling of the Public Utility Law Judge, the Commission also affirmed the institutional drift initiated by their ruling: laws regulating common carriers applied to Uber and similar services, despite the fact that they do not own and operate their own fleet of vehicles. That is, formal institutional rules were applied to new technology “on the ground,” creating informal institutional change. Uber was now operating in a different institutional environment in Maryland than it had been when it launched in February 2013. Through

---

<sup>67</sup> Public Service Commission of the State of Maryland (2013c), 5.

<sup>68</sup> In *Ibid*, 18.

<sup>69</sup> *Ibid*.

<sup>70</sup> *Ibid*, 19.



institutional drift, the Commission was firm in its view that Uber was a common carrier liable for some regulatory oversight. Whilst Uber once again appealed the Commission's order for UberBLACK and UberSUV to apply for motor carrier licenses, the company was running out of avenues to continue litigation. Uber conceded that it was unlikely to reverse the finding that it was a common carrier through the legal process. Given this informal institutional change, the question then became *how* UberBLACK and UberSUV would be regulated.

That is, Uber was not in a position to veto regulations making veto possibilities low. Yet in determining that it did have the authority to regulate Uber, it was up to the Commission to determine how, making discretion high. To finalize the regulation of UberBLACK and UberSUV, Uber and the Commission negotiated a settlement, which was announced on 26 February 2015. Under the settlement, new regulations would be created allowing UberBLACK and UberSUV to be classified as “brokers” and allowing them to use surge pricing. However, drivers were still required to have a passenger-for-hire license and operating permits for their vehicles. Yellow opposed the settlement, believing that Uber was likely to lose the litigation, and thus the Commission had no reason to concede anything. However, the Commission was eager to end the litigation with Uber.<sup>71</sup> The settlement did not change formal institutional rules as legislation remained the same. However, it did A) determine that Uber was liable for regulation under formal institutional rules as they existed, and B) create informal institutional change by interpreting how the formal institutional rules should apply. The settlement, as an active interpretation of the rules to create informal institutional change, is thus an example of conversion.

However, having established that Uber was a common carrier, the Commission also went further than the Public Utility Law Judge. The August 2014 decision by Commission also ordered the Commission's staff to develop and propose draft regulations for ridesharing services within ninety days. These regulations were to address insurance, vehicle safety, driver qualifications, and surge pricing, among other issues. Whilst the affirmed Public Utility Law Judge ruling, and later the settlement, only affected UberBLACK and UberSUV, the new regulations would address all ridesharing services, including UberX, as well as Uber's competitors, such as Lyft.

The creation of new regulations was an opportunity for Uber and other ridesharing companies. Whilst the Commission was clearly not willing to allow Uber to circumvent regulatory oversight entirely, it nevertheless did not what to quash ridesharing in the state or regulate companies like as Uber and Lyft as taxis. The new regulations were to strike a balance and “reflect the evolving nature of these

---

71 Public Service Commission of the State of Maryland (2015a), 4–7.

services while continuing to protect the public interest.”<sup>72</sup> This point was reiterated by Commissioner Anne Hoskins in her concurring statement, which cited the FTC’s recommendation to the Colorado Public Utilities Commission stressing the need for flexibility in new rules to allow for more innovation and competition.<sup>73</sup> The concurring statement also stressed the need for meaningful public engagement in the drafting of new regulations, noting that Uber was “very, very popular in Baltimore.”<sup>74</sup> Whilst the Commission was adamant that regulating Uber as a common carrier was in the public interest,<sup>75</sup> it was also eager to accommodate the presence of Uber and ridesharing.

On 12 February 2015, the staff of the Commission released their draft regulations. The regulations established TNCs as a category to be regulated separately to taxis. The proposed regulations would require TNC drivers to acquire a passenger-for-hire license from the Commission. This would involve a rigorous background check similar to what taxi drivers must undergo, which includes submitting fingerprint to the FBI for a national criminal background check. Driver’s vehicles, meanwhile, would need to be inspected for safety annually, and would need to be fully insured while being used for transport services (closing the insurance gap). Surge pricing was also targeted, with the regulations requiring TNCs to submit a range of fares that it would charge consumers for the Commission’s approval.<sup>76</sup> Whilst the regulations created TNCs as a new category, the standard of regulatory requirements were similar to taxis. Soon after the draft regulations were released, the Commission scheduled a rule-making session to consider how to proceed with enacting them. As the draft regulations interpreted how formal institutional rules applied to ridesharing, they, too, constituted an attempt at conversion.

