# The Promise of Plans

## Affect, Desire, and Collective Futures

Peter T. Dunn

University of Washington
ptdunn@uw.edu

*Paper presented at the ACSP 2021 Annual Conference*
*October 23, 2021*

## Introduction

A description of planning might fairly characterize it as a rational practice oriented to bringing about a better future. Grounded in the paradigms of the social sciences and public management, planning research and practice is attentive to the political frictions and interpersonal emotions of the city while simultaneously taking refuge in the apparent stability of reason-based analysis and decision-making. Planning is inherently oriented towards the future, and its normative basis guides its evaluation of present problems and its envisioning of their eventual resolution. This paper uses the idea of "promise" to open up a different reading of how planning works. It argues, first, that plans are more than rational, working affectively through embodied desires, intensities, or dispositions that circulate among human and non-human actors and are poorly represented by rational models. Second, because plans work with and through existing desires, they have an inherent conservatism that will always frustrate attempts to use the plan for radical change. Although plans often envision new configurations of familiar forms, they do not as readily propose new values.

This paper builds on recent work examining the affective dimensions of cities and city planning, which have found the working of desires and imaginations in development approvals (Hillier & Gunder, 2003) and plans (Wood, 2009), affects of uncertainty and hope as means of governing (Tucker, 2017), and the affective workings of resilience strategies (Grove, 2014). For the most part, through, affect theory is largely underutilized in planning theory (Buser, 2014; Marotta & Cummings, 2019). In further exploring affect here, I hope join these authors in showing that affect is already present in our practice even if not in our theory. However, the literature that inspires this study is not primarily from planning, but

from work in information studies and science and technology studies on the envisioning and deployment of new technologies. Like planning, the field of technology is naturally preoccupied with visions of a better future. Also like planning, it must grapple with the inevitable dissonance between what it imagines and what it sees in actual implementation. I hope to show that scholarship examining such promises can contribute to examples in planning of how affect, desire, and embodied practices work together to particular kinds of future visions. I offer one small example of such a planning case in the empirical contribution of this paper, a study of emerging technology practices in urban transportation.

In the next section, I elaborate on the idea of promise and how it works affectively using examples from information studies. The following section then applies these ideas to my research on new mobility. New mobility is broad term describing recent trends in urban mobility enabled by digital technologies. These have emerged in the intersection of two distinct cultures: Silicon Valley tech startups and urban transportation planners. In asking how the promise of new mobility works, I show how planners have adapted their longstanding desires to new technological objects. A conclusion briefly returns to the question of what an understanding of the promise can do for planning.

## The Promise

A promise is a collective projection of present desires onto an imagined but imminent future. These desires are attached to the specific artifacts and practices that promise to deliver these futures. In using the promise to understand the functioning of plans, I emphasize them as anticipatory, affective, and relational. The anticipatory dimension of promises shows how they work across temporalities of present and future. In arguing for greater attention to the practices and logics of anticipation, Ben Anderson has said that geographers have a poor understanding of "processes whereby a future is made present and becomes a cause for action" (Anderson, 2010, p. 793). I suggest the promise as one such process, and will examine how the promise's anticipation of a particular future is both a reflection of present concerns and a framework for present action. This work operates on an affective level, meaning that the promise is not a state of affairs that can be represented abstractly, but an immanent experience of a certain feeling or atmosphere. This more-than-rational understanding of beliefs and action is an outgrowth of the development of affect

theory and related non-representational theory in the social sciences and humanities (Buser, 2014; Gregg & Seigworth, 2010; Thrift, 2004). Lastly, promises are relational. As affective phenomena, promises operate not as individual feelings but through their circulation, a point that Ahmed (2004) argues helps bind individuals and communities around their shared orientations. In addition, a promise has an inherent relationality in that it outlines a relationship between a thing that makes a promise and a subject who is promised to. The direction of this relationship can be traced even in the frequent cases when distinctions between promisor and promisee are blurred.

This section draws out these dimensions of the promise using two literatures. The first is work in affect theory, mostly from a humanities tradition, which helps us to understand how our orientation to the future works in ways beyond the language of representation. The second is recent empirical work from information and technology studies, together with the theories of socio-technical change they build on. Although technological developments drive new mobility, technology provides a helpful illustration of the promise for other reasons as well. Because they are so often developed with the explicit intentions of transforming something in the world, technologies seem to carry within them a future that promises something better than the past. Further, technologies have material artifacts that facilitate a tracing of promises in grounded practices of the everyday rather than in their abstract representations.

## The more-than-rational promise of the future

### Anticipatory promises

Some idea of the future, whether specified or vague, desirable or not, is the frequent basis for governing the present. Anticipating the future in these frames involves both an uncertainty and an imperative to act: “Anticipatory regimes offer a future that may or may not arrive, is always uncertain and yet is necessarily coming and so therefore always demanding a response” (Adams et al., 2009, p. 249). For Anderson, anticipation is not about knowing the future as much as “enabl[ing] the performative operation of establishing the *presence* of ‘what has not happened and may never happen’” (Anderson, 2010, p. 783, quoting Massumi). The futures described in these accounts are often undesirable (e.g., terrorist attacks, climate change), which support a particular kind anticipatory governance

of avoidance. The framing of promise, in contrast, not only works in a more positive register, it also connotes greater certainty.

