



# MEANINGFUL INEFFICIENCIES:

Public Judgment about Novel Technologies  
through Play and Ambiguity

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*A Sounder Public Judgment Working Paper*

# PREFACE

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## The Public Judgment Working Paper Series from Public Agenda

In our age of endemic mistrust, fake news, extreme rhetoric and technology-enhanced manipulation of public opinion, it is increasingly difficult for the public to come to terms with issues in meaningful ways. Public Agenda's Souder Public Judgment Initiative brings fresh thinking to this profound challenge facing our democracy.

The concept of "public judgment," in contrast to raw, reactive and unstable "opinion," derives from the work of Public Agenda co-founder Dan Yankelovich, a pioneer of public opinion research in America. Rather than a particular point of view or ideology, the term is meant to connote that people have thought and felt their way forward on an issue in a reasonably well-rounded, fair-minded way. It is a stage of public thinking at which people having moved beyond simplistic magic answers and developed relatively responsible, stable positions that take into account the tradeoffs inevitably embedded in thorny public problems.

The conditions that support the formation of public judgment have to change with the way information, communications and persuasion change. They do not appear magically, they must be created and, at times, fought for and defended. These papers, by leading thinkers and practitioners across a variety of relevant fields, are intended to help us do precisely that. The current paper, "Meaningful Inefficiencies: Public Judgment About Novel Technologies Through Play and Ambiguity," examines the importance of slowing down decision making and creating space for ambiguity in helping communities engage complex and novel change, such as the application of new technologies in public life.

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# MEANINGFUL INEFFICIENCIES:<sup>1</sup>

## Public Judgment about Novel Technologies through Play and Ambiguity

On a recent warm summer's evening, a group gathered in a community center in Boston's Chinatown to discuss the placement of digital kiosks and sensors on Chinatown's sidewalks. This was not a group of technologists; they were local advocates, residents, educators and teens, asked to advise on the city's plan for technology in the public realm. More specifically, they were asked to govern an "exploration" zone, an area of four square blocks in Chinatown where the city had temporarily installed technologies for questioning their usefulness and testing their functionality.

This was part of a pilot project in Boston called Beta Blocks, an experiment in involving people in conversations and decisions about data, surveillance, and public value. Would people want air quality sensors in their neighborhood? What would they do with the data? Would they want free WiFi? What if the WiFi beacons were also collecting data about users? Would they want a digital kiosk with local community information? What if it also delivered relevant ads based on who's walking by? If you invite people to talk about data surveillance, they might bring up Cambridge Analytica or the Russian collection of facial data from a viral Facebook app or their fear of city government's sharing data with ICE.<sup>2</sup> Keep talking, and they may extoll the conveniences of automatic tolling stations on highways or responsive traffic signals.

The point is, no righteous path exists in the municipal uptake of novel technologies. Do these technologies violate privacy and personal liberties? Do they enhance freedom through mobility and convenience? Do they do all of these things? Most data scientists don't even understand everything that can be done with data. So why would cities be invested in consulting the public about things even the experts don't fully comprehend? The answer is that most cities are not so invested. Decisions about sensors, kiosks, utilities, street furniture, and any range of data-hungry "smart" technologies are typically made by city officials in conversation with tech companies. This is not due to bad intentions, necessarily, but to a system that makes no distinction between a park bench and a sensor. For most procurement offices, an object in the environment and an object that is actively monitoring the environment and the people in it are practically the same thing. But the truth is they are not. When urban technologies incorporate private user data into decisions about the shape and function of the public realm, the stakes are higher than when benches are placed. When technologies passively collect data from people on the street, either by sensing devices or sensing bodies—a collection process in which one doesn't even have the opportunity to click "I accept"—then the stakes are higher still.

Beta Blocks is an experiment in arriving at sound public judgments on the value of urban technologies. It brings together the public, the public sector, and the private sector to address the problems introduced by urban technologies. The commonsense approach would be to teach data literacy, allow multiple stakeholders to have informed conversations, and then arrive at decisions. But the novelty of the problem (that is, the use of personal data to determine what ads to present on sidewalk kiosks) means few precedents exist to model good decisions. With the process muddled by the uncertainty of the novelty and overwhelmed by the technical complexity of the issue, the linear path from information to decision is disrupted.

