Transversal Politics of Big Tech

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Our everyday life is entangled with products and services of so-called Big Tech companies, such as Amazon, Google, and Facebook. International relations (IR) scholars increasingly seek to reflect on the relationships between Big Tech, capitalism, and institutionalized politics, and they engage with the practices of algorithmic governance and platformization that shape and are shaped by Big Tech. This collective discussion advances these emerging debates by approaching Big Tech transversally, meaning that we problematize Big Tech as an object of study and raise a range of fundamental questions about its politics. The contributions demonstrate how a transversal perspective that cuts across sociomaterial, institutional, and disciplinary boundaries and framings opens up the study of the politics of Big Tech. The discussion brings to the fore perspectives on the ontologies of Big Tech, the politics of the aesthetics and credibility of Big Tech and rethinks the concepts of legitimacy and responsibility. The article thereby provides several inroads for how IR and international political sociology can leverage their analytical engagement with Big Tech and nurture imaginaries of alternative and subversive technopolitical futures.

Notre vie quotidienne implique des produits et services des entreprises de la « Big Tech » : Amazon, Google et Facebook, par exemple. Les chercheurs en relations internationales (RI) réfléchissent de plus en plus aux relations entre la Big Tech, le capitalisme et la politique institutionnalisée. Ils s'intéressent aux pratiques de gouvernance algorithmique et de plateformisation, qui modèlent et sont modelées par la Big Tech. Cette discussion collégiale promeut l'émergence de ces débats par une approche transversale de la Big Tech, c'est-à-dire que nous problématisons la Big Tech en tant qu'objet d'étude et soulevons un éventail de questions fondamentales concernant sa politique. Les contributions montrent comment une perspective transversale, qui dépasse les frontières et les cadres sociomatériels, institutionnels et disciplinaires, donne accès à l'étude de la politique de la Big Tech. La discussion met en évidence des perspectives sur l'ontologie de la Big Tech, sa politique d'esthétisme et de crédibilité, tout en repensant les concepts de légitimité et de responsabilité. Ainsi, l'article fournit plusieurs pistes pour permettre aux RI et à la sociologie politique internationale d'exploiter leur approche analytique de la Big Tech et d'entretenir des imaginaires d'avenir technopolitique alternatifs et subversifs.

Nuestra vida cotidiana está repleta de productos y servicios de los llamados gigantes tecnológicos, como Amazon, Google y Facebook. Los investigadores del área de las RRII tratan de reflexionar cada vez más sobre las relaciones entre los gigantes tecnológicos, el capitalismo y la política institucionalizada, y se concentran en las prácticas de la gobernanza algorítmica y de la plataformización que dan forma a los gigantes tecnológicos y que, a su vez, son conformadas por ellos. Esta discusión colectiva contribuye a estos debates emergentes abordando los gigantes tecnológicos de forma transversal, lo que significa que problematizamos los gigantes tecnológicos como objeto de estudio y planteamos una serie de cuestiones fundamentales sobre su política. Las contribuciones demuestran cómo una perspectiva transversal que atraviesa las fronteras y los marcos sociomateriales, institucionales y disciplinarios abre el estudio de la política de los gigantes tecnológicos. El debate pone en primer plano las perspectivas sobre las ontologías de los gigantes tecnológicos, la política de la estética y la credibilidad de los gigantes tecnológicos, y replantea los conceptos de legitimidad y responsabilidad. Por consiguiente, este artículo ofrece varias claves sobre cómo las RRII y la Sociología Política Internacional pueden aprovechar su implicación analítica con los gigantes tecnológicos y cultivar imaginarios de futuros tecno-políticos alternativos y subversivos.

Introduction

Tobias Liebetrau and Linda Monsees

This collective discussion piece (CDP) examines the politics of Big Tech. In keeping with the open-ended and transcending spirit of international political sociology (IPS), it demonstrates the value of exploring Big Tech from a transversal perspective. The transversal perspective allows us to problematize Big Tech as an object of study and raises a range of fundamental questions about its politics. By engaging cultural theory, science and technology studies, and political theory, the CDP offers several inroads for exploring agency, practices, aesthetics, legitimacy, and accountability of Big Tech and it questions the distinctions between public and private, state and market, and national and international. The transversal point of departure of the CDP is hence productive in demonstrating, dismantling, and critically examining the enabling and suppressing political practices of Big Tech. As such, the CDP foregrounds a highly relevant topic and furthers the ongoing debate on the societal and political implications of Big Tech.

To account for the increasing economic, social, and political influence of Big Tech, social science scholars have coined terms such as "surveillance capitalism" (Zuboff 2015, 2019), "internet-industry complex" (Flyverbom, Deibert, and Matten 2019), and "(big) data capitalism" (Chandler and Fuchs 2019; West 2019). Our discussion is rooted in these works, which understand infrastructure, services, devices, and knowledge production as part and parcel of what makes up Big Tech (Arora 2016; Gorwa, Binns, and Katzenbach 2020; Atal 2021; Srivastava 2021). Big Tech "works its will through the automated medium of an increasingly ubiquitous computational architecture of 'smart' devices, things and spaces" (Zuboff 2019, 8). Indeed, Big Tech should not only be understood as an economic actor, but also as an agent that fundamentally alters social relations by weaving together data, people, and devices (Hofmann, Katzenbach, and Gollatz 2016). Datafication is not only a social and technical phenomenon, but also something that fundamentally

alters global economic relations (Couldry and Meijas 2019; Milan and Treré 2019; Sadowski 2019).

Writing from an IPS perspective writ large, scholars have demonstrated how algorithmic governance exceeds the intentional use of its designers and users (Hayles 2017; Aradau, Blanke, and Greenway 2019b; Amoore 2020). This is a decisive point that deserves further scrutiny since it opens up the debate of where the political lies in Big Tech. Big Tech shapes cultural production (Bellanova and González Fuster 2018), partakes in state-led surveillance (Baumann et al. 2014; Gros, de Goede, and Isleyen 2017), and claims to fill in functions that were formerly public ones (Christensen and Liebetrau 2019). The transversal lens adopted in the CDP allows us to move these debates forward by questioning Big Tech as an object of research and shed new light on its politics by problematizing how it is inscribed in questions of practice (Liebetrau), aesthetic design (Austin and Leander), legitimacy (Monsees), and accountability (Srivastava). While the contributions offer different analytical and empirical points of departure for transversal analysis, they promote a core, shared insight that the politics of Big Tech cannot be reduced to one overarching logic or explanatory principle. On the contrary, we need to enquire into the partial ways in which the politics of Big Tech is constituted by exploring various intersections of the aesthetic, political, economic, and technological—in short, a transversal perspective.

Studies predicated on a transversal perspective (Bleiker 2000; Bigo and Walker 2007; Basaran et al. 2017; de Goede 2017; Aradau, Hoijtink, and Leese 2019a) question "the very logic of the nation-state to structure our understanding of the conditions of possibility for political action, either as contained by it or always taking place with reference to it" (Hoffmann 2021, 2). They resist "reification in spatio-temporal frameworks of systemic theories, drawing, instead, transversal lines contingent on knowledges and relations that couldn't be reduced to the ontological terrain of the state" (Huysmans and Nogeuira 2016, 300). Following this line of thought, the CDP critically examines how Big Tech practices influence the conditions of possibility for politics without taking these practices as a priori expressions of structural or historical rationales tied to distinctions such as national–international, state–market, politics–economics, and public–private.