The reassuring or inspirational promises are easy to see in the futurism found in technology discourse. Dourish and Bell, for example, show how the development of ubiquitous computing at the Palo Alto Research Center in the 1980s and 90s was "at once a technological and an imaginative effort" (Dourish & Bell, 2011, p. 3). Vincent Mosco (2004) uses the notion of "mythology" to describe images of technological development as not just improving some aspect of our everyday reality, but letting us aspire to something grander. Sheila Jasanoff's idea of "sociotechnical imaginaries," which she defines as "collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff, 2015, p. 4), makes clear that such imaginaries can be oriented either towards a positive future or away from a negative one. These kinds of promises allow a particular kind of anticipation, one that both imagines a better future and reassures us of its ability to produce it.

Information scholar Morgan Ames provides an example of what she calls a "charismatic technology" in her study of the low-cost laptop distributed worldwide by the One Laptop Per Child (OLPC) initiative. With a charismatic technology, she says, "what is important is not what the object is but how it invokes the imagination through what it promises to do" (p. 21). For OLPC, the immodest promise was that the laptop was the best chance to "eliminate poverty, create peace, and work on the environment," according to founder Nicholas Negroponte (quoted in Ames, 2019, p. 17). While OLPC offers an example of how a specific artifact can work as a promise, other work traces promises in more broadly distributed actors and practices. In her study of the maker movement in China, Sylvia Lindtner (2020) examines the "promise" of making through what she calls the "socialist pitch," which she finds present in national economic development literature, everyday office support functions, and many sites in between. The socialist pitch promises that anyone can intervene at scale, attaching personal career ambitions and individual desires for fulfilment to larger visions of national economic and technological greatness.

## Affective promises

This brief introduction has already suggested how anticipation is "an affective state" (Adams et al., 2009, p. 247), in which a given future has "affectively imbued representations

that move and mobilize" (Anderson, 2010, p. 785). In Lindtner's example from China, the socialist pitch works by connecting visions of a better future for China as a whole to the yearnings for participation and empowerment held at a personal scale (Lindtner, 2020). Similarly, in Lilly Irani's ethnography of rhetorics of entrepreneurialism in India, the individual entrepreneur hears a promise of agency and creative expression that moves him to participate in a national economic development project (Irani, 2019). In examples like these, promises work by organizing anticipated futures around already existing affective orientations.

Affect for these authors is not synonymous with a person's feelings. Instead, it refers to something less easily defined and more social, variously described as "bodily capacities emergent from encounters" (Anderson, 2014) or a pre-cognitive "form of thinking" (Thrift, 2004). By one definition, affect "is the name we give to those forces—visceral forces beneath, alongside, or generally *other than* conscious knowing, vital forces insisting beyond emotion—that can serve to drive us toward movement, toward thought and extension" (Gregg & Seigworth, 2010, p. 1). Attention to affect is in part a corrective to accounts of social phenomena built on representational models and rational-calculative explanations. When Michelle Murphy, for example, points out that the abstractions of "the economy" like GDP do not just offer a simplified representation of the world, but also "propagate imaginaries, lure feeling, and hence have supernatural effects in surplus of their rational precepts" (Murphy, 2017, p. 24), she is arguing that we must understand economic rhetoric affectively.

In her book *The Promise of Happiness*, Sara Ahmed (2010) uses the idea of "happiness" to make a clear connection between anticipation and affect. For her, an object becomes happy if it promises happiness. Put differently, the happiness is anticipatory; the judgment about an object being happy is made before it brings happiness, but in the expectation that it will do so. Further, the power of this promise lies in the distance between the happy object and the subject's lack of happiness:

> "Indeed, the very promise of happiness may acquire its force by not being given by the objects that are attributed as happiness-causes. The happy object circulates even in the absence of happiness by filling a certain gap; we anticipate that the happy object will cause happiness, such that it becomes a prop that sustains the fantasy that happiness is what would follow if only we

> could have 'it.' The happy object, in other words, is a gap-filler. The promise of the object is always in this specific sense ahead of us." (Ahmed, 2010, p. 32)

Lauren Berlant makes a similar argument in her book *Cruel Optimism* (Berlant, 2011). Beginning from the claim that the present is first of all an affective perception, she talks about "an object of desire" as "a cluster of promises," through which the subject can imagine receiving or becoming something in proximity to the object (p. 23). "In optimism," she says, "the subject leans toward promises contained within the present moment of the encounter with her object" (p. 24), and in this leaning-towards is an affective experience in which the desire attaches to the object.

Recent empirical accounts of educational reforms have used this affect theory to examine how promises of new technologies have gained their powers by speaking to existing desires. In his ethnographic study of a new middle school billed as a "school for digital kids," Christo Sims (2017) argues that the excitement surrounding the school's innovative pedagogy built on networked, technologically enabled learning is generated by a longstanding "yearning" for societal transformation through schools. In Ames's (2019) study, the charismatic OLPC laptop has captured a preexisting social imaginary of funders and administrators, in which children are curious and self-directed learners, and attached it to the machine. In their promises, these reforms become a kind of "mythology," (Dourish & Bell, 2011; Mosco, 2004) that generate their own affective atmospheres of enchantment and transcendence by imbuing certain objects—the laptop, the curriculum—with the desires that already existed outside of them.

