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Public Deliberation and Platform Governance:

A Pragmatist Approach in Contribution to the Theory of Workplace Democracy

By

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### **Abstract**

In contribution to burgeoning theories of deliberative workplace democracy, I argue that Habermas's model of deliberation is unhelpful for normative recommendations about the democratization of firms in the platform economy. Based on the discussions of platform workers online, I instead argue that John Dewey's model of deliberation has greater critical purchase for them as deliberators. On Dewey's rendering, platform workers are deliberative inquirers seeking but failing to achieve collective knowledge and control of sources of disruption to their work. A set of normative recommendations following from Dewey's account demands self-governance from the first, an experimentalist governance strategy that would follow from the activities in which platform workers are already engaged. Pace Habermas, who worries that this lacks sufficient democratic legitimacy, the Deweyan model of deliberation allows platform workers to begin collectively experimenting now.

To foresee future objective alternatives and to be able by deliberation to choose one of them and thereby weigh its chances in the struggle for future existence, measures our freedom.

- John Dewey, Human Nature and Conduct

#### 1 Introduction

Workers at platform firms are frustrated. These workers, typically employed by firms like Uber, TaskRabbit, Amazon, and Google, find themselves backed into a discursive corner.<sup>1</sup> Although workers discuss frustrations with inappropriate wages, opaque management systems,<sup>2</sup> and insufficient information to appropriately perform their work,<sup>3</sup> these discussions are largely ignored by firm management.<sup>4</sup> What about the way that workers discuss contributes to this outcome?

Platform workers discussions face three structural challenges: physical isolation of workers from each other, physical isolation of workers from management, and contractual atomization as independent contractors. Even though platforms are organized as spaces of action, the organizational architecture of platforms as places of employment physically isolates workers. Platform operators set the terms of participation. Platform workers sell their labor to platforms and complete tasks individually, not collectively. Platform organization also physically isolates workers from management, clients, and customers because of the remoteness of workers' tasks —

<sup>&</sup>lt;sup>1</sup> Vallas and Schor, "What Do Platforms Do?"; Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective."

<sup>&</sup>lt;sup>2</sup> Ma and Kou, "I'm Not Sure What Difference Is between Their Content and Mine, Other than the Person Itself."

<sup>&</sup>lt;sup>3</sup> Rosenblat, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers."

<sup>&</sup>lt;sup>4</sup> Thäter et al., "How Do Workers Gain Voice on Digital Work Platforms? Hotspots and Blind Spots in Research on Platform Worker Voice," 78.

<sup>&</sup>lt;sup>5</sup> Wood et al., "Good Gig, Bad Gig"; Seetharaman, Pal, and Hui, "Delivery Work and the Experience of Social Isolation"; Vallas and Schor, "What Do Platforms Do?"; Bajwa et al., "The Health of Workers in the Global Gig Economy"; Glavin, Bierman, and Schieman, "Über-Alienated"; Walker, Fleming, and Berti, "'You Can't Pick up a Phone and Talk to Someone.""

they are not performed in a common physical space.<sup>6</sup> Indeed, platform workers typically own the technologies and other means of production that they use to deliver services to customers through platforms. Uber drivers, for example, own their own cars and use them to create value for Uber.<sup>7</sup> Similarly, workers on social media and task-matching platforms contract with workers who use their own computers and software to create value for the platform.<sup>8</sup> Platforms institutionalize this arrangement by employing workers as independent contractors; incentives and opportunities for business are allocated by algorithms and workers "bid" on tasks.<sup>9</sup> Despite this formal and de facto atomization and decentralization, platform workers notice that they share many common interests. Typically, they discuss their concerns on online forums.<sup>10</sup>

These discussions occur outside of platforms themselves – management has no imperative to take them into account.<sup>11</sup> However, online discussions have created informal organization networks between platform workers that have resulted in strikes and protests,<sup>12</sup> coordination among workers to switch to another platform,<sup>13</sup> and litigation reform.<sup>14</sup>

The emergence of informal collective action among platform workers has prompted a rethinking of the intra-firm presuppositions of employee voice. Traditionally, "employee voice"

<sup>&</sup>lt;sup>6</sup> Glavin, Bierman, and Schieman, "Über-Alienated"; Bérastégui, "Exposure to Psychosocial Risk Factors in the Gig Economy."

<sup>&</sup>lt;sup>7</sup> Vallas and Schor, "What Do Platforms Do?"; Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective."

<sup>&</sup>lt;sup>8</sup> Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective," 9.

<sup>&</sup>lt;sup>9</sup> Cf. Vallas and Schor, "What Do Platforms Do?," 282.

<sup>&</sup>lt;sup>10</sup> This does not mean that platform firms lack traditional voice mechanisms altogether. Such mechanisms exist "functionally," however little work has yet been done to assess their successes for platform workers according to Thäter et al., "How Do Workers Gain Voice on Digital Work Platforms? Hotspots and Blind Spots in Research on Platform Worker Voice," 77–78..

<sup>&</sup>lt;sup>11</sup> Thäter et al., 75.

<sup>&</sup>lt;sup>12</sup> Woodcock and Graham, *The Gig Economy*.

<sup>&</sup>lt;sup>13</sup> Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy."

<sup>&</sup>lt;sup>14</sup> Adrian et al., *Missing Voice?*, 35–36; Karanović, Berends, and Engel, "Regulated Dependence"; Cameron and Rahman, "Expanding the Locus of Resistance"; Lee et al., "Working with Machines"; Allen-Robertson, "The Uber Game"; Maffie, "The Role of Digital Communities in Organizing Gig Workers"; Mendonça and Kougiannou, "Disconnecting Labour."

These voice conceptualizations depend on several terms: public, publicity, public sphere, digital public sphere, platforms, platform operators, and platform workers, and platform firms. Public has been defined above. Following this definition, publicity is the manner in which something is exposed to general view. A "public sphere" is a space in which discussions and their objects of reference come into general view for all discussants, typically with the normative

<sup>&</sup>lt;sup>15</sup> Boxall and Purcell, "An HRM Perspective on Employee Participation," 32.

Greer, "E-Voice"; Diamond and Freeman, "Will Unionism Prosper in Cyberspace? The Promise of the Internet for Employee Organization"; Taras and Gesser, "How New Lawyers Use E-Voice to Drive Firm Compensation."
 Walker, Fleming, and Berti, "You Can't Pick up a Phone and Talk to Someone."

<sup>&</sup>lt;sup>18</sup> Thäter et al., "How Do Workers Gain Voice on Digital Work Platforms? Hotspots and Blind Spots in Research on Platform Worker Voice," 75.

<sup>19 &</sup>quot;Definition of Public."

<sup>&</sup>lt;sup>20</sup> Khan, Mowbray, and Wilkinson, "Employee Voice on Social Media — An Affordance Lens," 14; Walker, Fleming, and Berti, "You Can't Pick up a Phone and Talk to Someone," 781.

<sup>&</sup>lt;sup>21</sup> As I will show in §6.1, Dewey and Habermas have radically different understandings of the public sphere. Habermas in *Structural Transformation of the Public Sphere* defines the *bourgeois* public sphere as a "The bourgeois public sphere may be conceived above all as the sphere of private people come together as a public; they soon claimed the public sphere regulated from above against the public authorities themselves, to engage them in a debate over the general rules governing relations in the basically privatized but publicly relevant sphere of commodity exchange and social labor" Habermas, *The Structural Transformation of the Public Sphere*, 27.. Asen, "The Multiple Mr. Dewey." says Dewey's public sphere contains "overlapping, intersecting, and contesting discursive forums in which diverse citizens interact variously to address shared concerns." My definition here is closest to Allen and Mendieta, *The Cambridge Habermas Lexicon*, 356., who define the public sphere as "that realm in which actors enter into communicative interaction among themselves that at the same time operates as the medium of the production of a collective self-understanding."

criterion of egalitarian reciprocity.<sup>22</sup> The "digital public sphere" is the same, mediated by online software infrastructures.<sup>23</sup> Platforms are socio-technical systems comprised of two-tiered institutional norms and distributed technical infrastructures on which users sell their labor.<sup>24</sup> As socio-technical, platforms are the holistic composite of their norms and infrastructures – neither can be considered independently of the other.<sup>25</sup> As normatively two-tiered, those who own and manage the platform and those who sell their labor through it have distinct norms. The first group, platform operators, have the right to set the "rules of the game" for the second group, platform workers.<sup>26</sup> Platform workers have the right as independent contractors to sell their labor only if they comply with the rules of the game.<sup>27</sup> Platforms' technical infrastructures are software- and hardware-based. 28 As software, platforms are digital arenas in which operators set rules, terms, and conditions.<sup>29</sup> As hardware, platforms link pieces of technology together through the software that either runs them or is compatible with them.<sup>30</sup> This technical infrastructure is distributed because, as said above, platform workers must own a piece of hardware to use the platforms' software. Platform firms, then, are firms whose business model depends on a platform.

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<sup>&</sup>lt;sup>22</sup> Calhoun, *Habermas and the Public Sphere*, 104.

<sup>&</sup>lt;sup>23</sup> Schäfer, "Digital Public Sphere," 1.

<sup>&</sup>lt;sup>24</sup> A highly contested term, "platform" as defined here synthesizes partial definitions given by Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective"; Gillespie, "The Politics of 'Platforms'"; Vallas and Schor, "What Do Platforms Do?"; Frenken and Fuenfschilling, "The Rise of Online Platforms and the Triumph of the Corporation"; Stark and Pais, "Algorithmic Management in the Platform Economy.".

<sup>&</sup>lt;sup>25</sup> Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective," 2.

<sup>&</sup>lt;sup>26</sup> Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective," 4–5; Stark and Pais, "Algorithmic Management in the Platform Economy," 54; Normatively rendered, platform operators must maximize profit (Ibid).

<sup>&</sup>lt;sup>27</sup> Stark and Pais, "Algorithmic Management in the Platform Economy," 51.

<sup>&</sup>lt;sup>29</sup> Gillespie, "The Politics of 'Platforms," 352.

<sup>&</sup>lt;sup>30</sup> Vallas and Schor, "What Do Platforms Do?," 270.

This thesis is concerned with the intersection of discursive difficulties, public visibility, and collective action faced by platform workers. To theorize this intersection, deliberative democracy is presupposed as a normative ideal for corporate governance because of platform workers' reliance on online discussions. Since Scherer and Palazzo helped formally introduce the application, 31 "deliberation" has been touted by several scholars as a means to achieve moral and otherwise procedural legitimacy at firms.<sup>32</sup> Likewise, because platform workers are engaged in a "mutual communication that involves weighing and reflecting on preferences, values, and interests regarding matters of common concern," their online discussions seem deliberative in the sense recognized by deliberative democrats.<sup>33</sup> Recent work at the intersection of these fields has, therefore, called for a more direct application of deliberative-democratic theory to corporate organization.<sup>34</sup> Elizabeth Anderson, building on the Republican work of Philip Pettit,<sup>35</sup> argues workplaces are "private governments," autocratic structures that suppress the will of workers.<sup>36</sup> Freedom in the workplace, construed as "non-domination," therefore requires an intrafirm deliberative democracy just as (public) governments do.37 Scholars Helene Landemore and Isabelle Ferreras have built on Anderson's work to both design and demand democratic workplace apparatuses.<sup>38</sup> Landemore has thus called for the application of her theory of

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<sup>31</sup> Palazzo and Scherer, "Corporate Legitimacy as Deliberation."

<sup>&</sup>lt;sup>32</sup> Gilbert et al., "Guest Editors' Introduction," 1.

<sup>&</sup>lt;sup>33</sup> Bächtiger et al., *The Oxford Handbook of Deliberative Democracy*, 19.

<sup>&</sup>lt;sup>34</sup> Gilbert et al., "Guest Editors' Introduction"; Goodman and Mäkinen, "Democracy in Political Corporate Social Responsibility"; Ferreras, "Democratizing the Corporation," June 1, 2023; Heiner, "Workers' Voice in Platform Labour: An Overview."

<sup>&</sup>lt;sup>35</sup> Pettit, Republicanism.

<sup>&</sup>lt;sup>36</sup> Anderson, *Private Government*.

<sup>&</sup>lt;sup>37</sup> Anderson, 69. "there is no adequate substitute for recognizing workers' voice in their government. Voice can more readily adapt workplace rules to local conditions than state regulations can, while incorporating respect for workers' freedom, interests, and dignity."

dom, interests, and dignity

<sup>&</sup>lt;sup>38</sup> Ferreras et al., *Democratize Work*, 26, 52.

"deliberative mini-publics" to workplaces.<sup>39</sup> Isabella Ferraras has similarly argued for deliberation at workers councils in her bicameral model of corporate governance.<sup>40</sup>

These theorists have, however, paid little attention to the normative details of deliberation itself. Historically, deliberative democratic theory falls along a participatory/communicative fault-line. Participatory democrats emphasize the practical requirements for deliberation, including institutional norms and norms of practice. This strand of deliberative democratic theory is epitomized in the works of John Dewey, who emphasizes what deliberators do in common. Deliberative democrats concerned with communication, however, generally emphasize norms of discussions themselves. Epitomized above all by Jürgen Habermas' "theory of communicative action," this strand of deliberative democratic theory emphasizes how deliberators communicate.

For both theorists, deliberation is something "public" in the sense defined above – "exposed to general view." However, both theorists write publicity into their normative models differently. Habermas's communicative account has a "normative core" which emphasizes the discursive generalization of "reasons for action" among deliberators.<sup>42</sup> For Habermas, what is "public" always-already has a discursively normative<sup>43</sup> content either successfully or failing to comply with the normative core. If the normative core has successfully been complied with, deliberation culminates in public opinion. Habermas's account of the formation of public opinion

<sup>&</sup>lt;sup>39</sup> Landemore, *Open Democracy*, 210-211.

<sup>&</sup>lt;sup>40</sup> Ferreras, "Democratizing the Corporation," June 1, 2023.

<sup>&</sup>lt;sup>41</sup> Bächtiger et al., *The Oxford Handbook of Deliberative Democracy*, 83.

<sup>&</sup>lt;sup>42</sup> Bernstein, "The Normative Core of the Public Sphere," 769.

<sup>&</sup>lt;sup>43</sup> Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, 297. "This normative content [for action] arises from the structure of linguistic communication and the communicative mode of sociation."

supposes *ex ante* deliberation, demanding norm-compliance epistemologically in-advance of action.<sup>44</sup>

Dewey's participatory account of deliberation, however, emphasizes inquiry as a response to disruption. For Dewey, what is "public" is in the process of obtaining an instrumentally normative content. Customary habits of evaluation, the closest approximation to "norms" in Dewey's vocabulary, are reconstructed as means to ends. For Dewey, if deliberation has completed successfully, deliberation culminates in an active public – a group of individuals who have taken collective action to control the consequences of an externality. If a public has formed, then habits have been sufficiently reformed as customs for all members of the public. These customs secure the administration of the externality. Pace Habermas, Dewey's account of deliberation and its products is *ex post* – or reflexive, always responding to inciting incidents based on the consequences of action.

How, then, do platform workers discuss? How should they deliberate? A preliminary distinction must be drawn between discussion and deliberation. Here, "discussion" refers to activity that Uber drivers and YouTube content creators participate in online. Not until normative theory is introduced in §4 will this be called "deliberation." Deliberation, there, will refer to

<sup>&</sup>lt;sup>44</sup> By this, I do not mean that deliberators are simply complying with normative criteria Habermas set in advance as theorist. Rather, I mean that Habermas's theory sets deliberative standards in advance a priori – there is no room for a case in which deliberative universalization is inappropriate or inadequate. There is something transcendental about Habermas's theory in a Kantian sense, as discussed below. The public is not something that must be made for Habermas.

<sup>&</sup>lt;sup>45</sup> Anderson, "Dewey's Moral Philosophy."

<sup>&</sup>lt;sup>46</sup> Dewey, *The Public and Its Problems*.

<sup>&</sup>lt;sup>47</sup> Inspiration for this distinction is taken from *Public and Its Problems* p. 145, where Dewey's position is explicitly "ex posto facto." These terms roughly correspond to the philosophical distinction between a Kantian *a priori* and a Peirciean *a posteriori* pragmatism. Where Kant wants practical postulates as a foundation for action, Peirce and Dewey adamantly reject such foundationalism in favor of an anti-foundationalist practical philosophy. *Ex ante* deliberation assumes reasons-giving as an *a priori* condition for the possibility of deliberation. *Ex post* deliberation makes no such assumption - "public deliberation" does not require reasons; it instead refers to the activities of a discrete, sociological category (a public) arising in response to the consequences of prior, unintended actions. Cf. Raymond Geuss's articulation of Dewey's account of publicity as an *ex post* "stamp," *Public Goods, Private Goods* (86). Cf. also Habermas and Fultner, *Truth and Justification*, where Habermas calls his view a "Kantian" pragmatism. See §6.1.

discussion with a specific normative content. Deliberation's normative content<sup>48</sup> has an input (that which is deliberated), a throughput (the process of deliberation itself), and an output (the results of deliberation.<sup>49</sup>

So far, theorists of corporate democratization have presumed aspects of Habermas's model of deliberation for all three normative contents. Landemore, for instance, assumes with Habermas that deliberation is primarily discursive and generalizing about reasons for decisions.<sup>50</sup> Ferreras, likewise, assumes that workers experience embeddedness into the public sphere exactly in Habermas's sense.<sup>51</sup> Habermas's is however, not the only deliberative model available to governance scholars, as others have emphasized.<sup>52</sup> Among these alternative models, John Dewey's work stands out for its simultaneous compatibility with contemporary work on deliberation in general,<sup>53</sup> industrial relations,<sup>54</sup> and employee voice and participation.<sup>55</sup> Habermas and Dewey offer competing models of deliberation which, when applied to platform workers, reveal opposed normative accounts and suggestions for their governance. While Habermas has appropriated pragmatism for his theory of communicative action, he loses the aspects of Dewey's model that cannot be reduced to communication – action<sup>56</sup> in general and the habits and customs that attend it. I argue for a fully pragmatist articulation of deliberation as applied to platform governance for this reason – the non-communicative actions of platform workers as discussants are too thoroughgoing to be ignored.

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<sup>&</sup>lt;sup>48</sup> Helene Landemore uses this triad to refer to deliberative legitimacy. I take it that the "normative content" of deliberation describes "(normative) legitimacy" in her sense as "the property by which an entity (person or organization) is morally entitled to rule (in the case of a state) or to issue binding commands (in the case of political bodies more generally)." Landemore, *Open Democracy*, 87.

<sup>&</sup>lt;sup>49</sup> Landemore, 106.

<sup>&</sup>lt;sup>50</sup> Landemore, 37.

<sup>&</sup>lt;sup>51</sup> Ferreras, "Democratizing the Corporation," June 1, 2023, 192.

<sup>&</sup>lt;sup>52</sup> Rahman, *Democracy Against Domination*; Sabel, "Dewey, Democracy, and Democratic Experimentalism"; Jackson, *Equality Beyond Debate*.

<sup>&</sup>lt;sup>53</sup> Cohen and Sabel, "Directly-Deliberative Polyarchy."

<sup>&</sup>lt;sup>54</sup> Herrigel, *Manufacturing Possibilities*; Flanagan, "Theorising the Gig Economy and Home-Based Service Work."

<sup>&</sup>lt;sup>55</sup> Ferreras, "Democratizing the Corporation," June 1, 2023.

<sup>&</sup>lt;sup>56</sup> Honneth and Farrell, "Democracy as Reflexive Cooperation: John Dewey and the Theory of Democracy Today."

My argument is among the first to put Dewey and Habermas in direct conversation on the question of corporate governance for platform workers. So far, as has been emphasized, the intersection of deliberation and governance has relied on the normative model offered by Habermas. Likewise, although Dewey has so far been applied obliquely by scholars like Muldoon<sup>57</sup> to advance workplace democratization and by Ferreras<sup>58</sup> to investigate freelancers' cooperatives, my application of Dewey's theory of deliberation relative to workplace democratization is novel. Some of Ferreras's work, for its part, comes very close to my argument, considering platform workers as public deliberators.<sup>59</sup> This move, emphasizing democratic experimentalism, thus builds on a broader literature on pragmatist governance. <sup>60</sup> So far, however, this literature has insufficiently discussed experimentation based on workers' own voices and based on the specific features of platform firms. I redress both gaps through a methodological priority given to these voices on the platform economy. These voices, analyzed through a sentiment analysis, give access to the specific discursive tendencies of platform workers. Literature on the platform economy has, likewise, tended to induce fissures based on the sector in which platform firms operate. I redress this by comparing the experiences of workers at firms infrequently discussed together, Uber and YouTube.