We recognize that the Big Tech label has been important in mobilizing public and political attention and critique over the past decade, drawing on historical references to other "Big" labels such as Big Oil, Big Tobacco, and Big Pharma. This is also how we use the qualifier big. However, we do not treat Big Tech as a monolithic and unproblematic starting point for analysis. Doing so comes at the risk of essentializing these companies, which makes it then possible to construct Big Tech as a unified political subject whose actions can be reduced to one logic or explanatory factor. We instead aim to explore the many ways in which Big Tech practices both preserve and challenge dominant vocabularies and visions of world politics. The CDP hence converges on an exploration of the politics of Big Tech in ways that exceed ideology, strategy, and the realm of economics in the strict sense. The aim of our contribution is thus not to find consensus on what Big Tech is or is not, where to locate the politics of Big Tech, or how to characterize it vis-à-vis traditional political science analytics. Instead, we show how a transversal approach allows us to problematize Big Tech in ways that open a range of fundamental questions about its politics by reworking conventional methods and concepts through which we grapple with politics and the political.

In the first contribution, Tobias Liebetrau argues for understanding Big Tech through a multiple ontology. Liebetrau ends the contribution by pointing us toward the political and normative consequences such an opening would have. How does Big Tech limit and challenge existing political institutions and practices? Jonathan Austin and Anna Leander follow up on this sentiment by challenging previous

political analyses of Big Tech and argue to take the aesthetic dimension more seriously in the way that it creates an alternative sensibility. Linda Monsees translates the question of how Big Tech challenges and limits political analyses into an examination of legitimacy. Using Uber as an illustration, she shows how to rethink legitimacy as a transversal practice. The transversal perspective in this contribution, as in the following, is thus less concerned with claims about how to rethink political analyses in general but focuses on very specific practices. In a similar vein, Swati Srivastava tackles the concept of responsibility to highlight the limits of previous political analyses in grasping the governing powers of Big Tech and a need for an expansion of the concept of political responsibility. She approaches the question of political consequences by pointing toward the need to rethink our ideas of how political constituencies are made up and where their political responsibility lies.

Read together, the contributions demonstrate how a transversal perspective not only challenges established ontologies and brings in new dimensions of the political but also enables analyses of how distinct practices of Big Tech reconfigure politics. By linking the examination of the transversal politics of Big Tech with insights from cultural theory, science and technology studies, and political theory, the article offers IR and IPS scholars a range of analytical vantage points for further exploring how the sociomaterial configurations of Big Tech constitute and are constituted by the current developments in world affairs and to what political consequences.

An Ontological Opening for Studying the Politics of Big Tech

Tobias Liebetrau

This contribution shows how thinking by the philosopher and ethnographer Annemarie Mol (Mol 1999, 2002, 2010) can help researchers to open up the study of the politics of Big Tech through situated and contextual analysis. Mobilizing Mol's conceptual assumptions of object multiple, coordination, and ontological politics, the piece displays the value of examining how Big Tech practices and processes are enacted, and the forms of politics thereby produced. In line with the transversal lens of this CDP, Mol's thinking does not offer an a priori functioning, rationale, or location for studying the politics of Big Tech. Rather, it maintains empirical openness and critical edge by enabling us to examine how the politics of Big Tech is enacted in practice. This ontological opening of the politics of Big Tech nurtures new avenues for critical engagements with our technopolitical future by "caring through assembling, enriching, and 'adding reality'" (de Goede 2020, 108).

Undertaking research on the politics of Big Tech this way requires questioning what Big Tech is, where it is located, for whom, and how. This allows us to distance ourselves from the all-encompassing research vision/position that Haraway (1988) has deemed the god trick. Instead, it urges us to examine how Big Tech is continuously envisioned, performed, and enacted at heterogeneous sites, places, and times in need of constant coordination and negotiation. Acknowledging that our research on Big Tech is situated and partial implies recognizing that analytical and theoretical concepts are unable to convey the essence or rationale of Big Tech once and for all. Invoking the thinking of Annemarie Mol is thus a plea for a critically driven research endeavor that brings to the fore the potential of studying empirical enactments of Big Tech and its politics. This sensitivity is particularly needed in Big Tech company contexts where a few modern realities—capitalism perhaps being the strongest—remain hegemonic.

¹IR scholars have started to pick up Mol's thinking. This is particularly happening in critical security studies. See, for example, Schouten (2014), Aradau and Tazzioli (2020), de Goede (2020), and Liebetrau and Christensen (2021).

Multiplying the Reality of Big Tech

In her ethnographic research on atherosclerosis in a Dutch hospital, Mol found the disease to exist through the entanglements of its different enactments by pathologists, surgeons, and patients. Mol's research builds on the insight that "ontology is not given in the order of things" (Mol 2002, 6). Instead, "ontologies are brought into being, sustained, or allowed to wither away, in common, day-to-day, sociomaterial practices" (Mol 2002). Hence, to Mol, atherosclerosis is, ontologically speaking, enacted as "more than one and less than many" (Mol 2002, 55). Consequently, rather than taking research objects—be it atherosclerosis or Big Tech—as stable phenomena that various actors refer to and interpret differently, "it is possible to understand them instead as things manipulated in practices. If we do this...this has far-reaching effects. Reality multiplies" (Mol 2002, 4–5). This is not to say that different realities are necessarily mutually exclusive or that they simply coexist as discrete realities side by side. As Mol (1999, 85) notes, realities "are not simply opposed to, outside, one another. One may follow from another, stand in for the other, and, the most surprising image, one may include the other." In other words, realities overlap and interfere.

Studying multiple realities of Big Tech contrasts with studying different perspectives² on Big Tech because the object under study is not assumed to exist as an independent, separate, and fixed entity with essential qualities to be revealed. Instead, the object is derived at and emerges in situated practice. In light of such heterogeneity, a complete picture of what Big Tech is can never be reached. Rather, through methods and practices, different starting points produce diverse realities of what Big Tech is. As Mol (1999, 82) underlines, "once we start to look carefully at the variety of the objects performed in a practice, we come across complex interferences between those objects." What is at stake, then, is the co-existence of different ways of framing concerns, handling problems, and enacting Big Tech realities, as well as the politics this produces.

This observation allows us to open up and question Big Tech companies as objects of research by studying how they are brought into being, and with what political implications. It helps us to avoid reducing heterogeneous practices and relations "by making them expressions of, or linking them to, (grand) narratives and concepts, [so] it also introduces an overarching structural and historical rationale" (Huysmans and Nogueira 2020, 5). Big Tech companies are not unproblematic starting points of research. They are not unified political subjects with essential attributes such as identity, intention, and political orientation. Approaching Big Tech companies as situated practices sensitizes us to the emergence of politics where realities intersect.

By focusing on the creation of politics where realities meet, the ontological opening is not designed to uncover or depict any fixed reality of Big Tech. Rather, it is an approach that focuses on the practical and political implications of enabling or silencing diverse realities, and calling into question the ontological assumptions that underpin dominant forms of living, being, and becoming with Big Tech companies. The approach thus supports continuous questioning of and engagement with the realities and politics conditioned by the practices of Big Tech companies, including the development of tools for contesting those that do not follow traditional political fault lines.