## Relational promises

Affects exist not as a thing within a body, but as a relation between them (Thrift, 2004). As Ahmed puts it, affect is like capital in that it "is produced only as an effect of its circulation" (Ahmed, 2004, p. 120). In this way, she claims, affect is a way of binding individuals and communities, so that not only are communities created by shared affect of their members, but also "the individual subject comes into being through its very alignment with the collective" (Ahmed, 2004, p. 128).

The promise, as an affective orientation to the future, has a similar relationality; for a promise to work, it must to some degree be shared between actors. Yet this promise need not be experienced uniformly, and indeed technological promises often resonate with some audiences but not with others. For both Sims (2017) and Ames (2019), for example, the

promised educational reforms tended to be less persuasive with teachers and students than with administrators and funders. In these cases, people did not simply use technologies differently, they had different affective orientations to them, informed by different experiences and desires. Ahmed (2010) is especially interested in these moments when someone becomes a stranger to the collective orientation towards an object as good, a condition she calls "affect alienation." Being out of alignment with a promise is a kind of rupture from the social world, she says, but in this rupture she sees a hopeful figure. By breaking free of the "lines that have already been given" (p. 48), the affect alien can "make room for possibility, for chance" (p. 20).

In practice, however, promises do not encourage making room for new ways of thought, but tend instead to reward harmony, reincorporate offshoots, and subsume dissent, as we shall see in the following section.

## The less-than-radical promises

The inherent contradiction of the promise is that it speaks a language of both change and continuity. While the notions of promises and imaginaries can conjure ideas of transformation, closer examination shows that often the opposite is true. To understand this, it helps to look to "what myths mean to the people who produce and believe in them, and what they reveal about the society that sustains them" (Mosco, 2004, p. 31). The promise is not just a transformation of what the world is, but an affirmation of what we believe the world ought to be. By directing those familiar fundamental desires towards a given object, the promise can "induce conventionality" (Berlant, 2011, p. 2) with "the comfort of repetition" (Ahmed, 2010, p. 48). As Berlant puts it,

> "Any object of optimism promises to guarantee the endurance of something, the survival of something, the flourishing of something, and above all the protection of the desire that made this object or scene powerful enough to have magnetized an attachment to it. When these relations of proximity and approximate exchange happen, the hope is that what misses the mark and disappoints won't much threaten anything in the ongoing reproduction of life, but will allow zones of optimism a kind of compromised endurance. In these zones, the hope is that the labor of maintaining optimism will not be negated by the work of world-maintenance as such and will allow the flirtation with *some* good-life sweetness to continue." (Berlant, 2011, p. 48)

Here Berlant makes an observation that is important for our examination of technological promises. When promises fail to materialize, we undertake a "labor of maintaining optimism" that is distinct from "the work of world-maintenance." While the latter is invested in the messy work of the promising object's encounter with reality, the former invests in the idealized endurance of the underlying beliefs. Beneath the surfaces of new technological artifacts and practices are reassurances that the values and beliefs contained within those systems can continue.

This attachment to existing desires explains the work of maintenance and repair so often invested in projects that disappoint. Such gaps are inevitable when mythology of a promise becomes "brittle" (Ames, 2019) in its collision with the mess of everyday life (Dourish & Bell, 2011). In Sims's (2017) ethnography shows how, despite the reformist interventions of a progressive school, sixth-graders continue to ignore teachers' instructions, misbehave at recess, and otherwise act like ordinary twelve-year-olds, and Ames (2019) reveals how once deployed in a Paraguayan classroom, OLPC laptops were often broken, used for entertainment, or simply unimpressive. Both scholars then describe the specific practices that maintain idealism in the face of such shortcomings. Those invested in the myth of the intervention's transformation go to great lengths to demonstrate some small version of the idealized promise, a performance aimed at the funders and supporters who can "realize the collective experience of having good intentions and being cutting edge" through "seeming verifications of the project's idealized potential" (Sims, 2017, p. 104). In the Chinese maker movement, Lindtner describes the performance of what she calls "happiness labor," which "produces a feeling of optimism and hope despite the proliferating sense of rising precarity" (Lindtner, 2020, p. 216), to keep workers engaged in their projects. This labor and other performances of success show that the existence of these promises is not automatic or inevitable. Instead, these myths must be created, circulated, nurtured, and repaired (Lindtner, 2020).

For such labor to maintain the promise, it often sidesteps the disruptions of political disagreement that might challenge it. The cycle of creating and maintaining promises of reform generates "a politicized buffer zone that helps absorb and fix volatile energies while leaving the sources of those volatilities intact" (Sims, 2017, p. 170). Myths become a way to purify conflicts and make the persistence of contradictions livable (Mosco, 2004, p. 28). Lindtner's and Irani's accounts show the dangers of a conservatism that cannot accommodate affective misalignment . In the "subsumption of hope and of yearnings for

alternatives" (Lindtner, 2020, p. 31) or the way that entrepreneurialism "subsumes hope...critique, mutual aid, and desires for better, more just worlds" (Irani, 2019, p. 213), each identifies a gap between the anticipated emancipatory future that moves participants and the perpetuation of existing paradigms of value capture that actually ensues. Transformative promises that radically challenge the deeply held beliefs of the people needed to carry it out would likely stumble. In speaking to some beliefs, however, the promise must either avoid conflicting views or subsume them.