However, the draft regulations were never accepted by the Commission. It is highly possible that the regulations proposed by the staff would have been amended by the Commission before being accepted. Defining Uber as a common carrier was a priority for the Commission because only by doing so could it regulate Uber at all. However, as discussed above, the Commission was aware of the benefits Uber brought to the market and consumers, and did want to accommodate its presence in the state. It also showed a willingness to compromise on the obligations that Uber had to comply with, illustrated by the settlement on UberBLACK and UberSUV. That is, the Commission was seeking a solution that

---

<sup>72</sup> Public Service Commission of the State of Maryland (2013c), 30.

<sup>73</sup> *Ibid.*, C-1.

<sup>74</sup> *Ibid.*, C-2.

<sup>75</sup> *Ibid.*, 28.

<sup>76</sup> Public Service Commission of the State of Maryland (2015b).

would not afford Uber an unfair advantage vis-à-vis traditional taxis and could protect the public interest whilst still encouraging the innovations that ridesharing brought to the market.

Despite the settlement on UberBLACK and UberSUV, Uber still opposed the draft regulations of ridesharing more broadly and was once again looking towards a legislative solution.<sup>77</sup> It was also becoming clear to lawmakers in the state that they would need to intervene to clarify the issue. Unlike passenger-for-hire services that had common regulations across the state, taxi regulations varied between local jurisdictions. Whilst Uber services in Baltimore were operating largely uninhibited despite their apparent illegality, other cities in Maryland were not as accommodating. In January 2015 authorities in Annapolis, Maryland's capital, announced that they would be targeting Uber drivers operating without appropriate licenses—which included almost all UberX drivers.<sup>78</sup> As formal institutional rules were interpreted and applied, the discretion to interpret and apply them in different ways decreased. A regulatory regime was solidifying in the state, one that was opposed by the ridesharing companies (now firmly established and politically influential) and inconsistently applied. This created the need for a legislative solution.

On 14 April 2015 both houses of the Maryland General Assembly had passed a new bill regulating ridesharing companies as TNCs.<sup>79</sup> The bill was signed into law by Maryland governor Larry Hogan a month later, making both the draft regulations and the settlement on UberBLACK and UberSUV moot. The regulations on TNCs under the new law were much less burdensome than what had been proposed by the staff of the Commission, and were thus welcomed by Uber and Lyft: vehicles would only need to be inspected for safety once, not annually; background checks for drivers would not require FBI checks; and surge pricing was allowed, with no need to get approval from the Commission. The legislation also specifically excluded TNCs from being defined as “common carriers.” The regulation of ridesharing in the state of Maryland had been resolved through the creation of new formal institutional rule via legislative reform. These new rules complemented and added to existing formal institutional rules governing transportation, and are thus an example of institutional layering.<sup>80</sup>

---

<sup>77</sup> Babcock (2015b)

<sup>78</sup> Ibid. (2015a).

<sup>79</sup> Maryland (2015).

<sup>80</sup> The regulatory burden on taxis was modified slightly, displacing some institutional rules, however these were minor. The regulatory framework for taxis remains mostly intact.

## Discussion

The formal response through new legislations thus, in contrast with the theoretical discussion above, largely negated rather than built upon the informal response by regulators. One possible reason for this is that the informal change did not have time to reap institutional benefits for the “winners” in the taxi industry. The legislative reforms cleared the Maryland General Assembly less than two months after the Commission announced its settlement on UberBlack and UberSUV and before the Commission was able to finalize new regulations for ridesharing. By contrast, a similar analysis of technological disruption in the copyright industries illustrates informal change being incorporated into formal legislative reform. However, this is because these informal changes had time to become embedded in the practices of actors in the market and thus became more difficult to displace at a later date.<sup>81</sup>

However, whilst in this case informal changes were not incorporated into the formal legislative response, the case is nevertheless consistent with the model shown in figure one. First, informal change developed a regulatory regime for ride-sharing, which was inconsistent state-wide and opposed vehemently by the industry and consumers, helping spur law makers into action. That is, as rules were interpreted, they created precedents, which gradually reduced discretion, resulting in new modes of change. Second, earlier informal change by the Commission shaped informal change made later. It first established, through institutional drift, that regulations, as they existed, did not need to change to cover ridesharing. Then, having established that, the Commission was able to pursue more radical change through reinterpreting the rules to try and establish a new regulatory regime for ridesharing.