Coordinating and Situating Multiple Realities of Big Tech

The analytical sensibility to the multiple and heterogeneous realities of the politics of Big Tech companies entails further exploration of how different versions of

²Mol introduces the concept of perspectivalism to show that when different actors refer to an object as the same stable phenomenon, it is a misconception (Mol 1999, 75–77; 2002, 152). In our case, it means that actors are enacting different versions of Big Tech through their situated practices.

Big Tech companies—and related ecologies of established truths, problems, and solutions—are brought into being, and how they relate and tie together. This draws attention to how relations between humans and nonhumans are made, remade, and stabilized over time. As Mol stresses, "nothing 'is' ever alone. To be is to be related" (Mol 2002, 54). Approaching Big Tech companies as object multiples hence prompts researchers to trace how different enactments and reenactments of these companies relate, tie together, and come to work (or not) transversally across distances, differences, and distinctions, invoking what Mol calls ontological politics (Mol 1999).

According to Mol, "coordination into singularity doesn't depend on the possibility to refer to a preexisting object. It is a task" (Mol 2002, 70). Coordination, she argues, "does not evoke a single, overarching and coherent order in which everything fits just fine and friction-free like the bits and pieces of a mosaic or the components of a watch. Instead, the term co-ordination suggests continuing effort. Tensions live on and gaps must be bridged, hence the need for 'co-ordination'" (Mol 2010, 264). Following this line of thought, IPS researchers are invited to explore the ways in which different enactments of Big Tech at heterogeneous sites, places, and times are in need of constant coordination and negotiation to endure and enact seemingly singular objects, including the related political stakes involved in terms of boundary drawing, enabling, silencing, and separating. In their contribution, Austin and Leander show how important practices of aesthetics and sensual credibility are to the coordination of the multiple processes that make up Big Tech.

Accordingly, the politics of Big Tech unfold transversally not because all practitioners across the globe enact the same version of it, but exactly because immense coordination work allows practitioners to enact Big Tech companies as object multiples. Big Tech companies are envisioned and enacted differently through employee codes of conduct, legal frameworks, statistics, software programs, stocks, designs, etc. The coming together of measures and devices provides the means that allow practitioners—employees, users, politicians, scientists, etc.—to bridge, enact, connect, and coordinate these Big Tech multiples across seemingly incommensurable differences and distances. Because Big Tech companies are enacted differently with the help of these measures, they exist as phenomena in a plethora of intertwined, yet dispersed places across the globe.

So a key concern is to understand how these bodies of Big Tech practice meet and produce political consequences. This sensitizes us to study the politics of Big Tech as transversal—as practices that both (dis)connect and cut across conventional boundaries and distinctions. An important question then is how concepts and institutions are affected when spatiotemporal relations are reconfigured by the crosscutting transversal operations and interventions of Big Tech. Rather than seeing politics as being eclipsed or erased by platformization, monopolization, or all-encompassing surveillance, as the interventions by Liebetrau, Austin and Leander, and Monsees attest to, Mol's thinking encourages us to question how dynamic sociomaterial entanglements and ways of coordinating define, restrain, or enable action and condition the politics of Big Tech across time and space.

The Ontological Politics of the Multiple Realities of Big Tech

Approaching Big Tech as an object multiple enacted in various practices in need of coordination opens up spaces for exploring and questioning its politics. Coining the term "ontological politics," Mol underlines how the status of what counts as real is open, negotiated, and contested, and is therefore also a political affair (Mol 1999, 75). This implies that ontological politics "is unlikely to come to rest once accounts are closed – because they won't be closed. Tolerating open-endedness, facing tragic dilemmas, and living-in tension sounds more like it" (Mol 1999, 83).

An ontological political sensitivity serves as a way to study how the politics of Big Tech is simultaneously embedded in, opposed to, and split from traditional political power. On the one hand, the practices of Big Tech work transversally by cutting across and unsettling political, institutional, and legal boundaries. On the other, these practices remain strongly linked to territorially bounded political and judicial institutions and boundaries. The interventions of Microsoft and SpaceX to actively take a stance against the Russian aggression in Ukraine are an example that provides fertile ground for exploring how the practices of Big Tech companies simultaneously question and stabilize conventional international political categories and boundaries, particularly in terms of who has the right to be protected, by whom, and how.

This simultaneity raises questions about the potentials and limits of institutionalized political and democratic repertoires of action for effectively exercising traditional political and democratic power in the form of regulation meant to ensure legitimacy, accountability, responsibility, and transparency (see the contributions by Monsees and Srivastava for detailed discussions on legitimacy and accountability). Moving forward, the ontological opening and its particular depiction of transversal analysis and politics can help us to raise new questions about what kind of democratic practices and imaginaries to introduce to the study of Big Tech—and how to do it.

The ontological opening also helps to develop a critical vocabulary for studying the politics of Big Tech that moves beyond a totalizing thinking that assumes critical positions to be theoretically, programmatically, and positionally fixed (de Goede 2020). It offers to move beyond a binary debate on Big Tech as doing good or bad, toward a sensitivity to examine our becoming with Big Tech through situated sociotechnical practices and using this to make conclusions and judgments about their politics. It thereby opens a place for critique that decidedly aims at being not so self-assured (Austin et al. 2019, 15). Instead of seeking certainty and resolution, nurturing an ontological political sensibility encourages future research on the politics of Big Tech to stay "open, pluralistic, and hospitable to new ideas" and to widen "the scope of what counts as knowledge, expertise, methodology, theory, practice and collaboration" (Lisle 2016, 420), thereby supporting the construction of alternative technopolitical futures.

A compelling research agenda then emerges for investigating how realities as matters of concern are brought to the fore in research, policy proposals, governance measures, and everyday practices relating to Big Tech companies—and how they can be questioned and remade, a crucial point being that the very act of making definitions or conclusions around the politics of Big Tech will itself always be a contingent and political act that involves closure. This demands that we as researchers engage with how our own assumptions, and the categories and concepts we deploy as starting points for analysis, serve to both reproduce, question, and challenge the politics of Big Tech.

As the interventions in this collective discussion reveal, the effects of ontological hegemony and contestation are to be found, experienced, and researched in many different ways. Mol's thinking and the idea of ontological openings help us to appreciate and nurture future ways of displaying, questioning, and engaging with the multiple faces of the power and politics vested with Big Tech companies. One way to seize this opportunity is by rearticulating and reasserting the subordinated and silenced sensibilities embedded in and enacted by our various ways of becoming with Big Tech.

The Sensual Credibility of Big Tech

Jonathan Luke Austin and Anna Leander

Why did SpaceX send one of Tesla's electric vehicles into space, mounted atop a rocket?

Why does the Boring company make flamethrowers?



Figure 1. Elon Musk's Tesla Roadster fired into space in 2018 aboard SpaceX's Falcon Heavy rocket test flight, carrying a dummy astronaut ("starman").

Why did Steve Jobs once insist his engineers redesign a circuit board to make it "prettier"?

Why has Boston Robotics made robots that can dance?

Generally, these instances of commercial extravagance are seen as symptoms of the narcissistic self-perception of those who work in the technology industry as the "visionaries" who are leading world political change. Indeed, critiquing Elon Musk's aforementioned use of SpaceX to fire one of Tesla's vehicles into space (figure 1), Alice Gorman has written that

It feeds into a cult of personality which is at odds with the 'space for all humanity' narrative that we in the space world frequently use to justify space exploration...And let's face it, there's no getting away from the fact that a red sports car is all about boys and their toys. The car is a signifier of wealth and masculinity. We've been trying so hard to leave behind the era where the archetypal astronaut was an elite white male, and we've just stepped right back into it.³

Likewise, critics have noted that Boston Dynamic's videos of its robots dancing to popular music serve as cultural camouflage for the likely intended military applications of such developments.⁴ Here, all this is ideological camouflage, easily deconstructed. But let us take a step back.

