CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

Legal Affordances in Global Wealth Chains

How Platform Firms Use Legal and Spatial Scaling

Grasten, Maj; Seabrooke, Leonard; Wigan, Duncan

Document Version
Accepted author manuscript

Published in:
Environment and Planning A

DOI:
10.1177/0308518X211057131

Publication date:
2023

License
Unspecified

Citation for published version (APA):
Grasten, M., Seabrooke, L., & Wigan, D. (2023). Legal Affordances in Global Wealth Chains: How Platform Firms Use Legal and Spatial Scaling. *Environment and Planning A*, *55*(4), 1062-1079. https://doi.org/10.1177/0308518X211057131

Link to publication in CBS Research Portal

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
If you believe that this document breaches copyright please contact us (research.lib@cbs.dk) providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 04. Jul. 2025

Pre-proof of publication in *Environment and Planning A*
https://doi.org/10.1177/0308518X211057131

Legal affordances in global wealth chains: How platform firms use legal and spatial scaling

Maj Grasten
Copenhagen Business School

Leonard Seabrooke *
Copenhagen Business School

Duncan Wigan
Copenhagen Business School

Abstract: Firms can use legal and spatial scaling to increase their control and capacity to exploit assets. Here we examine how platform firms, like AirBnB, Uber, and Bird, scale their operations through global wealth chains. Their use of law is to maximize wealth creation and protection, while their services use local spaces to extract value from established property, labor, and public thoroughfares. We examine how such 'networked accumulation' platform firms use legal and spatial scaling through legal affordances. This includes opportunities for absences, ambiguities and arbitrage that are realized via multi and inter-scalar strategies and produce variegation. Our analysis draws on legal documents, as well as interviews, from Barcelona and San Francisco. The article contributes with a model of how platform firms use legal and spatial scaling, as well as how activists can challenge their operations.

Keywords: Platform companies; global wealth chains; Uber; AirBnB; labor; housing; public thoroughfares; social activism.

1 Introduction

The rise of digital platform firms and their supply of 'on demand' services is a hallmark of contemporary capitalism. In the years immediately prior to the COVID-19 pandemic these services exploded, especially in providing customers with access to immediate mobility via scooters and taxi services, as well as accommodation services. The prominent pattern has been California-based platform firms providing information services to allow clients to use existing (people's cars and homes) or easily replaceable assets (scooters, city bikes). Such 'networked accumulation' platform firms (hereafter NAPFs) rely on existing or easily replaceable assets with minimal infrastructure, as distinct to platform firm models that extend or complement transport and accommodation infrastructures through the acquisition of their own fleets of vehicles or suites of properties (Stehlin, Hodson & McMeekin 2020). NAPFs typically launched local services under a cloud of 'regulatory indeterminacy' (Stehlin, Hodson & McMeekin 2020, 1256), relying on being "simultaneously embedded and disembedded from the space-times they mediate" (Graham 2020, 454)

* Correspondence to: Leonard Seabrooke, Department of Organization, Copenhagen Business School, Kilevej 14A, 2000 Frederiksberg, Denmark, lse.ioa@cbs.dk

In this article we suggest that NAPFs use legal and spatial scaling through the strategic deployment of *legal affordances*. We argue that the multi-scalar management of legal affordances permits these firms to engineer relationships among authorities, firms, investors, customers, and workers under the guise of a promise of market dominance and efficiency. Legal and spatial scaling also permits the presentation of an artificial view of the firm, where value production and wealth creation and protection appear to authorities as legally distinct, despite the integration of value and wealth chain activities. This maximizes the firm's potential to exploit other people's assets until they are contested and prevented from doing so.

We stress how the concept of *affordance* - paths of actionable complementarities between the actors and the environment (Gibson 1966; Norman 1988) – makes us focus on the relationships that permit legal and spatial scaling. NAPFs combine the opportunistic use of bodies of law, the spatial demarcation of the firm's corporate structure, and economic activities occurring in bounded local spaces. These firms do not use bodies of law as external resources, but integrate legal and spatial scaling into their everyday operations. Legal affordances are a privilege supported by a transnational interpretative community of professionals that promotes their widespread recognition through "embedded spaces of social practice" (Faulconbridge 2007). Legal affordance differs from legal provision, which is a granted right and commonly viewed as fixed and static external resources. As we clarify below, NAPFs use legal affordances to construct what David Harvey (1973, 2006) referred to as relational space that empowers their capacity to exploit other people's assets and avoid regulatory burdens.

Legal affordance offers three main strategies of *absence*, *ambiguity* and *arbitrage*. The selection of legal arbitrage, ambiguity, or absence produces variegation in how NAPFs operate in different locations (Peck and Theodore 2007; Dixon 2014; Braithwaite 2019). In short, the use of different forms of legal affordance produces variegation. In practice, this occurs from how platform firms articulate relationships within global value chains and global wealth chains to maximize control. While global value chains valorize material and technological practices available through the transnational governance of a dispersed production process (e.g. Whitfield and Staritz 2021), the use of global wealth chains harnesses opportunities in law, finance, and accounting (Finér and Ylönen 2017; Seabrooke and Wigan 2017). NAPFs use legal affordances to scale from the transnational to the local, developing stratagems to distinguish the exploitation of other people's assets in local physical spaces from transnational financial management.

Global wealth chains are centered around legal affordances linked to corporate functional differentiation. This includes the power to minimize taxes, to separate intellectual property rights from value production, and obscure who benefits from capital flows (Bryan, Rafferty, and Wigan 2016, 2017; Ajdacic et al. 2021). While many studies of global wealth chains locate legal and regulatory indeterminacy in offshore financial centers (e.g. Sharman 2017; Garcia-Bernando et al. 2017), we seek to contribute to new research that links global wealth chains to the exploitation of local spaces (e.g. McKenzie and Atkinson 2020). In particular we highlight how the use of legal affordances for legal and spatial scaling helps us understand how the exploitation of local physical assets feeds into transnational financial management of global wealth chains.

Others have described these platform firms as engaging in the 'sweating' of existing assets by incorporating them into a platform that becomes an increasingly large ecosystem of urban consumption generated through the network effects of app adoption and the greater circulation of a global clientele for such services (Lacy and Rutqvist 2015). Narratives of market failure in public policy in areas such as housing and transportation have accelerated the normalization of platform firms' information services to access temporary accommodation, catch a car ride, or use an e-scooter for the 'last mile' (Ossandón and Ureta 2019). This activity contributes to the spatial imaginary of NAPFs as not really located anywhere, and therefore not subject to standard laws and procedures (cf. Graham 2015; Grabher and van Tuijl 2020). This narrative has been important for the expansion of 'platform capitalism' and how the operations of platform firms are contributing to the remaking of social spaces (Langley and Leyshon 2017; Langley 2020).

We argue that understanding how legal affordances are used and challenged is important given that NAPFs have accelerated their activities and exacerbated socio-economic inequalities and tensions. Concerns have proliferated with the uptake of their services (Wells et al. 2021), and we can see concrete conflicts around property, labor, and the use of public thoroughfares. The development of 'automated landlords' as means of financial accumulation has led to backlashes in many cities (Fields 2019; Aguilera et al. 2019; Fields and Rogers 2021). The expansion of Uber and other share-riding services has generated labor conflicts (Graham et al. 2017), especially in relation to the employment status and rights of those providing the service and generating value (Rogers 2016; Cherry 2016). The use of public thoroughfares by e-scooter platform firms, like Bird and Lime, has also created alarm from clutter, impediments to pedestrians (Ruvolo 2020), and insurance liabilities (Watson 2019). Countering platform firms through legal affordances requires political coordination (Seidl 2020). Both produce variegation as platform firms adjust their engagement based on a combination of regulatory resistance and market opportunity (Peck and Theodore 2007).