Overall, this case study shows that Uber’s response in Maryland was consistent with its approach in the United States, more generally. As Thelen<sup>82</sup> has illustrated in her comparative study of the regulatory responses to Uber:

In the fragmented and politicized U.S. context, Uber was able to hold regulators at bay while it cultivated an alliance with consumers. Positioning itself as a champion of free markets and consumer choice, the company rallied its users against unpopular taxi lobbies in one jurisdiction after another, pressuring politicians while tying up labor advocates in protracted court battles.

These same tactics were used in Maryland. Uber would frequently stonewall the Commission’s efforts to get more information on Uber’s operations and engage in lengthy litigation and appeals as it built up its presence in the state. This gave it

---

<sup>81</sup> Cartwright (2018).

<sup>82</sup> Thelen (2018), 949.

time to ingratiate itself with consumers and voters, which it later attempted to use to pressure policy makers, including through online petitions.

## Conclusion

The case of Uber illustrates how institutions continue to inform the way that actors respond to a critical juncture, using the historical institutionalist approach shown in figure one above. First, the arrival of Uber triggered a critical juncture, as it operated seemingly out of reach of current formal institutional rules. Through an extended legal process, Uber was consistently able to argue that it was not a common carrier because it did not own or operate any vehicles, nor did it employ any drivers. Meanwhile, legislators in Maryland were slow to react and unsuccessful in securing enough support to pass new formal institutional rules to clarify ridesharing's legality in Maryland. In the absence of this, regulators and courts sought to apply formal institutional rules to regulate Uber. This involved drift, as existing rules were applied to address changing conditions "on the ground" and later conversion, as rules were actively reinterpreted to apply to Uber and other TNCs. Gradually, discretion decreased as the rules were applied, creating an unsatisfactory outcome, spurring legislative involvement through institutional layering.

The institutional context also played an important role. Whilst the Commission's jurisdiction was set out in specific legislation, which it was bound by, it was also cognizant of the broader context in which it operated. It had an obligation to not only protect consumers but also to encourage innovation and competition, which was benefitting consumers as well. Meanwhile, whilst Uber was popular with the public its ability to skirt regulatory obligations threatened the public good. The Commission was not applying existing rules independent from these considerations. This is why the Commission pursued new regulations addressing TNCs specifically and made a settlement with Uber creating carve outs for UberBLACK and UberSUV as well. The alternative would be to force Uber to comply with taxi regulations, which according to its conclusion that Uber was a common carrier, and in the explicit opinion of the Commission's staff, it was within its right to do.

The article makes three main contributions to historical institutionalist literature. First, it illustrates, through a case study, how an exogenously induced and endogenously mitigated model of institutional change can be applied. The Commission was able to use existing institutions, including a body of case law, which was nearly a century old, to pursue informal and endogenous institutional change in response to the critical juncture. Second, it addresses criticisms of endogenous and agent-based accounts of change by stressing the importance of

time and precedents. As decisions were made and actions were taken, the environment that actors operated in changed. Initially, veto possibilities over informal change were higher, as Uber was able to stonewall and engage in lengthy litigation against the Commission. However, as avenues for obstructionism dwindled, so did veto possibilities. Thus, the mode of change moved from drift to conversion. This does not reflect the fact that the modes are ill-defined. Rather, it reflects the fact that past/contemporary decisions have a causal impact on future outcomes: a core tenant of historical institutionalist research. Last, it illustrates the utility of historical institutionalism to understanding how regulatory regimes respond to technological change. This has implications for future research, which can apply the approach used in this article to other cases.

The case study also contributes to debates on sharing business and the appropriate regulatory response to them. The article argues that Uber's innovation was to use new technology not to disrupt the market or incumbent competitors, but to disrupt regulations (i.e., initiate a critical juncture). The critical juncture caused by Uber is not incidental; it is core to the company's business strategy. By creating a crisis in the institutions that govern its industry, Uber hoped to then help build its own regulations. Advocates of Uber and other sharing businesses may claim that regulations shield incumbents from competition, but the reverse is also true. In the case of Maryland, a new tiered regulatory regime was established, which allows Uber to compete with incumbent taxi industries with the benefit of a much lighter regulatory burden. This is despite the fact that as the Commission found, correctly in the authors' view, Uber provides a service which is in essence the same.