## Case: New Mobility

I have argued that promises work affectively by speaking to existing desires, which must then be maintained when their mythology encounters the frictions of a messy reality. This section returns these ideas to the concerns of urban planning with a brief survey of new mobility. Over the past decade or so, transportation planning has engaged with new narratives of urban mobility. These center on the possibilities of smartphone-equipped travelers, new kinds of mobility services built around apps and data, and the fine-grained travel data these systems produce. The focus of this paper is on the trip-centered mobility systems that travelers encounter through smartphone apps, but similar promises surround other emerging mobility technologies in domains like automated driving and intelligent traffic control systems. "New mobility" here refers to the following connected phenomena:

- *Ride-hailing services*, most popularly Lyft and Uber, which allow travelers to request a driver and car to pick them up and drop them off at specified locations. These also include services that involve sharing rides with other passengers or combining the ride with walking or transit.
- *Micromobility,* the industry term for the bike and scooter share services. While the preceding city-run bike share systems use semi-permanent docks, the free-floating or "dockless" systems that have launched in recent years allow trips to end at a suitable parking location anywhere within a defined service area. The dockless systems generally require a traveler to use a smartphone app to book, unlock, and pay for a vehicle.
- *Real-time trip information*, including road traffic, transit arrivals, and micromobility availability, provided to travelers through apps such as Google Maps, Transit, or OneBusAway. While some of this transportation data is proprietary, much of it is

managed and shared through open data standards like the General Transit Feed Specification (GTFS) and the General Bikeshare Feed Specification (GBFS).

- *Mobility data for cities*, especially trip-based data of the above services provided through the Mobility Data Specification (MDS), or ad hoc data sharing agreements between providers and agencies.

These systems work at intersections among government agencies, mobility service and technology vendors, and smartphone-equipped travelers. The particular histories of these technologies varies, but most were introduced or popularized in the past decade. Many originated from technology companies outside of government or transportation fields; to a large degree the unfolding story of new mobility is one of a collision between these two professional domains. The interaction between the cultures of Silicon Valley tech startups and transportation planners explains much of how the promise of new mobility works.

My examination of the promise of new mobility and its practices in transportation planning is informed by a qualitative study of the ways professionals talk about, regulate, and use new mobility. Data sources include attendance at industry conferences and webinars, a study of the development of open-source data standards, interviews with planners and vendors, and analysis of industry documents, city regulations, and media coverage. (A different thread of my research has examined these phenomena from the traveler's point of view.)

As argued above, an understanding of the relational nature of promises is essential for understanding its power. In arguing that promises work affectively, I join the scholars emphasizing that affects do not reside in a given entity, but circulate among people and things in shared orientations (Ahmed, 2004; Murphy, 2017). In this way, the promise of new mobility emerges from connections among transportation and technology professionals, software and data systems, physical infrastructures, and travelers. In these examples, however, I focus somewhat more closely on the responses and orientations of transportation planners to a promise produced by tech vendors, technologies, and the planners themselves, while giving less attention to the perspectives of vendors, funders, or travelers. I use the term "transportation planners" loosely here to describe professionals who envision, direct, regulate, or deliver mobility infrastructures and services with the explicit intention of serving a public interest, regardless of their specific employer or job title.

## New mobility's technical capabilities

Industry discourse around new mobility frequently blurs the actually existing mobility of present and imagined mobilities of the future. This section gives examples of four kinds of new mobility capabilities that lie at the foundation of its promises. Each describes practices and outcomes that are to some degree present and observable today, but are simultaneously evocative of possible new futures that will extend existing practices in scope and scale. In brief, the first promise of new mobility is that data it generates, together with the automated operations of sophisticated algorithms and artificial intelligence, will allow transportation services to operate more efficiently. Second, new mobility will provide detailed and extensive data on urban mobility patterns that are useful for better planning mobility infrastructure. Third, new mobility will make new transportation resources available to the public without significant public expenditures. Lastly, new mobility will provide convenience and choice to travelers. Practices like these, together with the data and services described above, form the object of the new mobility promises that I will focus on in the subsequent section.

### Data-driven mobility operations

Dockless bikeshare offers a straightforward example how new mobility data promises to make mobility operations more efficient. For a traditional dock-based bikeshare system, identifying locations for docks, based on goals of maximizing ridership and expanding system access, is both a political and a logistical challenge to bikeshare operators. In addition, bike rebalancing—operators' practice of moving bikes by van to locations where rides are anticipated, rather than waiting for riders to end trips in such locations organically—is a critical but expensive function in a successful system with or without docks. For a dockless system, however, operators do not need to guess where popular destinations will be; travelers identify these themselves whenever they end a trip. Operators collect fine-grained origin and destination data which can then be used as the basis for predictive models, together with data on trip times and basic rider demographics, that anticipate where and when bikes should be rebalanced. For cities, both the rider-determined trip-ends and predictive models for operator rebalancing promise flexibility, accuracy, and efficiency in distributing micromobility resources.

Similarly, ride-hailing companies have promised that they can use their sophisticated real-time routing engines to identify travelers going on similar routes and

match them together with a driver in a carpool. Such real-time coordination among strangers would be impossible without the centralized data clearinghouse and fast processing that large and technologically sophisticated vendors like Uber and Lyft can offer. For transportation planners and engineers, these carpools promise a relatively straightforward response to the congestion caused by travelers going on the same routes in single-occupancy vehicles.