In this article we follow a view common among legal geographers that "socio-legal life is constituted by different legal spaces operating simultaneously on different scales and from different interpretive standpoints" (Santos 1987, 288; Blomley 2003, 2004) Legal affordances arise from relations within and between bodies of law at different scales, where questions of definition, jurisdiction and applicability configure the legal space of NAPFs' strategy and the physical space of operations. We highlight how a focus on legal affordances as comprised of *absences*, *ambiguity and arbitrage* allows us to see how NAPFs use legal and spatial scaling to connect the local to the transnational. We also suggest that social activism concerned with property, labor, and public thoroughfare rights can challenge legal affordances. These challenges can then be pushed at different scales where adjudication may be on offer, but are also limited given that NAPFs have considerable resources to spend in fending off legal challenges.

In what follows we provide a discussion of legal affordances and their use. We outline a model with which to understand how NAPFs use legal and spatial scaling via global wealth chains, and control value producing activities from local areas. The model also locates how policy and social activism that runs through local and national courts can disrupt NAPFs' operations. We then provide a series of empirical vignettes on NAPFs' management of their services and challenges against them, focusing on rights linked to labor, property, and public thoroughfares. We concentrate on Uber, AirBnB, and Bird, drawing primarily on material from public documents

and interviews from Barcelona and San Francisco. Finally, we discuss how a focus on legal affordances allows us to see how NAPFs use legal and spatial scaling.

II Legal Affordance as Ambiguity, Arbitrage, Absence

The platform economy is an artefact of legal affordances. More recent scholarship on affordances points to how the relationship between actors and their environment depends on the characteristics of the actor and their relationship to resources that can be produced from the environment (Adler-Nissen and Drieschov 2019). In these terms, affordances offer the potential to manipulate outcomes through relations that are specific to a context. Applied to law, affordances can arise between incompatible law, in the absence of law, and between scales of legal applicability. As the use of legal affordances involves claims to action within a jurisdiction, these claims can also be challenged by policy and social activists, as we show below. In the context of NAPFs' use of transnational financial and legal management to exploit local spaces, we consider three affordances: *absences*, *ambiguity* and *arbitrage.* The use of these affordances leads to legal and spatial scaling, which endures until otherwise contested.

We conceptualize NAPFs' use of legal affordance as examples of what David Harvey (1973; 2006) called relational space. Harvey's tripartite notion of capitalist space and time – absolute, relative, and relational - points to how innovations in the organization of the firm are leading to transformations in capitalist space and time. Absolute space is geometric and linear, operating around mechanical properties of time and distance. Here, space, becomes a "thing in itself" with an existence independent of matter (Harvey 1973, 13). Relative space is about different sorts of relations and spatial scales that call for discrete measures. We can compare the time-space of satellite communication to the crow's flight, or consider the relative time-space of global value chains where measurement may be nominated in cost, value added or the interdependencies of the production process. In relational space, "there is no such thing as space outside of the processes that define it. Processes do not occur *in* space, but define their own spatial frame" (Harvey 2006, 123). It is about "the relations between different (relational and absolute) characteristics that exist in and define their own spatial orders'" (Bryan, Rafferty and Wigan 2017: 88). We suggest that NAPFs harness relations between (jurisdictional and jurisprudential) characteristics that exist in and define their own spatio-legal orders. Legal affordances allow firms to produce a spatial frame for their activities that transcends the relative and absolute spatial categories undergirding regulatory traction. Informed by this way of viewing relational space, we identify how NAPFs use legal and spatial scaling through legal affordances.

Combining Harvey's view of relational space with legal affordances allows us to speak also to the continuing tradition of scholarship on the legal foundations of capitalism (Commons 1924; Robé 2011; Pistor 2019). From this perspective NAPFs are vanguards in how the economic geography of firm activity is tied to the use of the law as a device to place the managers of the firm at distance from responsibility. Assets, labor, and services exist prior to platform mediation or represent a negligible cost when provided, with the sustainability of the firm a function of maintaining ambiguity or changing the law. This arrangement forces us to reconsider conventional understanding of the firm as a 'nexus of contracts' (Jensen and Meckling 1976), in which law is

required to *commit* the role of investors, labor, and service provision to ensure the delivery of a product. We are now in the period in which NAPFs manage legal affordances to maximize their flexibility and capacity to avoid commitment or regulatory burdens. We suggest that the use of legal affordances permits scaling. While scaling has been viewed through the lens of territorial units, with change in one affecting other geographic scales (Sheppard 2002), we highlight how relations around legal affordances have multi-scalar effects. Such management includes *absences*, *ambiguity* and *arbitrage* that permit a system of transnational-to-local exploitation to persist. We now specify these legal affordances.

Absences

Pistor (2019) notes that capital is legally encoded to provide opportunities and constraints that circumscribe distributional outcomes. But law may not mirror the full range of extant economic practice and form. Economic activity may not all be coded in law, and this is, in itself, a resource. Some practices and forms that transcend legal codification are permissible in the absence of legal guidance on jurisdiction, identification, categorization, or permissibility. Some of these absences come from the deliberate exclusion of legal precedents and arguments related to concerns that are obvious (such as labor rights) but potentially costly to the firm. Legal absences also include what Lindahl terms 'a-legal' positioning', which "manifests itself within the legal order as another possible ordering of behavior which interferes with the realm of practical possibilities made available by the legal collective it questions" (Lindahl 2013: 158). The 'a-legal' implies that affordances can arise from legal absences.

Ambiguity

Legal *ambiguity* is produced, negotiated and harvested in and through space. Legal geographers have unfolded the interplay of legal abstractions and material environments, "the mutual constitutivity of law and geography - word and world" (Delaney 2002, 81). Law creates space, with property addressing the 'ordering of space', its categorization and organization (Blomley 1997, 286; Teresa 2016). Yet, when law maps onto space, selections are made in and through law, with law potentially distorting reality and becoming a 'map of misreading' (Santos 1987). For instance, the choice of law and forum clauses in transnational commercial contracts leverage favorable jurisdictions. Legal illegibility is a resource for platform firms able to strategically place operations in zones of legal uncertainty open to multiple (mis)readings. Ambiguity may arise at one scale in conflicts between distinct bodies of law or uncertainties surrounding legal opinion. Ambiguity also arises as an interpretative opportunity space produced by relations between law at multiple scales. It is deployed in inter-scalar legal strategies that rely on questions of what law applies where and to which activity.

Arbitrage

Legal *arbitrage* is the exploitation of differences in legal treatments offered by two or more authorities or from distinct interpretations. Such behavior often complies with regulations while acting against the spirit of the law and regulatory purpose (Fleischer 2010; Friedrich and Thiemann 2020). For firms, legal arbitrage may entail placing parts of the corporate structure, corporate entities, in jurisdictions where the law provides the most opportunity for strategic manipulation.

Akin to financial arbitrage, legal arbitrage also operates in a 'market' for the provision of services, whereby the service providers receive income for offering legal opportunities (Langenbucher 2020). Often these arrangements involve an alliance between legal, financial and tax professionals with the legal and regulatory authorities in jurisdictions (Christensen et al. 2022). As is often pointed out in the literature on global wealth chains, this may occur both 'offshore' (tax havens) and 'onshore' through established permissive relationships in countries like Ireland and the Netherlands (Garcia-Bernardo et al. 2017; Seabrooke and Wigan 2017). NAPFs are able to strategically locate corporate entities, placing their intellectual property, payment and bookkeeping entities, and operational entities in the jurisdictions that offer the greatest advantages, including opacity in revealing their actual behavior. Equally, legal treatments at one scale can be played off against legal treatments at another, leading to prolonged legal battles, that can in turn and over time be displaced from one scale to another.