## References

- Babcock, Stephen. 2015a. "Annapolis is about to start cracking down on Uber drivers." *technical.ly*, 29 January 2015. <https://technical.ly/baltimore/2015/01/29/annapolis-ticketing-uber-drivers/>.
- Babcock, Stephen. 2015b. "Maryland and Uber are still at odds over ridesharing regulations." *technical.ly*, 18 February 2015. <https://technical.ly/baltimore/2015/02/18/maryland-uber-still-odds-ridesharing-regulations/>.
- Bell, Stephen. 2005. "How tight are the policy constraints? The policy convergence thesis, institutionally situated actors and expansionary monetary policy in Australia." *New Political Economy* 10 (1): 65–89.
- Bell, Stephen. 2011. "Do We Really Need a New 'Constructivist Institutionalism' to Explain Institutional Change?" *British Journal of Political Science* 41 (4):883–906.
- Bell, Stephen. 2017. "Historical Institutionalism and New Dimensions of Agency: Bankers, Institutions and the 2008 Financial Crisis." *Political Studies* 65 (3): 724–39.
- Bell, Stephen, and Hui Feng. 2013. *The Rise of the People's Bank of China*. Cambridge, MA: Harvard University Press.

- Bell, Stephen, and Hui Feng. 2014. "How Proximate and 'Meta-Institutional' Contexts Shape Institutional Change: Explaining the Rise of the People's Bank of China." *Political Studies* 62 (1): 197–215.
- Bell, Tom W. 2014. "Copyright Porn Trolls, Wasting Taxi Medallions, and the Propriety of Property." *Chap. L. Rev.* 18: 799.
- Capoccia, Giovanni. 2015. "Critical junctures and institutional change." In *Advances in Comparative Historical Analysis*, edited by James Mahoney and Kathleen Thelen, 147–179. Cambridge: Cambridge University Press.
- Capoccia, Giovanni, and R. Daniel Kelemen. 2007. "The study of critical junctures: Theory, narrative, and counterfactuals in historical institutionalism." *World Politics* 59 (03): 341–69.
- Cartwright, Madison. 2018. "Who cares about Reddit? Historical institutionalism and the fight against the Stop Online Piracy Act and the PROTECT Intellectual Property Act." *Policy Studies* 39 (4): 383–401.
- Christensen, Clayton M., Michael E. Raynor, and Rory McDonald. 2015. "What is disruptive innovation." *Harvard Business Review* 93 (12): 44–53.
- Cortez, Nathan. 2014. "Regulating disruptive innovation." *Berkeley Technology Law Journal*: 175–228.
- Edelman, Benjamin G., and Damien Geradin. 2015. "Efficiencies and regulatory shortcuts: How should we regulate companies like Airbnb and Uber." *Stan. Tech. L. Rev.* 19: 293.
- Elliott, Rebecca Elaine. 2015. "Sharing App or Regulation Hackney: Defining Uber Technologies, Inc." *The Journal of Corporation Law* 41 (3): 727–753.
- Hacker, Jacob S., Paul Pierson, and Kathleen Thelen. 2015. "Drift and conversion: hidden faces of institutional change." In *Advances in comparative-historical analysis*, edited by James Mahoney and Kathleen Thelen, 180–208. Cambridge: Cambridge University Press.
- Katz, Vanessa. 2015. "Regulating the sharing economy." *Berkeley Technology Law Journal* 30: 1067.
- Mahoney, James, and Kathleen Thelen. 2010. "A Theory of Gradual Institutional Change." In *Explaining Institutional Change: Ambiguity, Agency, and Power*, edited by James Mahoney and Kathleen Thelen, 1–38. New York: Cambridge University Press.
- Maryland, United States. 2015. Public Utilities - Transportation Network Services and For-Hire Transportation.
- Mastracci, Joshua M. 2015. "Case for Federal Ride-Sharing Regulations: How Protectionism and Inconsistent Lawmaking Stunt Uber-Led Technological Entrepreneurship." *Tulane Journal of Technology and Intellectual Property* 18: 189.
- Miller, Stephen R. 2016. "First principles for regulating the sharing economy." *Harvard Journal on Legislation* 53: 147.
- Mitchell, Erin. 2015. "Uber's Loophole in the Regulatory System." *HLRe: Off Rec.* 6: 75.
- Peters, B. Guy, Jon Pierre, and Desmond S. King. 2005. "The politics of path dependency: Political conflict in historical institutionalism." *The journal of politics* 67 (4): 1275–300.
- Pierson, Paul. 2015. "Power and path dependence." In *Advances in comparative-historical analysis*, edited by James Mahoney and Kathleen Thelen. Cambridge: Cambridge University Press.
- Posen, Hannah A. 2015. "Ridesharing in the Sharing Economy: Should Regulators Impose Uber Regulations on Uber." *Iowa Law Review* 101: 405.
- Public Service Commission of the State of Maryland. 2013a. "Case No. 9325 and delegation to the Public Utility Law Judge Division, In the Matter of an Investigation to Consider the Nature and