My argument makes five moves. First, I document the content of platform workers' online discussions, emphasizing existing literature's consensus around the relevance of discourse to firm success, current worker discussions, and their collective strategies. Second, I present Habermas's model of *ex ante* public deliberation and render platform workers in the model accordingly, making preliminary normative recommendations. On a Habermasian rendering,

<sup>&</sup>lt;sup>57</sup> Forestal, "Platform Socialism."

<sup>&</sup>lt;sup>58</sup> Charles, Ferreras, and Lamine, "A Freelancers' Cooperative as a Case of Democratic Institutional Experimentation for Better Work."

<sup>&</sup>lt;sup>59</sup> Charles, Ferreras, and Lamine.

<sup>&</sup>lt;sup>60</sup> Sabel, "Dewey, Democracy, and Democratic Experimentalism"; Herrigel, Manufacturing Possibilities.

platform workers' deliberations are not in the process of accruing universalized understanding and consensus. Therefore, a deliberative-democratic institutional design based on formal, representative voice structures with Habermasian premises should be instituted so that platform workers can perform such universalization. Third, I present Dewey's model of *ex post* public deliberation and perform the same normative rendering. On Dewey's terms, platform workers' deliberations are in the process of seeking actionable means to their tentatively agreed-on ends. Platform workers should therefore reflexively examine the current outcomes of their deliberations and experiment with norms (or, in Dewey's vocabulary, "customs")<sup>61</sup> that more regularly foment collective action. Hereby, these workers can begin to overcome the structural barriers to their discussions, finding each other as workers undergoing common conditions. This requires a strong custom of collective reflexivity among platform workers.

Fourth, I argue Dewey's model of deliberation is more successful than Habermas's at describing the deliberations of platform workers for three reasons, each of which Habermas has already critiqued Dewey for: workers' reliance on practical norms (a critique from deliberative inputs), the inquiry involved in their deliberations (a critique from deliberative throughput, or procedure), and the strategic character of their deliberations (a critique from deliberative outputs). To start, deliberations depend on implicit, practical norms presupposed by platform workers – Habermas's theory of communicative action cannot accommodate practical norms. Next, deliberations primarily concern advice exchanges – Dewey's model of inquiry is more appropriate to describe this. Finally, platform workers' deliberations are strategic – Habermas denies strategic action a place in his normative ambit. In the process, I respond to the

<sup>&</sup>lt;sup>61</sup> Although these terms are not entirely interchangeable, as will be discussed below, they will be used as such for the sake of brevity. "Norms" will be used when discussing Habermas's model and "customs" will be used when discussing Dewey's model.

<sup>&</sup>lt;sup>62</sup> See Landemore, *Open Democracy*, 106–7 for more on inputs, throughputs, and outputs.

Habermasian objection that deliberators require an entirely new discursive space dependent on Habermas's model. I argue in response to the critique from input that such a space requires ignoring too many details of platform workers' deliberations to be either empirically or normatively useful. I respond in the critique from output that Habermas's formal institutional designs are opposed to workers' prevailing, informal strategies of collective action. Fifth, I conclude with a more complete normative recommendations to platform workers themselves based on Dewey's model. Ultimately, Dewey's account of deliberation provides a stronger normative framework than Habermas's for platform workers because his *ex post* account of deliberation more clearly describes the practical norms, inquiry, and strategies of these workers; it also prescribes a norm of collective inquiry and action in response to the individualized inquiry his model recognizes.

### 2 Platform Workers' Discussions: Uber and YouTube

#### 2.1 Literature Review

The effects of Uber and YouTube on the global economy have been enormous. Where Uber has taken center stage in platform debates as a governance "disruptor" for several stakeholders (workers included), YouTube has interested scholars for the networks of actors its software infrastructures mobilize. As a media firm, YouTube and its creators are often absent from more narrow scholarly discussions about platform workers. Where Uber was an obvious choice given its centrality to empirical research documenting workers' grievances with platform governance, YouTube was thus selected for its peripheral position. Understanding the

<sup>63</sup> Cramer and Krueger, "Disruptive Change in the Taxi Business: The Case of Uber."

<sup>&</sup>lt;sup>64</sup> Lewis, "Alternative Influence"; Soriano and Gaw, "Platforms, Alternative Influence, and Networked Political Brokerage on YouTube."

<sup>&</sup>lt;sup>65</sup> Dolata and Schrape, "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective."

discussions of workers at both firms together, therefore, argues for a set of discursive practices common to platform workers despite their industry. <sup>66</sup> I argue in three steps. First, sociological and human-computer interaction (HCI) literature will be surveyed to establish the accepted themes of the discussions of platform workers at Uber and YouTube. Second, novel data collected from online forums on which these platform workers converse will be analyzed to supplement the themes already accepted in this literature. In §4.3 and §5.3, this combination of accepted themes and novel data will be analyzed according to the presuppositions of Deweyan and Habermasian deliberations.

Uber is a ride-hailing platform firm.<sup>67</sup> Unlike traditional taxi firms' reliance on local geographical knowledge<sup>68</sup>, Uber's services rely on algorithms. Defined in 1979 by computer scientist Robert Kowalski as "logic + control," algorithms are repeatable procedures that transform an input set of data into an output based on the specifications of the procedure.<sup>69</sup> These algorithms are the "technics" in Uber's socio-technical system. As socio-technical, these algorithms perform social functions typically performed by markets, matching drivers with riders and determining pricing based on real-time supply and demand.<sup>70</sup>

Uber's technologies (and the aggressive expansion strategies it employs to promote them)<sup>71</sup> have disrupted<sup>72</sup> markets across the world. In response, stakeholders inside and outside Uber have discussed its cross-jurisdictional legal status,<sup>73</sup> the technical capabilities of its algorithms,<sup>74</sup>

<sup>&</sup>lt;sup>66</sup> Of course, this claim is limited by the fact only two firms have been selected for discussion.

<sup>&</sup>lt;sup>67</sup> "The History of Uber."

<sup>&</sup>lt;sup>68</sup> Pakusch et al., "The Automation of the Taxi Industry – Taxi Drivers' Expectations and Attitudes Towards the Future of Their Work."

<sup>&</sup>lt;sup>69</sup> Panagia, "On the Possibilities of a Political Theory of Algorithms," 113.

<sup>70 &</sup>quot;Uber Engineering's Tech Stack."

<sup>71</sup> Martini, "International Regulatory Entrepreneurship," 156.

<sup>&</sup>lt;sup>72</sup> Cramer and Krueger, "Disruptive Change in the Taxi Business: The Case of Uber."

<sup>&</sup>lt;sup>73</sup> Martini, "International Regulatory Entrepreneurship"; Hall and Krueger, "An Analysis of the Labor Market for Uber's Driver-Partners in the United States"; Collier, Dubal, and Carter, "Disrupting Regulation, Regulating Disruption"; Thelen, "Regulating Uber."

and their experiences driving for the firm.<sup>75</sup> Discussants across jurisdictions have so far employed strategies to push back against Uber's market entry. These discussants engaged in multi-stakeholder collaboration to ensure Uber's compliance with pre-existent regulation. Kathleen Thelen, for instance, describes regulatory compliance as a consequence of coalition formation.<sup>76</sup> These coalitions, argues Thelen, required a diverse set of actors including taxidrivers, policymakers, and Uber drivers themselves to discuss and disseminate information about compliance. Regulatory success depended on mobilizations based on "flashpoints" of discursive agreement.<sup>77</sup> Amit Tzur has similarly argued that circumvention of these flashpoints depended in-part on Uber's ability to disseminate information in its favor, shaping stakeholder debates.<sup>78</sup> Customers were mobilized through early use of the firm's technology and through online forums. In general, Uber's influence on public discourse has been localized to its ability to win over its customer-base, especially through its software innovations<sup>79</sup> and/or explicit attempts at policy circumvention.80 When disruptions wrought in-part by Uber's technologies dominated stakeholder discussions, as in Australia, France and Germany, policymakers, who interviewed incumbent taxi drivers and some Uber drivers, sought decisive regulatory action.<sup>81</sup> Drivers

<sup>&</sup>lt;sup>74</sup> Abraham, "Pay Algorithms Make Working in the Gig Economy Feel Like 'Gambling,' Study Says"; Gritsenko and Wood, "Algorithmic Governance"; Möhlmann et al., "Algorithmic Management of Work on Online Labor Platforms."

<sup>&</sup>lt;sup>75</sup> Lee et al., "Working with Machines"; Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy"; Norlander et al., "The Effects of Technological Supervision on Gig Workers"; Glöss, McGregor, and Brown, "Designing for Labour"; Bergh et al., "Information Asymmetry in Management Research"; Mäntymäki, Baiyere, and Islam, "Digital Platforms and the Changing Nature of Physical Work."

<sup>76</sup> Thelen, "Regulating Uber."

<sup>&</sup>lt;sup>77</sup> Thelen, 949.

<sup>&</sup>lt;sup>78</sup> Tzur, "Uber Über Regulation?," 355.

<sup>&</sup>lt;sup>79</sup> Edelman and Geradin, "Efficiencies and Regulatory Shortcuts"; Geradin, "Should Uber Be Allowed to Compete in Europe? And If so How?"; Rogers, "The Social Costs of Uber."

<sup>&</sup>lt;sup>80</sup> Posen, "Ridesharing in the Sharing Economy: Should Regulators Impose Über Regulations on Uber?"; Uzunca, Rigtering, and Ozcan, "Sharing and Shaping"; Cramer and Krueger, "Disruptive Change in the Taxi Business: The Case of Uber."

<sup>&</sup>lt;sup>81</sup> Thevenoud, "Un taxi pour l'avenir, des emplois pour la France."; "Point to Point Transport Taskforce – Discussion Paper."

themselves are not the primary discussants, according to such authors. Instead, customers generally have the most influence over regulatory decisions, especially in spite of labor.<sup>82</sup>

Uber drivers themselves generally speak little about regulatory options. As a class of stakeholders, they are isolated and, as such, tend to speak most often about the conditions of their isolation. As isolated from management, Uber drivers experience what Stark and Pais call "algorithmic management" and what Katzenbach and Ulbricht call "algorithmic governance." 84 For both authors, this management/governance operates technically through an information asymmetry. Platform operators at Uber are constantly extracting data from the behaviors<sup>85</sup> of both drivers and riders. The resulting information asymmetry sees a glut of behavioral data fed to platform operators' algorithms and no such data accessible to platform workers - they own neither the sensors to collect such data nor the infrastructure to process it. 86 Platform workers don't have access to these algorithms either – they are "black boxed," or operationalized without any disclosure of their contents.87 For Rosenblat and Stark, the consequential "power asymmetry" provides a "soft control" over workers by an "institutionalized nudging of the driver" to practice behaviors that maximize firm profit.88 For Shoshana Zuboff,89 this is a selfreproducing dynamic – the more drivers use the Uber system, the more data Uber collects, the more refined are its governance mechanisms. This is a social rather than technical isolation of workers from management. Obviously, Uber drivers have no on-the-job contact with management (or each other) because the firm coordinates them through an app – no face-to-face

<sup>&</sup>lt;sup>82</sup> Rahman and Thelen, "The Rise of the Platform Business Model and the Transformation of Twenty-First-Century Capitalism," 181.

<sup>83</sup> Stark and Pais, "Algorithmic Management in the Platform Economy."

<sup>&</sup>lt;sup>84</sup> Gritsenko and Wood, "Algorithmic Governance."; Hereafter these terms will be used interchangeably, with a preference for "algorithmic governance."

<sup>85</sup> Stark and Pais, "Algorithmic Management in the Platform Economy," 60.

<sup>&</sup>lt;sup>86</sup> Muldoon and Raekstad, "Algorithmic Domination in the Gig Economy," 10.

<sup>&</sup>lt;sup>87</sup> Pasquale, *The Black Box Society*.

<sup>&</sup>lt;sup>88</sup> Rosenblat, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," 3768.

<sup>&</sup>lt;sup>89</sup> Zuboff, *The Age of Surveillance Capitalism*.

manager needed.<sup>90</sup> Less obviously, Uber's app offers no channels of communication from the driver to management except in criminal or otherwise life-threatening situations.<sup>91</sup>

Uber drivers themselves are more than aware of the above isolations from management decisions, summarized as information control, pricing, and rating mechanisms. The constant tracking of driving behavior, logging "the exact route that you took," creates in drivers a shared feeling that "everything is controlled by Uber," without drivers' input or knowledge — should a driver take "a shortcut, like trying to stop taking Uber rides... they will shut you off." Uber drivers have said informational asymmetry about the rating mechanism "adds a form of "emotional labor" to the job alongside the responsibility of driving safely and efficiently. Uber's algorithm matches drivers to riders according to ratings that each produces for the other, at least in part. Drivers, ignorant of the algorithm, thus discuss having become "dependent on the customer's arbitrary rating," and means to maximize it at all costs. The information control mechanism refers to asymmetry about rides themselves. As one driver put it, drivers are "driving around blind..." — they neither receive information about the distance nor the fare of a potential ride within the 15 seconds they have to accept or reject it. Concerning the pricing mechanism, drivers are also unable to cancel unprofitable rides without being "suspended or permanently

<sup>90</sup> Glavin, Bierman, and Schieman, "Über-Alienated," 406.

<sup>&</sup>lt;sup>91</sup> Muldoon and Raekstad, "Algorithmic Domination in the Gig Economy," 9.

<sup>&</sup>lt;sup>92</sup> Mäntymäki, Baiyere, and Islam, "Digital Platforms and the Changing Nature of Physical Work," 452.

<sup>&</sup>lt;sup>93</sup> Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy," 8.

<sup>&</sup>lt;sup>94</sup> Rosenblat, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," 3765.

<sup>95</sup> Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy," 9.

<sup>&</sup>lt;sup>96</sup> Glöss, McGregor, and Brown, "Designing for Labour," 1638.

<sup>&</sup>lt;sup>97</sup> Lee et al., "Working with Machines," 1610.

<sup>&</sup>lt;sup>98</sup> Glöss, McGregor, and Brown, "Designing for Labour," 1638.

<sup>&</sup>lt;sup>99</sup> Rosenblat, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," 3762.

removed from the system."<sup>100</sup> Removal from the platform can occur for no reason drivers are aware of. <sup>101</sup> Nor are drivers aware of the reasons for rate changes. <sup>102</sup>

Despite the isolations Uber drivers face, the above difficulties are discussed in common on online forums. On such forums, Uber drivers express solidarity and attempt strategies of collective learning and action. Drivers often collectively hypothesize about management decisions, suggesting that management might "fudge the ratings of drivers." Through what Zalmanson calls "guessing the system," drivers engage in shared learning to better understand the Uber system as a whole. Where some drivers have offered advice to help others simply understand the system better, others have outright recommended strategies of coordinated resistance. Resistance includes trip refusal, misleading the system through misuse of the Uber app, switching to other ridesharing apps when rates are low, and strategically cancelling rides to prevent negative ratings. The James Allen-Robertson, in his study of online Driver exchanges, has called this kind of investigative resistance "rule discovery" – "by pooling together" "observations of the algorithm's behavior to generate hypotheses," drivers collectively work to understand that behavior to circumvent it. Despite this, Vasudevan and Chan find that that "while rivers resist" Uber's governance, "they ultimately consent to Uber's 'hegemonic regime'"

<sup>&</sup>lt;sup>100</sup> Ibid.

<sup>&</sup>lt;sup>101</sup> Mäntymäki, Baiyere, and Islam, "Digital Platforms and the Changing Nature of Physical Work," 455; Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy," 8.

<sup>&</sup>lt;sup>102</sup> Rosenblat, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," 3768.

<sup>&</sup>lt;sup>103</sup> Thäter et al., "How Do Workers Gain Voice on Digital Work Platforms? Hotspots and Blind Spots in Research on Platform Worker Voice," 75.

<sup>&</sup>lt;sup>104</sup> Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy," 10.

<sup>105</sup> Zalmanson, "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy,"

<sup>&</sup>lt;sup>106</sup> Zalmanson.

<sup>&</sup>lt;sup>107</sup> Zalmanson, 11–12; For further discussion of resistance strategies see, e.g., McDaid, Andon, and Free,

<sup>&</sup>quot;Algorithmic Management and the Politics of Demand"; Arubayi, "Documenting the Everyday Hidden Resistance of Ride-Hailing Platform Drivers to Algorithmic Management in Lagos, Nigeria."

<sup>&</sup>lt;sup>108</sup> Allen-Robertson, "The Uber Game," 3.

wherein the platform "shapes the conditions of labor and can use its constant surveillance of drivers to crush dissent." <sup>109</sup>

Clearly, a discursive gap is at work. Regulatory discussions largely depend on coalitions forged between consumers and policymakers. Platform governance depends on the algorithmically enforced compliance of Uber drivers, itself mediated through an opaque management system with one-way channels of communication. Workers are aware of this quagmire, discuss it, and devise collective action strategies to resist it. Yet, neither regulators nor Uber itself appear to respond to these difficulties. As shall soon be shown, this pathology is not unique to Uber – it appears on other platforms as well.

YouTube is one such platform on which this communicative gap also appears. YouTube is a video-sharing platform that allows users to upload, share, and view content from around the world. Currently owned by Google, YouTube's platform and monetization methods are not as straightforward as Ubers'. Where Uber drivers algorithmically bid for riders whose payments are split between the driver and the firm, YouTube's recommendation systems perform a similar function to maximize a set of viewing metrics. If a content creator is a YouTube "partner," they may choose to allow third-party advertisements on videos they have produced that follow YouTube's "rules of the game," their community guidelines, terms of service, and "policy, safety, and copyright" policies. Although other sources of income are possible through the website, third-party "YouTube ads" are Google's and most content creators. It is chief source of income from the site. Revenues are split between the platform operators and the platform worker.

<sup>&</sup>lt;sup>109</sup> Vasudevan and Chan, "Gamification and Work Games," 881.

<sup>110</sup> Hosch, "YouTube."

<sup>&</sup>lt;sup>111</sup> Davidson et al., "The YouTube Video Recommendation System," 296.

<sup>112 &</sup>quot;How to Earn Money on YouTube - YouTube Help."

<sup>&</sup>lt;sup>113</sup> YouTube, "Terms of Service."

<sup>&</sup>lt;sup>114</sup> "Google 2022 10K," §II.7.

<sup>&</sup>lt;sup>115</sup> Perelli, "How Much Money YouTubers Make and Can Earn, According to Creators."

YouTube also employs a second content moderation algorithm in combination with manual reviews to ensure guideline compliance. Both the recommendation and moderation algorithms are sites of content creator contestation.

American regulators are, however, chiefly interested in YouTube for its algorithms' role in propagating misinformation. Senator Gary Peters has, for instance, recently called YouTube's algorithms a potential "threat to homeland security." The International Fact-Checking Network at the Poynter Institute for Journalism has similarly called YouTube one "of the major conduits of online disinformation" worldwide. These and other comments have prompted scholars to audit YouTube's algorithms for their radicalization potential, several having found a link between these algorithms' ability to keep viewers on the website and their intensification of video content over time.

YouTube content creators themselves, however, are not concerned with this regulatory agenda. Algorithmic content moderation on YouTube has frustrated creators due to its "blackboxed" opacity and its epistemological precarity. The precarity includes both the ignorance of the algorithms themselves, how they are being applied, when and whether these applications are changing, and how their income will be impacted by these three forms of ignorance. Further research found that perceptions of fairness involved in moderation decisions was low given a combination of low to no inclusion of creator voices in decision-making processes and general

<sup>&</sup>lt;sup>116</sup> Hamilton, "YouTube Took down Twice as Many Videos as Usual from April to June Because the Pandemic Forced It to Rely on Moderation Algorithms."

<sup>&</sup>lt;sup>117</sup> WATCH LIVE, loc. 1:54.

<sup>&</sup>lt;sup>118</sup> Network, "An Open Letter to YouTube's CEO from the World's Fact-Checkers."

<sup>&</sup>lt;sup>119</sup> Ledwich and Zaitsev, "Algorithmic Extremism"; Haroon et al., "YouTube, The Great Radicalizer?"; Marwick, Clancy, and Furl, "Far-Right Online Radicalization."