III A model of NAPF legal and spatial scaling

NAPFs are composed of global value chains and global wealth chains, in which they use legal affordance to scale their activities and maximize their control. At the local scale is the material delivery of products and services, while the immaterial delivery of information services through multiple locations, and financial management is coordinated transnationally. Transnational financial and legal management ensures that corporate entities are distinct, separating out global payments systems, rents flowing to intellectual property rights, and national operational units where compliance with national regulations and laws is customized. To put this another way, legal affordances are used for scaling in a manner that local value chain activity is collateralized into the global wealth chains. These wealth chains also facilitate the movement of considerable sums of capital that provide the business model flexibility to exit from unfavorable local spaces. Garcia-Bernando and colleagues have, for example, identified how the common use of global wealth chains includes the use of 'conduit' and 'sink' jurisdictions, the former channeling funds for tax minimization and the latter storing wealth for tax and secrecy purposes (Garcia-Bernando et al. 2017). Multiple market entrance relies on prolonged unprofitability sustained by patient private capital. The promise but prolonged absence of profits means incumbent platform firms with greater capital resources – and less fiscal demands – can wait for market dominance (Hovenkamp 2021).

Technology firms have been at the forefront on the use of transnational corporate structure for wealth management purposes, *arbitraging* between jurisdictions offering different legal affordances. NAPFs are no exception, with AirbnB and Uber channeling revenues from activities outside the US to low tax Ireland and the Netherlands. Uber, until recent crackdowns on digital economy tax avoidance, organized through the infamous Double Irish Dutch Sandwich structure, where revenues from international operations flowed through Ireland to Netherlands and out to no tax Bermuda. In March 2019, the firm pulled its intellectual property out of its Bermuda subsidiary in response to new rules targeting artificial tax arrangements and moved it, at an increased revised value, to a Netherlands subsidiary, ultimately owned in low-tax Singapore. This created a US$6.1bn tax asset to be deployed against profits accruing in the Netherlands, and that may arise in operational jurisdictions (Browning and Newcomer 2019). The revalued intellectual property creates a correspondingly larger deduction for a corporate tax war chest.

Legal *ambiguity* provides further opportunities for scaling and the management of value and wealth chains. In Europe, Airbnb and Uber have fought to operate under the jurisdiction of the E-Commerce (2000) and Services Directives (2006). The E-Commerce Directive under the 'country of origin principle' affords market entrance without prior authorization and a defense against local and urban regulation, while also allowing platform firms to refuse to provide data to local authorities wishing to enforce protective laws. The Services Directive bans quantitative limits so that numerical restrictions on operations can be resisted (Tansey and Haar 2019). As far as the firms are able to maintain they operate in the information economy, national and urban regulations on underlying transport or accommodation services can be circumvented, or simply ignored. As such, ambiguity as to the sectoral definition of platform firms enables legal and spatial scaling from the activities that produces revenue.

Claims that NAPFs are solely in the business of information service provision similarly neuter the capacity of national revenue authorities to collect sales taxes from the underlying service. As far as the NAPF is deemed to operate an information intermediary service that is not part and parcel of the underlying accommodation or transport service (provided by independent contractors and private hosts) then drivers and hosts may be liable to a sales tax, but the local corporate entity is not. This is not a legal ambiguity but absence in that the law has not ruled on it in most cases. Drivers and host income may not pass the sales tax threshold. The OECD average threshold is US$51.151, well above average earnings for host and drivers (OECD 2018). Sales tax on commissions paid by hosts and drivers to the NAPF is applicable to transactions where the platform and the consumer (supplier) are situated in the same jurisdiction. In this situation the firm would be obliged to remit sales tax to the revenue authority. Where the NAPFs place of business is not the same as the place of service delivery, place of supply rules impose the obligation to collect and remit sales tax on the host or driver. Uber's latest Securities and Exchange Commission 10-K filing states that exposure to sales tax is a significant risk.

NAPFs rely on these legal affordances – absence, ambiguity, and arbitrage – to exploit other people's assets and scale from the local to the transnational. Figure 1, below, presents a model of NAPFs' scaling operations through legal affordances, moving between the local and the transnational. Our reasoning here is to show how legal and spatial scaling is organized. First, the scale ranges from the transnational at the top, where corporate management takes place, down to the local at the bottom, where there is the site of physical exploitation. The white-tipped arrow moving from the transnational to the local, where the material value in ride-sharing, accommodation, and 'last mile' personal transport is present depicts this. At the middle of the scale are jurisdictions in which legal affordances are claimed, including through transnational law protected by sovereign jurisdiction, as well as jurisprudence in national and sub-national systems. Interaction between these scalar 'tiers' reflects the ongoing construction of state spatiality, with law seeking to bind activity to permissible geographic spaces (Brenner 2001, 605).

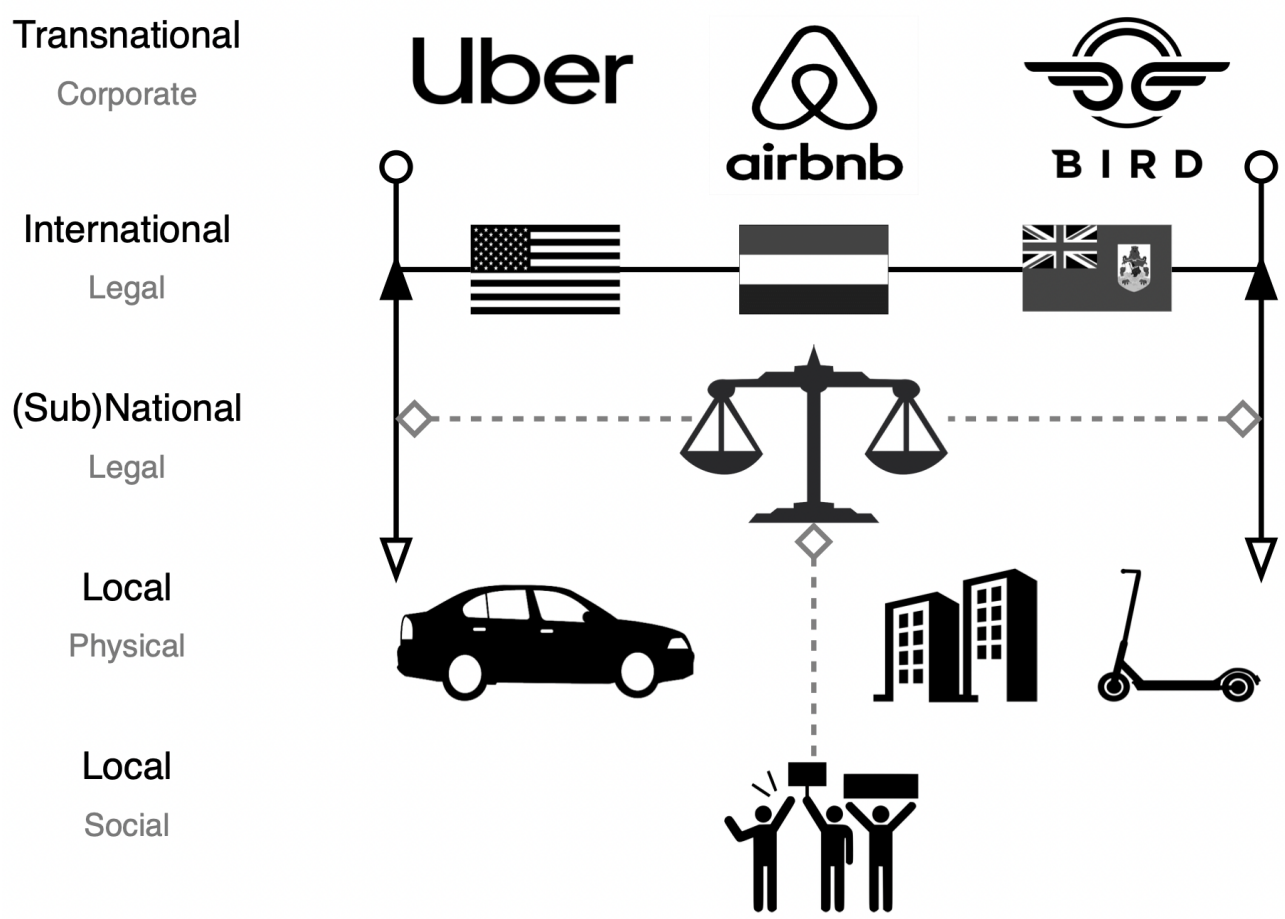

Figure 1: Legal Affordances in NAPFs' Scaling Operations

Figure 1 also locates potential challenges to platform firms' use of legal affordances. Moving from the bottom of the illustration, we can see urban-based policy and social activism that goes to the (sub)national legal system to challenge legal absence, ambiguity and arbitrage. This policy and social activism can move between scales harnessing the same inter-scalar affordances that platform firms do, but to push back against them (Leitner et al. 2008). Policy and social activists can ask for legal clarification, to ground value-adding activity in a particular jurisdiction, and remove absences through legal adjudication that provide recognition. Where successful, indicated by the white diamonds, this can disrupt platform firms' operations and send them packing, or at least force them to adjust.