### Data-driven infrastructure decisions

Cities are responsible for managing their public rights-of-way, the crowded spaces that support the movement of people and goods, access to properties, parking of vehicles, and leisure activities. New trip data from mobility service providers, increasingly shared with cities automatically in standard formats like MDS, promise a far more detailed picture of urban mobility than transportation official have been able to achieve through legacy tools like car counts. MDS currently provides cities with precise origins, destinations and routes for trips on shared bikes and scooters. Although ride-hailing companies have successfully resisted sharing such detail on their rides, they do often share aggregated data with less precise geography. By learning where people ride bikes or where they take Ubers and Lyfts, planners expect they can better make or justify decisions to locate bike lanes, pick-up zones, and other transportation infrastructure.

### New transportation resources

Increasingly, firms like Lyft and Lime are providing transportation services that were once delivered by transit agencies or municipal DOTs. For example, transit agencies have long struggled to provide service in low-density suburban areas surrounding a rail station or transit center. Their options are providing expensive, low-ridership bus routes to shuttle commuters to the transit center, or building large park-and-rides for travelers to drive their own cars for part of the journey. Ride-hailing companies have offered a different response, deployed at various scales in cities across North America, in which travelers take an Uber or Lyft between their homes and the station. In a series of partnerships, transit agencies have worked to subsidize fares and integrate payments, and Lyft and Uber have begun providing coordinating transit information in their apps. For agencies, subsidizing these rides promises to be more cost-effective than operating low-ridership buses or building new parking garages, and the hope is that such services might induce more commuters to take

transit. Particularly for smaller agencies, ride-hailing services are beginning to provide something like public transit in their drivers' vehicles rather than in buses.

### Traveler choice and convenience

Lastly, planners are attentive to the user experience of new mobility, and are excited by the idea that with more information and more services available, travelers will be more likely to chose transportation modes other than driving alone. "Choice" is a key word in this narrative, and the expansion of new mobility in many major cities promises travelers more options. Additionally, the proliferation of smartphones and real-time data promise that travelers will be better informed about the availability, cost, and timing of their mobility choices, and that this information will make travel easier and more enjoyable. For planners, the hope is that choice and convenience will induce travelers to use modes other than driving alone.

## The promise of new mobility

At the heart of the promise of new mobility is a translation between emerging digital information and the longstanding objectives of transportation planners. Put simply, what is new about new mobility is data. The collection, communication, and coordination of shared bike locations, bus routes, traffic conditions, driver availability, and other phenomena represented digitally as data is the foundation of new transportation services and new planning practices. To understand how the technical affordances of data become visions of a different kind of urban mobility is in part an exercise of logical translation, explaining what practices data enables and how those practices will lead to certain outcomes. In the capacities described above, data describing trips becomes the basis for more efficient operations, smarter allocations of resource, and happier travelers. At the same time, however, understanding the movement from the technical to the imaginary also requires an attention to the desires and orientations of those who create and sustain the promise. In this section, I examine how the promise works more-than-rationally in two ways: by engaging with the stated visions and objectives of transportation planners and their available infrastructures, and by mobilizing the less explicit affective orientations of planners. In either case, new mobility's promise works by orienting an existing desire towards a new object.

## Stated goals for urban mobility

Certain visions of urban mobility have long defined transportation planning. In broad terms, these include environmental sustainability, safety, equity, and accessibility. In more specific applications, these become the common goals of reducing vehicle-miles traveled, discouraging single occupancy vehicle usage, promoting walking and biking, promoting public transit, expanding access to transportation services to low-income populations and neighborhoods, reducing commute times, reducing traffic congestion, eliminating traffic deaths and serious injuries, and alleviating the disproportionate transportation burdens of racial and income groups. When many new mobility firms like Uber launched from the Silicon Valley startup culture, they arrived with their own values and visions (e.g., rapid scaling of users, disruption of existing paradigms, a platform structure designed to evade liability) and made little effort to coordinate with planning discourse or practice. By now, however, these vendors have largely harmonized their language to that of urban transportation planning and state their shared commitment to planners' goals. Lyft tells its customers, investors, and city regulators that they "believe that cities should be built for people, not cars" (Lyft, 2021, p. 7). Uber positions its work as focused on four "pillars" of economic empowerment, safety, sustainability, and equity (Uber, 2021), language that would fit easily in any local transportation plan. Both Uber and Lyft have positioned themselves as partners with public transit. Bike and scooter share companies have joined the fight for making the right-of-way more friendly to bikes, and they have promoted their efforts to make their services available to low-income populations. The new mobility capabilities outlined above all point towards making it easier for people to get around without using a car. In this way, new mobility has not asked transportation officials to adopt new visions as much as to attach those visions to new devices.

In many cases, the promise of new mobility has not only left these values relatively untouched, it has also demanded little in the way of infrastructure investment. Particularly with new ride-hailing and bike-share companies that are built on the minimal-asset business models of a tech startup, new mobility focuses on what its software can do within the existing environment rather than imagining a radically different one. Transportation planners are not asked to change the right-of-way, offer new transit services, or secure new funding. Free floating bike share promises that it will work with existing sidewalk space, without requiring the space and investments of docks. Lyft and Uber promise that that

their services will connect make transit workable without any need for new routes. Working with existing infrastructure helps planners to better envision the promised future of new mobility becoming a reality, and at the same time allows them to avoid the political obstacles to implementing infrastructure changes.