<sup>&</sup>lt;sup>120</sup> Ma and Kou, ""How Advertiser-Friendly Is My Video?," 16.

<sup>&</sup>lt;sup>121</sup> Ma and Kou, 429:17.

inconsistencies in the outcomes thereof.<sup>122</sup> Although platform governance on YouTube includes a multitude of social and technical factors, Ma and Kou's research ultimately finds creators unable to access human decision-makers and information on the details of their processes, including whether or not decisions even made by human beings (as opposed to algorithms).<sup>123</sup>

Examining content moderation, Ma and Kou<sup>124</sup> have shown that content creators are both acutely aware of and self-reflexively engaged with YouTube's moderation systems. More than this, creators engage in "long-term learning" through the pooling of individual experiences with content moderation algorithms and the strategies taken to circumvent them. <sup>125</sup> Sophie Bishop, D. Kaye and Joanne Gray use the language of gossip to explicate the communicative aspect of creators' labor. Bishop's "algorithmic gossip" is a productive, collaborative talking conversation that progressively informs creators' practices and habits, like upload frequency and video editing stylization. <sup>126</sup> Likewise, Kaye and Gray's "copyright gossip" takes Bishop's understanding of gossip as "reflexive communicative sensemaking" and applies it specifically to creators' deliberations concerning YouTube's copyright detection algorithms. <sup>127</sup> This is a labor that has similarly been called "affective." or dependent on the maintenance of close interpersonal ties.

Despite these difficulties, however, YouTubers have found ways to manage the precarities involved in their isolation from management decisions. Collectively, individuals discuss on

<sup>&</sup>lt;sup>122</sup> Ma and Kou, "I'm Not Sure What Difference Is between Their Content and Mine, Other than the Person Itself," 28:17-18.

<sup>&</sup>lt;sup>123</sup> Ma and Kou, "'I Am Not a YouTuber Who Can Make Whatever Video I Want. I Have to Keep Appeasing Algorithms.'"

<sup>&</sup>lt;sup>124</sup> Ma and Kou; Ma and Kou, "I'm Not Sure What Difference Is between Their Content and Mine, Other than the Person Itself"; Ma and Kou, ""How Advertiser-Friendly Is My Video?"; Ma et al., "'Defaulting to Boilerplate Answers, They Didn't Engage in a Genuine Conversation': Dimensions of Transparency Design in Creator Moderation."

<sup>&</sup>lt;sup>125</sup> Ma and Kou, ""How Advertiser-Friendly Is My Video?," 429:17. See also Bartolome and Niu, "A Literature Review of Video-Sharing Platform Research in HCI."

<sup>&</sup>lt;sup>126</sup> Bishop, "Managing Visibility on YouTube through Algorithmic Gossip," 2602–3.

<sup>&</sup>lt;sup>127</sup> Kaye and Gray, "Copyright Gossip," 3; See also Gillespie, "The Politics of 'Platforms'"; Van Dijck, "YouTube beyond Technology and Cultural Form," the latter of whom calls this activity an "informational exchange" that maintains a creator's "techno-socio-cultural" security.

online in forums and have coalesced in informal, union-like structures for the exchange of concerns, the pooling of experiences, and strategies for each to achieve their desired goals. <sup>128</sup> Individually, management of precarity included financial diversification by producing content on more than one platform, engaging in reparative labor to diminish the impacts of moderation penalties, and engaging in preparatory labor to diminish future impacts of the same. <sup>129</sup>

Again, a discursive gap is at work. YouTube lacks formal channels to implement instances of YouTube content creator e-voice and officials in regulatory discourses pay no attention to workers' discussions.

Four conclusions about these discussions should be noted for corporate governance. First, workers at both platforms are undergoing the same phenomena. Both lament the lack of transparency of their respective platforms' policies and decisions, and both would prefer greater control over their tasks. Second, workers on both platforms engage in comparable collective action strategies. Workers on both platforms engage in collective learning to deal with their isolation. These strategies include additional forms of affective labor required to observe and test algorithm behavior. Third, neither group of workers is ignorant of the power and information asymmetries demanding these strategies. Fourth, platform workers' concerns are neither implemented by platform firms nor discussed in regulatory discourses – a gap exists between the platform workers and platform operators.

<sup>&</sup>lt;sup>128</sup> Niebler, "YouTubers Unite."

<sup>&</sup>lt;sup>129</sup> Ma and Kou, ""How Advertiser-Friendly Is My Video?," 429:17.

### 2.2 Corpus Analysis

#### 2.2.1 Methods

To investigate this discursive gap empirically, two corpuses 130 were produced from online, open-access, public conversations on community forums on which platform workers at YouTube and Uber discuss. 131 Both corpuses were built to supplement existing literature with an eye towards the overall dynamics of actors in discussions, rather than the mere content of those discussions. Discussions were gathered from the online communities "/r/youtubers" and "/r/uberdrivers" on Reddit to this end. Reddit is a website linking hundreds of online communities, called subreddits (designated with the prefix "/r/"), that host discussions created, curated, and administered by users. 132 Reddit has no connection to either YouTube or Uber – it is an entirely independent third-party discussion forum. Despite this, workers on both platforms actively use the subreddits /r/youtubers and /r/uberdrivers to discuss experiences with their platforms and strategies for operationalizing them to their ends. As of the beginning of data collection, /r/youtubers had about 133 221,000 members and /r/uberdrivers had about 344,000. Reddit was selected as a source for platform worker conversations both for the enormity of these communities and for its being open-access, public, and open-source 135 – all individual posts can be read through the website's user interface and downloaded en masse. The highest-ranking 136 1000 "discussion threads from the online community" were selected for download, including original posts and 5 beneath each post's comments. However, presumably because of the smaller

<sup>&</sup>lt;sup>130</sup> Himmelberger, "Corpora Scraped from /r/Youtubers and /r/Uberdrivers."

<sup>&</sup>lt;sup>131</sup> Bucher, Schou, and Waldkirch, "Pacifying the Algorithm – Anticipatory Compliance in the Face of Algorithmic Management in the Gig Economy."

<sup>132 &</sup>quot;Guide to Reddit AMAs | PR Social."

<sup>133 &</sup>quot;YouTubers - A Place for the YouTube Community."

<sup>134 &</sup>quot;The Uber Driver's Subreddit."

<sup>135 &</sup>quot;Reddit.Com: Api Documentation."

<sup>&</sup>lt;sup>136</sup> Rankings on Reddit are the output of collective voting. The 1000 posts given here had the greatest net amount of positive and negative votes of all posts on the subreddit since the subreddit began.

size of the community, the software written by the author to perform the download only collected 705 discussion threads from YouTube. Thus, 6000 threads composed of 1000 original posts and 5 comments per thread were downloaded from /r/uberdrivers, and 4230 threads composed of 705 discussion threads and 5 comments per thread were downloaded from /r/youtubers. An original script using the Python Reddit API Wrapper (PRAW) – a python package that allows for access to Reddit's API<sup>137</sup> – was used to complete the download.

Analysis proceeded in four parts.<sup>138</sup> First, sentiment analysis was run on both corpuses to the determine most negative postings. Defined as the "computational study" of emotions and attitudes, sentiment analysis uses contexts and associations between words to infer the emotional positivity or negativity of a set of texts.<sup>139</sup> A positive score is between 0 and 1, a negative score is between 0 and -1. Negative postings were sought to find those voices critical of platform governance. It was assumed that posts with more positive scores would be uncritical of this governance and, therefore, irrelevant to this research. Second, Latent Dirichlet Allocation (LDA) was used to develop a set of ten themes present in those posts with the most negative sentiment scores (< 0). LDA is a probabilistic computational technique that discovers "latent" topics in a corpus<sup>140</sup> by assigning calculations of frequency, called weights, to words' (co)occurrence.<sup>141</sup> Themes were aggregated as dictionaries composed of a set of most frequently (co)occurring terms and their weights. Third, the terms in the dictionaries were interpreted based on the content

<sup>137 &</sup>quot;Reddit.Com: Api Documentation."

<sup>&</sup>lt;sup>138</sup> Because this research only intends to demonstrate a generalizable presence of themes already evidenced in the above literature for the sake of theory-building, this empirical component will be rather sparse. As such, it aims only to show that, by standard corpus-analytic metrics, those themes which researchers in platform-economic literature have excavated are not particular to their research questions but are generalizable for political-theoretic work.

<sup>139</sup> Liu, *Sentiment Analysis*, 1–3.

<sup>&</sup>lt;sup>140</sup> Zhao et al., "Latent Dirichlet Allocation Model Training with Differential Privacy."

<sup>&</sup>lt;sup>141</sup> Hecking and Leydesdorff, "Topic Modelling of Empirical Text Corpora."

of each. Interpretation proceeded based on a set of part-whole, or hermeneutic, heuristics.<sup>142</sup> For this, the whole of the LDA output was read together then cross-referenced with the output of those posts with which it was associated. Repeat keywords appearing across categories were removed. Fourth, two visualizations were built based on the final dictionaries: a word frequency graph and a graph of posts sorted exclusively by category. For exclusive categorization, each post was assigned to the first topic that matched based on the keywords in the dictionary. These are reproduced in Appendix 3.

Analysis proceeds in three parts. First, the results of the sentiment analysis are generalized at the level of both firms. Second, the distribution of latent topics from the LDA vs. the manually refined dictionary categorizations are generalized at the same level. Third, these results are generalized across both firms according to the themes already taken for granted in the above literature: complaints, experiences, and strategies. Hereafter, the generalizations from both firms are compared against those themes present in HCI and sociological literature on Uber and YouTube.

#### 2.2.2 Analysis

On /r/youtubers, the sentiment analysis found that the ten most negative posts concerned community interactions, monetization, and firm-level policies. These results are tabulated in Appendix 1. Posters asked for advice concerning personal difficulties related to content production such as stuttering, script writing, and bullying – commentors responded with assistance. Posters also asked for advice on policy clarity and interpretation, specifically related to new features on the website ("Shorts") and general policy violations which hamper the content production process. Notably, five out of the ten most negative posts concern YouTube's policies.

Alsaigh and Coyne, "Doing a Hermeneutic Phenomenology Research Underpinned by Gadamer's Philosophy,"4.

Thus, while half of the ten most negative posts concern issues specific to the affective and traditional labors associated with being a YouTuber like community interaction and the craft of production, the other half concern creators' interaction with the firm's guidelines.

The LDA analysis produced a set of terms with statistical weights common to the corpus. These terms and weights are reproduced in Appendix 2, along with a generalized interpretation into a set of 10 single-term topics. The posts most closely associated with each topic are reproduced in Appendix 3's figure 1. Appendix 3's figure 2 reproduces a distribution from the hermeneutic dictionary formation discussed above. The most significant, if obvious, distinction between the two distributions is the concentration of posts located in the "content creation" category – where the LDA distributed topics more evenly, the dictionary detected a plurality of posts concerned with the details of content creation. While not insignificant, this minimally suggests that at least a plurality of creators' concerns deal with the specifics of their craft. More judiciously, language associated with content creation spreads more diffusely across other areas of concern.

On /r/uberdrivers, the sentiment analysis found that the ten most negative posts concerned drivers' interactions with passengers and Uber's (lack) of regulation thereof. In nearly all posts, drivers are concerned with Uber's (in)ability to oversee the fraught interpersonal relations that emerge from driving passengers. These posts are most concerned with driver-passenger altercations, complaints made to Uber to adjudicate them, and Uber's failure to administer fares and ratings on drivers' behalf. The combination of a post containing a petition demanding a clearer deactivation policy, another allegedly confirming Uber management's manipulation of passenger<sup>143</sup> ratings, and the experiential anecdotes of negative driver-passenger

<sup>&</sup>lt;sup>143</sup> Uber drivers have their own vocabulary and refer to passengers as "pax." This term, "pax," and not passenger is visible in in Appendix 1 §7.2.

relations paints a rough-and-ready picture of drivers facing conditions without a means to do anything about them.

The generalized results of the LDA analysis are reproduced in Appendix 2 while the posts most closely associated with each topic are reproduced in Appendix 3's *figure 3*. The appendix's *figure 4* reproduces a distribution produced according to the hermeneutic dictionary formation discussed above. The most frequently occurring category for the LDA analysis was the ride itself, whereas the most frequently occurring category for the dictionary distribution was the driver. Given that the LDA also detected a large number of posts concerned with drivers, this may only suggest that those keywords associated with drivers and driving tend to diffuse through those categories detected by the LDA.

While sparse, this examination of data gathered from /r/youtubers and /r/uberdrivers has only intended to illustrate two points. First, a computational overview of corpuses derived from online fora is generally consonant with findings in pre-existent literature. This is purely instrumental – only some currently-existent literature is directly concerned with the discussions of platform workers. Much of the literature cited above only details workers' concerns the contents of their discussions, not their interactions as discussants.

Second, platform workers' concerns at both firms generally overlap. Workers on both firms are primarily concerned with their work itself. Content creators are most concerned with the details of video production and Uber drivers are most concerned with their interaction with passengers and/or firm management. As opposed to discussing collective action possibilities, the majority of posts either concern the individual work of content production or the individual work of driving. As existent literature suggests, discussion includes the sharing of experience and pooling of information so that drivers and creators can better operate. According to the analysis

conducted here, however, hypothesis-formation and information-pooling are secondary to merely enduring each firm's policies and standard working conditions. Creators and drivers alike thus slam their management as "jerks" and perpetrators of "mass-extortion." <sup>144</sup>

Content creators discuss policy updates as "hoops to jump through" and as givens to be complied with. Unlike those strategies discussed in existent literature, the analysis performed here thus evidences a far more ubiquitous strategy – focusing on what's in the platform worker's control. Discussing community guidelines compliance and the obscurity of language as it applied to a video game, one commentor rejoins suggesting that the game's settings be adjusted in advance. With a "50-50% chance" of demonetization according to another commentor, all discussants agree that the original creator must take the initiative to comply. Instead of inquiring into the means whereby such unpredictable, "50-50%" demonetization odds emerge, discussion concerns atomized response strategies. As one commentor puts it responding to an aspiring YouTuber gossiping about the recommendation algorithm – "Forget the robots focus on the people." "The needed knowledge" to succeed on YouTube, claims another commentor, "is spiritual and not physical" - one must take the initiative to understand their audience. The same advice is given to another aspiring YouTuber attempting to maximize their likelihood of success - "Just focus on the journey..." Content creators opt for strategies responding to both the content moderation and recommendation algorithms that, pace Bishop, therefore seek habits of individual responsiveness and resilience.

Similarly, discussing added fuel assistance fees, commentors merely lament – "Help is on the way!!! All paid by the customer of course. Uber's profits not affected." Another commentor responds in the same thread with his strategy of coping with Uber's fuel assistance – "I decline almost 70% of the offers." One commentor was confident that the above petition for clearer

<sup>&</sup>lt;sup>144</sup> Himmelberger, "Corpora Scraped from /r/Youtubers and /r/Uberdrivers."

deactivation policies would never be implemented — "all of this would hurt Uber's bottom line" since "drivers are easily replaceable, customers are not." Likewise, although some commentors respond to each other about policy changes by sharing the results that the change has had on their income, others simply advice — "ignore the messages and act like the independent contractor that you are" — exercise your own judgment. Similarly, another Uber driver posted that they have not been paid because their passengers hadn't paid, a move that commentors swiftly responded is outside Uber's agreement with drivers. Lacking intrafirm voice channels, one commentor suggested this poster notify management on Twitter. This appears to mount an informal collective mobilization strategy — other posters remark that interactions on Twitter got complaints in front of Uber's support on the website. Other users, however, call this strategy "a waste of time."

# **3** Transition: Democratizing the (Online) Workplace

One solution to close the discursive gap between platform workers, platform operators, and regulators is obvious: give them a voice at the firms at which they operate. Or, more bluntly: democratize platform firms. This solution to administrating what are effectively "private governments"<sup>145</sup> could involve a variety of voice mechanisms, to be debated in design literature, including but not limited to workers' councils, <sup>146</sup> mini-publics <sup>147</sup> (statistically representative sections of the workforce siloed off for discussions of firm-level policy changes), and any arena that can transform adversarial relationships between capital and labor into collaborative ones. <sup>148</sup> Each of these designs are deliberatively democratic – they presume that voice structures should allow workers the ability to debate on issues of common interest. These designs simultaneously,

<sup>&</sup>lt;sup>145</sup> Anderson, *Private Government*.

<sup>&</sup>lt;sup>146</sup> Ferreras, "Democratizing the Corporation," June 1, 2023.

<sup>&</sup>lt;sup>147</sup> Landemore, *Open Democracy*.

<sup>&</sup>lt;sup>148</sup> Ferraro, "Going Political?," 13.

however, either take the deliberative presuppositions of social theorist Jürgen Habermas for granted or, at least, presumes that regulatory agendas should inscribe its principles. Heiland Heiner and Isabelle Ferreras, for instance, have suggested that platform workers' demands are voiced in a public sphere matching Habermas's description but lacking institutionalized voice mechanisms. However, as I intend to show, there are structural features of Habermas's account that are unhelpful for normative accounts of platform governance and normative prescriptions towards its democratization. To counter some of these unhelpful features, I suggest an alternate model for rendering platform workers discussions deliberative. For this I turn to John Dewey, whose work has been used simultaneously as a participatory foil to Habermas, a starting point for governance recommendations, and a forefather of deliberative democracy in his own right.

To compare Dewey and Habermas, I will first present their models of deliberation in §3.1 and §3.2 respectively. First, I model their accounts of normativity (§3.1.1 and §3.1.2). At the end of these sections, I conclude with four general points: the internal differentiation of norms, the *a priori* ground for norms, the communication and sharing of norms, and the meaning of "reflection" on norms. Second, I model their accounts of public deliberation. I conclude with two general points: the role of strategy and the design of institutions. A tabulation of these conclusions and their relative strengths and weaknesses is given in §6.

<sup>&</sup>lt;sup>149</sup> Heiner, "Workers' Voice in Platform Labour: An Overview," 47; Ferreras, "Democratizing the Corporation," June 1, 2023.

<sup>&</sup>lt;sup>150</sup> Jackson, Equality Beyond Debate, 2.

#### 4 Habermas's Communicative Model of Deliberation

# 4.1 Normativity in General

Jürgen Habermas's vast oeuvre can be reconstructed for questions of platform governance as a single normative model based on attention to a few key concepts: the distinction between lifeworld and system, the distinction between communicative and strategic action, speech-acts, argumentation, discourse, and deliberation. These distinctions set the normative criteria for the inputs to deliberation. 151 Habermas's lifeworld-system distinction refers to the specialization of meaning required for communicating with other individuals. The lifeworld is the sum of background resources that individuals take for granted for communication, including languages and shared patterns of interpretation. 152 The lifeworld reproduces itself through communicative action – individuals' speaking to each other to achieve mutual understanding. <sup>153</sup> When the norms requisite for mutual understanding are relaxed and social action is instead coordinated by something other than mutual understanding, a system appears. 154 Systems reproduce themselves through strategic action in which mutual understanding is suspended. Instead, strategic actors seek goals by calculating the likelihood of other actors' behaviors – strategists want to win and want their competitors to lose. Systemic coordination thereby depends on interest alignment across self-interested actors. 155

<sup>&</sup>lt;sup>151</sup> Landemore, *Open Democracy*, 106.

<sup>&</sup>lt;sup>152</sup> Habermas, The Theory of Communicative Action: Lifeworld and System, 2:124.

<sup>&</sup>lt;sup>153</sup> Habermas, 2:149–50. "Participants in communication encounter one another in a horizon of unrestricted possibilities of mutual understanding. What is represented at a methodological level as hermeneutics' claim to universality, merely reflects the self-understanding of lay persons who are acting with an orientation to mutual understanding. They have to assume that they could, in principle, arrive at an understanding about anything and everything"

<sup>&</sup>lt;sup>154</sup> Bohman and Rehg, "Jürgen Habermas."

<sup>&</sup>lt;sup>155</sup> Allen and Mendieta, *The Cambridge Habermas Lexicon*, 432.