IV Legal and Spatial Scaling in Action

To demonstrate how NAPFs use legal affordances to scale from transnational financial and legal management to the exploitation of assets in local spaces, we provide a series of case vignettes that speak to the dynamics identified in Figure 1. Our case vignettes draw on public documents, interviews with investors, municipal authorities, senior professionals in NAPFs, and social activists dealing directly with platform economy policy concerns.

Uber and Urban Workers

Established in San Francisco in 2009 Uber developed as a smartphone app connecting drivers with riders. The firm occupies a series of legal ambiguities, which have been used as part of a "move fast and break things" corporate mentality strongly associated with California-based NAPFs. This attitude has persisted since earlier experiments in the 1990s with using legal ambiguity over the status of labor as employees or self-employed with internet-based firms like America Online (as relayed in an interview with an investor, San Francisco, April 2019). For Uber, these legal ambiguities include determinations of whether it is an integrated firm or a marketplace, whether it provides transport or information services, whether it is employer or intermediary, and, correspondingly, whether drivers are employees or freelancers. These classificatory ambiguities coupled with transnational flexibility through the strategic management of wealth and value chains afford a series of advantages over incumbent taxi firms providing directly comparable services. Uber claims to simply be an information service linking riders and drivers, allowing easy entry and exit to and from operational urban sites. Similarly, maintaining legal distance from the underlying transport value chain provides a basis for eschewal of asset ownership and obligations for capital asset maintenance, insurance and liability. Maintaining the independent status of drivers affords escape from the burden of managing industrial relations and adhering to legal obligations attached to employment, such as paid leave, social insurance, and working time requirements.

On the basis of legal affordances, this NAPF expanded at speed and with ample private and patient funding. Prior to its Initial Public Offering (IPO) in 2019, Uber raised a total of US$24.7bn and was privately valued at US$76bn. Soaring revenues and consistent operating losses have been crucial to expansion. Losses are tolerated by investors and shareholders alike, who recognize the firm's unique access to legal affordances that incumbents can't attain. Between 2016 and 2018 revenue rose from US$3.845bn to US$11.270bn with operating losses standing at US$3.023bn in 2016, US$4.080bn in 2017 and US$3.033bn in 2018 (Wigan 2021). These losses convert to tax assets ('loss carry forward') that can, when the firm generates profits, be deployed in profit-making subsidiaries that form a 'fiscal unity' with Uber's Dutch holding company. Uber operates in over 10,000 cities globally with 5 million drivers providing 18.7 million trips per day. On its 2019 IPO the firm traded at a market value of US$46bn. Addressing risks to future performance in its IPO filing the firm stated that:

> Our business would be adversely affected if drivers were classified as employees instead of independent contractors… If, as a result of legislation or judicial decisions, we are required to classify Drivers as employees…. We would incur significant additional expenses for compensating Drivers… Further, any such reclassification would require us to fundamentally change our business model and consequently have an adverse effect on our business and financial condition (Uber S-1 2019: 29).

A key source of competitive advantage is this legal ambiguity and the ability it affords to shift risks and costs onto drivers, and, ultimately, the public purse. Uber neither owns the vehicles used to provide rides nor employs the drivers. Variations in the terms and conditions agreed to between Uber and those providing labor perpetuate this ambiguity while also relying on jurisdictional arbitrage. For example, those using the service in the UK agree that:

> YOU ACKNOWLEDGE THAT UBER DOES NOT PROVIDE TRANSPORTATION, LOGISTICS, DELIVERY OR VENDOR SERVICES OR FUNCTION AS A TRANSPORTATION PROVIDER OR CARRIER AND THAT ALL SUCH TRANSPORTATION, LOGISTICS, DELIVERY AND VENDOR SERVICES ARE PROVIDED BY INDEPENDENT THIRD PARTY CONTRACTORS WHO ARE NOT EMPLOYED BY UBER OR ANY OF ITS AFFILIATES.[1]

Language of this kind is replicated across the agreements between Uber and labor in its local operational sites. Independent contractors do not have access to a host of employment rights that impose costs on employers. These, depending on jurisdiction, may include payment of wage and sometimes a minimum wage; working time rules; leave; holiday pay; flexible working; non-discrimination; health and safety at work; tax and security obligations; maternity, paternity and parental leave; protection from unfair dismissal; rules regarding transfer of undertakings and collective labor law obligation (OPBP 2017). An interview with a San Francisco investor affirmed that Uber directly relies on the absence of government intervention for its operations, noting that a common attitude among Uber investor circles was "who cares about governments? They'll be dead soon anyway" (San Francisco, April 2019). The absence of clear categorization not only provides the source of Uber's market dominance, but an avenue for contestation that organized interests may pursue, more or less successfully.

Jurisprudence has struggled to resolve the ambiguity surrounding the categorization of Uber's drivers. The question was brought to the European Court of Justice (ECJ) in 2017 subsequent to contestation in Barcelona by organized interests in the taxi industry. *Asociación Profesional Élite Taxi* brought an action in Barcelona asserting that Uber represented unfair competition and infringed national taxi laws stipulating that taxis required licensing (Durri 2019). The Spanish judge referred to the European Court seeking clarification on the legal status of Uber's business model. On the basis that the Uber app is indispensable for both drivers and customers, and that Uber exercises decisive influence over the conditions under which drivers work, the Court found that the:

> intermediation service must be regarded as forming an integral part of an overall service whose main component is a transport service and, accordingly, must be classified not as an "information society service" but as "a service in the field of transport" (ECJ 2017).

In Barcelona, protests led the national government to devolve regulation to regional and local governments, positioning Uber to negotiate on a city by city basis.[2] In Catalonia, the Minister of Territory and Sustainability introduced a series of regulations, including minimum waiting times and compulsory registration, to restrict the operation of private hire vehicles. The presence of thirteen taxi unions has led to organized activism on labor concerns, and Uber has, in consequence, exited Barcelona (Lomas 2019).

In San Francisco there has been contention between policymakers, activists, and Uber. San Francisco municipal policymakers have pointed out that 'transport network companies', like Uber, are responsible for half of the increase in traffic congestion in the city in the past decade (SFMTA 2020: 19). They appealed to Uber to share data to assist with urban planning and ease traffic congestion, as well as to abide by a zoning 'white curb' policy for specified pick-up zones. Both led to weak responses, with Uber claiming its data is market sensitive and only shared a

highly aggregated level meaningless for policy purposes (interview with San Francisco Municipal Transport Authority (SFMTA) officials, San Francisco, April 2019). Municipal authorities were able to intervene on liability insurance.

On the activist side, driver groups such as Gig Workers Rising, Rideshare Drivers United, We Drive Progress and Mobile Workers United have sought change. Gig Workers Rising (GWR), in particular, developed a series of 'actions' and 'protests' against Uber, enrolling 10,000 petitions. Their agenda is based on: i) fair wages; ii) transparency on payment, driver deactivation and background checks; iii) worker benefits; and iv) the right to have a voice (interview with GWR, San Francisco, April 2019). From GWR's perspective Uber drivers faced declining income from changes in Uber per minute and per mile rates, as well as lowered rewards for 'Quest' work, where drivers reached a target, like 60 hours of work or 100 rides a week. Drivers were also frustrated with the fact that they worked long hours and the harm and cost to their own material assets, their vehicles, were not a wage consideration (interview with GWR, San Francisco, April 2019). These concerns are akin to those identified by Wells, Attoh and Cullen (2021) of 'just in place' workers among Uber drivers in Washington D.C.