<sup>1</sup> This piece includes excerpts from the book, *Meaningful Inefficiencies: How Play and Care Are Transforming Civic Life*, by Eric Gordon and Gabriel Mugar, forthcoming from Oxford University Press, 2020.

<sup>2</sup> U.S. Immigration and Customs Enforcement.

Public sector organizations tend to prioritize efficiency in decision making. They are invested in charting a path to a goal with the least amount of friction. But when problems are novel, and decision spaces are complex, efficiency can be at odds with the goal of building trust. The Beta Blocks pilot provides useful fodder for considering alternative paths to public judgment, as the strategy is not to create straightforward approaches to multistakeholder decision-making, but to make room for play, for freedom of movement and thought within very specific structures. Through the creation of what Gabriel Mugar and I call “meaningful inefficiencies,” a plurality of people can embrace uncertainty, within a clear set of rules, for a comfortable amount of time, before reaching judgment.

The concept of meaningful inefficiencies is inspired by game systems. The decision a player makes to step outside of everyday life and into a play space, or magic circle,<sup>3</sup> almost always inserts an inefficiency into some larger system of exchange and interaction. The philosopher Bernard Suits describes the experience of playing a game as follows:

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A prelusory goal is typically identified by asking the question, “How do I win?” and is defined for the player before he or she enters the game system. I win in chess by capturing my opponent’s king. Once I understand that, I can enter into the “magic circle” of the game, which is defined by a set of rules (prelusory means) that stop me from achieving my goal (capturing my opponent’s king) by the most efficient means possible (reaching across the board and grabbing it). These constitutive rules, as Suits calls them, provide the restrictions and limitations necessary for play. And, interestingly, players accept these rules precisely because they allow them to play. Thus, *games are, by definition, inefficient*; play requires the space that contained inefficiency affords. Put another way, “meaningful inefficiencies” is the productive lag in systems generated by rules, which enforce and justify *playing*.<sup>5</sup>

Participatory budgeting, for example, can be a meaningful inefficiency, insofar as it presents a goal and inserts lengthy deliberation as an obstacle to achieving it.<sup>6</sup> The result is not merely to slow down the budgeting process, but to open up a piece of the process to public deliberation so as both to instruct the public in how budgeting works and empower it in shaping outcomes. The outcome of meaningful inefficiencies in this example is to hold space for people, for social interaction, and for moments of productive encounter in which exist infinite possibilities. Without these encounters, organizations dictate a world prescribed by systems, predicated by their makers with little room for variability.

Most public sector organizations are eager to adopt new technologies or tools that “cut the fat” or “reduce friction” in the system, not the other way around. Indeed, there is necessarily a tension

<sup>3</sup> J. Huizinga, *Homo Ludens: A Study of the Play-Element in Culture* (Boston, MA: Beacon Press, 1955).

<sup>4</sup> B. Suits, *The Grasshopper: Games, Life, and Utopia* (New York: Broadview Press, 2005), 10.

<sup>5</sup> E. Gordon and S. Walter, “Meaningful Inefficiencies: Resisting the Logic of Technological Efficiency in the Design of Civic Systems,” in *Civic Media: Technology, Design, Practice*, edited by E. Gordon and P. Mihailidis (Cambridge, MA: MIT Press, 2016).

<sup>6</sup> J. Lerner, *Making Democracy Fun: How Game Design Can Empower Citizens and Transform Politics* (Cambridge, MA: MIT Press, 2014).

between a meaningful inefficiency and a *mere* inefficiency. When a website loads slowly, or one has to wait in three different lines at the Department of Motor Vehicles to renew a driver's license, these *mere* inefficiencies mostly lead to anxiety and frustration for users. In the rush to address them, especially when introduced to digital tools that are seemingly designed for such a purpose, organizations can easily design against the values of the publics they seek to cultivate. Incorporating dialogue, providing opportunities for the public to explore the algorithm, and investing in building the public's capacity to understand the data being used are all meaningful inefficiencies needed for sound public judgment.

The impact a process like Beta Blocks can have on a city is tied to its ability to bring multiple stakeholders together into conversation around the novelty of urban technologies, without presumption of neat or simple conclusions. The value is in the relationships that form over time, with the process functioning as the rules and mechanics that structure play. Beta Blocks brings to light the tension between the certainty of a product's functionality and the uncertainty of its use. It generates an ambiguity that allows relationships to form as people are drawn together by their active questioning.