- Extent of Regulation Over the Operations of Uber Technologies, LLC and Other Similar Companies, May 16, 2013.”
- Public Service Commission of the State of Maryland. 2013b. Motion to Compel. Case No. 9325. (ML 148606), 19 July 2013.
- Public Service Commission of the State of Maryland. 2013c. Order No. 86528, In the Matter of an Investigation to Consider the Nature and Extent of Regulation Over the Operations of Uber Technologies, LLC and Other Similar Companies, 6 August 2014.
- Public Service Commission of the State of Maryland. 2013d. Public Brief of Staff, In the Matter of an Investigation to Consider the Nature and Extent of Regulation Over the Operations of Uber Technologies, LLC and Other Similar Companies, 11 December 2013.
- Public Service Commission of the State of Maryland. 2013e. Staff’s Report on Uber Technologies, LLC and Other Similar Companies, 9 May 2013.
- Public Service Commission of the State of Maryland. 2015a. Order No. 86877 Order No. 86877. (ML 164551), 26 February 2015.
- Public Service Commission of the State of Maryland. 2015b. Proposed Amendments to the Commission’s Passenger-for-Hire Regulations. Case No. 9325 (ML 164084), 12 February 2015.
- Public Utility Law Judge Division. 2014. Proposed Order with Confidential version. Case No. 9325 (ML 154524), 24 April 2014.
- Rassman, Catherine Lee. 2014. “Regulating rideshare without stifling innovation: Examining the drivers, the insurance gap, and why Pennsylvania should get on board.” *Pittsburgh Journal of Technology Law & Policy* 15: 81.
- Stark, Alastair. 2018. “New institutionalism, critical junctures and post-crisis policy reform.” *Australian Journal of Political Science* 53 (1): 24–39.
- Steinmo, Sven. 2008. “Historical institutionalism.” In *Approaches and methodologies in the social sciences: A pluralist perspective*, edited by Donatella Della Porta and Michael Keating, 118–38. Cambridge: Cambridge University Press.
- Streek, Wolfgang, and Kathleen Thelen. 2005. “Introduction: Institutional Change in Advanced Political Economies.” In *Beyond Continuity : Institutional Change in Advanced Political Economies*, edited by Wolfgang Streek, and Kathleen Thelen, 1–39. Oxford: Oxford University Press.
- Thelen, Kathleen, and Sven Steinmo. 1992. “Historical institutionalism in comparative politics.” In *Structuring politics: historical institutionalism in comparative analysis*, edited by Sven Steinmo, Kathleen Thelen, and Frank Longstreth, 1–39. Oxford: Oxford University Press.
- Thelen, Kathleen. 2018. “Regulating Uber: The Politics of the Platform Economy in Europe and the United States.” *Perspectives on Politics* 16 (4): 938–53.
- Thurbon, Elizabeth. 2016. *Developmental mindset: The revival of financial activism in South Korea*. Ithica, NY: Cornell University Press.
- Uber Technologies. 2013. Uber Technologies Inc. - Response to May 8, 2013 Staff Report on Uber Technologies and Other Similar Companies, 13 May 2013.
- Van der Heijden, Jeroen, and Johanna Kuhlmann. 2017. “Studying Incremental Institutional Change: A Systematic and Critical Meta-Review of the Literature from 2005 to 2015.” *Policy Studies Journal* 45 (3): 535–54.
- Zaleski, Andrew. 2014. “Case 9325: Uber and the legality of ridesharing in Maryland.” *technical.ly*, 11 March 2014. Available at: <https://technical.ly/baltimore/2014/03/11/uber-ridesharing-case-9325/>.