In 2019 the California State Legislature passed Assembly Bill 5 impeding gig economy firms from classifying their workers as independent contractors on the basis of tests of control, integration in the firm's business, and driver dependence. Reclassification threatened to add up to 30% to operational costs (Said 2020). Uber resisted compliance and launched Proposition 22, a state ballot measure seeking to maintain that Uber drivers are independent contractors. The measure was opposed by an alliance between the California Labor Federation and the aforementioned driver groups. This opposition raised US$19mn in support of the campaign. US$205mn was spent by an alliance of Uber, Lyft, Doordash, Instacart and Postmates in support of the ballot. Proposition 22 passed with the support of 59% of ballots and creates a third category of worker for transport and delivery network firms. Uber drivers, in consequence, do not have access to a time-based wage floor, unemployment insurance, workers' compensation, sick leave or state mandated health insurance. Given this victory, Uber's US agreement with labor now includes the provision that all matters will "be settled by binding arbitration between you and Uber, and not in a court of law".[3]

Airbnb and Property Rights

Founded in 2007 in San Francisco, Airbnb operates an online platform connecting hosts and guests for short-term rentals. Homeowners rent spare rooms or entire homes for a fee. The NAPF charges hosts a 3% transaction fee and guests 6-12% of the rental price. Hosts are responsible for their own listings and accommodation service. Airbnb claims not to be party to contractual relations between hosts and guests, nominating itself a booking, or payment collection agent in facilitating 'online home sharing'. According to Airbnb co-founder, Brian Chesky:

> There were laws created for businesses, and there were laws for people. What the sharing economy did was create a third category: people as businesses… They don't know whether to bucket our activity as person or a business" (quoted in Kessler 2014).

Airbnb had 5.6 million listings in more than 100.000 cities worldwide in September 2020. In wake of its December 2020 IPO its value was US$75bn, more than the Marriott and Hilton hotel chains combined (Forbes 2020). Demand for AirBnB services has expanded from a global clientele who contribute to value production, using the local physical assets and feeding financial resources into the global wealth chain.

Legal affordances arise in definitional and jurisdictional ambiguity over property use rights and enforcement. 'Peer to peer' short-term rentals blur legal distinctions between commercial and residential property use, creating policy conflict in urban centers (Aguilera et al. 2019). Airbnb integrates the two sides of this distinction in bringing commercial activity into private homes (Kreiczer-Levy 2019), operating in grey zones between residential short-term rentals and hotel accommodation. Airbnb has encouraged buy-to-let investment (Cocola-Gant and Gago 2019; cf. Christophers 2019a) and generated 'new technology-driven rent gaps' (Wachsmuth and Weisler 2018), with landlords switching from long- to short-term rentals. Municipal lawmakers responded to the 'professionalization' of short-term rentals by passing various 'Airbnb laws', or updating existing housing laws (Katsinas 2021). In Paris, London and Berlin, homeowners are now allowed to rent out apartments only when it is the primary residence (cf. Aguilera et al. 2019). The activity reflects a history of struggles turning on geographies of property (Blomley 2004), including zoning and eminent domain (Pritchett 2003).

Market strategy rests on being "one of the most litigious startups in Silicon Valley", filing at least 11 lawsuits against US cities since 2008 (Carville et al. 2020). Airbnb's IPO prospectus identified regulation as a key risk; "We are subject to a wide variety of complex, evolving, and sometimes inconsistent and ambiguous laws and regulations that may adversely impact our operations" (Airbnb S-1 2020, 40). Bloomberg noted that AirBnB "can draw on an in-house army of 120 lawyers and a legal budget that was about US$60mn in 2018" (Carville et al. 2020). Across cases against US cities, Airbnb evoked federal laws to fight city-level regulations, arguing such regulations are an infringement on its First Amendment right to speech (arguing advertisements are 'speech') and calling on the right of digital networks to 'federal immunity' to liability for third-party postings, based on Section 230 of the US Communications Decency Act (CDA). The scope of this immunity is uncertain (Yablon 2019).

After six years operating 'a-legally' in San Francisco, Airbnb was legalized in 2014 on condition that hosts obtained a business license, were the primary resident, and paid hotel taxes collected by the platform (Said 2014). The law relied on host self-reporting; Airbnb was not required to track listings nor provide relevant data on hosts. Illegal, unregulated listings continued. When Airbnb agreed to settle a lawsuit with San Francisco in 2017, a former member of the city's legislative body commented; "Three years ago, we said the law being passed, which was written by Airbnb, won't work because there was no skin in the game in terms of enforcement" (quoted in Benner 2016). The law was widely contested by affordable housing campaigners and unions, which resulted in Proposition F, the 'Airbnb initiative', a 2015 citizen-led ballot which would have significantly reduced rental periods. Airbnb spent US$8mn combating the initiative (Cutler 2015). The "battle over proposition F galvanized the city" (Hoffmann and Heisler 2021: 35), with a new amendment in 2016 forcing Airbnb to remove unlicensed rentals from its website and fines imposed on failure to do so. Airbnb filed a lawsuit in US federal court against San Francisco. The court ruled the ordinance did not infringe federal laws as it applied to transactions between

Airbnb and the hosts of unregistered properties (Airbnb, Inc. v. City and County of San Francisco 2016). Airbnb's 'platform immunity' in terms of being liable for content posted on its website was effectively upheld.

While in San Francisco lawmakers struggled to legalize Airbnb, in 2007 Barcelona banned private room listings without permit on the basis of over-tourism and increased gentrification (cf. Törnberg and Chiappini 2020). Although legal wrangling from municipalities over eminent domain is a known case with residential property (Christophers and Niedt 2016), this was new. In 2014, Barcelona froze the granting of new licenses for short term rentals and, the following year, municipal authorities fined Airbnb and HomeAway €600.000 for offering unlicensed properties (Leshinsky and Schatz 2018). Airbnb appealed. To facilitate enforcement, the Catalonian government launched a social media platform where tourists were informed about illegal listings.[4] A temporary ban on rentals of rooms of less than 30 days was imposed in 2020, with a signal that this could be permanent (O'Sullivan 2021)

Airbnb deploys legal arbitrage in defense, seeking adjudication at different levels. The ECJ ruled in 2019 that Airbnb 'must be classified as an "information society service"', not an estate agent nor an 'accommodation service' (i.e. a hotel), under the E-Commerce Directive (ECJ 2019). The decision undergirds Airbnb's strategy of defending platform immunity in national jurisdictions. On the basis of the Directive's country of origin principle Airbnb is responsible for complying with only Irish law unless urban regulation meets a public interest test. Similar to the US CDA, Airbnb is not obliged to provide regulators access to data on the basis of a 'notice-and-take down' clause, that operates on a case by case basis. Legal fragmentation created by the ECJ provides legal-spatial flexibility in forum shopping between overlapping jurisdictions. Legal ambiguity follows at the national level; "We have Europe, we have the state regulations that have transposed all the European provision, we have ours and then the local one" (interview with municipal official, Barcelona, September 2020). Such ambiguity also fosters legal absence in regard to what enforcement tools have the most potential in gaining traction on the NAPF, as well as obligation to provide data.