### Implicit desires for the management of mobility

Transportation professionals within the planning and technology fields discuss sustainability, equity, and safety goals quite explicitly. A different set of values, however, appeared in the subtext, and I suggest that these implicit desires are equally important in making the promise work. These are not so much about what planners want for urban mobility per se, but in how they envision going about the work of making a better city. The slipperiness of these desires is what makes them more evocative of affect. In looking for these implicit orientations I three themes: certainty, solvability, and transcendence.

First, the certainty promised by new mobility operates through both descriptive and predictive data. Data on yesterday's actual bus arrival times, for example, provides clarity to planners analyzing bus schedules. In one example from Seattle, local officials had a sense that a certain road was a good candidate for a bike lane, but data from bikeshare showing its frequent use provided the evidence needed to make a stronger case. Data describing all kinds of mobility patterns gives officials confidence that their judgments are not arbitrary or biased. By the same token, data that predicts what will happen in the future, although inherently less certain, can also give planners reassurance in their decisions. The purpose of both descriptive and predictive certainty is to guide and justify the decisions planners must make under conditions of persistent uncertainty. In these practices of calculation (Anderson, 2010), some of the anxiety around the future's unknowability can be tamed (Adams et al., 2009).

Second, new mobility offers solutions to many of the transportation problems described above by framing them as technical problems. The development scholar Tania Murray Li (2007) builds on the idea of the "anti-politics machine" (Ferguson, 1994) to identify practices of "rendering technical," in which political problems are sidestepped by framing them as solvable engineering problems. Rendering technical functions both to bracket out the unsolvable political components of a problem and to position the technical expert as the one who can solve the reframed problem (Li, 2007). In new mobility, we can see how technologies surrounding smartphones and new datasets made practices promising

to turn social problems into computer science problems especially tempting. Uber and Lyft promising that they can provide last-mile transit services in the suburbs, for example, allows planners to avoid political battles that would come from competing with other routes for limited funds or securing new funding. Similarly, an emphasis on data collection for bike trips as a means for securing bike lanes overlooks the well-known political obstacles to taking road space away from cars. To be sure, the planners in my study were not blind to the political realities of their profession. At the same time, they were nevertheless drawn again and again to the problems that look somewhat more solvable.

Finally, new mobility promises solutions, and in doing so, it conjures images of an escape from the mess of transportation. With so many intractable problems in urban mobility—land use patters and infrastructure built for automobiles, travel time and cost burdens falling hardest on those least able to pay, chronic underfunding of public transit, limited ROW space, the physical vulnerability of bike riders and pedestrians—there is appeal to any intervention that claims it can circumvent them. The tech imperative to "disrupt" means to fundamentally transform the rules of the game, sidestepping the old challenges of a given technology's development in a way radically expands access. Disruption is in this way an escape, a kind of do-over that can, like a myth, "offer an entrance to another reality," one with "the promise of the sublime" (Mosco, 2004, p. 3). In my research, this promise of transcendence is far more prevalent among technology companies, while planners approach such visions with greater skepticism. Transportation planners live their professional lives in the mess of traffic jams, limited funds, and stubborn drivers, where there sometimes seems to be little room for idealism. Perhaps for this reason, though, a promise that is grounded in the land use and infrastructure that we have but looks sufficiently new, with its rich data sets, advanced algorithms, and novel business models, could be seen as the thing that really will allow us to transcend the mess.

In the implicit promises I identify here—new mobility offers certainty about what mobility patterns are and will be, it can turn persistent political and social problems into solvable problems of data analysis, and it can transcend the mess of getting around the city—new mobility creates, circulates, and captures affective orientations that are not represented in the explicit goals of transportation. The following section examines the maintenance work that allows the promise survives its collision with complex external factors.

## Maintaining the promise

Promises work by directing our attention to a future, whether that future can be directly controlled or merely anticipated. I have suggested above that these futures become a concern for the present because they resonate with particular desires among actors here and now, and in some sense then produced by the present. Here I turn to the question of how the present is produced in order to maintain the promise of the future. Dourish and Bell (2011) refer to the everyday embodied practices of technology a "mess" in contrast to the "mythology" of the stories we tell about technologies. Accounts like theirs show that within the friction between what we want to happen and what actually does happen is a labor of reconciliation. The point of such accounts is not to show that a technology has or has not lived up to its promise, but to ask how its promise survives as an object that is both inevitable and just out of reach. In responding to failures and celebrating successes, planners use the mess of actually existing new mobility to keep its promises alive.

First, pilots, the short-term or small-scale deployments of a certain mobility intervention, are a key site for demonstrating that new mobility can deliver its promises. For example, transit agencies and ride-hailing platforms have in recent years formed partnerships around specific transit centers to test "ride to transit" programs. Similarly, bike and scooter share programs are launched with limited numbers of vehicles before the city finalizes its regulatory structures. When these pilots succeed in achieving their specified objectives, they become the stories that circulate at conferences and in promotional materials to show that new mobility's promises are imminently achievable, once the pilot is scaled up. When they fall short of expectations, they become the basis for "lessons learned" so that with corrective measures, the promise remains a possibility. In either case, the pilot maintains the promise by reframing the experience of the present in terms of the possibility of the future. Despite the thoughtful and genuine attention to what has actually happened in the pilot, which shapes subsequent policy interventions, its more potent affective work is in lending credibility to the promised future that will one day operate at full scale with all the kinks worked out.