The injection of aesthetic elements into novel technologies goes far beyond marketing stunts and now constitutes a process of carefully and precisely calibrating the aesthetic ecologies of our engagement with digital–technological worlds. For example, Google is increasingly preoccupied with developing what has been termed a "handmade aesthetic" that privileges "blending in" and "carving out space" within our lives by "shifting the dialogue away from the idea of giving up part of ourselves to a machine...and towards services that are made to fluidly and reassuringly reconcile themselves to the user." For Google, the goal has become not making technologies invisible but rather objects that reconcile themselves with the synesthetic world in ways that make us feel "at ease" with their presence (see, e.g., figure 2). Everything should be "soft" (ware). As part of this process, Google invests immense resources into researching the color palettes, materials (fabrics, metals, plastics),

https://www.space.com/39646-tesla-roadster-gets-interplanetary-id.html.

⁴https://www.dancemagazine.com/dance-robotics-2645129383.html?rebelltitem=3#rebelltitem3.

 $^{^5} https://intelligence.wundermanthompson.com/2018/07/big-techs-handmade-aesthetic/.$



Figure 2. The Google Home, designed to blend in to its surroundings through soft colours and fabrics. For more examples produced by Google see https://tinyurl.com/yc49cam8. CC BY-SA 2.0, NDB Photos.

audial components (beeps, chimes), and far more that it hopes will best insinuate these technologies in ways that allow us to accept their presence as being as natural as that of a window or carpet. As Google's Ivy Ross put it, "we try to create products that have a sensory experience and we're all craving that right now, to ignite our senses." And it is this far more comprehensive—even artistic—consideration of the design properties of today's technology that must be taken very seriously indeed.

The attention Google places on the aesthetic design of its products reveals how the power and authority vested in its hands cannot be reduced to the technical properties of the objects it creates. Nor can they be ascribed to the ways in which the varied and constantly shapeshifting "Big Tech" industry (see Liebetrau's contribution to this collective discussion) to which Google belongs functionally serves particular human needs, or the skill with which they have engineered a capture of economic, legal, and institutional centers of power (as Monsees argues in this collective discussion). Instead, that power also rests significantly in its capacity to generate a certain "sensual credibility" through the "intangible value"—or "magic" (Thrift 2010, 290)—associated with its products and activities (Austin 2019, 259). This sensual credibility, as we describe below, works fundamentally transversally: cutting across contexts, fields, and spheres of sociality. Importantly, associated with those processes are not only political possibilities but also forms of symbolic violence and hierarchies. Indeed, we take the term sensual credibility from the work of Alexander Kluge and Oskar Negt (2016). For them, it refers specifically to the credibility sensuous experience lends to resistance: "the masses" who "live with experiences of violence, oppression, [and] exploitation...possess material, sensual evidence of the restriction of possibilities in their lives...Accordingly, the resistance to this restriction has a sensual credibility" (Kluge and Negt 2016, 43). In their view, the restrictions that the proletariat's enmeshing in the logic of capitalism place on

https://intelligence.wundermanthompson.com/2018/07/big-techs-handmade-aesthetic/.

the possibility of rational or reflexive (i.e., strategic) resistance to that suffering means that their anger and resentment are affectively *felt* and experienced rather than thought and reasoned. The sensual and affective is therefore located at the core of their resistance. It affords resistance the "credibility" required for it to be possible. Likewise, Dewey (2012, 131) wrote that most of the negative consequences afflicting human beings are "*felt* rather than perceived." And this too was Marx's thesis: "the notion of revolution as a sensual struggle that leads to the overcoming of alienation" (Bonefeld and Psychopedis 2005, 77).

Big Tech's involvement in generating sensual credibility, which is therefore clear, is deeply salient politically. Most obviously, one can parse it as a form of control and manipulation (of users, citizens, publics, etc.) This, for example, was the concern at the core of the Frankfurt School's dissection of the culture industry (Adorno and Horkheimer 1979). What we "feel" can equally be manipulated as that which we "think" and so the question is to what degree this aesthetic ecology of sensual credibility is being captured, transformed, and redesigned, or—indeed—manipulated by one or another set of politicoeconomic interests. However, we should complicate this perspective. The aesthetic ecologies underlying the sensual credibility of Big Tech exceed capture, manipulation, and strategic transformation. Indeed, because of the transversal dynamics of those ecologies, the politics of their composition or recomposition should not be reduced to the strategic goals of the corporations concerned. Instead, in our understanding, aesthetics refers to "a mode of experience that rests on the directness and immediacy of sensuous perception" (Berleant 2010, 195). Within this reading of aesthetics-as-sensibility, "nothing in the human world is excluded" from the aesthetic (Berleant 2010, 46). As such, aesthetic engagement exceeds easy strategic manipulation due to the necessity of it resonating (socially, culturally, politically) far beyond any particular object or technology. Moreover, these aesthetic recompositions can also be seen as being "autonomously" provoked by factors external to Big Tech itself (government regulation, consumer fatigue, ethical concerns within Big Tech itself about the effects of its technologies, etc.). In this view, and in line with the transversal analytics of CDP, it is crucial to ask not only who composes the nature of sensual credibility but also—more fundamentally—what the politics of this recomposing is and *how* it is formed in this complex ecological mode of emergence. This leaves open a path of investigation focusing on how reconfigurations of "sensual credibility" are associated both with hierarchies and forms of symbolic violence and with alternatives and novel forms of resistance, both of which are foundational for the legitimacy and accountability of Big Tech (see, respectively, Monsees' and Srivastava's contribution to this collective discussion).

From this perspective, we can begin probing the transversal politics of projects such as those of Elon Musk and Google. To begin, we would suggest that it is telling that a *deliberate* appreciation for the aesthetic has only recently been situated at the center of Big Tech. At its origins, the aesthetics of Big Tech were essentially parasitic upon dominant cultural norms. Thus, Wendy Chun has argued that technological "languages draw from a series of imperatives that stem from World War II command and control structures" in which the machine is an object to blindly follow the orders of the commander:

This conflation of instruction with result stems in part from software's and computing's gendered, military history: in the military there is supposed to be no difference between a command given and a command completed — especially to a computer that is a "girl." For computers, during World War II, were in fact young women with some background in mathematics. Not only were women available for work during that era, they also were considered to be better, more conscientious computers, presumably because they were better at repetitious, clerical tasks. They were also undifferentiated: they were all unnamed "computers." (Chun 2011, 29).

Skipping forward in time, Andersen and Pold (2018, 42) describe how:

Throughout the history of human-computer interaction (HCI), the preference in interface design has always been user-friendly office work...[Thus the first] operating systems...[were] structured around the desktop metaphor, with folders, documents, and so forth, and PCs were widely marketed through software packages for office work, such as Microsoft's Office package with word processing, spread sheets, and slide shows. As Warren Sack states, "[That] these operations correlate almost exactly with what the bureaucrat does with his file cabinets, desk, and trash can is no coincidence."