Speech-acts are the "medium for achieving understanding" – they are the vehicle of the lifeworld's reproduction and the discrete units of communicative action. <sup>156</sup> Speech-acts create normative obligations for speakers – as an action, speech-acts oblige individual speakers to be responsible for the consequences of the presence or absence of truth-content in their utterances. <sup>157</sup> If action is communicative, speakers follow three communicative norms vis-à-vis speech-acts: (1) maximize mutual understanding (2) do so by making true statements that accurately represent the world and (3) take responsibility for your statements when they fail to maximize mutual understanding (are false). <sup>158</sup> These three norms alone – concretized in empirical communication as "validity claims" – produce mutual understanding. <sup>159</sup>

Validity claims appear in argumentation, which is the foundation of Habermas's social theory and, thereby, his account of normativity *qua* social action.<sup>160</sup> Argumentation about practical questions<sup>161</sup> is an exchange of reasons among subjects abiding by the norms of communicative speech-acts.<sup>162</sup> Such an exchange of "reasons to do something"<sup>163</sup> is the sole means to the end of achieving a rational consensus among arguers – each speaker regards the other's reasons as "reasonable" and is, thereby, able to ultimately come to mutual understanding with them.<sup>164</sup> When arguments produce such consensus, they become discourses abiding by Habermas's Principles D and U. Principle D demands a shared commitment to consensus – norms governing actions or choices are valid "only if all those affected by the action or choice

<sup>&</sup>lt;sup>156</sup> Habermas and MacCarthy, *The Theory of Communicative Action: Reason and the Rationalization of Society*, 1:308

<sup>&</sup>lt;sup>157</sup> Russell, *Habermas and Politics*, 26.

<sup>&</sup>lt;sup>158</sup> Habermas and MacCarthy, *The Theory of Communicative Action: Reason and the Rationalization of Society*, 1:308. These are not normative injunctions, but metaethical requisites for communicative action. See Allen and Mendieta, *The Cambridge Habermas Lexicon*, 105.

<sup>&</sup>lt;sup>159</sup> Ibid.

<sup>&</sup>lt;sup>160</sup> Allen and Mendieta, *The Cambridge Habermas Lexicon*, 12.

<sup>&</sup>lt;sup>161</sup> Questions of the form: "what is to be done?"

<sup>&</sup>lt;sup>162</sup> Allen and Mendieta, *The Cambridge Habermas Lexicon*, 101.

<sup>&</sup>lt;sup>163</sup> Habermas, Moral Consciousness and Communicative Action, 49.

<sup>&</sup>lt;sup>164</sup> Russell, *Habermas and Politics*, 12.

could accept it in a reasonable discourse."<sup>165</sup> Principle U shows how consensus is possible – norms governing actions or choices are valid only if "the foreseeable consequences and side effects" of its observance by each individual in the discourse could be "jointly accepted by all those affected without coercion."<sup>166</sup> The above, from the lifeworld-system distinction to Principles U and D, are the "normative core"<sup>167</sup> of Habermas's public deliberation – Habermas presupposes them and demands their spread through discursive practice if deliberation is to be democratically legitimate and normatively desirable.

Although much more can be said about Habermas's account of normativity, four conclusions can be drawn for democratic corporate governance. First, the norms governing actions relevant to governance are double. Communicative action in the lifeworld depends on adherence to the communicative norms of speech-acts. Argumentation thus debates norms of action, the subject of Principles U and D. Conversely, strategic action in systems depends on adherence to institutional norms which require no justification. Second, norms of action have an *a priori* reference point, namely, the argumentative procedure presupposed by Principle U. 168 Third, valid norms shared across arguers must be made explicit in natural language for the sake of argumentation. Norms cannot be both shared and valid without this communicative explication. Fourth, although norms are reflective, reflection must occur in a "real discourse" for

<sup>&</sup>lt;sup>165</sup> Bohman and Rehg, "Jürgen Habermas."

<sup>&</sup>lt;sup>166</sup> Rehg, "Universalization Principle and Discourse Principle," 450.

<sup>&</sup>lt;sup>167</sup> Bernstein, "The Normative Core of the Public Sphere," 769. See also Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, 360. "the public sphere is reproduced through communicative action" and its rules of discourse.

<sup>&</sup>lt;sup>168</sup> Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, 135. Here Habermas describes normative justification as an *a priori* procedure. Cf. Allen and Mendieta, *The Cambridge Habermas Lexicon*, 105, who argues that Principle U has no binding moral obligations – it is a metaethical *a priori* which must be presupposed for any rational argumentation at all. Cf. also in *Between Facts and Norms* "There are no shared structures preceding the individual except the universals of language use."; Allen and Mendieta, *The Cambridge Habermas Lexicon*, 335. "the transcendental role of Kant's necessary subjective conditions of objective experience is transferred to the intersubjective presuppositions of linguistically mediated communication" <sup>169</sup> Allen and Mendieta, 9; Stahl, "Habermas and the Project of Immanent Critique," 542.

validity.<sup>170</sup> Argumentative discourse is thus a procedure of norm revision based on the mutual exchange of reasons for action. Abiding by Principle U, argumentation qua procedure therefore demands that reasons be "publicly intelligible" and "publicly acceptable."<sup>171</sup> This "procedural core" of Habermas's communicative action ties his moral theory (normativity) to publicity (democracy).<sup>172</sup> Hereafter I refer to these four conclusions as Habermas's normative razor – reasons must be antecedent to norms, actions from a discourse must aim at compliance with norms given in the discourse, and explication of the norms is necessary and sufficient for their possible validity.

# 4.2 Deliberation in (the) Public

No deliberation relevant to Habermas's account precedes the presuppositions of communicative action in argumentation. For Habermas, public deliberation refers only to the practice of argumentation in a sociological arena, the public sphere. The Habermasian public sphere is the space where "publicly acceptable" reasons appear and where private individuals share their interests to determine problems of common, public concern and means to their resolution. Production of these reasons demands that democratic states protect a sphere of "private autonomy" in which "free and equal" citizens are capable of encountering each other as such. This has historically demanded, among other things, a guarantee to life, liberty, and property.

<sup>&</sup>lt;sup>170</sup> Habermas, Moral Consciousness and Communicative Action, 68.

<sup>&</sup>lt;sup>171</sup> Russell, *Habermas and Politics*, 12.

<sup>&</sup>lt;sup>172</sup> Allen and Mendieta, *The Cambridge Habermas Lexicon*, 102.

<sup>&</sup>lt;sup>173</sup> Allen and Mendieta, 357.

<sup>&</sup>lt;sup>174</sup> Habermas, The Structural Transformation of the Public Sphere, 12.

<sup>&</sup>lt;sup>175</sup> Russell, *Habermas and Politics*, 64; Habermas states that these are "empirical, and not conceptually necessary" demands Habermas, *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, 78.. Even so, they historically and contingently secure private autonomy.

When the public deliberates about policies and laws, it becomes a political public sphere. 176 For Habermas, this presupposes representative democracy. Because most of the theoretical content of Habermasian deliberation is given by his account of norms, political public deliberation will be recounted step-wise. What follows produces legitimate "throughput" and "output" from deliberation. 177 Habermas offers a "two-track" model of deliberation – one occurring in the lifeworld and one occurring in the political system. Deliberation in the lifeworld occurs vis-à-vis communicative action and its attendant communicative norms. Deliberation in this "weak" or "informal" public sphere proceeds as argumentation based on competing reasons for the acceptance or rejection of legislative choices.<sup>178</sup> This deliberation proceeds until the "unforced force of the better argument" wins out, forming "communicative power" based on the consensus of arguers. 179 As practical, communicative power is a set of obligations produced by communicative interactions; interlocutors in the public sphere are bound to act in accordance with the norms they supported in deliberation. As institutional, this power influences legislative arenas, the "strong" or "formal" public sphere, through stakeholder pressures. 180 Only these arenas in the political system can "act" to produce decisions that collectively bind the informal public.<sup>181</sup>

Two conclusions about Habermas's model of deliberation are in order. First, no public deliberation is strategic. All public deliberation depends on argumentation, none of which depends on any action other than a speech-act. The political public sphere in which public deliberation occurs is limited to the "perception, identification, and treatment" of society-wide

<sup>&</sup>lt;sup>176</sup> Habermas, Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, 159.

<sup>&</sup>lt;sup>177</sup> Landemore, *Open Democracy*, 106.

<sup>&</sup>lt;sup>178</sup> Habermas, Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, 300.

<sup>&</sup>lt;sup>179</sup> Habermas, 305. Cf. Russell 33.

<sup>&</sup>lt;sup>180</sup> Habermas, 486.

<sup>&</sup>lt;sup>181</sup> Habermas, 300.

problems vis-à-vis communicative power's consensual influence on formal legislative institutions. Public deliberators do not engage in joint action. Second, institutional design depends on the security of communicative action. Political communication depends on a lifeworld whose resources are sufficient to meet the needs of communicative action. Habermas is unequivocal:

According to discourse theory, the success of deliberative politics depends not on a collectively acting citizenry but on the institutionalization of the corresponding procedures and conditions of communication, as well as on the interplay of institutionalized deliberative processes with informally developed public opinions.<sup>184</sup>

There is no experimentation with institutions' securing lifeworld resources – political institutions must be designed so that communicative action can reproduce them. For this reason, Habermas's is ultimately an *ex ante* deliberation. To be sure, Habermas's public deliberation procedurally and reflexively responds to incidents based on the opportunity of citizens to raise arguments. However, the *a priori* of communicative action demands a backward-looking gaze to reasons for action rather than a forward-looking gaze to the consequences of action. Therefore, institutions must be designed *ex ante* to make this gaze secure. <sup>185</sup>

#### 4.3 Platform Workers as Habermasian Public Deliberators

Habermas describes his work as a "rational reconstruction" of the "self-understanding" of actually existing legal and political institutions.<sup>186</sup> Firms, as several authors<sup>187</sup> have argued, are analogous to such institutions at least insofar as their decision-making power and consequences for stakeholders are concerned. So, insofar as that analogy holds good and Habermas is relied

<sup>&</sup>lt;sup>182</sup> Habermas, 301.

<sup>&</sup>lt;sup>183</sup> Habermas, 302.

<sup>&</sup>lt;sup>184</sup> Habermas, 298.

<sup>&</sup>lt;sup>185</sup> These conclusions are reproduced in Appendix 4.

<sup>&</sup>lt;sup>186</sup> Habermas, Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, 82.

<sup>&</sup>lt;sup>187</sup> Landemore and Ferreras, "In Defense of Workplace Democracy"; Singer, *The Form of the Firm*; Frega, Herzog, and Neuhäuser, "Workplace Democracy—The Recent Debate."

upon, deliberation must take his normative account seriously to democratize the workplace. Doing so reveals two facts about platform workers' discussions of relevance to corporate governance theorists. First, platform workers would require a complete overhaul of their current practices to meet democratic standards on his account. Second, these standards cannot be met except through deliberate institutional design.

Habermas sharply distinguishes between strategic and communicative action and always considers work a form of strategic action. The goals of strategic and communicative action are necessarily opposed – work aims at successful strategies, communication aims at understanding. As dependent on systemic devices like money opposed to the lifeworld, all workers deliberations are unable to meet the norms demanded by communicative action *a priori* – they are conceptually excluded from communication.

Pace Habermas's binarization of strategic and communicative action, platform workers are seeking understanding despite being engaged in strategic activity. As understanding seekers, platform workers seek advice about the more opaque aspects of their firms. As strategists, platform workers' advice aims at securing their income. Conversely, on Christian Fuchs' account, communicative action is a form of

co-operative rationality...opposed to the dominative logic of [strategic] rationality....Its goal is social relations that transcend domination and create contexts that allow all humans to benefit and lead a good life<sup>190</sup>

Such cooperation, epitomized in the advice-giving and advice-receiving evidenced on platform workers' deliberative fora, suggests that public deliberation based on Habermas's "normative core" could be constructed for platform workers. For instance, given that both platform workers

<sup>&</sup>lt;sup>188</sup> Westminster Institute for Advanced Studies, Fuchs, and The Communication and Media Research Institute, *Critical Theory of Communication*, 185.

<sup>&</sup>lt;sup>189</sup> See also: Pusey, Jürgen Habermas, 81. instrumental actions are "oriented toward success."

<sup>&</sup>lt;sup>190</sup> Westminster Institute for Advanced Studies, Fuchs, and The Communication and Media Research Institute, *Critical Theory of Communication*.

are often seeking advice concerning general responses to firm-level policies, these models might give shape to a nascent firm-level public sphere capable of deliberating about and limiting firm-level policies as democratic citizens do in his two-track model.<sup>191</sup>

Constructing such a space for platform workers will demand compliance with the four conclusions of Habermas's normativity and the two conclusions of Habermas's ex ante public deliberation. Taking these demands slightly out of order, institutional design must presuppose an intrafirm democratic apparatus if the requirements of communicative action are to have any critical purchase. Indeed, communicative action can proceed without such an apparatus. However, in absence of a formal public sphere capable of decision-making influenced by an informal public sphere, the institution of communicative norms will be inconsequential. An adequate system of democratic representation is, therefore, the first upshot of applying Habermas's model to platform governance. 192 Isabelle Ferreras, for this reason, argues relatively quickly for firm democratization once workers' first steps towards the formation of a Habermasian public sphere are admitted. 193 That is, if such an informal public sphere already exists in an embryonic form, it must only be consummated through the appropriate institutional design, like an intrafirm workers' council. 194 If, however, one is going to cache part of their argument for workplace democracy out in terms of Habermas's public sphere, one should take his normative demands for that democracy seriously – a move Ferreras does not make. 195

<sup>&</sup>lt;sup>191</sup> Habermas, Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, 306.

<sup>&</sup>lt;sup>192</sup> Cf. Gilbert et al., "Guest Editors' Introduction," 8, who argue that "conscious engineering" is a prerequisite to the practice of Habermasian deliberation.

<sup>&</sup>lt;sup>193</sup> Ferreras, "Democratizing the Corporation," June 1, 2023, 192.

<sup>&</sup>lt;sup>194</sup> Ferreras, 206.

<sup>&</sup>lt;sup>195</sup> To the contrary, her invocation of industrial democracy as demonstrating the "limits of liberal economic understanding of society as contractual" runs at deep variance with Habmeras's normative requirements and institutional demands for the public sphere Ferreras, *Firms as Political Entities*, 36. As Russell argues of Habermas, modern liberal-democratic constitutional states require private autonomy secured by property rights. Russell, *Habermas and Politics*, 64.

The same oversight has arguably been made repeatedly by Palazzo and Scherer first introduced the intersection of Habermas's work with corporate governance – if workers form a firm-level, political public sphere that is debating firm policy, this depends on a firm-state analogy. 196 If this is so, then the strategic character of money (a Habermasian system) and private property must be questioned, the first insofar as it hampers communication and the second as a historical condition for communication. For Habermas, money is decoupled from the lifeworld and can only be recoupled through directly revising property and contract relations. 197 Palazzo and Scherer provide no such revision, maintaining that monetary profit and communicative action can immediately co-exist in firms as discursive arenas. 198 This couldn't be farther from Habermas's position – a deliberative democratization of the workplace would be a legal revision of property under the presupposition of the firm-state analogy. This would require further work to establish (1) the revision of property rights in the state in which the firm operates (2) a new basis for private autonomy with those revised property rights and (3) an analogous basis for private autonomy at the firm-level. Although Ferreras provides us with (1) under her model of workers as "labor investors," she lacks (2) and (3), the theoretical grounds Habermas requires for the application of the firm-state analogy on his terms. 199

If, however, such a Habermas-inspired institutional design were in place, one should ask

– to what extent do platform workers' current discussions meet Habermasian criteria? How

ready are platform workers for democratic throughput? With Habermas's four-part normative

razor we can say: not very. First, platform workers' discussions, as atomized, primarily reflect

<sup>&</sup>lt;sup>196</sup> Gilbert et al., "Guest Editors' Introduction," 1; Palazzo and Scherer, "Corporate Legitimacy as Deliberation," 83. Palazzo and Scherer, to be sure, to invoke Habermas's demand for the exposure of reasons to argumentative procedures, but their account of validity claims neither acknowledges how these can exist in a Habermasian system (a corporation).

<sup>&</sup>lt;sup>197</sup> Habermas, The Theory of Communicative Action: Lifeworld and System, 2:266.

<sup>&</sup>lt;sup>198</sup> Palazzo and Scherer, "Corporate Legitimacy as Deliberation," 82.

<sup>&</sup>lt;sup>199</sup> Ferreras, "Democratizing the Corporation," June 1, 2023, 211.

that atomization. Discussions suggest coping strategies as recommendations for action, not moral norms possibly valid for all arguers. Second, action does not aim at compliance with reasons either practically and intermediately through the "binding and bonding" obligations of language or discursively and finally as consensus. 200 There is no empirically documented consensus among platform workers at Uber or YouTube about material of relevance to Habermas. Although these workers converge around common complaints with their firms, no generalizable norms of action following discourse principles D and U can be evinced. Likewise, although there is generalized acceptance of the norm that platform workers take individual responsibility for their legal status as independent contractors, the universal acceptance of the norm has no consequences for all affected by virtue of that acceptance. A genuine discourse capable of validating norms requires deliberations without egocentrism, deliberators arguing in the "interest of all."201 The advice-giving and solidarity formation of platform workers are, however, almost entirely egocentric, based on the concerns of singular workers. There is, then, little reason to believe that platform workers even have discourse in Habermas's sense. Fourth, the norm of individual responsibility is practically, and not communicatively, presupposed. Platform workers' physical and contractual isolations are the condition for the norm. Platform workers have no choice but to presuppose the norm of individual responsibility – it is a condition for their working at Uber and YouTube and, therefore, of discussions themselves.

Qua prescriptive, the above are not reasons for rejecting Habermas's model outright. Rather, they are facts of platform workers' discussion that must be overcome *if* democratic apparatuses are to be instituted on Habermasian terms. Habermasian deliberation requires both

<sup>&</sup>lt;sup>200</sup> Habermas, On the Pragmatics of Communication, 84.

<sup>&</sup>lt;sup>201</sup> Habermas, Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, 98.

an institution and a "cultural context and social basis" that supports it.<sup>202</sup> Preliminarily, there is therefore a strong theoretical reason to suspect the inappropriateness of Habermas's presuppositions to a workplace deliberative democracy. How a Habermasian might respond to this suspicion is expanded on in §6.1.

## 5 Dewey's Action-Reconstructive Model of Deliberation

## 5.1 Normativity in General

For Dewey, all human action is both instrumental and subject to reconstruction, or a mutual readjustment of means and ends.<sup>203</sup> Means are human practices considered individually whereas ends are the same practices considered collectively and in aggregation.<sup>204</sup> Thus, a painting is an end composed of techniques, or means. Means towards which men are disposed but which do not empirically guide behavior to achieve ends are habits.<sup>205</sup> Every practice of a means to an end is the exercise of an active habit.<sup>206</sup> Practice is not necessarily an action; action is a special case of habit which, in general, is merely a predisposition to respond to one's environment.<sup>207</sup> Habits acting as means of interaction across practitioners are customs.<sup>208</sup> Similarly, customs considered as means of evaluating the desirability of an object are moral standards.<sup>209</sup> Customs, then, are norms both in the sense of institutional<sup>210</sup> behavioral

<sup>&</sup>lt;sup>202</sup> Habermas, 275.

<sup>&</sup>lt;sup>203</sup> Dewey, Human Nature and Conduct an Introduction to Social Psychology, 225.

<sup>&</sup>lt;sup>204</sup> Dewey, 36. Dewey uses the example of a soldier in relation to an army to demonstrate the individual-collective relation.

<sup>&</sup>lt;sup>205</sup> Dewey, 25. Dewey calls these "potential means."

<sup>&</sup>lt;sup>206</sup> Dewey, 25. Dewey also calls these "actual means." Dewey is drawing a quiet distinction here between potentiality and actuality, following Aristotle. Thus Dewey says "Eye, arm and hand are, correspondingly means proper only when they are in active operation." Cf. Aristotle's account of the eye in *De Anima* 412b12 in (Aristotle and McKeon, *The Basic Works of Aristotle*). This point is crucial: the distinction drawn here between potential and actual/active habits reappears at the level of public deliberation.

<sup>&</sup>lt;sup>207</sup> Dewey, *Human Nature and Conduct an Introduction to Social Psychology*, 42.

<sup>&</sup>lt;sup>208</sup> Dewey, 59. Customs are thus a special type of habit, a habit of human interaction. Customs form through "associations" of men with each other.

<sup>&</sup>lt;sup>209</sup> Dewey, 75; Anderson, "Dewey's Moral Philosophy."