The labor of maintaining the promise is likewise apparent in new mobility's efforts to respond to emerging frictions with visions of technological fixes. In a typical pattern, some combination of technical, environmental, or social factors mean that a new mobility system does not work as effectively as envisioned. Rather than giving cause to abandon the

promise, such events instead give occasion to envision a new technological fix in an ever-expanding promise. When ride-hailing and micromobility are shown to serve neighborhoods and travelers that are richer and whiter than city averages, vendors and regulators respond with new programs and technologies that promise to achieve equity with better analysis of trip data, digitally enforced vehicle distribution policies, or new technologies expanding access to riders without credit cards of phones. When illegally parked shared bikes and scooters clutter sidewalks, providers develop new tools for automated enforcement based on more accurate geospatial data and AI-powered evaluation of user-submitted photos. When studies show that the presence of ride-hailing in a city actually increases total VMT, ride-hailing companies respond by emphasizing their capacities for pooling travelers into shared rides or integrating their services with transit. In examples like these, new mobility promises to solve not only the transportation problems that predate it, but also those that it generates itself.

Like any promise, new mobility is not a given, stable image to be accepted or rejected. It is a dynamic vision, produced collectively, that must be actively circulated, nurtured, and repaired. Although the complex relationship between planners and the vendors of mobility technologies and services is beyond the scope of this paper, this dynamic contains multiple promises of new mobility. Depending on the audience, these have varying degrees of credibility, and history suggests that they will not all survive. The point to make here, however, is that these promises have an inbuilt resilience when they are founded in deeply held beliefs and values. Belief in the ability for electric scooters to transport significant numbers of people to a transit center in a poor neighborhood is not deeply held. Beliefs that cities should be built around high-capacity transit, that mobility should be shared and widely available, or that transportation should not emit greenhouse gases, however, might be. If last-mile e-scooter networks should happen to fail, we can expect that planners will engage in various labors of promise maintenance to ensure that their deeply held beliefs do not fail with them.

## Conclusion: Planning for the mess of the present

I have argued in this paper that the collection of emerging digitally enabled transportation phenomena known as new mobility makes promises to transportation planners, and that these promises mobilize affective orientations by engaging the established values of urban

transportation. Rather than determining whether new mobility's promise is good or bad, or whether it is true or false, I have instead asked how the promise works. Using literature on affect theory and empirical work studying cases of "charismatic" technological deployments, I have shown that the promise works by attaching an existing desire to a new object. The gap between what the object promises in its mythology and the experience of that object in the mess of its actual deployment can both create a persistent yearning to close the gap and necessitate repair work to keep the promise alive. Throughout these processes, subjects are engaged affectively; visions that circulate among professional actors generate certain orientations and intensities that cannot be fully represented in rationalistic terms. Finally, the endurance of existing values within the promise and its stabilization of dissent shows the promise to fundamentally conservative despite its superficial appearances of change. My conclusion will briefly suggest where to take these observations within planning practice interested in radical change.

Despite its engagement with the work of transportation planners, this paper has made only passing reference to what a plan is and how it relates to a promise. Although they both reference the future and a particular vision for it, plan and promise are not synonymous; they have different relationships to the notions of intention, instruction, guarantee, and anticipation. Yet I find the term promise useful in that its twin evocations of assurance and desirability implicitly open an affective reading that "plan" does not. In this sense, at least, plans are a kind of promises. The framing of plans as more than rational is not new. Planning theory has explored how plans function are persuasive stories (Throgmorton, 2003; van Hulst, 2012) and how they constantly reconcile the ideal and the practical (Gunder, 2008; Hoch, 2016). Besides contributing to this framing of planning as dealing with imagined futures rooted in present emotions, the idea of promise can also show how a plan is inherently relational. When we hear of a promise, we understand that the promise is made by someone to someone else. This emphasizes a power dynamic that is too easily obscured in the neutralized framing of plan.

A related implication of the promise for planning suggests that a plan or vision is not the only way to realize change. Consider Mosco's observation of technological myth-making that "it is when technologies such as the telephone and the computer cease to be sublime icons of mythology and enter the prosaic world of banality—when they lose their role as sources of utopian visions—that they become important forces for social and economic change" (Mosco, 2004, p. 6). A recurring theme of the empirical accounts discussed

in this paper is that promises are not pre-given from an idealized nowhere, but are actively produced here and now by people's beliefs, feelings, and actions. If it is our own orientation to the promise that sustains it, then we collectively have the power to create new promises. As with Ahmed's celebration of the affect alien shows us, noticing the gap between our own feeling and what has been promised is a way to open new spaces.

As a final opening, let me briefly turn to one example of the productive space that can open in such a gap. In his book on Black internet culture, André Brock (2020) describes an often-invoked emancipatory promise of social media and argues that such framings miss the individual, embodied experience of social media. He is interested instead in activity that begins from the energy and desire of a particular Black subject engaging a community. Using the notion of the "libidinal," he looks to the anger, joy, and catharsis of online expressions of racial identity. By showing "the ways Black folk use the internet as a space to extol the joys and pains of everyday life" (p. 6), he challenges rationalist framings of the internet to point instead to a desire that is visceral and subconscious. Social media promised liberation from racial oppression, and when Black users did not feel that promise, they created new practices instead.