This affective-aesthetic "infusion" of the technological with dominant cultural discourses generates a certain kind of sensual credibility: integrating them seamlessly into the taken-for-granted of our lives. However, Big Tech has more recently shifted away from simply "following" the contours of preexisting cultural aesthetics. Instead, it is now leading the development of new modes of sensual credibility. It works with consumers and clients and, more broadly, with those involved in its value chains. Given the pervasiveness of technology, that includes "society" at large. As such, Big Tech is qualitatively different from conventional hierarchically organized corporate, military, or business actors. It is something "other" than simply a modern iteration of a monopoly-holding corporation, as indeed its own self-definitions insist. Critics who overlook this, assuming a conventional "business model" where aesthetic practices serve solely profit maximization and the extension of market shares (rather than being at the core of value creation), miss their target and severely underestimate the political significance of those practices. Grasping the "sensual credibility" generated by Big Tech requires dissociating it from manipulation and relocating it in the relational affective processes to which it belongs. It (therefore) also requires replacing the image of fixed and stable aesthetic investments and commitments reproducing dominant culture with that of constantly shifting ones. Both moves associate digital technologies with constant change, innovation, and creativity, as well as with participatory possibilities.

Indeed, a certain aesthetic "agility" has been central to Big Tech's ability to reinvent its image, playing a crucial role in generating its responses to challenges to its authority, principally now expressed as a "big-tech backlash around privacy issues and the urge to 'disconnect' for fear of what technology is doing to us." At one time, Big Tech generated authority in part through the emergence of a kind of "cyberpunk" aesthetic (namely, 2001: A Space Odyssey) in which technologies would "free" us from the limits of human being (whether corporeal, emotional, or terrestrial). Such an aesthetic has, however, begun to fracture and projects like that of Google are becoming more common. As Saara Tuusa has written, the shift toward integrating the technological into the world not as an augmentation of humanity and its capacities but rather as something working in harmony with the human reflects the fact that the digital "does not promise a better future anymore." Instead, "it represents a dystopia where we don't control our devices, but they control us." The challenge for Big Tech has therefore been that of developing an aesthetics reversing that perception in ways that generate continued acceptance of the place of Big Tech, steering clear both of techno-utopias that have lost credibility and of neo-luddite overtones that would be self-defeating.

The centrality of aesthetics in generating such an alternative authoritative sensual credibility can hardly be overestimated and rests on its transversal capacities. Aesthetics is something that may quite literally "cut across" and entangle different spheres of being and sociality. A teacup has an aesthetic. A smartphone has an aesthetic. A line of code has an aesthetic. These aesthetics often operate across contexts

See https://tinyurl.com/3ql58wk9.

⁸See https://tinyurl.com/3ql58wk9.

generating synesthetic and semiotic resonance with social groups: a broad sensual credibility beyond what otherwise separate them. This is particularly true of Big Tech, whose aesthetics is relationally and diffusely generated. In this regard, the activities of Big Tech go far beyond advertising as traditionally conceived (Arvidsson 2011). This is much more than ideological camouflage but represents instead a radical reconfiguration of the conditions of sensibility—of life and its politics—in ways that are morphing the constellations of our minds, bodies, and worlds. It is something that imbeds itself at the deepest levels of our consciousness (Leander 2019). Exploring this intersection of the aesthetic with the political, economic, and technological is thus crucial to understanding the power vested in Big Tech and its status in the contemporary world. As one analyst of *Apple* has bluntly put it: "Apple isn't a tech company...it's a design company betting that consumers want something more than just technology in their lives." As Steve Jobs once described, Apple operates "at the intersection of technology and liberal arts." Indeed, Apple has been at the forefront of involving their consumers—the "Apple Family"—in the design and marketing of their products (Leyshon and Crewe 2016). What creates economic value for Big Tech is less and less the specific technical attributes of its products and ever-increasingly their aesthetic design and capacity to shift the sensual ecologies of our lives. While the nuts-and-bolts technology that provides the infrastructures on which Big Tech is founded is constructed elsewhere (i.e., ARM, Intel), the world of Big Tech is pervaded by actors able to mesh objects together in ways that ensure that they are socially accepted through their coproduction and so able to flow freely across global spaces while remaining firmly anchored in them. In line with Liebetrau's contribution to this discussion, the generation of sensual credibility and so aesthetics—is centrally important to the coordination of the multiplicity of different processes that make up Big Tech. Aesthetics is also crucial as an analytical lens capturing these processes. As this makes clear, aesthetics operates transversally, connecting practices and processes, observer and observed.

In short, the ways in which sensual credibility is being generated (and regenerated) by Big Tech are not a secondary concern to questions of political economy, power, and international politics. Projects like that of Google seem to be actively redistributing the sensible (whatever the company's intentions) and working to modulate the frictions between technology, sociality, and politics. However, misrecognition obfuscates the politicality of these processes. Moreover, it is ironic that these projects work as a kind of inverse deployment of the posthumanist philosophies that have developed across social science. If IPS and other fields now prominently recognize the power of the technological (and the rest of the nonhuman), so corporations that were founded on that power (and who often naively believed that the technological alone was sufficient to transform the world) now prominently recognize and work with the need to symmetrically mesh and entangle those technologies with factors more commonly associated with the human. Indeed, it is for this reason that there are now most likely far more graduates of the arts and the social sciences working in Silicon Valley than within academia itself. From this, scholars of IPS and post-humanists have something to learn, as the introduction and entirety of this collective discussion attest to. To understand the power and authority of Big Tech requires that we inject our political and economic analyses with an aesthetic one. To turn full circle, while it is easy to critique Elon Musk firing an electric car into space aboard one of his rockets, fixating on these spectacles risks diverting attention away from the far deeper reconfiguration of the aesthetic ecologies of technology that Big Tech is driving forward today. It also preempts the analytical (and political) engagement with these reconfigurations that are crucial in the contemporary context.

https://www.aboveavalon.com/notes/2017/4/26/apple-isnt-a-tech-company.

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The Transversal Politics of Legitimacy: Uber and the Datafication of Social Goods

Linda Monsees

When Uber launched its ride-sharing service in 2011, it faced stark critique on several fronts, and it had to legitimize its business models to users, lawmakers, and local politicians. Today, Uber operates globally, but in its early years it needed to establish its legitimacy as a mobility provider. Future employees, customers, and legislators were skeptical about the novel service. That is why Uber had to "mobilize its growing user base to lobby the regulators on its behalf using the very digital application (or app) that was the foundation for its ridesharing business model" (Garud et al. 2020, 3). Notably, Uber had to convince policy-makers to regulate it as a platform, and not as a transportation service (Pelzer, Frenken, and Boon 2019; Garud et al. 2020). This brief example shows how Big Tech is embedded in a language game around *legitimacy*. Uber had to present itself as a legitimate actor providing better mobility than traditional services.