<sup>&</sup>lt;sup>210</sup> North, *Institutions, Institutional Change, and Economic Performance*, 6.

conventions (social norms) and politico-ethical imperatives (moral norms).<sup>211</sup> Norms, then, are for Dewey also subject to reconstruction.

Reconstruction occurs through deliberation, Dewey's most concise<sup>212</sup> account of which<sup>213</sup> appears as follows:

(i) a felt difficulty; (ii) its location and definition; (iii) suggestion of possible solution; (iv) development by reasoning of the bearings of the suggestion; (v) further observation and experiment leading to its acceptance or rejection; that is, the conclusion of belief or disbelief. <sup>214</sup>

Given that Dewey later states that (i) and (ii) "frequently fuse into one,"<sup>215</sup> the process *simpliciter* occurs in four steps. Felt difficulties are conflicts between desired and intended results. Difficulties disrupt means' ability to achieve ends, the functioning of a prior, active habit.<sup>216</sup> <sup>217</sup> Deliberation always weighs several alternative actions.<sup>218</sup> Any "suggestion of possible solution" is, therefore, a reflection on choices for action based on one's habits.<sup>219</sup> At this moment, all habits beside reflection itself are suspended and, therefore, merely potential. "Development by reasoning of the bearings of the suggestion" is a further reflection on each choice based on its hypothetical consequences.<sup>220</sup> Once these consequences are sufficiently coherent in the mind of the deliberator, individuals choose to act based on those consequences.<sup>221</sup>

<sup>&</sup>lt;sup>211</sup> FeldmanHall, Son, and Heffner, "Norms and the Flexibility of Moral Action."

<sup>&</sup>lt;sup>212</sup> See also Dewey, *Experience and Education*, *Experience and Nature*, and *Essays in Experimental Logic*. Dewey accounts for specific steps in his epistemology in several ways. The account given here is both general and specific enough to account for his general position.

<sup>&</sup>lt;sup>213</sup> In *How We Think*, Dewey refers to the above process as "reflection." Dewey's vocabulary shifts over his oeuvre. However, the above account is homologous to his looser account of "deliberation" in *Human Nature and Conduct*.

<sup>&</sup>lt;sup>214</sup> Dewey, *How We Think*, 72.

<sup>&</sup>lt;sup>215</sup> Dewey, How We Think, 72.

<sup>&</sup>lt;sup>216</sup> Dewey differentiates between "habits" as mere means and "active habits" as habits "that project themselves" toward ends. I understand "means-ends relation" to include habits "projecting themselves" towards ends.

<sup>&</sup>lt;sup>217</sup> Dewey, Human Nature and Conduct an Introduction to Social Psychology, 25.

<sup>&</sup>lt;sup>218</sup> Dewey, 190.

<sup>&</sup>lt;sup>219</sup> Ibid. Reflection also involves "the formation of habits of mind" and "arrangement of the particular facts upon perception" (Ibid 75). Reflection is therefore the preparation of a *habitus* ready for action in Pierre Bourdieu's sense (cf. Bourdieu, "Structures, *Habitus*, Practices.")

<sup>&</sup>lt;sup>220</sup> Dewey, How We Think, 75.

<sup>&</sup>lt;sup>221</sup> Dewey, Human Nature and Conduct an Introduction to Social Psychology, 192.

"Observation and experiment" are actions which experimentally repeat the deliberative process. The consequences of the experiment are observed until another disruption occurs, at which point deliberation repeats. Experimental consequences thereby reconstruct the hypothetical consequences on which deliberators reflect, thereby reconstructing the actions deliberators take. Reconstructed actions thereby reconstruct experimental consequences, and so on *ad infinitum*. The initial "disruption" is therefore only one in a chain of ongoing, perpetual disruptions in the ongoing, perpetual process of deliberation. Because habits are always that which are disrupted, reconstruction is only an ongoing (re)formation of new habits that account for disruptions. Dewey thus offers a four-step model of deliberation: (1) disruption (2) reflection (3) action (4) reconstruction. (1)-(3) are deliberation proper, whereas (4) extends the deliberative cycle through disruptions that actions produce.

Four conclusions about norms, hereafter called Dewey's normative razor, follow from Dewey's account of reconstructive deliberation. First, because all human behavior is both social and guided by habit, all human behavior is normative in the same way. Second, norms have no a priori reference point. As normatively contextualist, Dewey's norms are emergent in and with the determinate, empirical interactions of individuals in association with each other. Third, shared norms are not necessarily communicated. Although norms can be and are made explicit as value judgments, one cannot prove that something is valuable by mere argument.

<sup>&</sup>lt;sup>222</sup> Dewey, *How We Think*, 77-78.

<sup>&</sup>lt;sup>223</sup> Dewey, *Reconstruction in Philosophy*.

<sup>&</sup>lt;sup>224</sup> Dewey says as much – the culmination of reconstruction is a "trained mind," Dewey, *How We Think*, 78. with the habits sensitive to "certain classes of stimuli…rather than bare recurrence of specific acts" Dewey, *Human Nature and Conduct an Introduction to Social Psychology*, 42.. What is disrupted functions anew in a reconstructed meansends relation.

<sup>&</sup>lt;sup>225</sup> Dewey, *Theory of Valuation*. For Dewey, "all planned human conduct, personal and collective seems to be influenced, if not controlled, by estimates of value or worth of ends to be attained."

<sup>&</sup>lt;sup>226</sup> Dewey, 32

<sup>&</sup>lt;sup>227</sup> Dewey, *Human Nature and Conduct an Introduction to Social Psychology*, 59.

<sup>&</sup>lt;sup>228</sup> Anderson, "Dewey's Moral Philosophy."

The necessary and sufficient condition for the sharing of norms across individuals is interaction produced by association. While value judgments may be made propositionally explicit, such explication ultimately aims at a practical judgment motivating action. For norms to be shared, value judgments must ultimately be experimentally tested and their "observable conditions and consequences" must be publicly visible for all experimenters to see. Fourth, as reconstructed, norms depend on reflection — without reflection, disruptions are not recognized, competing norms are not recognized, and no experimental actions are taken. Therefore, collective reflection on the success and failure of actions is required for the activity of a norm in a given association. Once more, for this to occur, the consequences of these actions must be publicly observable.

## 5.2 Deliberation in (a) Public

Before recounting Dewey's theory of public deliberation, some further stage-setting is in order. Dewey distinguishes between associations, communities and democracy.<sup>233</sup> Associations are social actions, or actions joining individuals together through a shared custom.<sup>234</sup> When associations take on a normative dimension and aim at a common good, associations become communities.<sup>235</sup> For Dewey, "democracy is not an alternative to other principles of associated life. It is the idea of community life itself."<sup>236</sup> If democracy is the ideal of both association and community, then it is a descriptive, sociological criterion for associations and a normative ideal

<sup>&</sup>lt;sup>229</sup> Anderson.

<sup>&</sup>lt;sup>230</sup> Dewey, *Theory of Valuation*, 20.

<sup>&</sup>lt;sup>231</sup> Dewey, 14.

<sup>&</sup>lt;sup>232</sup> Dewey, 14; Anderson, "Dewey's Moral Philosophy"; Dewey, *Human Nature and Conduct an Introduction to Social Psychology*, 278.

<sup>&</sup>lt;sup>233</sup> Publics will be defined below. As the main site of contestation between Dewey and Habermas, I dedicate more time to explaining them than the definitions given here.

<sup>&</sup>lt;sup>234</sup> Dewey, *The Public and Its Problems*, 188. Cf. *Human Nature and Conduct*, 59. This is a (re)constructivist statement. Customs do not precede associations, but are (re)constructed through them.

<sup>&</sup>lt;sup>235</sup> Dewey, 188.

<sup>&</sup>lt;sup>236</sup> Dewey, 148.

for their political institutions.<sup>237</sup> Democracy, of course, has specific normative requirements, which Dewey summarizes as the classical triad fraternity, liberty, and equality.<sup>238</sup> Insofar as these are democratic norms they are, for Dewey, ideal norms for any and all associated living, with or without a common good.

Dewey's model of public deliberation, as I read it, has three rounds: (1) individual deliberation, (2) associated deliberation, and (3) 239, or a disruption by consequences with which the association is not directly involved.<sup>240</sup> More specifically, externalities disrupt associations' ability to predict and control the consequences of their joint activity.<sup>241</sup> (1) Individuals initially recognize the disruption as something private and habitual. Individuals therefore reflect on disruptions privately until their habits are exhausted. Eventually active public deliberation. Following the above model of deliberation, public deliberation also begins with a disruption. For Dewey, a public is any association formed in response to an externality, deliberators reconstruct their private habits in the recognition that they are unable to individually respond to consequences that they are currently undergoing. (2) Reconstructing the disruption as social, and not merely individual, prompts individual deliberators to associate and seek a common custom. Associated deliberators reflect on possible customs until inquiry and publication are decided on. Associated reflection engages in a "systematic and continuous inquiry into all the conditions" affecting deliberators' joint action.<sup>242</sup> As in individual deliberation, all customs in associated deliberation are suspended beside reflection itself. Because the association demands publicity, it is a public in a merely potential state of formation. The association begins to reconstruct itself as

<sup>&</sup>lt;sup>237</sup> This statement reflects Dewey's broader anti-foundationalist project of collapsing facts and values, discussed most completely in his *The Quest for Certainty*.

<sup>&</sup>lt;sup>238</sup> Dewey, *The Public and Its Problems*, 148.

<sup>&</sup>lt;sup>239</sup> I would like to thank my advisor Dr. Gary Herrigel for pointing me to this term for Dewey's work and to Charles Sabel's paper "Dewey, Democracy, and Democratic Experimentalism" in which the use has further weight.

<sup>&</sup>lt;sup>240</sup> Dewey, *The Public and Its Problems*, 27.

<sup>&</sup>lt;sup>241</sup> Dewey, 188.

<sup>&</sup>lt;sup>242</sup> Dewey, 218.

an active public once it decides that it is "necessary" that the externality's consequences be "systematically cared for."<sup>243</sup> (3) The active public recognizes the initial disruption as a problem of administration, or systematic care. It reflects on two general avenues of action – demandsmaking and self-governance. The active public may either demand legal or institutional reform with more desirable consequences<sup>244</sup> or begin to administer the externality itself through the creation of new institutional organs.<sup>245</sup> Hereby publics "form themselves"<sup>246</sup> by breaking "existing political forms" and their attendant customs.<sup>247</sup> The active public's reconstruction, if successful, witnesses government sanctioning of the demands or the self-governance – either existing democratic channels respond to public demands or new democratic channels are created.<sup>248</sup> If the public's reconstruction failed, an eclipsed public forms in which "systematic care" is widely recognized but has neither organs of self-governance nor policy demands to secure it.<sup>249</sup>

Two conclusions about Dewey's model of deliberation are in order. First, all public deliberation is strategic insofar as it attempts a mutual readjustment of ends and means. This ultimately depends on deliberators' joint action, the final subject of public deliberation itself. Second, institutions cannot be designed *ex ante* to meet the needs of Deweyan deliberators. As Dewey himself says, institutions cannot be designed based on any *a priori* principles.<sup>250</sup> Only the organization of the public itself as an experimental process of trial and error can be prescribed since the principles of externality administration follow exclusively from the disruptions they produce. For this reason, Dewey's should be called an *ex post* deliberation. Deweyan

<sup>&</sup>lt;sup>243</sup> Dewey, 17–21.

<sup>&</sup>lt;sup>244</sup> Dewey, 193.

<sup>&</sup>lt;sup>245</sup> Dewey, 31.

<sup>&</sup>lt;sup>246</sup> Dewey, 31.

<sup>&</sup>lt;sup>247</sup> Dewey, 31.

<sup>&</sup>lt;sup>248</sup> Dewey, 31.

<sup>&</sup>lt;sup>249</sup> Dewey, 178.

<sup>&</sup>lt;sup>250</sup> Dewey, 33.

deliberation occurs in response to inciting incidents and, therefore, its norms and designs must follow therefrom.

	Disruption	Reflection	Action	Reconstruction
Individual	Habits ineffective	Multiple habits possible	Habits tested	Individual → Social
Association (Potential Public)	Customs ineffective	Multiple customs possible	Publicity tested	Social → Public
Active Public	Current administration ineffective	Multiple administrative moves possible	Administrations tested / demanded	Demand stronger administration

Figure 5: Dewey's model of public deliberation

### 5.3 Platform Workers as Deweyan Public Deliberators

As a theorist of deliberation *ex post*, Dewey does not demand that his deliberators adhere to a deliberative schema. Indeed, as both Axel Honneth and Jeffrey Jackson have alternately shown, Dewey's is an "action-theoretic" account of publicity that contains actions that are distinctly nondeliberative 252 in the sense recognized by deliberative democrats. Because Dewey's basis of rationality is instrumental action, he is not faced with either the normative or procedural requirements of Habermas and his latter-day followers. For Dewey, communication is already an instrumental activity embedded in joint, social action – it requires no institutional security. Therefore, a Deweyan need not normatively presuppose an institutional design for the application of his model.

Rendering Uber and YouTube platform workers' discussions as instances of Deweyan deliberation, therefore, begins with the disruption that blocks the existing habits of individual platform workers. The unpredictable modifications to workplace policy faced by platform

<sup>&</sup>lt;sup>251</sup> Cf. Honneth and Farrell, "Democracy as Reflexive Cooperation: John Dewey and the Theory of Democracy Today," 774, who call Dewey's an "action-theoretic concept of the 'public.""

<sup>&</sup>lt;sup>252</sup> Jackson, Equality Beyond Debate, 146.

<sup>&</sup>lt;sup>253</sup> Cf. Dewey, *Human Nature and Conduct an Introduction to Social Psychology*, 17. "Conduct is always shared." Cf. also Dewey, *The Public and Its Problems*, 151. "Associated activity needs no explanation; things are made that way."

workers and the inscrutability of their "black boxed" algorithms are just such a disruption. Advice-giving, for this reason, generally centers around these two aspects of platforms as sociotechnical assemblages - they endogenously and continuously disrupt platform workers' individual habits. Reflecting on the insufficiency of individual control over either management decisions or technical inscrutability, platform workers post online about their dilemmas. Per the three stages of public deliberation, such individuals have hereby entered into a form of joint activity or association stimulated by their common problems. As an informal association, platform workers' search for explications of firm guidelines and observations are a form of inquiry that mutually readjusts means and ends. "Rule discovery" among Uber drivers and "longterm learning" among YouTube content creators are instances of Dewey's account of inquiry and publication. Platform workers as Deweyan deliberators have become accustomed to publishing their experiences in a search for collective control. Platform workers are informal "autoethnographers" of algorithms and management decisions, observing the behavior that the sociotechnicality of their workplaces has on them as individuals.<sup>254</sup> This epistemological strategy corresponds to what Bruno Latour has called "saturated description" - searching for causes to collective problems through the pooling of experience or, as Dewey would call it, "collective intelligence."<sup>255</sup> As investigators, however, platform workers fall short of the threshold for active publicity – their investigations only concern each other egocentrically, and not as a class.

Summarizing based on Dewey's four-part normative razor, the custom/norm of advice-giving reflects Dewey's *ex post*, consequentialist criterion for reasons – platform workers advise based on the likely consequences of action. Second, actions themselves are guided by contextual norms emergent from firm-level activity. Third, norms themselves are shared not through

<sup>&</sup>lt;sup>254</sup> Christin, "The Ethnographer and the Algorithm," 904.

<sup>&</sup>lt;sup>255</sup> Christin, "The Ethnographer and the Algorithm," 906.

argumentation but a collective activity, inquiry. Fourth, reflexivity is not a procedural revisal of norms but a fallibilist revisal of hypotheses for action.

As Elizabeth Anderson argues, Deweyan democracy is its own solution – the means to resolve social disruptions is to institute further democratic procedures. <sup>256</sup> Because democracy is a set of reflective, investigative procedures, belief revision is progressively institutionalized as the diversity of opinions collectively and iteratively address common problems.<sup>257</sup> Diagnostically, therefore, platform workers as associated have only failed to live up to one of the normative criteria of democracy – joint investigative action. Normatively put, platform workers have not yet become accustomed to the collective inquiry requisite for an active publicity that could administer or demand resolution to their disruptions. Instead, the deliberations of associated platform workers are caught in an undemocratic, actantial bind. Following Bruno Latour's account of actants as objects that make "actors do things," 258 platform workers' observe and deliberate about algorithms and firm-wide decisions actiantially, or as doings to be individually reflected on and jointly shared. Individual deliberations continue to produce opportunities for firm-level data collection, thereby refining platform algorithms and management systems. Of course, as Vallas and Schor argue, this does not necessarily entail a greater control of platform operators over platform workers than wage-work managers had over wage-earners.<sup>259</sup> However, such data collection is an externality in just Dewey's sense, producing consequences outside the immediate purview of platform workers' transactions.<sup>260</sup> For a genuine public deliberation, however, "publicity in respect to all consequences which concern" deliberators jointly must be sought in response to such an externality. Until a joint inquiry is on the table for such

<sup>&</sup>lt;sup>256</sup> Anderson, "The Epistemology of Democracy," 19.

<sup>&</sup>lt;sup>257</sup> Anderson, 13.

<sup>&</sup>lt;sup>258</sup> Latour, Reassembling the Social, 55.

<sup>&</sup>lt;sup>259</sup> Vallas and Schor, "What Do Platforms Do?"

<sup>&</sup>lt;sup>260</sup> Frenken and Fuenfschilling, "The Rise of Online Platforms and the Triumph of the Corporation," 103.

deliberators in a more complete recognition of the role this externality plays in reproducing their disruptions, their customs will remain at a level insufficient for resolution.

The final aim of democratic life, for Dewey, is the autonomy, or self-governance, of all involved in democracy.<sup>261</sup> The actantial bind has disrupted the very possibility of self-governance for platform workers. Committed to the custom of individual responsibility in the middle of a socio-technical system that mines data based on their individual behaviors, such self-governance is upended. Platform workers are instead dependent on algorithms, dominated vis-à-vis the combination of algorithms themselves and the (lack of) voice channels at platform firms.<sup>262</sup> As Elizabeth Anderson has argued, the autocratic decision-making workers face at firms is already a form of domination and, thereby, heteronomy.<sup>263</sup> At platform firms, one might say, this injustice is compounded by Rosenblat and Stark's information and power asymmetries to produce what has been called epistemic domination.<sup>264</sup>

For Dewey, institutional design thereby depends on the very strategies that platform workers undertake at their firms in direct response to lingering workplace dominations and the novel epistemic domination created by their actantial bind. Such a design, following Charles Sabel, is necessarily experimentalist, since it must follow from the collective actions of platform workers themselves. Neither theorist nor platform worker can demand democratization outright as an institutional *a priori*. Rather, democratization of platform firms is a task for platform workers in conjunction with regulators to create avenues of experimental activity. With a custom of collective inquiry in place sufficient for public deliberation, platform workers could, in line with

<sup>&</sup>lt;sup>261</sup> Anderson, "The Epistemology of Democracy," 16.

<sup>&</sup>lt;sup>262</sup> Muldoon and Raekstad, "Algorithmic Domination in the Gig Economy."

<sup>&</sup>lt;sup>263</sup> Anderson, *Private Government*.

<sup>&</sup>lt;sup>264</sup> Harris, "Epistemic Domination in Advance."

<sup>&</sup>lt;sup>265</sup> Sabel, "Dewey, Democracy, and Democratic Experimentalism."

Dewey's model, begin pooling joint experience for a more robust inquiry into their disruptions and begin creating associations accordingly.

### 6 Dewey, Habermas, and Deliberative Democratic Governance in Conversation

Deweyan, Ex Post Habermasian, Ex Ante Reasons Given prospectively towards Given retrospectively as antecedent consequences justifications Aim at consequences Aim at compliance with reasons Actions Norms Practical and communicative Strictly communicative **Explication** Insufficient and unnecessary Necessary and Sufficient **Strategy** Embedded into communication Opposed to communication Experimental: Secure externality **Institutional** Pre-Given: Maintain communicative Design action

Figure 7: Chart comparing Dewey and Habermas's accounts of public deliberation

Putting Dewey and Habermas in conversation is, at one level, a historical exercise. Habermas has been engaging with Dewey since at least his 1963 work *Theory and Practice*<sup>266</sup> and has already spoken to many of the central questions at issue in platform governance – norms, discussion, deliberation, and democracy. The following argues for some general consequences of these engagements with respect to platform workers' deliberations based on the general conclusions about normativity in each theorist (§4.1 and §4.2) and the general conclusions about public deliberation (§5.1 and §5.3).