Brock's attention to the libidinal is notable for asking first what the subject desires (shared culture, catharsis) and then how the technology satisfies that desire, rather than beginning with what the object promises (a techno-democratic forum) and asking whether the subject's use accords with it. Whereas so many of the examples in this paper have focused on the *pull* of myths, charisma, and promises that are the objects of our affective orientations, Brock's emphasis is the *push* that fuels Black Twitter from the ground up. In flipping this coin to the other side, Brock reminds us of our own power to create new spaces for our desires. Realizing radical change then might not mean making new promises, but questioning our own feelings towards the existing myths and becoming better aware of the work of our own desires.

## References

Adams, V., Murphy, M., & Clarke, A. E. (2009). Anticipation: Technoscience, life, affect, temporality. *Subjectivity*, *28*(1), 246–265. https://doi.org/10.1057/sub.2009.18

Ahmed, S. (2004). Affective Economies. *Social Text*, *22*(2), 117–139. https://doi.org/10.1215/01642472-22-2_79-117

Ahmed, S. (2010). *The promise of happiness*. Duke University Press.

Ames, M. G. (2019). *The Charisma Machine: The Life, Death, and Legacy of One Laptop per Child*. The MIT Press. https://doi.org/10.7551/mitpress/10868.001.0001

Anderson, B. (2010). Preemption, precaution, preparedness: Anticipatory action and future geographies. *Progress in Human Geography*, *34*(6), 777–798. https://doi.org/10.1177/0309132510362600

Anderson, B. (2014). Encountering affect: Capacities, apparatuses, conditions. Ashgate.

Berlant, L. G. (2011). *Cruel optimism*. Duke University Press.

Brock, A. (2020). Distributed Blackness: African American Cybercultures. University Press.

Buser, M. (2014). Thinking through non-representational and affective atmospheres in planning theory and practice. *Planning Theory*, *13*(3), 227–243. https://doi.org/10.1177/1473095213491744

Dourish, P., & Bell, G. (2011). Divining a digital future: Mess and mythology in ubiquitous computing. MIT Press.

Ferguson, J. (1994). The anti-politics machine: "development," depoliticization, and bureaucratic power in Lesotho. University of Minnesota Press.

Gregg, M., & Seigworth, G. J. (2010). *The Affect theory reader*. Duke University Press.

Grove, K. (2014). Agency, Affect, and the Immunological Politics of Disaster Resilience. *Environment and Planning D: Society and Space*, *32*(2), 240–256. https://doi.org/10.1068/d4813

Gunder, M. (2008). Ideologies of Certainty in a Risky Reality: Beyond the Hauntology of Planning. *Planning Theory*, *7*(2), 186–206. https://doi.org/10.1177/1473095208090434

Hillier, J., & Gunder, M. (2003). Planning Fantasies? An Exploration of a Potential Lacanian Framework for Understanding Development Assessment Planning. *Planning Theory*, *2*(3), 225–248. https://doi.org/10.1177/147309520323005

Hoch, C. (2016). Utopia, scenario and plan: A pragmatic integration. *Planning Theory*, *15*(1), 6–22. https://doi.org/10.1177/1473095213518641

Irani, L. (2019). Chasing innovation: Making entrepreneurial citizens in modern India. Princeton University Press.

Jasanoff, S. (2015). Future imperfect: Science, technology, and the imaginations of modernity. In S. Jasanoff & S.-H. Kim (Eds.), *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power* (pp. 1–33). The University of Chicago Press.

Li, T. (2007). The will to improve: Governmentality, development, and the practice of politics. Duke University Press.

Lindtner, S. M. (2020). Prototype nation: China and the contested promise of innovation.

Lyft. (2021). *Lyft Annual Report 2020*. https://investor.lyft.com/financials-and-reports/annual-reports/default.aspx

Marotta, S., & Cummings, A. (2019). Planning affectively: Power, affect, and images of the future. *Planning Theory*, *18*(2), 191–213. https://doi.org/10.1177/1473095218802317

Mosco, V. (2004). The digital sublime: Myth, power, and cyberspace. MIT Press.

Murphy, M. C. M. (2017). *The economization of life*. Duke University Press.

Sims, C. (2017). *Disruptive Fixation: School Reform and the Pitfalls of Techno-Idealism*. Princeton University Press. http://muse.jhu.edu/book/56272

Thrift, N. (2004). Intensities of feeling: Towards a spatial politics of affect. *Geografiska Annaler: Series B, Human Geography*, *86*(1), 57–78. https://doi.org/10.1111/j.0435-3684.2004.00154.x

Throgmorton, J. A. (2003). Planning as Persuasive Storytelling in a Global-Scale Web of Relationships. *Planning Theory*, *2*(2), 125–151. https://doi.org/10.1177/14730952030022003

Tucker, J. L. (2017). Affect and the dialectics of uncertainty: Governing a Paraguayan frontier town. *Environment and Planning D: Society and Space*, *35*(4), 733–751. https://doi.org/10.1177/0263775816680821

Uber. (2021). *ESG Report*. https://investor.uber.com/home/default.aspx

van Hulst, M. (2012). Storytelling, a model *of* and a model *for* planning. *Planning Theory*, *11*(3), 299–318. https://doi.org/10.1177/1473095212440425

Wood, S. (2009). Desiring Docklands: Deleuze and Urban Planning Discourse. *Planning Theory*, *8*(2), 191–216. https://doi.org/10.1177/1473095209102234