In this piece, I examine how these legitimacy claims are made possible, and how they can be understood as reshaping the relation between the social, the economic, and the political. I argue that Big Tech makes claims about its legitimacy by transforming the idea of what societal problems are, as well as the required solutions (social goods). Legitimacy is a crucial concept for assessing democratic politics. There are long-standing debates about what counts as legitimacy: if the input or output dimension should count or if the process (throughput) is the main adjudicating factor (Gronau and Schmidtke 2016). However, what interests me here is the way in which claims about legitimacy enact specific political configurations and "show how it functions in the political discourse" (Kratochwil 2006, 306). The performative dimension of the concept is important. Legitimacy claims are embedded in claims about authority and responsibility (Zürn 2016; see also Srivastava's contribution). I understand legitimacy claims as performative. With legitimacy claims, I refer to particular statements of and about legitimacy, which can ultimately enact legitimacy of an actor (if the claims are accepted). Legitimacy is central to debates of who provides public goods such as health or security. The fact that private companies are involved in (public) legitimacy claims is of course nothing new (Brühl and Hofferberth 2013). These private companies need to establish their legitimacy vis-à-vis governments and citizens. In the case of Big Tech this means, for example, legitimizing the use of data to provide better customer experience even if it infringes on the private sphere. Big Tech thus has to establish its legitimacy of being a core provider of (novel) digital services. Importantly, through its services, Big Tech provides crucial infrastructure for better mobility, safety, or education. ¹¹ This is, as I argue throughout this contribution, crucial for Big Tech to establish its legitimacy. As part of this collective discussion, I am therefore interested in how the concept of legitimacy needs to be rethought in the context of Big Tech. What interests me here is how to grasp the new forms of legitimacy claims by Big Tech. How is Big Tech able to present itself as a legitimate agent capable of solving urgent societal problems? Why are its claims about its own authority and capability so convincing?

I understand legitimacy as a transversal practice that is multiple, relational, and cutting across assumed boundaries of the political. Nancy Fraser made this argument in the context of subaltern publics. According to Fraser, it is crucial to include the multiple practices of public formation and thus also legitimacy claims (Fraser 1990), as only then do we get a comprehensive picture of political relations among multiple actors. As I illustrate with the example of Uber, legitimacy claims are transversal in the sense that they "cut across" distinctions of global and local, or

¹¹I cannot develop this point much further due to space constraints, but the distinction between state and market, and private and public, brings further complications. Social goods that are associated with the state are increasingly provided by Big Tech.

the social and the economy. Enacting legitimacy is a relational practice (Jackson and Nexon 1999), which has performative effects, to the extent that it also defines who is legitimized to do what. The "what" here are social goods such as security, health, or mobility. The important point is that these social goods are performatively enacted in this process. In the case of Uber, the creation of its transportation service went hand in hand with creating the social good of cost-saving and environmentally friendly transportation that is an addition to existing public transportation. Making legitimacy claims and attempting to establish oneself as a legitimate actor thus went hand in hand with creating a new service and a new social good. Conceptualizing legitimacy claims as a transversal practice brings to the fore how these claims enact social goods.

Datafied Social Goods

To grasp the legitimacy politics of Big Tech, we need to take a step back and look at how Big Tech is able to configure the relationship to its customers, as well as how this is embedded in wider social dynamics that reconfigure public-private relations. In increasingly data-driven societies, Big Tech companies are remarkably able to shape their relations with their users as well as with regulatory bodies. This is partially because they "benefit from the direct relationship they enjoy to a large number of consumers who rely on the platform as it becomes integrated into the fabric of their daily lives" (Culpepper and Thelen 2020, 290). The prevailing image is that Big Tech does not exercise their interests against those of consumers, but rather supports their needs. As Culpeper and Thelen note, "[p]latform firms have succeeded in getting what they want because the public wants it too" (Culpepper and Thelen 2020, 295). 12 The user has an intimate connection to digital services and can enjoy economic progress, mobility, and freedom because she is a customer of Big Tech services and their platforms. Big Tech has been very successful in presenting itself as not acting against the interests of the user citizen but instead improving health, mobility, or financial services. For Uber, it was indeed crucial to mobilize its own customers in its struggles with regulatory bodies. For example, in New York, Uber "portrayed itself as a boon to minorities that were traditionally discriminated against by taxis" (Seidl 2020, 7). It was thus able to present itself as a company improving equal access to mobility and therefore working in the interest of New York's citizens.

Drawing on the work by Maghalaes and Couldry, Uber's activities can be understood as embedded in a broader development of Big Tech promoting the idea of datafied social goods (Maghalaes and Couldry 2021). By this, they mean that social goods are "generally taken as proportional to and made comprehensible by the quantity, type, and granularity of the data that can be gathered" (Maghalaes and Couldry 2021, 349). The assumption is that technologists should and can define what a social good is and how it can be achieved (Maghalaes and Couldry 2021, 350), and ultimately providing social goods will also be a profitable endeavor (Maghalaes and Couldry 2021, 353). Traditionally, social goods are provided by the state and are not easily quantifiable. However, Big Tech presents goods such as safety or health as achievable by relying on their datafied practices. Safety becomes a question of probability, of how good the algorithms of Big Tech work. The idea of social goods increasingly dominates societal debates (Maghalaes and Couldry 2021, 355). Current processes of datafication extract data from all kinds of human relations, generating profit for Big Tech. Couldry and Mejias predict that "[i]f successful, this transformation will leave no discernable 'outside' to capitalist production: everyday life will have become directly incorporated into the capitalist process of production" (Couldry and Mejias 2019, 343).

¹²Austin and Leander's contribution emphasizes how the design dimension creates "sensual credibility." This is an additional aspect of how the relation between consumers and Big Tech is shaped.

This then brings us to the theme of legitimacy. Through the naturalization of the idea of datafied social goods, Big Tech is empowered to present itself as the essential legitimate actor. This does not mean that these processes are without contestation and that all legitimacy claims are accepted without resistance. However, because of their position and role in society (see introduction and the contribution by Austin and Leander) resistance is difficult to mobilize. Health hazards, fake news, and digital education are all issues Big Tech supposedly understands better. Furthermore, Big Tech supposedly acts more freely of interest than state actors. This "self-authorizing nature of Big Tech algorithmic governance" (Srivastava 2021, 4) allows Big Tech to performatively enact legitimacy claims. Uber could present itself as enhancing existing public transportation in a more equal and efficient way. In the controversies with local governments, Uber was able to present itself as representing the interests of citizens, "portray[ing] themselves as promoting the interest of consumers in efficiency, innovation, and choice" (Culpeper and Thelen 2020, 8). Whereas political parties and governments are perceived as biased and serving a specific interest, the reliance on neutral tech and the power of Big Data makes Big Tech a prime responder to social issues.

Transversal Legitimacy

We can now start to understand legitimacy claims by Big Tech from a transversal perspective. Big Tech makes claims about its legitimacy by transforming the fundamental idea of how to provide social goods. Legitimacy claims by Big Tech have performative effects to the extent that they enact a certain role of Big Tech and its relation to its users, as well as enacting datafied social goods. This has the potential to change what societies perceive as social problems and solutions. We can thus observe a *double movement* where Big Tech is defining as well as providing social goods. Big Tech can present itself as the legitimate provider of security and the solver of social problems. What is at stake is not any kind of services but fundamental social goods. In the process, the notion of social goods is transformed, as well as the role of Big Tech. Big Tech is a legitimate agent for providing datafied social goods. Again, the point is not to say that global corporations were never involved in the politics of legitimacy. Nevertheless, Big Tech is now able to engage with users more directly and actively design their wishes and wants (Bellanova and González Fuster 2018). Even more so, Big Tech can provide social goods in ways governments cannot.