Bird and Public Thoroughfares

Founded in Santa Monica by Travis VanderZanden, former Chief Operating Officer at Lyft and Vice President of International Growth at Uber, Bird's scooters hit the streets in September 2017. Their empowerment comes from significant private equity backing with Silicon Valley investors betting that scooters become a permanent - and environmentally friendly - solution to the 'last mile' problem left by the failures of public transport (Ossandón and Ureta 2019). Sequoia Capital led its second funding round of US$300mn in June 2108, valuing the firm at US$2bn (Inc. 2018). Bird, among other platform firms with electric scooters, notably Lime, are vanguards of legal *absence*, using a persistent strategy of dumping scooters and bikes on public thoroughfares in urban centers to then await legal challenges to their operations. The firm now operates in more than 100 cities across Europe, the Middle East and the United States.

Using significant capital resources, it has established and acquired e-scooters businesses in many cosmopolitan urban centers. Bird's significant capital resources have also kept it afloat as it replicates a strategy of losses. For example, in the first 2019 Bird made US$15mn in revenue and

losses of $US100mn (Schellong et al. 2019). At the same time, it was able to raise US$623mn in capital in 2020, with an expectation that the global e-scooter market will be worth US$50bn by 2025 (based on Crunchbase data in 2020). Much of the business model relies on the profitability of e-scooters, which by some estimates produce US$813 in revenue or 41% marginal profit over their manufacturing cost (Kamps 2018).

Regulators in Barcelona acted in 2016 to establish a limited legal framework for the operation of Personal Mobility Vehicles (bikes, segways, rickshaws and e-scooters) nominating permitted and restricted routes. The General Transit Directorate subsequently banned e-scooters for transgression of these restrictions (Orquin 2016). Devolution of regulatory authority to the city level led to their reintroduction under a series of rules, including designated parking areas, speed limits and limitations of use to specific thoroughfares. Some regulations targeted scooters employed in commercial activity which required the use of helmets and third-party civil liability insurance. Bird launched in Barcelona in April 2019 and continued to operate despite an order from the City Council to desist until the establishment of a legal framework. Operating in the absence of licensing attracted the ire of regulators with the Councilor for Mobility targeting the firm: 'If we can penalize them, we will do' (Merino 2019). By November 2019, 4.084 e-scooters owned by Reby and Bird were sanctioned and collected by the municipal authorities (Benvenuty 2019).

Bird launched in San Francisco in April 2018, also in the absence of a legal framework. The San Francisco Municipal Transport Authority (SFMTA) sent a letter to Bird stating it would, "'not tolerate any business model that results in obstruction of the public right of way or poses a safety hazard" (Marshall 2018). On St. Patrick's Day in 2018 municipal authorities confiscated scooters as litter. Since then they are required to have a permit and a form of parking, with US$500 fines being regularly imposed on the firm for non-compliance (interview with SFMTA officials, San Francisco, April 2019). The permitting regime established requirements for user insurance, education to ensure safe scooter use, low income plans, and data sharing with the municipal authority (a sharp contrast with Uber). Initially 5 permits were offered allowing 500 scooters each. SFMTA received permit applications from Bird, Lyft, Skip, Spin, Lime, Scoot, ofo, Razor, HOPR, Jump, USCooter and Ridecell. Skip and Scoot were awarded licenses to operate within the city. Bird reacted in two ways, first experimenting with a one-month rental model that placed them outside the regime. It then exercised its transnational financial muscle with the acquisition of Scoot. The firm and its competitors have since confronted policy and social activism based on the rights of the disabled to access public thoroughfares unhindered (interview with SFMTA officials, San Francisco, April 2019; see also Ruvolo 2020). That e-scooter NAPFs rely upon an absence of law as opposed to absent categorization limits room for maneuver. Urban authorities initially stunned by sudden arrival have acted to constrain and corral operations, even though interest in the transnational financial model behind Bird and other e-scooter platform firms continues.

V Conclusion

Networked accumulation platform firms rely upon the policing of a legal distinction between a global wealth chain revolving around information service provision and financial management, and value chains that extract value from local spaces. The articulation of their global wealth chains

seeks to maximize legal flexibility in where they pay tax and manage financial transactions with capital resources that permit them to enter and exit local spaces with relative ease. We have argued that NAPFs deliberately use legal affordances to enable legal and spatial scaling. NAPFs, like Uber, AirBnB, and Bird, use legal affordances in absences, ambiguities, and arbitrage to maximize their control over transnational financial and legal management alongside access to local sites where physical assets can be exploited. Such arrangements permit hyper-rents until they are challenged by policy and social activism that can disrupt NAPFs' operations. As detailed above, such activism has met mixed success and certainly not challenged NAPFs' capacity for expansion, which is further enabled by their ability to sustain losses while investors wait for stronger market positions.

Our findings contribute in detailing how transnational legal and financial management interacts with legal entanglements in local spaces. Such interactions are critical to the NAPFs studied here, which rely on exploiting 'under-utilized' assets, or introducing new inexpensive vehicles, with backing from mega-powerful financiers. As discussed, these NAPFs use legal affordances as a scaling device, including locating market opportunities, avoiding regulatory intervention, and rapidly entering and exiting sites of exploitation. Given this, NAPFs are characterized by a conflictual approach to authority that centers on the permissiveness of authorities and heightening NAPF's control over finance and information (Stehlin et al. 2020, 1252). This control over finance occurs through global wealth chains, forms of transnational legal and financial management through corporate entities, that are then linked to what can be extracted from local sites of physical activity. The use of legal affordances and the relations they rely on – what is permissible, what is contested – is a source of variegation linking the transnational and local scales through tiers of lawmaking and legal interpretation (Dixon 2014; Haberly and Wójcik 2017).

We know that the social and economic effects of NAPFs are significant. First of all, Uber normalizes 'just in time' labor and provides new rationalities for labor and corporate organization that place the stress on self-employed individuals with little responsibility from the firm (Ettlinger 2016). Second, AirBnB makes housing inequality outcomes worse and supports the rentierization and financialization of urban property (Christophers 2019b). As such AirBnB is part of an ongoing story of gentrification (Brahinsky 2020). Third, Bird and other e-scooter and bike NAPFs show the audacious disregard with which private capital treats public space. Underpinning these outcomes is NAPFs' use of legal affordances. Table 1 provides a summary of the importance of legal absence, ambiguity and arbitrage to Uber, AirBnB, and Bird.

	Uber	**AirBnB**	**Bird**
Absence	Categorization, arbitration	Categorization	Legal void
Ambiguity	Driver employment status, industry sector	Commercial vs. personal use	Use of public space, 'last mile' solution
Arbitrage	Employment costs, taxation	Taxation, data-sharing, commercial usage requirements	Device dumps; liability

Table 1: Summary of legal affordances used by platform companies

Ambiguity and absence allow the transcendence of conventional legal distinctions underpinning regulatory frameworks (Makela et al. 2018, 2). This allows interpretation to devolve to legal communities and permits NAPFs to engage in arbitrage for advantageous legal treatment. All of this occurs in a context where NAPFs are able to finance prolonged and attritional legal battles, limiting the capacity for challenges against their business model. NAPFs exploit opportunities to use other people's assets where they can, and where municipal authorities permit. As such, an important element of contemporary capitalism is variegation in the relationship between the exploitation of material assets and labor, exploitation of urban space and public resources, and the exploitation of the law.

Endnotes

[1] As documented in Uber Legal. https://www.uber.com/legal/en/document/?name=general-terms-of-use&country=great-britain&lang=en-gb. Accessed April 20 2021.

[2] While the ECJ decision was ratified in some European jurisdictions, a French industrial tribunal ruled that Uber is an information service one month later (Ram 2018).

[3] As documented in Uber Legal. https://www.uber.com/legal/en/document/?name=general-terms-of-use&country=united-states&lang=en. Accessed April 20 2021.

[4] As documented here: https://www.fairtourism.barcelona. Accessed April 20 2021.

Funding

This research received funding from the European Research Council project #694943-CORPLINK.

References

Adler-Nissen, R., & Drieschova, A. (2019). Track-change diplomacy: technology, affordances, and the practice of international negotiations. *International Studies Quarterly,* 63(3), 531-545.