### 6.1 Reasons and Norms: Consequential and Antecedent

Habermas critiques Dewey's input for its irrationality, on his account. Habermas's account of democratic legitimacy depends on the exchange of reasons for action, the inputs to his deliberative model. Dewey, however, has no account of reasons in Habermas's sense – his inputs are disruptions. For Habermas, anything but a communicative input risks moral relativity and,

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<sup>&</sup>lt;sup>266</sup> Habermas, Viertel, and Habermas, *Theory and Practice*.

therefore, irrational violence against a person encountered as radically other. This normative stance follows rather obviously from what Habermas has himself called his "Kantian pragmatism." Habermas's lifeworld is singularly unified through the medium of language; according to Habermas, all human experience is mediated through language, as is the "learning process" of belief revision. This alone yields "an empirically universal form of communication" without alternative. There is, then, a singular (if internally differentiated) political public sphere for Habermas in which reasons for actions for action are communicated — reasons must be given *ex ante* towards universalization. Without Principles (D) and (U) as context-neutral and unconditional rules of argument, the public deliberation has no possible legitimate output. Habermas's Dewey, lacking a necessary communicative input, thus cannot achieve the perspective-taking of the other required for legitimate democratic outcomes.

A Deweyan can respond doubly, both substantively and instrumentally. Substantively, Habermas's insistance on explicit, universalizable norms limits the scope of deliberation. Titus Stahl has noted in response that

there could be norms, which acquire their normative force not in virtue of their (potential) discursive justification, but rather due to the fact that non-discursive attitudes of mutual attribution of authority are taken, by the participants, to be sufficient to institute basic social statuses. <sup>273</sup>

These norms, Stahl continues, need not rely on a communicated agreement for either their existence or for actors to abide by them. Positively, these norms might include implicit expectations of emotional rapport, such those are necessary for Uber drivers to maximize their algorithm ratings and for YouTubers to participate in algorithmic gossip. These could also

<sup>&</sup>lt;sup>267</sup> Habermas and Fultner, *Truth and Justification*, 8–9.

<sup>&</sup>lt;sup>268</sup> Habermas and Fultner, 13.

<sup>&</sup>lt;sup>269</sup> Habermas and Fultner, 20.

<sup>&</sup>lt;sup>270</sup> Habermas, Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy, 274.

<sup>&</sup>lt;sup>271</sup> Habermas, 361.

<sup>&</sup>lt;sup>272</sup> Habermas and Fultner, *Truth and Justification*, 234.

<sup>&</sup>lt;sup>273</sup> Stahl, "Habermas and the Project of Immanent Critique," 542.

include naturalized, institutionally-embedded forms of coercion that actors take for granted.<sup>274</sup> Dewey's reliance on disruption as an input to public deliberation hereby allows non-explicit customs to operate either for better or worse. Deweyan public deliberators, as concerned with courses of action, therefore have a wider scope of options to deliberate about. Negatively, this move rebuts Habermas insofar as he is unable to account for activities of relevance to democratic governance but about which his model is quietist. This depends on the relativization of norms – insofar as norms are not universalizable, they are relative to deliberators.

Positively, this move rebuts Habermas on two counts. First, Deweyan deliberative democratic design has a wider variety of options that can accommodate non-explicit customs and a wider scope of dominations to be checked. As Nancy Fraser<sup>275</sup> and Charles Sabel<sup>276</sup> have alternately suggested, Dewey's view is rational in proportion to the collaboration it fosters *ex post* not by sweeping agent-relative norms under the rug but by facing them head on in arenas of contestation. On Sabel's experimentalist model, local, agent-relative variations in norms must simply be presupposed. On Fraser's contestatory model (likened to Dewey's<sup>277</sup>), agent-relative norms are a given – norms do not operate through universal generalization but contestation and conflict that must be collaboratively channeled. Deweyan legitimacy is not a question of consensus, but resolution of a problem through coordinated action while maintaining democratic norms.

Responding instrumentally, Dewey's contextualism<sup>278</sup> about norms allows his deliberation an immediate usefulness to platform workers. On Dewey's view, however, disproportionate

<sup>&</sup>lt;sup>274</sup> Midtgarden, "Critical Pragmatism," 511.

<sup>&</sup>lt;sup>275</sup> Fraser, "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy," 122.

<sup>&</sup>lt;sup>276</sup> Sabel, "Dewey, Democracy, and Democratic Experimentalism," 38.

<sup>&</sup>lt;sup>277</sup> Jackson, Equality Beyond Debate, 209.

<sup>&</sup>lt;sup>278</sup> Anderson, "Dewey's Moral Philosophy"; Jackson, *Equality Beyond Debate*, 178.

social power and conflict are an anthropological given.<sup>279</sup> Publics, then, do not seek consensual perspective-taking when conflicts arise. Rather, and quite radically, publics deliberate *ex post* about the potential consequences of action in response to a disruption and proceed to break with existing political forms to resolve it. Thus, For Raymond Geuss, Dewey's account automatically suggests a "variety of overlapping publics" that can come into conflict relative to the knowledge, consequences, value judgments, and externalities of each.<sup>280</sup> With democratic life presupposed as the aim of associated living, Dewey's publics will seek democracy for themselves through their deliberations just thereby. Dewey is thus immediately useful to platform workers insofar as he recognizes that they are already participating in conflictual activities that will ultimately amount to some kind of democratic voice.

Although this answer may seem naïve from Habermas's standpoint (indeed, he has said as much),<sup>281</sup> it is difficult to see how Habermas's model is on balance, superior to Dewey's for platform workers. The Habermasian, I have argued, is already committed to the claim that institutional design must pre-exist to ensure platform workers can even be considered public deliberators. Moreover, it is not clear that they can be considered as such at all given Habermas's commitment to the notion that work and money are strategic and that private property rights are one of the presuppositions of modern democratic apparatuses. By contrast, although the Deweyan model may offer a degree of naivety from Habermas's Kantian "view from nowhere," he offers a normative model which can take direct account of platform workers where they stand. As Roberto Frega argues:

far from restraining its content to neutral reasons to be used within the institutional debate, it [a Deweyan model] covers all beliefs and forms of expression which circulate in the multiple forums where political issues are debated, according to a model which, like the

<sup>&</sup>lt;sup>279</sup> Dewey, Clopton, and Ou, Lectures in China, 1919-1920, 66.

<sup>&</sup>lt;sup>280</sup> Geuss, *Public Goods, Private Goods*, 93.

<sup>&</sup>lt;sup>281</sup> Habermas and Fultner, *Truth and Justification*, 235.

deweyan, is problem driven. Therefore, the outcome of public reason is not adjudication according to uncontroversial universal principles, but local decisions which take into consideration contextual factors. <sup>282</sup>

The collective demands-making and/or administration animating "local decisions" is the ultimate adjudicator of the success/failure of a deliberation. One might call this a transcendental test — Dewey's model demands public deliberation produce something beyond itself — an active, practicing public. Habermas's test, however, remains immanent to its discourse — it offers no account of any non-discursive practice beyond it. As Frega again summarizes, Habermas limits "the scope of reason [to] providing justification to given theoretical beliefs or existing institutions, rather then in terms of the practical dimension of joint action." The empirical observability of collective action strategies that fit into Dewey's deliberative model does not, therefore, merely amount to the claim that Habermas's model is "too ideal." Rather, for platform workers, it suggests that the strategies of communication they already practice are largely irrelevant to his model. If, then, one is seeking a normative model of instrumental relevance, Dewey's model is superior. Habermas cannot meet platform workers as public deliberators as Dewey can — his formality is quietist about the customary content which Dewey's account relies on.

#### 6.2 Actions and Norms: Instrumental and Communicative

Habermas has similarly critiqued Dewey's view for its inability to distinguish between strategic and communicative action, a critique from throughput. Habermas's Dewey lacks mutual understanding as a democratic telos. If instrumental activity is to be involved in democracy at all, Habermas demands that it proceed through a mutual understanding between official decision-

<sup>&</sup>lt;sup>282</sup> Frega, "What Pragmatism Means by Public Reason."

<sup>&</sup>lt;sup>283</sup> Frega, 47.

makers – scientists and politicians.<sup>284</sup> As troubling as this critique may be for democracy in general (especially after COVID), it poses little to no difficulty for a Deweyan rendering of platform workers as public deliberators. At least for platform firms, sources of disruption wrought by scientific knowledge require no specialists and empirically lack voice channels securing Habermasian deliberation. As inquirers already at work observing the algorithms and management systems that disrupt them, platform workers are already engaged in the kind of technical-instrumental action that the citizens of most democratic states are not. As such, this critique from throughput is irrelevant to Dewey's normative model at platform firms – deliberators' *ex post* reference to consequences remains sufficient.

In this way, Dewey's model offers a relatively close fit to the discussions of platform workers. Michel Callon has thus used Dewey to advocate for a model of democratic deliberation in which citizens are "co-researchers" who collectively operate to establish relevant facts and render problematic situations intelligible.<sup>285</sup>

#### 6.3 Strategy: Embedded and Excluded

For Habermas, strategy must be bracketed. Public deliberation necessarily excludes it at the risk of moral validity. For Dewey strategy in Habermas's sense is already involved in platform workers' discussions. Because strategy involves a kind of collective information-pooling for platform workers, the ability to institutionalize this experimentally renders Dewey necessarily stronger on this front. The Deweyan normative demand for self-governance thus amounts to a deeper, more thoroughgoing normative proposal than Haberma's – it demands that strategy itself be embedded in democratic social action. Indeed, I have argued that Habermas's theory seems to commit theorists to the presupposition of workplace democracy only if they can prove the

<sup>&</sup>lt;sup>284</sup> Habermas, *Toward a Rational Society*, 70.

<sup>&</sup>lt;sup>285</sup> Callon, Lascoumes, and Barthe, Acting in an Uncertain World, 28.

workplace-government analogy on *his* terms – it isn't clear that they can. One need not provide such an analogy for Dewey – deliberation occurs as a quest for control over threatening, concerning situations. Therefore, whatever warrants disruption is subject to the demands of democracy as the ideal type of human association, one in which human beings are already instrumental strategists. The public-private distinction and, thereby, any analogy between public sector and private sector, breaks down.<sup>286</sup> Indeed, Deweyan public deliberation seeks non-domination and self-governance wherever it appears.<sup>287</sup> Because Habermas has excluded strategy from his normative ambit, however, it is unclear whether, how, and why one would seek to maintain his normative model for applying communicative action to strategic actors.

Perhaps a Habermasian would suggest that platform workers' non-democratic difficulties are due to some form of systematically distorted communication or other "colonization" of the lifeworld – strategy has perhaps invaded their lifeworld and, therefore, democracy must be installed to halt this invasion. While this may be true, one would have trouble understanding on what grounds such a claim could be made if one has already called platform workers a public sphere (as theorists like Ferreras and Heiner do). As argued, this claim presupposes communication's normative distinction from strategy and that strategy has itself been bracketed to demand the installation of democratic designs. Indeed, no distortion can arise except through an invasion of lifeworld norms with those of the system, thereby distorting communication in the lifeworld. But, if the system's strategic character has already been bracketed, normative

<sup>&</sup>lt;sup>286</sup> Cf. *Public and Its Problems*: "There is no sharp and clear line which draws itself, pointing out beyond peradventure, like the line left by a receding high tide, just where a public comes into existence which has interests so significant that they must be looked after and administered by special agencies, or governmental officers" Dewey, *The Public and Its Problems*, 64.. See also Frega, "What Pragmatism Means by Public Reason," 29., who argues that Dewey blurs "the dualism of the public and the private," ie. state and civil society. See also Melvin Rogers' introduction to Penn State edition of *Public and Its Problems*. In the *Ethics of Democracy*, Dewey writes that "in a representative system, 'the governors and the governed' do not form 'two classes'...but are rather 'two aspects of the same fact' - namely, the ruling people" Dewey and Rogers, *The Public and Its Problems*, 11–12...

<sup>287</sup> Midtgarden, "Critical Pragmatism," 507, 511.

undesirability of emphasizing the lifeworld in isolation cannot be due to such an invasion. Indeed, bracketing the system, one would have to bring it in once more to justify the critical purchase of Habermas's schema. One is thereby lead to wonder why she shouldn't begin with workers' deliberations as they currently stand, at a position at the intersection of instrumental strategy and understanding. However, if one does so, they are led to just Dewey's approach to public deliberation.

#### 7 Conclusion: Normative Reconstruction

Habermas's view of the deliberation misleads us by supposing that platform workers have little to no a public deliberative capacity *ex ante*. While this may be true, Dewey's conception reveals how the private habits of platform workers prevent a more robust public deliberation *ex post*. That is, because platform workers tend to only acknowledge their transactional consequences as sources of common disruption, they are not yet an active public. Because their habits are not yet accustomed to the actantial behavior of the algorithms that manage them nor to the collective inquiry needed to successfully experiment with them, they are not public deliberators in Dewey's sense either. Platform workers are not yet able to make demands as undergoing externalities – they have not yet recognized that they are undergoing any. To remediate this, Dewey's account of normativity can be combined with his account of public deliberation to prescribe a hypothetical set of customs to produce more desirable consequences.

Although, according to my argument, platform workers are already operating at the level of associated customs, these are insufficiently public. Platform workers construe their disruptions as individualized, not collective. As a consequence, their actions are limited to individualized inquiry, advice-giving, and experimentation. All of this is packaged in the custom "Do best what is in your control." With Dewey, workers should begin by "starting from acts which are

performed, not from hypothetical causes for those acts, and consider their consequences."<sup>288</sup> Made explicit, workers should first embrace the norm – "Pay attention to what follows from what is in your control." Then, externalities must be recognized as a necessary consequence of the application of the current norm. Workers should thereby embrace the norm – "Find the limits of your own control." Once these limits are found, an externality will be detected. At this point, platform workers will have formally entered into a reconstruction process that is actively public.

Upon the reconstruction of a norm that explicitly discusses the collective externality faced by platform workers vis-à-vis the socio-technicality of their firms, the rest of Dewey's model follows verbatim. Workers can begin either forming local organs of self-governance that collectively pool experience for concerted social action and/or make demands of both management and public administrators. The formation of either concerted action or demands-making would suggest an active public whose deliberative potentials have been consummated in and by its joint action. At their most radical, demands would entail a systematic administration of the externalities that platform workers face in the form of an experimentalist workplace democratization. Hereby these externalities, especially as wrought by the norm of practical individuality, would be internalized within the firm. The formation of the platform workplace as a "democratic community" would, thereby, resolve the problems of platform workers as a public decisively.<sup>289</sup>

Crucially, Habermas's account of the public sphere is incapable of the above prescriptions, both procedurally and consequentially. Procedurally, the normative core of Habermas's public deliberation largely disapproves of platform workers' current discussions. Instead of experimentation, Habermas's model depends on institutional background conditions to

<sup>&</sup>lt;sup>288</sup> Dewey, *The Public and Its Problems*, 12.

<sup>&</sup>lt;sup>289</sup> Dewey, 216.

render current discussions successful as deliberations. Likewise, because its context- and content-neutrality bar it from attention to and prescription of implicit, practical norms (customs), Habermas's model first demands adherence to his institutional schema. This in turn demands a theoretical reconstruction of platform workers' deliberations outside those they currently undertake by revising property law and its role in deliberation, a move that current applications of Habermas to corporate governance overlook. Dewey's account of the public, by contrast, allows both attention to and prescription of customs norms and, therefore, serves as a more helpful alternative for diagnosing platform workers' deliberations. Insofar as this is more helpful, it suggests a broad variety of strategies that platform workers can themselves undertake to consummate the potentially public deliberations they already maintain.

I have sought in this thesis to contribute to several literatures, all of which have more or less spoken past each other at platform workers' expense. While much work has been done collecting and analyzing the contents of workers' discussions on the platform economy, little has been said about the normative possibilities that these discussions afford platform workers. Likewise, while literature on deliberative democracy and corporate governance has sought to bridge the two together, attention to the normative requirements of deliberation has been severely understudied. By studying both workers' discussions themselves through sentiment analysis and considering how these discussions have different normative possibilities depending on the deliberative models in which they are rendered, I have pointed to a unique experimentalist opportunity for platform workers. Indeed, some experimental collective action has already been attempted by YouTube content creators.<sup>290</sup> By examining the discussions that produce these actions, I have argued that Dewey's model of deliberation both more accurately renders them and more thoroughly and immediately prescribes possibilities for them than does Jürgen

<sup>&</sup>lt;sup>290</sup> Niebler, "YouTubers Unite."

Habermas's. I have hereby sought to question the Habermasian emphasis on argumentation and debate as preconditions to democratization in deliberative governance literature. I have instead insisted on Dewey's experimentalist model based on action, with shared disruption as its precondition.

# 8 Appendices

# 8.1 Appendix 1: Most Negative Posts Output

# 8.1.1 YouTube Posts

Post Title	Brief Summary	Comments Summary	<b>Sentiment Score</b>
Comments-How to deal with Bullies	a small gaming channel owner expressing their concerns about receiving negative and bullying comments on their content, and seeking advice on how to respond to such comments in a respectful and assertive manner	Suggesting various strategies for dealing with negative feedback on a YouTube channel	-0.9853
How can I tell if a partnership offer is real or a scam?	A small YouTuber seeks advice on distinguishing real partnership offers from scams.	Users suggest verifying potential scams via direct company contact and safe link opening.	-0.9823
[question] is there anything I can do to deal with haters who turn on my youtube notis to DISLIKE my streams with 7 DIFFERENT ACCOUNTS?	A gaming YouTuber seeks advice on handling a persistent troll disliking their streams.	Advice given includes ignoring the troll, hiding like/dislike counters, and understanding dislikes still boost engagement.	-0.9771
Anyone Else Really Dislikes the YouTube Shorts Format?	Vertical format unsuitable for most genres; poor player; thumbnail issues.	Sites should focus on their strengths; mixed opinions on YouTube shorts.	-0.9748
[Question] How do I get over my stuttering problem?	Struggle with stuttering, affects recording and communication. Seeking advice.	Record in stages, focus on breathing, script preparation, stay calm.	-0.9747
[Question] Wtf is going on with YouTube?	Videos flagged for policy violations despite unrelated content; confusion and frustration.	Tags in descriptions may violate YouTube's policy; migration to Twitch.	-0.9743
[Question] Is it even worth becoming a YouTuber now?	YouTube's issues: algorithm control, copystriking, demonetization, favoritism.	YouTube ad monetization declining; focus on audience and products.	-0.9636
My inability to stick to writing one script at a time	Constant cycle of generating video ideas without completing full scripts.	Continuous influx of video ideas without completing scripts; organization strategies.	-0.9617
Realistically, how much can someone make creating "baby sleep music" videos on YouTube?	Concerns about father's unrealistic expectations and impulsive investment in YouTube.	Challenges with monetizing music/whitenoise channels; limited ad revenue.	-0.9592
[Question] My reaction	Copyright claim on	Request for video link; discussion	-0.9565

video got blocked in a	reaction video; dispute	on demonetization and disputes.
lot of countries resulted in unblocking		

# 8.1.2 Uber Posts

Post Title	Brief Summary	Comments Summary	Sentiment Score
Fuck Jails and hospitals that order Ubers for released inmates and patients.	Concern about hospitals and jails ordering Ubers for unclean passengers.	Instances of challenging and concerning experiences as a rideshare driver.	-0.9989
Uber driver lied and added a cleaning charge, what can I do besides disputing the charge on Uber?	Dispute about mess; accusation of lying due to intoxication.	Dispute over mess in the car; differing perspectives on responsibility.	-0.9981
I'm done.	Traumatic experience with passenger, quitting Uber due to fear.	Terrifying incidents with passengers, quitting Uber due to safety concerns.	-0.9965
Enjoy your ban, and thanks for the \$3.75	Altercation with passengers over ride capacity, threats, and attempted damage.	Passenger ban unlikely; report incident to insurance company.	-0.9964
Confirmed. Uber DOES fudge the PAX rating!	Driver app shows higher passenger ratings; Uber possibly manipulating numbers.	Uber possibly manipulates surge pricing and passenger ratings.	-0.9962
Almost fought for my life (\$7 trip)	Passenger threatens driver's life during a ride.	Passenger threatens driver's life, emphasizing safety precautions and support.	-0.9958
Just got a guy banned from Uber	Driver confronted by passenger trying to put minor in car. Uber took prompt action.	Transporting minors against terms of service and risky for drivers.	-0.9946
A petition for Uber and Lyft to implement a clear deactivation policy, giving drivers a voice in cases of deactivation.		Uber/Lyft driver deactivations and need for better accountability.	-0.9945
Entitled Pax at a Kroger, am I wrong for how I handled it?	Refused to load groceries, ended trip and drove away.	Refused to load groceries, attitude upset driver, considered canceling passengers.	-0.9942
Passenger fails to meet up at our arranged time to retrieve her phone, throws a fit, and now has to wait several days for her phone to be shipped to her instead.	Passenger fails to retrieve phone, throws fit, delayed shipment.	Passenger's fit backfires, delayed phone return.	-0.994

# 8.2 Appendix 2: Raw LDA Output

# 8.2.1 YouTube

Weight*Term	Interpretation
'0.040*''video'' + 0.013*''channel'' + 0.012*''content'' + 0.011*''get'' + 0.010*''like'''	Content Creation: Discussing the process of creating and getting content for YouTube videos and channels.
'0.038*''video'' + 0.016*''song'' + 0.014*''channel'' + 0.011*''it'' + 0.011*''claimed'''	Music and Copyright: Related to music videos or songs on YouTube, possibly discussing copyright claims.
'0.019*''video'' + 0.015*''content'' + 0.014*''youtube'' + 0.010*''view'' + 0.009*''channel'''	View Count Strategies: Discussing strategies to increase views on YouTube videos and channels.
'0.022*''video'' + 0.021*''channel'' + 0.014*''im'' + 0.009*''dislike'' + 0.008*''know'''	Personal Opinions: Expressing personal experiences or opinions on YouTube channels and videos.
'0.035*''video'' + 0.013*''channel'' + 0.011*''view'' + 0.010*''youtube'' + 0.010*''ad'''	Advertisements: Discussing the impact of ads on the viewing experience and channel revenue.
'0.043*''video'' + 0.009*''youtube'' + 0.008*''short'' + 0.007*''say'' + 0.007*''view'''	Short Videos: Discussing the trend of short, quickly consumable content on YouTube.
'0.023*''video'' + 0.019*''channel'' + 0.011*''think'' + 0.010*''youtube'' + 0.009*''like'''	Viewer Preferences: Discussing personal preferences, likes, and dislikes of YouTube videos and channels.
'0.019*''video'' + 0.011*''comment'' + 0.011*''youtube'' + 0.011*''channel'' + 0.009*''anything'''	Community Interaction: Discussing the role and issues of comments in the YouTube community.
'0.021*''channel'' + 0.014*''youtube'' + 0.011*''content'' + 0.009*''get'' + 0.008*''music'''	Music Content: Discussing music channels or the use of music in YouTube videos.
'0.020*''video'' + 0.014*''channel'' + 0.010*''youtube'' + 0.010*''people'' + 0.009*''idea'''	People in YouTube: Discussing YouTubers, their audiences, or the people featured in videos.