Ultimately, this has the potential to lead to a transversal reconfiguration in the way in which Liebtrau hints at in his contribution. Legitimacy is not straightforwardly moved from the state to private companies. Instead, what happens is a redistribution of legitimacy claims, while at the same time the notion of what the core social goods are is renegotiated. This renegotiation is a process that is contested; in the example of Uber local authorities, taxi drivers and activists were (and still are) contesting Uber's business model. Big Tech enacts claims about its legitimacy and responsibility on multiple planes. The audience for these legitimacy claims is neither a national society and its citizens nor only national governments. Legitimacy needs to be gained vis-à-vis local communities (Oyedemi 2020; Garud et al. 2020), while at the same time giving answers to global problems. For example, when Uber emerged as a ride-share provider, the company had to fight a legitimacy game on several fronts. Alongside legal challenges, they also needed to convince customers of their new service and spread the idea that they should not be considered as a digital cab company, but as a digital platform (Garud et al. 2020, 8). In addition, Uber had to engage with the user citizens of each city anew (Garud et al. 2020, 12). The local struggles of Uber were thus part of the creation of Uber as a global company. Contestation and resistance occurred locally, and Uber's legitimacy claims were not accepted without resistance. This process of gaining legitimacy is thus always open for renegotiation. The transversal perspective comes in when we look at how legitimacy claims configure relations between the social and the economic, and hence also the political. Big Tech can engage in a distinct and partly novel language game of legitimacy where it can present itself as the solver of local and global societal issues. A transversal perspective on these phenomena furthers our understanding of how Big Tech becomes embedded in a new public–private configuration that transcends the global–local divide. It is crucial that this is not read back into a framework of national politics, but in a way in which the contradictions and overlapping legitimacy claims are brought to the fore.

Political Responsibility of Big Tech

Swati Srivastava

Facebook has had a complicated relationship with responsibility. When reports of fake news on Facebook influencing the 2016 US election first came out, founder and CEO Mark Zuckerberg called it a "pretty crazy idea" (Solon 2016). However, it was later revealed that the profiles of at least 87 million Americans were compromised from a third-party application made by a voter profiling firm, Cambridge Analytica, employed by the Trump campaign. After the scandal broke in March 2018, Zuckerberg went on a public apology tour around the American states, "sitting on tractors, attending church, bottle-feeding calves" (Isaac, Frankel, and Kang 2020). Zuckerberg (2018) also testified at the US Congress, arguing:

We didn't take a broad enough view of our responsibility, and that was a big mistake. And it was my mistake. And I'm sorry. I started Facebook, I run it, and I'm responsible for what happens here. So, now, we have to go through our — all of our relationship with people and make sure that we're taking a broad enough view of our responsibility. Across the board, we have a responsibility to not just build tools, but to make sure that they're used for good.

Zuckerberg invokes two aspects of responsibility in this statement. First, he takes personal responsibility—"I started Facebook, I run it, and I'm responsible." Second, Zuckerberg alludes to a broader responsibility of Facebook as a company to "not just build tools, but to make sure they're used for good." This contribution theorizes how to understand Facebook's second kind of responsibility.

Theorizing broader responsibility is important because, as Liebetrau and Monsees highlight in the introduction, Facebook acts as a policy-maker for billions by algorithmically determining what information people have access to and how they engage with each other. Zuckerberg has acknowledged the company's role as a governor: "In a lot of ways Facebook is more like a government than a traditional company. We have this large community of people, and more than other technology companies we're really setting policies" (Klein 2018). The company's new Content Oversight Board has been dubbed "Facebook Supreme Court." Moreover, while 2018 marked Zuckerberg's first public appearance in Congress, he made references to prior sustained communications with American legislators on a vast array of issues, including tax reform, immigration, counterterrorism, and surveillance. Thus, the transversality of Big Tech cuts through established public–private categories for political agency and governance.

Yet, the transversal politics of Big Tech's practices pose a problem for allocating responsibility: "One man at Facebook who does not enjoy the legitimacy of the vote, democratic oversight, or the demands of shareholder governance exercises control over an increasingly universal means of social connection along with the information concealed in its networks" (Zuboff 2019, 127). An emerging "political Corporate Social Responsibility (CSR)" perspective argues that "corporations become politicized in two ways: they operate with an enlarged understanding of responsibility; and help to solve political problems" (Scherer and Palazzo 2011, 919). However,

this conception inverts the process of governance and responsibility. Instead, it is *because* Big Tech giants address political problems that we must enlarge political responsibility to include them. Thus, Facebook's political responsibility emerges from its role as a governor of speech, information, and privacy.

The international community has assigned more responsibilities to corporations for their labor conditions, environmental stewardship, and human rights obligations based on a corporate "social license" to operate (see Srivastava 2020 for an overview). Scholarship seeped in moral responsibility in international politics inquires: "Should the considerable capacities and access to resources of some multinational corporate leviathans result in their being shouldered with greater responsibilities (for protecting human rights, for example) than some states?" (Erskine 2008, 705). Both the social and moral perspectives are susceptible to responses such as the 2008 United Nations Framework for Business and Human Rights, which argued: "While corporations may be considered 'organs of society,' they are specialized economic organs, not democratic public interest institutions. As such, their responsibilities cannot and should not simply mirror the duties of states." In the resulting 2011 Guiding Principles, the UN General Assembly asserted that "the responsibility of business enterprises to respect human rights is distinct from issues of legal liability and enforcement." ¹⁴ In this manner, existing corporate responsibility often promotes a narrow view of politics that is unable to fully tackle Big Tech's transversality across state-market and public-private distinctions.

A "political responsibility" strand offers a different approach that is more receptive to transversality. In Eichmann in Jerusalem, Hannah Arendt (1963) wrestles with how an individual, Adolf Eichmann, whose job was to oversee the transportation of many thousands of people to extermination camps during the Holocaust, did not view himself as morally responsible. Arendt (1963, 51-53) claims that Eichmann lost the capacity to think critically, which removed him from moral calculations of good and bad. She did not doubt that Eichmann was guilty in the individual sense, but found it problematic to assign Eichmann self-conscious individual responsibility separate from his association with the German state. It was this distinction between guilt and responsibility that led Arendt to develop a collective form of responsibility where individuals such as Eichmann are politically responsible for what governments do in their name or on their behalf: "The question is never whether an individual is good but whether his conduct is good for the world he lives in. In the center of interest is the world and not the self' (Arendt 2003, 151). From this perspective, Arendt (2003, 157–58) contrasts collective, political responsibility against individual, moral responsibility:

No moral, individual and personal, standards of conduct will ever be able to excuse us from collective responsibility. This vicarious responsibility for things we have not done, this taking upon ourselves the consequences for things we are entirely innocent of, is the price we pay for the fact that we live our lives not by ourselves but among our fellow men, and that the faculty of action, which, after all, is the political faculty par excellence, can be actualized only in one of the many and manifold forms of human community.

Thus, Arendt develops an approach to political responsibility that is not simply a subcategory of moral responsibility (Ackerly 2018, 44).

However, Arendt's basis for politics, at least in some readings of her argument, are focused exclusively on the nation state as political community. This leads Arendt to overly limit who has political standing—German nationals such as Eichmann—and who do not—refugees and stateless people (Ackerly 2018, 44–45). Meanwhile, discharging political responsibility is too inward-oriented by changing structures

¹³A/HRC/8/5, April 7, 2008 Section 3, para 53.