Aguilera, T., Artioli, F., & Colomb, C. (2019). Explaining the diversity of policy responses to platform-mediated short-term rentals in European cities: A comparison of Barcelona, Paris and Milan. *Environment and Planning A: Economy and Space*, 0308518X19862286.

Airbnb, Inc. v. City and County of San Francisco, U.S. District Court for the Northern District of California, Case No. 3:16-CV-03615, filed June 27, 2016.

Airbnb S-1. 2020. Form S-1 Registration Statement. Washington: United States Securities and Exchange Commission.

Ajdacic, L., Heemskerk, E. M., & Garcia-Bernardo, J. (2021). The wealth defence industry: a large-scale study on accountancy firms as profit shifting facilitators. *New Political Economy* 26(4): 690-706..

Benner, K. (2016). Airbnb Ends Fight with New York City over Fines. *New York Times,* December 3.

Benvenuty, L. (2019). Las sanciones a patentes ilegales se multiplican por siete en un año. *La Vanguardia*. November 13.

Blomley, N. K. (1997). The properties of space: history, geography, and gentrification. *Urban Geography* 18 (4): 286-295.

Blomley, N. K. (2004). *Unsettling the City: Urban Land and the Politics of Property*. New York: Routledge.

Brahinsky, R. (2020). The story of property: Meditations on gentrification, renaming, and possibility. *Environment and Planning A: Economy and Space,* 52(5), 837-855.

Braithwaite, J. (2019). Tempered power, variegated capitalism, law and society. *Buffalo Law Review,* 67(3), 527-594.

Braun, B. (2016). From performativity to political economy: index investing, ETFs and asset manager capitalism. *New Political Economy*, *21*(3), 257-273.

Brenner, N. (2001). The limits to scale? Methodological reflections on scalar structuration. *Progress in Human Geography*, 25(4), 591-614.

Browning, L. and Newcomer, E. 2019 'Uber Created a $6.1 Billion Dutch Weapon to Avoid Paying Taxes'. *Bloomberg,* 8 August. https://www.bloomberg.com/news/articles/2019-08-08/uber-created-a-6-1-billion-dutch-weapon-to-avoid-paying-taxes.

Bryan, D., Rafferty, M., & Wigan, D. (2017). Capital unchained: finance, intangible assets and the double life of capital in the offshore world. *Review of International Political Economy*, 24(1), 56-86.

Bryan, D., Rafferty, M., & Wigan, D. (2017). The map and the territory: Exploring capital's new financialized spatialities. In *Handbook on the Geographies of Money and Finance.* Edward Elgar Publishing, 86–104.

Cherry, M. A. (2016). Beyond misclassification: The digital transformation of work. *Comparative Labour Law & Policy Journal* 37(3), 577-602.

Christensen, R. C., Seabrooke, L., & Wigan, D. (2022). Professional action in global wealth chains. *Regulation & Governance* 16(3): 705–721.

Christophers, B. (2019a). The rentierization of the United Kingdom economy. *Environment and Planning A,* 0308518X19873007

Christophers, B. (2019b). A tale of two inequalities: Housing-wealth inequality and tenure inequality. *Environment and Planning A*, 0308518X19876946.

Christophers, B., & Niedt, C. (2016). Resisting devaluation: Foreclosure, eminent domain law, and the geographical political economy of risk. *Environment and Planning A*, 48(3), 485-503.

Cocola-Gant, A., and Gago, A. (2019). Airbnb, buy-to-let investment and tourism-driven displacement: A case study in Lisbon. *Environment and Planning A: Economy and Space* 0(0), 1-18.

Commons, J. (1924) *The Legal Foundations of Capitalism.* New York: Macmillan Company.

Cover, R. (1983). The Supreme Court, 1982 Term – Foreword: *Nomos* and Narrative. *Harvard Law Review* 97, 4-68.

Cutler, K.-M. (2015). Airbnb, proposition F and the shared hypocrisy of bay area housing. *TechCrunch*, November 3. https://techcrunch.com/2015/11/03/prop-f/

Delaney, D., (2002). Beyond the word: Law as a thing of this world. In J. Holder and C. Harrison, editors, *Current Legal Issues Vol. 5: Law and Geography*. Oxford, UK:Oxford University Press, 67–83.

Dixon A. D. (2014). *The New Geography of Capitalism: Firms, Finance and Society*. Oxford: Oxford University Press.

Durri, I. (2019). Asociación Profesional Élite Taxi v. Uber Systems Spain SL. *International Legal Material* 58(4), 837-848.

ECJ. (2017). The Service Provided by Uber Connecting Individuals with Non-professional Drivers Is Covered by Services in the Field of Transport. [Press Release] Luxembourg: Court of Justice of the European Union.

ECJ. (2019). Judgment of the Court (Grand Chamber) in Case C-390/18, 19 December 2019.

Ettlinger, N. (2016). The governance of crowdsourcing: Rationalities of the new exploitation. *Environment and Planning A*, 48(11), 2162-2180.

Faulconbridge, J. R. (2007). Relational networks of knowledge production in transnational law firms. *Geoforum*, 38(5), 925-940.

Finér, L., & Ylönen, M. (2017). Tax-driven wealth chains: A multiple case study of tax avoidance in the Finnish mining sector. *Critical Perspectives on Accounting*, 48, 53-81.

Fleischer, V. (2010). Regulatory arbitrage. *Texas Law Review*, 89, 227.

Forbes (2020). Making sense of Airbnb stock's $75 billion valuation. Forbes, December 17. https://www.forbes.com/sites/greatspeculations/2020/12/17/making-sense-of-airbnb-stocks-75-billion-valuation/?sh=6386ab4b1adb

Friedrich, J., & Thiemann, M. (2020). Introduction–The Economic, Legal and Social Dimension of Regulatory Arbitrage. *Accounting, Economics, and Law: A Convivium,* 1(ahead-of-print).

Garcia-Bernardo, J., Fichtner, J., Takes, F. W., & Heemskerk, E. M. (2017). Uncovering offshore financial centers: Conduits and sinks in the global corporate ownership network. *Scientific Reports*, 7(1), 1-10.

Gibson, J. (1966). *The Senses Considered as Perceptual Systems*. Boston: Houghton Mifflin.

Grabher, G., & van Tuijl, E. (2020). Uber-production: From global networks to digital platforms. *Environment and Planning A,* 52(5), 1005-1016.

Graham, M. (2020). Regulate, replicate, and resist–the conjunctural geographies of platform urbanism. *Urban Geography,* 41(3), 453-457.

Graham, M., Hjorth, I., & Lehdonvirta, V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research*, 23(2), 135-162.

Haberly, D., & Wójcik, D. (2017). Earth incorporated: Centralization and variegation in the global company network. *Economic Geography*, 93(3), 241-266

Harvey, D. (1973, 1988). *Social Justice and the City.* Oxford: Basil Blackwell.

Harvey, D. (2006). *Spaces of Global Capitalism – Towards a Theory of Uneven Development.* London: Verso.

Hoffman, L. M., & Heisler, B. S. (2020). *Airbnb, Short-Term Rentals and the Future of Housing*. London: Routledge.

Hovenkamp, H. (2021). Antitrust and Platform Monopoly. *Yale Law Journal,* 130, 20-43.

Inc. (2018). Scooter Start-Up Bird Doubles Valuation to $2 Billion in 4 Months. *Inc.com*. June 29. https://www.inc.com/business-insider/scooter-company-bird-doubles-valuation-2-billion-unicorn-startup.html#:~:text=Just%20months%20after%20raising%20%24100,source%20close%20to%20the%20matter.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics,* 3(4), 305-360.

Kamps, H.J. (2018) 'How to understand the financial levers in your business', available from TechCrunch, https://techcrunch.com/2018/04/10/how-to-understand-the-financial-levers-in-your-business/. Accessed April 20 2021.

https://techcrunch.com/2018/04/10/how-to-understand-the-financial-levers-in-your-business/

Kessler, A. (2014). Brian Chesky: The 'sharing economy' and its enemies. *The Wall Street Journal*, January 17.