# 8.2.2 Uber

Weight*Term	Interpretation
'0.049*''I'' + 0.015*''driver'' + 0.011*''Uber'' + 0.011*''get'' + 0.009*''car'''	Driver: Discussions about the driver's role in the Uber experience.
'0.032*''I'' + 0.009*''Uber'' + 0.009*''get'' + 0.008*''driver'' + 0.007*''car'''	Experience: General discussions about the Uber experience.
'0.057*''I'' + 0.009*''get'' + 0.007*''car'' + 0.006*''back'' + 0.005*''Uber'''	Return: Discussions about returning to Uber or getting back home with Uber.
'0.079*''I'' + 0.012*''get'' + 0.011*''Uber'' + 0.011*''ride'' + 0.010*''car'''	Ride: Discussions about the process of getting a ride with Uber.
'0.056*''I'' + 0.014*''Uber'' + 0.013*''driver'' + 0.012*''get'' + 0.008*''ride'''	Interaction: Discussions about the interaction with Uber drivers during a ride.
'0.034*''I'' + 0.010*''Uber'' + 0.008*''get'' + 0.007*''car'' + 0.006*''driver'''	Vehicle: Discussions about the car or vehicle used in the Uber service.
'0.051*''I'' + 0.013*''Uber'' + 0.010*''get'' + 0.010*''driver'' + 0.007*''ride'''	Journey: Discussions about the journey or ride with Uber drivers.
'0.049*''I'' + 0.010*''Uber'' + 0.009*''get'' + 0.009*''driver'' + 0.008*''back'''	Feedback: Discussions about giving feedback or getting back to Uber.
'0.028*''I'' + 0.013*''Uber'' + 0.008*''driver'' + 0.007*''get'' + 0.006*''people'''	Community: Discussions about the people involved in the Uber experience.
'0.049*''I'' + 0.013*''Uber'' + 0.009*''get'' + 0.009*''driver'' + 0.008*''car'''	Service: Discussions about the Uber service, focusing on the drivers and cars.

## 8.3 Appendix 3: Post Distributions According to Topic

## 8.3.1 YouTube

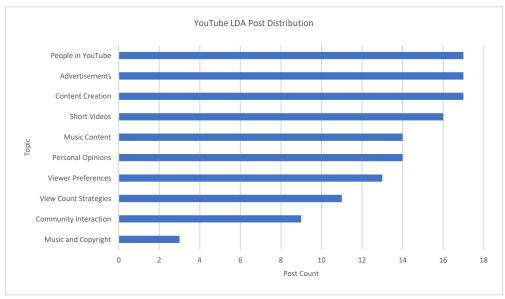


Figure 1: YouTube LDA Post Distribution

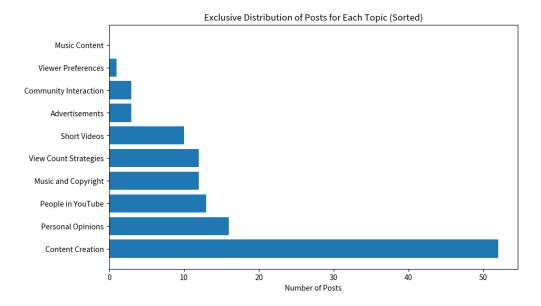


Figure 2: YouTube Dictionary Post Distribution

## 8.3.2 Uber

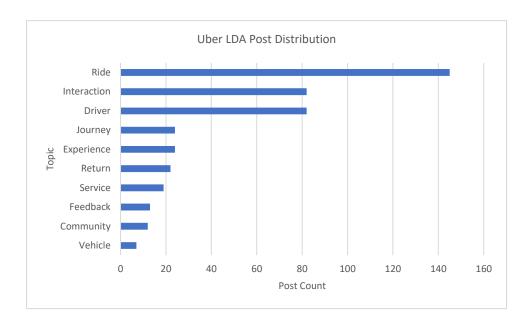


Figure 3: Uber LDA Post Distribution

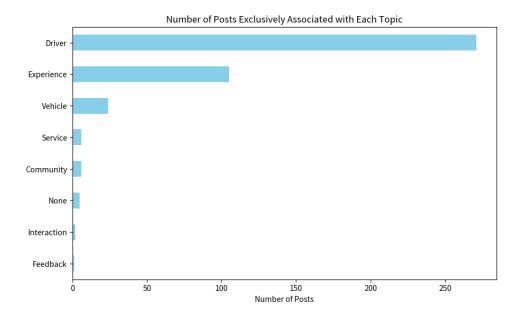


Figure 4: Uber Dictionary Post Distribution

### 9 References

- Abraham, Roshan. "Pay Algorithms Make Working in the Gig Economy Feel Like 'Gambling,' Study Says." *Vice* (blog), January 25, 2023. https://www.vice.com/en/article/dy7mpa/pay-algorithms-make-working-in-the-gig-economy-feel-like-gambling-study-says.
- Adrian, Wilkinson, Dundon Tony, Mowbray K Paula, and Brooks Sarah. *Missing Voice?:*Worker Voice and Social Dialogue in the Platform Economy. Edward Elgar Publishing, 2022.
- Allen, Amy, and Eduardo Mendieta, eds. *The Cambridge Habermas Lexicon*. 1st ed. Cambridge University Press, 2019. https://doi.org/10.1017/9781316771303.
- Allen-Robertson, James. "The Uber Game: Exploring Algorithmic Management and Resistance." *AoIR Selected Papers of Internet Research*, October 31, 2017. https://spir.aoir.org/ojs/index.php/spir/article/view/10033.
- Alsaigh, Rasha, and Imelda Coyne. "Doing a Hermeneutic Phenomenology Research Underpinned by Gadamer's Philosophy: A Framework to Facilitate Data Analysis." *International Journal of Qualitative Methods* 20 (January 2021): 160940692110478. https://doi.org/10.1177/16094069211047820.
- Anderson, Elizabeth. "Dewey's Moral Philosophy." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta and Uri Nodelman, Spring 2023. Metaphysics Research Lab, Stanford University, 2023.
  - https://plato.stanford.edu/archives/spr2023/entries/dewey-moral/.
- ——. Private Government, 2017.
  - https://press.princeton.edu/books/hardcover/9780691176512/private-government.
- Aristotle, and Richard McKeon. *The Basic Works of Aristotle*. The Modern Library Classics. New York: Modern Library, 2001.
- Arubayi, Daniel. "Documenting the Everyday Hidden Resistance of Ride-Hailing Platform Drivers to Algorithmic Management in Lagos, Nigeria." *South Atlantic Quarterly* 120, no. 4 (October 1, 2021): 823–38. https://doi.org/10.1215/00382876-9443378.
- Asen, Robert. "The Multiple Mr. Dewey: Multiple Publics and Permeable Borders in John Dewey's Theory of the Public Sphere." *Argumentation and Advocacy* 39, no. 3 (January 2003): 174–88. https://doi.org/10.1080/00028533.2003.11821585.
- Bächtiger, André, John S. Dryzek, Jane J. Mansbridge, and Mark Warren, eds. *The Oxford Handbook of Deliberative Democracy*. First edition. Oxford Handbooks. Oxford, United Kingdom; New York: Oxford University Press, 2018.
- Bajwa, Uttam, Denise Gastaldo, Erica Di Ruggiero, and Lilian Knorr. "The Health of Workers in the Global Gig Economy." *Globalization and Health* 14, no. 1 (December 2018): 124. https://doi.org/10.1186/s12992-018-0444-8.
- Bartolome, Ava, and Shuo Niu. "A Literature Review of Video-Sharing Platform Research in HCI." In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–20. Hamburg Germany: ACM, 2023. https://doi.org/10.1145/3544548.3581107.
- Bérastégui, Pierre. "Exposure to Psychosocial Risk Factors in the Gig Economy: A Systematic Review." *SSRN Electronic Journal*, 2021. https://doi.org/10.2139/ssrn.3770016.

- Bergh, Donald D., David J. Ketchen, Ilaria Orlandi, Pursey P. M. A. R. Heugens, and Brian K. Boyd. "Information Asymmetry in Management Research: Past Accomplishments and Future Opportunities." *Journal of Management* 45, no. 1 (January 2019): 122–58. https://doi.org/10.1177/0149206318798026.
- Bernstein, Richard J. "The Normative Core of the Public Sphere." *Political Theory* 40, no. 6 (2012): 767–78.
- Bishop, Sophie. "Managing Visibility on YouTube through Algorithmic Gossip." *New Media & Society* 21, no. 11–12 (November 1, 2019): 2589–2606. https://doi.org/10.1177/1461444819854731.
- Bohman, James, and William Rehg. "Jürgen Habermas." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Fall 2017. Metaphysics Research Lab, Stanford University, 2017. https://plato.stanford.edu/archives/fall2017/entries/habermas/.
- Bourdieu, Pierre. "Structures, *Habitus*, Practices." In *The Logic of Practice*. Cambridge, UK: Oxford, UK: Polity Press: B. Blackwell, 1990.
- Boxall, Peter, and John Purcell. "An HRM Perspective on Employee Participation." In *The Oxford Handbook of Participation in Organizations*, edited by Adrian Wilkinson. Oxford Handbooks Series. Oxford; New York: Oxford University Press, 2010.
- Bucher, Eliane Léontine, Peter Kalum Schou, and Matthias Waldkirch. "Pacifying the Algorithm Anticipatory Compliance in the Face of Algorithmic Management in the Gig Economy." *Organization* 28, no. 1 (January 2021): 44–67. https://doi.org/10.1177/1350508420961531.
- Calhoun, Craig. Habermas and the Public Sphere. MIT Press, 1993.
- Callon, Michel, Pierre Lascoumes, and Yannick Barthe. *Acting in an Uncertain World: An Essay on Technical Democracy*. Inside Technology. Cambridge, Mass: MIT Press, 2009.
- Cameron, Lindsey D., and Hatim Rahman. "Expanding the Locus of Resistance: Understanding the Co-Constitution of Control and Resistance in the Gig Economy." *Organization Science* 33, no. 1 (January 2022): 38–58. https://doi.org/10.1287/orsc.2021.1557.
- Charles, Julien, Isabelle Ferreras, and Auriane Lamine. "A Freelancers' Cooperative as a Case of Democratic Institutional Experimentation for Better Work: A Case Study of SMart-Belgium." *Transfer: European Review of Labour and Research* 26, no. 2 (May 1, 2020): 157–74. https://doi.org/10.1177/1024258920919686.
- Christin, Angèle. "The Ethnographer and the Algorithm: Beyond the Black Box." *Theory and Society* 49, no. 5 (October 1, 2020): 897–918. https://doi.org/10.1007/s11186-020-09411-3.
- Cohen, Joshua, and Charles Sabel. "Directly-Deliberative Polyarchy." *European Law Journal* 3, no. 4 (1997): 313–42. https://doi.org/10.1111/1468-0386.00034.
- Collier, Ruth Berins, V.B. Dubal, and Christopher L. Carter. "Disrupting Regulation, Regulating Disruption: The Politics of Uber in the United States." *Perspectives on Politics* 16, no. 4 (December 2018): 919–37. https://doi.org/10.1017/S1537592718001093.
- Cramer, Judd, and Alan B Krueger. "Disruptive Change in the Taxi Business: The Case of Uber," n.d.
- Davidson, James, Benjamin Liebald, Junning Liu, Palash Nandy, Taylor Van Vleet, Ullas Gargi, Sujoy Gupta, et al. "The YouTube Video Recommendation System." In *Proceedings of the Fourth ACM Conference on Recommender Systems*, 293–96. Barcelona Spain: ACM, 2010. https://doi.org/10.1145/1864708.1864770.
- "Definition of Public," July 7, 2023. https://www.merriam-webster.com/dictionary/public.

- Dewey, John. Experience and Education. The Kappa Delta Pi Lecture Series. New York: Touchstone, 1938. -. How We Think. New York: D. C. Heath and Co. Publishers, 1910. -. Human Nature and Conduct an Introduction to Social Psychology. New York: Henry Holt and Company, 2015. http://search.ebscohost.com/direct.asp?db=pzh&jid=201441196&scope=site. —. Reconstruction in Philosophy. H. Holt, 1920. . The Public and Its Problems, 1946. http://archive.org/details/in.ernet.dli.2015.190550. —. The Quest for Certainty: A Study of the Relation of Knowledge and Action. Minton, Balch, 1929. ——. Theory of Valuation, 1939. http://archive.org/details/in.ernet.dli.2015.204950. Dewey, John, Robert W Clopton, and Tsuin-chen Ou. Lectures in China, 1919-1920. Honolulu: University Press of Hawaii, 1973. Dewey, John, and Melvin L. Rogers. The Public and Its Problems: An Essay in Political Inquiry. Penn State Press, 2012. Diamond, W J, and R B Freeman. "Will Unionism Prosper in Cyberspace? The Promise of the Internet for Employee Organization." British Journal of Industrial Relations 40, no. 3 (September 2002): 569-96. Dolata, Ulrich, and Jan-Felix Schrape. "Platform Companies on the Internet as a New Organizational Form. A Sociological Perspective." Innovation: The European Journal of Social Science Research, March 15, 2023, 1–20. https://doi.org/10.1080/13511610.2023.2182217. Edelman, Benjamin G., and Damien Geradin. "Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies like Airbnb and Uber?" SSRN Electronic Journal, 2015. https://doi.org/10.2139/ssrn.2658603. FeldmanHall, Oriel, Jae-Young Son, and Joseph Heffner. "Norms and the Flexibility of Moral Action." Personality Neuroscience 1 (September 7, 2018): e15. https://doi.org/10.1017/pen.2018.13. Ferraro, Fabrizio. "Going Political? Towards Deliberative Corporate Governance." Journal of Management and Governance 23, no. 1 (March 1, 2019): 3–20. https://doi.org/10.1007/s10997-018-9433-9. Ferreras, Isabelle. "Democratizing the Corporation: The Bicameral Firm as Real Utopia." Politics & Society 51, no. 2 (June 1, 2023): 188–224. https://doi.org/10.1177/00323292231168708.
- https://doi.org/10.1177/00323292231168708.

  ———. "Democratizing the Corporation: The Bicameral Firm as Real Utopia." *Politics & Society* 51, no. 2 (June 1, 2023): 188–224. https://doi.org/10.1177/00323292231168708.

  ———. *Firms as Political Entities: Saving Democracy through Economic Bicameralism.* 1st ed.
- Ferreras, Isabelle, Julie Battilana, Dominique Méda, and Miranda Richmond Mouillot. *Democratize Work: The Case for Reorganizing the Economy*. University of Chicago Press, 2022. https://doi.org/10.7208/chicago/9780226819631.001.0001.

Cambridge University Press, 2017. https://doi.org/10.1017/9781108235495.

Flanagan, Frances. "Theorising the Gig Economy and Home-Based Service Work." *Journal of Industrial Relations* 61, no. 1 (February 1, 2019): 57–78. https://doi.org/10.1177/0022185618800518.

- Forestal, Jennifer. "Platform Socialism: How to Reclaim Our Digital Future from Big Tech." *Contemporary Political Theory*, July 29, 2022. https://doi.org/10.1057/s41296-022-00576-3.
- Fraser, Nancy. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy." In *Habermas and the Public Sphere*, edited by Craig Calhoun. MIT Press, 1993.
- Frega, Roberto. "What Pragmatism Means by Public Reason." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, October 19, 2010. https://papers.ssrn.com/abstract=1694494.
- Frega, Roberto, Lisa Herzog, and Christian Neuhäuser. "Workplace Democracy—The Recent Debate." *Philosophy Compass* 14, no. 4 (2019): e12574. https://doi.org/10.1111/phc3.12574.
- Frenken, Koen, and Lea Fuenfschilling. "The Rise of Online Platforms and the Triumph of the Corporation." *Sociologica*, January 29, 2021, 101-113 Pages. https://doi.org/10.6092/ISSN.1971-8853/11715.
- Geradin, Damien. "Should Uber Be Allowed to Compete in Europe? And If so How?" *Competition Policy International*, 2015.
- Geuss, Raymond. *Public Goods, Private Goods*. Princeton Monographs in Philosophy. Princeton, N.J: Princeton University Press, 2001.
- Gilbert, Dirk Ulrich, Andreas Rasche, Maximilian J. L. Schormair, and Abraham Singer. "Guest Editors' Introduction: The Challenges and Prospects of Deliberative Democracy for Corporate Sustainability and Responsibility." *Business Ethics Quarterly* 33, no. 1 (January 2023): 1–25. https://doi.org/10.1017/beq.2022.35.
- Gillespie, Tarleton. "The Politics of 'Platforms." *New Media & Society* 12, no. 3 (May 2010): 347–64. https://doi.org/10.1177/1461444809342738.
- Glavin, Paul, Alex Bierman, and Scott Schieman. "Über-Alienated: Powerless and Alone in the Gig Economy." *Work and Occupations* 48, no. 4 (November 2021): 399–431. https://doi.org/10.1177/07308884211024711.
- Glöss, Mareike, Moira McGregor, and Barry Brown. "Designing for Labour: Uber and the On-Demand Mobile Workforce." In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, 1632–43. San Jose California USA: ACM, 2016. https://doi.org/10.1145/2858036.2858476.
- Goodman, Jennifer, and Jukka Mäkinen. "Democracy in Political Corporate Social Responsibility: A Dynamic, Multilevel Account." *Business & Society* 62, no. 2 (February 1, 2023): 250–84. https://doi.org/10.1177/00076503211068421.
- "Google 2022 10K." Accessed May 1, 2023. https://www.sec.gov/Archives/edgar/data/1652044/000165204423000016/goog-20221231.htm.
- Greer, Charles R. "E-Voice: How Information Technology Is Shaping Life within Unions." *Journal of Labor Research* 23, no. 2 (June 2002): 215–35. https://doi.org/10.1007/s12122-002-1003-9.
- Gritsenko, Daria, and Matthew Wood. "Algorithmic Governance: A Modes of Governance Approach." *Regulation & Governance* 16, no. 1 (2022): 45–62. https://doi.org/10.1111/rego.12367.
- "Guide to Reddit AMAs | PR Social." Accessed July 21, 2023. https://www.bu.edu/prsocial/best-practices/social-media/guide-to-reddit-amas/.