¹⁴A/HRC/17/31, March 21, 2011 Section 2A, para 12.

within the nation state rather than beyond. Iris Marion Young builds on Arendt's notion of political responsibility while extending political community beyond the nation state. Young (2004, 374–75) begins with the observation of a global basic structure where "workers, owners and even the nation–states that have jurisdiction over them are embedded in transnational economic structures which connect individuals and institutions in faraway corporate boardrooms and retail outlets to them." Young (2004, 366) then theorizes a structural approach to political responsibility such that, for instance, the global supply chain applies to "relations between strangers in the same country or city as much as transnationally." For Young, "the global structure provides the umbrella, and the supply chain provides the path" to discharge structural responsibility (Ackerly 2018, 47). Ultimately, Arendt, Young, and their interlocuters assign political responsibility to those perpetuating "the normative, institutional, and material resources that together compose the background institutional rules and conditions that enable and constrain agency" (Lu 2017, 148).

Political responsibility in the structural approach enlarges circles of complicity by drawing more agents into political structures. The structural framework allows for transversal analysis that cuts through conventional distinctions, such as publicprivate, to inform who is responsible for structuring political harms and in what ways. For Big Tech, this means drawing firms into the public sphere where they are responsible for more than satisfying consumers and shareholders; they are responsible for governing constituents. As Monsees's contribution argues, Big Tech firms have enacted new legitimacy claims for their datafied social goods. In a public goods framework, political talk may be conceived as "a common-pool resource essential to the healthy function of any democracy" so that "social media platforms have an obligation to their users, and their users to one another, to practice that talk agonistically, rather than antagonistically" (Collins, Marichal and Neve 2020, 415). Thus, Big Tech is also constituted by a "political license" to operate. The political license is crucial to acquiring and sustaining public legitimacy as governors. Big Tech's legitimation efforts include "construct[ing] an image of a responsiveness and attentiveness primarily concerned with responding to its user community, much like politicians must do with their constituents" (Marichal 2012, 46). As Arendt recognized, politics is a powerful domain for assigning responsibility. The act of calling Big Tech politically irresponsible leverages the rhetorical prowess of politics to adjudicate any harms from Big Tech's hidden politicality (cf. introduction of the CDP) while expanding the scope of politics itself to be more transversal.

In political responsibility, constituents grant public legitimacy through problem definition, public deliberation, and trust building (Dewey 2012). Political responsibility differs from traditional legal liability and social responsibility vantage points on corporate responsibility as it changes what is at stake: legitimacy rather than legality or reputability. Holding a corporation responsible for its legal or social harms is different than holding a corporation responsible for its political harms. Consider Zuckerberg's statement on Facebook's content moderation policies: "Should executives sitting in an office here in California have the right people to be making decisions for 2 billion people?" (Foer 2017). Legal liability concerns whether the "right people" follow Facebook's corporate governance policies and limit exposure to litigation. Social responsibility inquires whether Facebook's privacy policies enable better user engagement, leading to an increase in its social reputation and profit. Political responsibility questions whether Facebook even has the "right" to make decisions for 2 billion people, and if so, by who's accord and with what conditions.

What implications might a political license have for Big Tech's responsibility? Big Tech's power as and through public infrastructures distinguishes it from other global companies. Thus, the allocation of political responsibility must see through the "private platform façade" denying what Big Tech companies really *are*. Uber claims that it is not a taxi company; it is a technology platform that connects drivers

and passengers. Facebook claims that it is not a publishing company; it is a technology platform that connects content distributors and consumers. On the one hand, the political license removes any neutrality from the term "platform," which "was never meant to absolve companies from taking responsibility for the damage they do. What if McDonald's, after discovering that 80 percent of their beef was fake and making us sick, proclaimed that they couldn't be held responsible, as they aren't a fast-food restaurant but a fast-food platform? Would we tolerate that?" (Galloway 2017, 122). On the other hand, a political license makes it apparent that the legal immunities from claiming to be a platform do not displace Facebook's political responsibility as the world's largest media publisher, which the company has itself boasted about (Dwoskin 2018). Thus, just as "platform power" allows Big Tech to operate transversally, an expanded conception of political responsibility allows our notions of responsibility to evolve transversally as well.

More broadly, conceiving of a political license has the potential to spark more creative reckonings with the "multiple realities of Big Tech" (see also Liebetrau) than the passive framing of users forever fated to monopolistic corporate control. When Facebook allows third-party access to user data without consent for the purpose of microtargeting or refuses to take down fake news promulgated by bots, the underlying actions are not just a violation of company policy (these are often not a policy violation), but a deeper violation of public trust in the corporation. Our resulting response should be colored through the prism of political irresponsibility and an abuse of corporate political power. If we only perpetuate the logics of moral, legal, or social responsibility by either imposing new privacy policies or boycotting the use of Facebook, we have done something to address the problem, but we have not done everything. Theorists are constructing new forms of engaging "digital publics" (Forestal 2020) and corporate legitimations (see the contribution by Monsees). Legal scholars are undergoing their own reckoning to expand Big Tech's legal liability through the use of stronger antitrust regulation (Wu 2018), public utility regulation (Rahman 2018), and imposing constitutional liability (Crawford and Schultz 2019). "Digital rights" are also gaining ground in Europe and the United States. This contribution encourages IPS scholars to similarly commit to expanding political responsibility for Big Tech. These efforts include conjuring a new political constituency out of its users through arguments like this one.

Concluding Thoughts

Jonathan Luke Austin, Anna Leander, Tobias Liebetrau, Linda Monsees, and Swati Srivastava

This collective discussion suggested to explore the politics of Big Tech from an IPS-grounded transversal perspective. It demonstrated the value of this perspective by showing how it allows for dismantling a singular notion of Big Tech and a fixed location of its politics. The transversal approach directs research away from a confinement of Big Tech and its politics within the bounds of the state and the distinctions between national and international, state and market, politics and economics, and public and private. The article showed how a transversal perspective enables several ways of problematizing the practices, aesthetics, legitimacy, and accountability of Big Tech. The first contribution by Liebetrau demonstrated the value of an ontological opening that problematizes what Big Tech is, where it is located and how it hangs together. The second contribution by Austin and Leander argued for an epistemic and methodological opening towards the aesthetic and sensual credibility of Big Tech. The transversal perspective also allowed for the development of a different kind of political vocabulary as the third and fourth contributions show. Monsees and Srivastava focused on legitimacy and responsibility, respectively.

We find that IPS research is in a favorable position to further unpack and explore how a transversal perspective can help us grasp the ways in which the sociomaterial configurations of Big Tech constitute and are constituted by the current developments in world politics and economy. The CDP demonstrates the importance of working transversally to allow for and nurture continuous reworking and problematization of our methodologies and concepts to grasp and grapple with the politics of Big Tech. The article thereby paves the way for an open-ended research agenda on Big Tech that aims not to define what it is but to analyze, question, and critique its politicality as a form of productive power that makes reality intelligible and actionable in particular ways.

This research agenda encourages IR and IPS research on Big Tech to draw partial connections, probe boundaries, and embrace contradictions, rather than imposing or assuming a singular definition of Big Tech or locating its politicality in a fixed place, set of practices, or overarching logic. It thereby enables critical research on how to resist, unmake, and challenge the exclusionary practices of Big Tech. This implies that we engage with practices of designing, using and contesting Big Tech. In doing so, we should not approach technology, economy, or society as separate realms or static spheres but as actively becoming with—and being altered by—Big Tech. We believe that this research agenda enables IR and IPS to leverage their critical engagement with Big Tech to nurture imaginaries of novel, alternative, and subversive technopolitical futures.

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