I will go so far as to say that this state of ambiguity is a required condition of sound public judgment about any novel problem. Public policy should be guided by the humble recognition that no one has the answer. Ambiguity, in this situation, is not a bad thing; it is necessary. But for most practitioners, who are operating with deadlines and deliverables, it can be a deeply uncomfortable place to be. Design firms like IDEO have called out ambiguity as a state designers need to embrace. Being comfortable with ambiguity mitigates the tendency for designers or anyone in a consulting position to feel like they need an answer at every moment. Embracing ambiguity gives designers permission to dive deep into understanding the nuance of a particular situation or environment, bringing their clients along on the exploration as they speak with potential users and test out early ideas.

The role of ambiguity in public sector work is quite different. That it starts and ends with questions about public value means the boundaries defining needs and interest can be far messier and more nebulous than that which a client relationship might contend. To factor multiple publics into decision-making processes, to ensure trust and ownership across multiple stakeholders, to create spaces for vulnerability and play among competing interests, requires that practitioners and organizations tolerate a certain level of ambiguity. And for this work to be done right—well beyond simply tolerating it—ambiguity must actually be incorporated into the design process. The open-ended exploration of the needs and interests of multiple publics provides the flexibility required to create valuable products and experience. The alternative to being open ended in these cases would mean accepting the default values of novel technologies and bypassing the complexities and contradictions of working with multiple publics.

Ambiguity cannot be a permanent state. Indeed, there is no better way to squander trust with publics than to accomplish nothing. The designer needs self-consciously to construct a space for play before arriving at specific objects or outcomes. This space for play allows the designer and

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the stakeholders to reflect upon the moral and ethical dimensions of the design's mechanisms before they disappear into the mundane.<sup>7</sup> Take 311, as an example—a tool created or incorporated by many municipal governments around the world to enable citizens to report urban problems, like potholes, graffiti, darkened street lights, and so on. The technology quickly found an application within government operations and is now a regular part of doing business in many cities.<sup>8</sup> In this case of a “successful civic tech,” however, few groups have challenged the promised value of such a tool. Who is best served by the technology? Who is excluded? What kinds of things can users report? Who gets to decide? Where are the inequities in reporting, and what is the responsibility of government to address them? These questions are difficult, and they may run counter to the goal of increasing government efficiency in solving everyday urban problems. So, in the majority of cases, the ambiguity of 311 has been quickly erased for clarity of function.

Simone De Beauvoir writes in *The Ethics of Ambiguity* that it is easy, when faced with ambiguity, to “follow the line of least resistance” into unambiguity, whatever that may be.<sup>9</sup> Despite the many bureaucratic obstacles to getting things done in large organizations, there is a strong drive toward unambiguity, by either getting novelties adopted or quickly pushing them into disuse. It is precisely this ease that a project like Beta Blocks resists—it ensures that what might seem like an accepted matter of course will become difficult. Of course, bureaucracies present many difficulties, but some difficulties are easier than others. Typical bureaucratic difficulty is not generative, productive, or expansive; it is a mere inefficiency. Meaningful inefficiency, on the other hand, carries with it a responsibility to embrace the more difficult form of difficulty, one that *inserts* ambiguity, but always intentionally.

Sound public judgment about novel urban problems is never efficient. And as conversations about self-driving cars, data privacy, and other such “smart” uncertainties become more and more a part of everyday life, it is imperative that public sector organizations embrace meaningful, not mere, inefficiencies. In fact, the more complex and novel a problem is, the more inefficiencies should be built into its resolution. The Beta Blocks project has demonstrated that there are big decisions to make about the future of urban infrastructure, and they have to be made with a recognition that cities comprise a plurality of publics. As a result, people within public sector organizations have to start thinking like designers who are conditioned to tolerate—no, to invite—ambiguity. ■

<sup>7</sup> B. Latour, *Reassembling the Social: An Introduction to Actor Network Theory* (New York: Oxford University Press, 2005).

<sup>8</sup> D. O'Brien, *The Urban Commons: How Data and Technology Can Rebuild Our Communities* (Cambridge, MA: Harvard University Press, 2018).

<sup>9</sup> S. de Beauvoir, *The Ethics of Ambiguity* (New York: Open Road Media, 2011), 220.



## PUBLIC AGENDA

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