- Habermas, Jürgen. *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. Edited by Steven Seidman and Jeffrey C. Alexander. 2nd ed. Routledge, 2020. https://doi.org/10.4324/9781003060963-4.
- ——. Moral Consciousness and Communicative Action. Repr. Cambridge: Polity, 2007.
- . On the Pragmatics of Communication. MIT Press, 1998.
- ——. The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society. 5th or later Edition. Cambridge, Mass: The MIT Press, 1991.
- ———. *The Theory of Communicative Action: Lifeworld and System.* Vol. 2. Boston: Beacon Press, 1984.
- ———. *Toward a Rational Society: Student Protest, Science and Politics.* 3. Aufl. Boston: Beacon, 1989.
- Habermas, Jürgen, and Barbara Fultner. *Truth and Justification*. Studies in Contemporary German Social Thought. Cambridge, Mass: MIT Press, 2003.
- Habermas, Jürgen, and Thomas MacCarthy. *The Theory of Communicative Action: Reason and the Rationalization of Society*. Nachdr. Vol. 1. The Theory of Communicative Action / Jürgen Habermas. Transl. by Thomas MacCarthy. Boston: Beacon, 1984.
- Habermas, Jürgen, John Viertel, and Jürgen Habermas. *Theory and Practice*. Repr. Cambridge: Polity Press, 2007.
- Hall, Jonathan V., and Alan B. Krueger. "An Analysis of the Labor Market for Uber's Driver-Partners in the United States." Working Paper. Working Paper Series. National Bureau of Economic Research, November 2016. https://doi.org/10.3386/w22843.
- Hamilton, Isobel Asher. "YouTube Took down Twice as Many Videos as Usual from April to June Because the Pandemic Forced It to Rely on Moderation Algorithms." Business Insider. Accessed July 21, 2023. https://www.businessinsider.com/youtube-moderators-sent-home-pandemic-uptick-2020-2020-8.
- Haroon, Muhammad, Anshuman Chhabra, Xin Liu, Prasant Mohapatra, Zubair Shafiq, and Magdalena Wojcieszak. "YouTube, The Great Radicalizer? Auditing and Mitigating Ideological Biases in YouTube Recommendations." arXiv, March 24, 2022. http://arxiv.org/abs/2203.10666.
- Harris, Keith Raymond. "Epistemic Domination in Advance." *Thought: A Journal of Philosophy*, 2023. https://doi.org/10.5840/tht202341317.
- Hecking, Tobias, and Loet Leydesdorff. "Topic Modelling of Empirical Text Corpora: Validity, Reliability, and Reproducibility in Comparison to Semantic Maps." arXiv, June 4, 2018. https://doi.org/10.48550/arXiv.1806.01045.
- Heiner, Heiland. "Workers' Voice in Platform Labour: An Overview." WSI, no. 21 (2020).
- Herrigel, Gary. Manufacturing Possibilities: Creative Action and Industrial Recomposition in the United States, Germany, and Japan. Oxford; New York: Oxford University Press, 2010.
- Himmelberger, Shae. "Corpora Scraped from /r/Youtubers and /r/Uberdrivers." Harvard Dataverse, July 21, 2023. https://doi.org/10.7910/DVN/AMNAHJ.
- Honneth, Axel, and John M. M. Farrell. "Democracy as Reflexive Cooperation: John Dewey and the Theory of Democracy Today." *Political Theory* 26, no. 6 (1998): 763–83.
- Hosch, William L. "YouTube." In *Encyclopedia Britannica*, 2023. https://www.britannica.com/topic/YouTube.
- "How to Earn Money on YouTube YouTube Help." Accessed July 21, 2023. https://support.google.com/youtube/answer/72857?hl=en&ref\_topic=9257989&sjid=626 0345515053503612-NA.

- Investopedia. "The History of Uber." Accessed July 20, 2023.
  - https://www.investopedia.com/articles/personal-finance/111015/story-uber.asp.
- Jackson, Jeff. *Equality Beyond Debate: John Dewey's Pragmatic Idea of Democracy*. 1st ed. Cambridge University Press, 2018. https://doi.org/10.1017/9781108553049.
- Karanović, Jovana, Hans Berends, and Yuval Engel. "Regulated Dependence: Platform Workers' Responses to New Forms of Organizing." *Journal of Management Studies* 58, no. 4 (June 2021): 1070–1106. https://doi.org/10.1111/joms.12577.
- Kaye, D. Bondy Valdovinos, and Joanne E. Gray. "Copyright Gossip: Exploring Copyright Opinions, Theories, and Strategies on YouTube." *Social Media* + *Society* 7, no. 3 (July 2021): 205630512110369. https://doi.org/10.1177/20563051211036940.
- Khan, Maria, Paula K. Mowbray, and Adrian Wilkinson. "Employee Voice on Social Media An Affordance Lens." *International Journal of Management Reviews*, January 5, 2023, ijmr.12326. https://doi.org/10.1111/ijmr.12326.
- Landemore, Hélène. *Open Democracy: Reinventing Popular Rule for the Twenty-First Century*. Princeton: Princeton University Press, 2020.
- Landemore, Hélène, and Isabelle Ferreras. "In Defense of Workplace Democracy: Towards a Justification of the Firm–State Analogy." *Political Theory* 44, no. 1 (February 1, 2016): 53–81. https://doi.org/10.1177/0090591715600035.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Clarendon Lectures in Management Studies. Oxford; New York: Oxford University Press, 2005.
- Ledwich, Mark, and Anna Zaitsev. "Algorithmic Extremism: Examining YouTube's Rabbit Hole of Radicalization." arXiv, December 24, 2019. http://arxiv.org/abs/1912.11211.
- Lee, Min Kyung, Daniel Kusbit, Evan Metsky, and Laura Dabbish. "Working with Machines: The Impact of Algorithmic and Data-Driven Management on Human Workers." In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, 1603–12. Seoul Republic of Korea: ACM, 2015. https://doi.org/10.1145/2702123.2702548.
- Lewis, Becca. "Alternative Influence." Data & Society. Data & Society Research Institute, September 18, 2018. https://datasociety.net/library/alternative-influence/.
- Liu, Bing. Sentiment Analysis: Mining Opinions, Sentiments, and Emotions. 1st edition. New York, NY: Cambridge University Press, 2015.
- Ma, Renkai, and Yubo Kou. "'How Advertiser-Friendly Is My Video?': YouTuber's Socioeconomic Interactions with Algorithmic Content Moderation." *Proceedings of the ACM on Human-Computer Interaction* 5, no. CSCW2 (October 13, 2021): 1–25. https://doi.org/10.1145/3479573.
- ——. "'I Am Not a YouTuber Who Can Make Whatever Video I Want. I Have to Keep Appeasing Algorithms': Bureaucracy of Creator Moderation on YouTube." In *Companion Computer Supported Cooperative Work and Social Computing*, 8–13. Virtual Event Taiwan: ACM, 2022. https://doi.org/10.1145/3500868.3559445.
- ——. "'I'm Not Sure What Difference Is between Their Content and Mine, Other than the Person Itself': A Study of Fairness Perception of Content Moderation on YouTube." *Proceedings of the ACM on Human-Computer Interaction* 6, no. CSCW2 (November 7, 2022): 1–28. https://doi.org/10.1145/3555150.
- Ma, Renkai, Pennsylvania State University, Yubo Kou, and Pennsylvania State University. "Defaulting to Boilerplate Answers, They Didn't Engage in a Genuine Conversation': Dimensions of Transparency Design in Creator Moderation" 7 (n.d.).

- Maffie, Michael David. "The Role of Digital Communities in Organizing Gig Workers." *Industrial Relations: A Journal of Economy and Society* 59, no. 1 (January 2020): 123–49. https://doi.org/10.1111/irel.12251.
- Mäntymäki, Matti, Abayomi Baiyere, and A.K.M Najmul Islam. "Digital Platforms and the Changing Nature of Physical Work: Insights from Ride-Hailing." *International Journal of Information Management* 49 (December 2019): 452–60. https://doi.org/10.1016/j.ijinfomgt.2019.08.007.
- Martini, Domenic. "International Regulatory Entrepreneurship: Uber's Battle with Regulators in France." San Diego International Law Journal 19, no. 1 (January 1, 2017): 127.
- Marwick, Alice, Benjamin Clancy, and Katherine Furl. "Far-Right Online Radicalization: A Review of the Literature." *The Bulletin of Technology & Public Life*, May 10, 2022. https://doi.org/10.21428/bfcb0bff.e9492a11.
- McDaid, Emma, Paul Andon, and Clinton Free. "Algorithmic Management and the Politics of Demand: Control and Resistance at Uber." *Accounting, Organizations and Society*, May 11, 2023, 101465. https://doi.org/10.1016/j.aos.2023.101465.
- Mendonça, Pedro, and Nadia K. Kougiannou. "Disconnecting Labour: The Impact of Intraplatform Algorithmic Changes on the Labour Process and Workers' Capacity to Organise Collectively." *New Technology, Work and Employment* 38, no. 1 (March 2023): 1–20. https://doi.org/10.1111/ntwe.12251.
- Midtgarden, Torjus. "Critical Pragmatism: Dewey's Social Philosophy Revisited." *European Journal of Social Theory* 15, no. 4 (November 1, 2012): 505–21. https://doi.org/10.1177/1368431011432373.
- Möhlmann, Mareike, Lior Zalmanson, Tel Aviv University, Ola Henfridsson, University of Miami, Robert Wayne Gregory, and University of Miami. "Algorithmic Management of Work on Online Labor Platforms: When Matching Meets Control." *MIS Quarterly* 45, no. 4 (October 14, 2021): 1999–2022. https://doi.org/10.25300/MISQ/2021/15333.
- Muldoon, James, and Paul Raekstad. "Algorithmic Domination in the Gig Economy." *European Journal of Political Theory*, February 23, 2022, 147488512210820. https://doi.org/10.1177/14748851221082078.
- Network, The International Fact-Checking. "An Open Letter to YouTube's CEO from the World's Fact-Checkers." *Poynter* (blog), January 12, 2022. https://www.poynter.org/fact-checking/2022/an-open-letter-to-youtubes-ceo-from-the-worlds-fact-checkers/.
- Niebler, Valentin. "'YouTubers Unite': Collective Action by YouTube Content Creators." *Transfer: European Review of Labour and Research* 26, no. 2 (May 2020): 223–27. https://doi.org/10.1177/1024258920920810.
- Norlander, Peter, Nenad Jukic, Arup Varma, and Svetlozar Nestorov. "The Effects of Technological Supervision on Gig Workers: Organizational Control and Motivation of Uber, Taxi, and Limousine Drivers." *The International Journal of Human Resource Management* 32, no. 19 (October 28, 2021): 4053–77. https://doi.org/10.1080/09585192.2020.1867614.
- North, Douglass C. *Institutions, Institutional Change, and Economic Performance*. The Political Economy of Institutions and Decisions. Cambridge; New York: Cambridge University Press, 1990.
- Pakusch, Christina, Alexander Boden, Martin Stein, and Gunnar Stevens. "The Automation of the Taxi Industry Taxi Drivers' Expectations and Attitudes Towards the Future of Their

- Work." *Computer Supported Cooperative Work (CSCW)* 30, no. 4 (August 2021): 539–87. https://doi.org/10.1007/s10606-021-09408-1.
- Palazzo, Guido, and Andreas Georg Scherer. "Corporate Legitimacy as Deliberation: A Communicative Framework." *Journal of Business Ethics* 66, no. 1 (2006): 71–88.
- Panagia, Davide. "On the Possibilities of a Political Theory of Algorithms." *Political Theory* 49, no. 1 (February 1, 2021): 109–33. https://doi.org/10.1177/0090591720959853.
- Pasquale, Frank. *The Black Box Society: The Secret Algorithms That Control Money and Information*. Cambridge: Harvard University Press, 2015.
- Perelli, Amanda. "How Much Money YouTubers Make and Can Earn, According to Creators." Business Insider. Accessed July 21, 2023. https://www.businessinsider.com/how-much-do-youtubers-make.
- Pettit, Philip. *Republicanism: A Theory of Freedom and Government*. Oxford Political Theory. Oxford: New York: Clarendon Press; Oxford University Press, 1997.
- "Point to Point Transport Taskforce Discussion Paper," n.d. https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/discussion-paper.pdf.
- Posen, Hannah A. "Ridesharing in the Sharing Economy: Should Regulators Impose Über Regulations on Uber?" *IOWA LAW REVIEW* 101 (n.d.).
- Pusey, Michael. *Jürgen Habermas*. Key Sociologists. Chichester [West Sussex]: London; New York: E. Horwood; Tavistock Publications, 1987.
- Rahman, K. Sabeel. Democracy Against Domination. New York: Oxford University Press, 2017.
- Rahman, K. Sabeel, and Kathleen Thelen. "The Rise of the Platform Business Model and the Transformation of Twenty-First-Century Capitalism." *Politics & Society* 47, no. 2 (June 2019): 177–204. https://doi.org/10.1177/0032329219838932.
- "Reddit.Com: Api Documentation." Accessed July 21, 2023. https://www.reddit.com/dev/api/.
- Rehg, William. "Universalization Principle and Discourse Principle." In *The Cambridge Habermas Lexicon*, edited by Amy Allen and Eduardo Mendieta, 450–54. Cambridge: Cambridge University Press, 2019. https://doi.org/10.1017/9781316771303.119.
- Rogers, Brishen. "The Social Costs of Uber." *SSRN Electronic Journal*, 2015. https://doi.org/10.2139/ssrn.2608017.
- Rosenblat, Alex. "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers," 2016.
- Russell, Matheson. *Habermas and Politics: A Critical Introduction*. Thinking Politics. Edinburgh: Edinburgh University Press, 2019.
- Sabel, Charles. "Dewey, Democracy, and Democratic Experimentalism," 2012. https://philpapers.org/rec/SABDDA.
- Schäfer, Mike S. "Digital Public Sphere." In *The International Encyclopedia of Political Communication*, 1–7. John Wiley & Sons, Ltd, 2016. https://doi.org/10.1002/9781118541555.wbiepc087.
- Seetharaman, Bhavani, Joyojeet Pal, and Julie Hui. "Delivery Work and the Experience of Social Isolation." *Proceedings of the ACM on Human-Computer Interaction* 5, no. CSCW1 (2021): 1–17.
- Singer, Abraham A. *The Form of the Firm: A Normative Political Theory of the Corporation*. New York, NY: Oxford University Press, 2019.

- Soriano, Cheryll Ruth R, and Fatima Gaw. "Platforms, Alternative Influence, and Networked Political Brokerage on YouTube." *Convergence* 28, no. 3 (June 1, 2022): 781–803. https://doi.org/10.1177/13548565211029769.
- Stahl, Titus. "Habermas and the Project of Immanent Critique." *Constellations* 20, no. 4 (2013): 533–52. https://doi.org/10.1111/1467-8675.12057.
- Stark, David, and Ivana Pais. "Algorithmic Management in the Platform Economy." *Journal of Economic Sociology* 22, no. 3 (2021): 71–103. https://doi.org/10.17323/1726-3247-2021-3-71-103.
- Taras, Daphne, and A. Gesser. "How New Lawyers Use E-Voice to Drive Firm Compensation: The 'Greedy Associates' Phenomenon." *Journal of Labor Research* 24, no. 1 (March 1, 2003): 9–29. https://doi.org/10.1007/s12122-003-1027-9.
- Thäter, Laura, Thomas Gegenhuber, Elke Schüßler, and Markus Ellmer. "How Do Workers Gain Voice on Digital Work Platforms? Hotspots and Blind Spots in Research on Platform Worker Voice." In *Missing Voice?: Worker Voice and Social Dialogue in the Platform Economy*. Edward Elgar Publishing, 2022.
- "The Uber Driver's Subreddit," May 1, 2023. https://web.archive.org/web/20230501125207/https://www.reddit.com/r/uberdrivers/.
- Thelen, Kathleen. "Regulating Uber: The Politics of the Platform Economy in Europe and the United States." *Perspectives on Politics* 16, no. 4 (December 2018): 938–53. https://doi.org/10.1017/S1537592718001081.
- Thevenoud, Thomas. "Un taxi pour l'avenir, des emplois pour la France." vie-publique.fr, April 24, 2014. http://www.vie-publique.fr/rapport/33980-un-taxi-pour-lavenir-des-emplois-pour-la-france.
- Tzur, Amit. "Uber Über Regulation? Regulatory Change Following the Emergence of New Technologies in the Taxi Market." *Regulation & Governance* 13, no. 3 (September 2019): 340–61. https://doi.org/10.1111/rego.12170.
- Uber Blog. "Uber Engineering's Tech Stack: The Foundation," July 19, 2016. https://www.uber.com/blog/tech-stack-part-one-foundation/.
- Uzunca, Bilgehan, J. P. Coen Rigtering, and Pinar Ozcan. "Sharing and Shaping: A Cross-Country Comparison of How Sharing Economy Firms Shape Their Institutional Environment to Gain Legitimacy." *Academy of Management Discoveries* 4, no. 3 (September 2018): 248–72. https://doi.org/10.5465/amd.2016.0153.
- Vallas, Steven, and Juliet B. Schor. "What Do Platforms Do? Understanding the Gig Economy." *Annual Review of Sociology* 46, no. 1 (July 30, 2020): 273–94. https://doi.org/10.1146/annurev-soc-121919-054857.
- Van Dijck, José. "YouTube beyond Technology and Cultural Form." In *After the Break*, edited by Jan Teurlings, 147–60. Amsterdam University Press, 2013. https://doi.org/10.1515/9789048518678-010.
- Vasudevan, Krishnan, and Ngai Keung Chan. "Gamification and Work Games: Examining Consent and Resistance among Uber Drivers." *New Media & Society* 24, no. 4 (April 1, 2022): 866–86. https://doi.org/10.1177/14614448221079028.
- Walker, Michael, Peter Fleming, and Marco Berti. "You Can't Pick up a Phone and Talk to Someone': How Algorithms Function as Biopower in the Gig Economy." *Organization* 28, no. 1 (January 2021): 26–43. https://doi.org/10.1177/1350508420978831.
- WATCH LIVE: Senate Committee Hearing on Social Media's Impact on Homeland Security, 2022. https://www.youtube.com/watch?v=NaJunR7S4IQ.

- Westminster Institute for Advanced Studies, Christian Fuchs, and The Communication and Media Research Institute. *Critical Theory of Communication: New Readings of Lukács, Adorno, Marcuse, Honneth and Habermas in the Age of the Internet*. University of Westminster Press, 2016. https://doi.org/10.16997/book1.
- Wood, Alex J, Mark Graham, Vili Lehdonvirta, and Isis Hjorth. "Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy." *Work, Employment and Society* 33, no. 1 (February 2019): 56–75. https://doi.org/10.1177/0950017018785616.
- Woodcock, Jamie, and Mark Graham. *The Gig Economy: A Critical Introduction*. Cambridge; Medford, MA: Polity, 2020.
- YouTube. "Terms of Service." Accessed July 21, 2023. https://www.youtube.com/static?template=terms.
- "YouTubers A Place for the YouTube Community," May 3, 2023. https://web.archive.org/web/20230503044216/https://www.reddit.com/r/youtubers/.
- Zalmanson, Lior. "Hands on the Wheel: Navigating Algorithmic Management and Uber Drivers' Autonomy." *South Korea*, 2017.
- Zhao, Fangyuan, Xuebin Ren, Shusen Yang, Qing Han, Peng Zhao, and Xinyu Yang. "Latent Dirichlet Allocation Model Training with Differential Privacy." arXiv, October 9, 2020. https://doi.org/10.48550/arXiv.2010.04391.
- Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Profile books, 2019.