Kreiczer-Levy, S. (2019). *Destabilized Property: Property Law in the Sharing Economy.* Cambridge: Cambridge University Press.

Lacy, P., & Rutqvist, J. (2015). *Waste to Wealth: The Circular Economy Advantage*. Palgrave Macmillan, London.

Langenbucher, K. (2020). Regulatory Arbitrage–What's Law Got To Do With It?. *Accounting, Economics, and Law*, (ahead-of-print).

Langley, P. (2020). The folds of social finance: Making markets, remaking the social. *Environment and Planning A: Economy and Space,* 52(1), 130-147.

Langley, P., & Leyshon, A. (2017). Platform capitalism: the intermediation and capitalization of digital economic circulation. *Finance and Society* 3(1), 11-31.

Leitner, H., Sheppard, E., & Sziarto, K. M. (2008). The spatialities of contentious politics. *Transactions of the Institute of British Geographers*, 33(2), 157-172.

Leshinsky, R., & Schatz, L. (2018). "I don't think my landlord will find out:" Airbnb and the challenges of enforcement. *Urban Policy and Research* 36(4),417-428.

Lindahl, H. (2013). *Fault Lines of Globalization: Legal Order and the Politics of A-Legality*. Oxford. Oxford University Press.

Lomas, N. (2018). 'Spanish 'anti-Uber' taxi strike ends after government agrees new regulation'. Available from Techcrunch https://techcrunch.com/2018/08/02/spanish-anti-uber-taxi-strike-ends-after-government-agrees-new-regulation/. Accessed April 20 2021.

Lomas, N. (2019). Rules to rein in ride-hailing apps coming to Barcelona. Techcrunch. January 29. https://techcrunch.com/2019/01/29/rules-to-rein-in-ride-hailing-apps-coming-to-barcelona/.

Makela, F, McKee, D, & Scassa, T (2018) Introduction: The "sharing economy" through the lens of law (pp. 1-13). In McKee, D, Makela, F, & Scassa, T (Eds) *Law and the "Sharing Economy": Regulating Online Market Platforms*. Ottawa: University of Ottawa Press.

Marshall. A. (2018). As Shared Scooters Invade, Cities Must Decide Whose Vehicles Belong Where'. *Wired*. April 4.

McKenzie, R., & Atkinson, R. (2020). Anchoring capital in place: The grounded impact of international wealth chains on housing markets in London. *Urban Studies,* 57(1), 21-38.

Merino, A. (2019). L'Ajuntament de Barcelona comença a requisar patinets de lloguer compartit. *Naciodigital*. September 12.

Norman, D.A. (1988). *The Psychology of Everyday Things*. New York: Basic Books.

OECD. 2018. *Consumption Tax Trends 2018: VAT/GST and Excise Rates, Trends and Policy Issues*. Paris: OECD.

OPBP. 2017. 'The Employment Status of Uber Drivers: A Comparative Report Prepared for the Social Law Project'. University of the Western Cape, Oxford: Oxford Pro Bono Publico.

Orquin, C. (2016).L'ensopegada del patinet: Barcelona intenta regular la circulació dels vehicles queixes del sector i confusió. *El Pais*. July 17.

Ossandón, J., & Ureta, S. (2019). Problematizing markets: market failures and the government of collective concerns. *Economy and Society*, 48(2), 175-196.

O'Sullivan, F. (2021). Barcelona wants to ban renting private rooms to tourists. *Bloomberg*, February 5. https://www.bloomberg.com/news/articles/2021-02-05/barcelona-s-new-plan-to-regulate-vacation-rentals

Peck, J., & Theodore, N. (2007). Variegated capitalism. *Progress in Human Geography*, 31(6), 731-772.

Pistor, K. (2019). *The Code of Capital: How the Law creates Wealth and Inequality.* Princeton University Press.

Potts, S. (2016). Reterritorializing economic governance: contracts, space, and law in transborder economic geographies. *Environment and Planning A* 48(3), 523-539.

Pritchett, W. E. (2003). The "public menace" of blight: Urban renewal and the private uses of eminent domain. *Yale Law and Policy Review*, *21,* 1–52.

Ram, A. (2018). Uber wins French employment case. *Financial Times*. February 8.

Robé, J. P. (2011). The legal structure of the firm. *Accounting, Economics, and Law*, 1(1). DOI: 10.2202/2152-2820.1001.

Rogers, B. (2016) Employment rights in the platform economy: getting back to basics. *Harvard Law & Policy Review* 10, 480-520.

Said, C. (2014). Airbnb to collect hotel taxes for San Francisco rentals. SF Gate, March 31. https://www.sfgate.com

Said, C. (2020). AB5 gig work bill: All your questions answered. San Francisco Chronicle, February 20.

San Francisco Municipal Transportation Agency (2020) *Curb Management Strategy,* San Francisco: SFMTA.

Santos, B. de S. (1987). Law: a map of misreading. Toward a postmodern conception of law. *Journal of Law and Society* 14(3), 279-302.

Schellong, D., Sadek, P., Schaetzberger, C. & Barrack, T. (2019). 'The Promise and Pitfalls of E-Scooter Sharing', available from Boston Consulting Group: https://www.bcg.com/publications/2019/promise-pitfalls-e-scooter-sharing. Accessed April 20 2021.

Seabrooke, L., & Wigan, D. (2017). The governance of global wealth chains. *Review of International Political Economy*, *24*(1), 1-29.

SFMTA. (2019).Powered Scooter Share Program Evolves Beyond Pilot Phase. San Francisco Municipal Transport Authority. July 31.

Sharman, J. C. (2017). Illicit Global Wealth Chains after the financial crisis: micro-states and an unusual suspect. *Review of International Political Economy*, 24(1), 30-55.

Sheppard, E. (2002). The spaces and times of globalization: Place, scale, networks, and positionality. *Economic Geography*, 78(3), 307-330.

Stehlin, J., Hodson, M., & McMeekin, A. (2020). Platform mobilities and the production of urban space: Toward a typology of platformization trajectories. *Environment and Planning A: Economy and Space*, *52*(7), 1250-1268.

Tansey, R. & Haar, K. (2019). *Uber Influential.* Brussels: Corporate Europe Observatory and AK Europa.

Teresa, B. F. (2016). Managing fictitious capital: The legal geography of investment and political struggle in rental housing in New York City. *Environment and Planning A. Economy and Space* 48(3): 465-484.

Törnberg, P., & Chiappini, L. (2020). Selling black places on Airbnb: Colonial discourse and the marketing of black communities in New York City. *Environment and Planning A,* 52(3), 553-572.

Uber S-1. 2019. Form S-1 Registration Statement. Washington: United States Securities and Exchange Commission.

Uber (2021) Form 10-K Uber Technologies Inc. Annual Report. Washington: United States Securities and Exchange Commission

Wachsmuth, D., & Weisler, A. (2018). Airbnb and the rent gap: Gentrification through the sharing economy. *Environment and Planning A: Economy and Space* 50(6), 1147-1170.

Wells, K. J., Attoh, K., & Cullen, D. (2021). "Just-in-Place" labor: Driver organizing in the Uber workplace. *Environment and Planning A*, 53(2) 315–331.

Whitfield, L., & Staritz, C. (2021). Local supplier firms in Madagascar's apparel export industry: Upgrading paths, transnational social relations and regional production networks. *Environment and Planning A* 53(4): 763–784.

Wigan, D. (2021). Uber Global Wealth Chains. In Unger, B., L. Rossel and J. Ferwerda (eds.) *Combating Fiscal Fraud and Empowering Regulators*. Oxford: Oxford University Press.

Yablon, C. M. (2019). The Lawyer As Accomplice. Cannabis, Uber, Airbnb, and the Ethics of Advising

"Disruptive" Businesses. *Minnesota Law Review* 104, 309-384.