

Other(wise) Futurings of Smart City: Cities and Collective Human (Counter-) Intelligence*

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스마트 시티의 또 다른 미래 구상: 도시와 집단 인간 (반-)지성*

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Abstract : This paper sketches out ideas of critical techno-social praxis toward alternative relations with data and cities, conceptualizes other(wise) futures of smart cities while remaining attentive to current theories and practices of smart cities. It responds to the questions of how the production of new digital technology and new forms/formations of innovative activities fit into the existing urban fabrics and how we can re-imagine and create alternative multiple visions for enabling smart cities and smart urbanism grounded in resources, priorities, and embodied knowledges of community. We connect such questions to the broader possibilities for an inclusive, equitable, participatory, and creative community-sensitive smart city. We think about the technical/technological infrastructures and platforms of the city, the stakes of smart citizenship, smart urbanism, and re-conceptualizations of AI other than artificial intelligence, to further think about the modes of smart engagement within the digitally mediated society that smart cities of the future might look like. It is also a call for a kind of techno-social relational praxis yet to emerge—representing urban spatial knowledge and complexity in ways that do not obscure but strive to center the generative, reflexive, and inclusive aspects in the development of collectively intelligently generated spatial information, artificial or not.

Key Words : Smart city, Futurings, Smart engagement, Smart citizen, Collective intelligence

요약 : 이 논문은 현재 알려져 있는 스마트 시티의 이론과 실천을 예리하게 주시하면서, 데이터 및 도시와의 다른 관계를 지향하는 비판적 기술-사회적 실천(critical techno-social praxis)의 구상을 제시하고 스마트 시티의 '또 다른(otherwise)' 미래를 개념화한다. 이는 새로운 디지털 기술의 생산과 혁신적 활동의 새로운 형태 및 구조가 기존의 도시 조직 속에 어떻게 자리 잡는지에 대한 질문에 답하고 있다. 또한, 지역사회의 자원, 우선순위, 그리고 내재된 지식에 기반하여 스마트 시티와 스마트 어바니즘을 실현하기 위한 대안적이고 다층적인 비전을 어떻게 새롭게 구상하고 창출할 수 있을지에 대해서도 다룬다. 이러한 질문들은 포용적이고 공정하며 참여적이고 창의적인 뿐만 아니라, 지역사회공동체의 특성을 존중하는 스마트 도시가 지닌 더 폭넓은 가능성과 연결한다. 이 논의는 스마트 시티의 미래가 구현될 디지털 매개 사회 속에서의 스마트 참여의 방식들을 고찰하기 위해, 도시의 기술적(technical/technological) 인프라와 플랫폼, 스마트 시민권과 스마트 어바니즘, 그리고 '인공지능(Artificial Intelligence)'이 아닌 다른 관점에서의 AI에 대한 재개념화를 다룬다. 이는 또한 아직 등장하지 않은 일종의 기술-사회적 관계형 실천에 대한 요구이기도 하다. 즉, 인공지능이든 아니든 집단적으로, 지성적으로 생성된 공간 정보 개발에서 생성적, 반사적, 포괄적인 측면을 모호하지 않고 중심에 두도록 노력하는 방식으로 도시 공간 지식과 복잡성을 표현하는 것이라 할 수 있다.

주요어 : 스마트 시티, 미래 구상, 스마트 참여, 스마트 시민, 집단 지성

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I. Preamble

Space evolves. It always becomes something (else). The theory of urban space provides us with the foundational insights into urban space—the meanings of space are contextualized not just by physical, but also by social, cultural, historical, and now digital environments that shape and are shaped by people’s everyday experiences (Lefebvre, 1991; Brook and Dunn, 2011; Tally Jr., 2013). Re-imagining urban spatiality requires a creative rethinking of space, and it is critical, or even a prerequisite, for understanding urban transformation. The smart city relates urban transformation to build new urban models that raise the city’s competitive power and efficiency; however, we also see the changing urban spatiality from the ordinary citizens’ creative engagement and reworkings with (already-familiar) everyday smart technologies and infrastructure (Figure 1). Seeing a Kakao Friends¹⁾ character drawn by hundreds of drones in one of the

popular beaches in Busan, Korea, and a person brought their chair to the shore to cool down a hot summer night heat holding their phone on hand, help us realize the complex socio-spatial entanglements of everyday urban life imbued with ubiquitous yet popular technologies: a smart city lived from the ground up, reshaping quotidian urban experience in ways both familiar and unprecedented. This is a smart city to better live our daily urban life, and this is urban life, but not as we knew it (before). Digital mediation of ‘technological everyday’ (Barns, 2019) creates these new socio-spatial relations in cities. These are moments of new openings: invitations to imagine not only the smart city we want or don’t want, but the smart city that emerges from how and what we imagine it to be. Making space for such possibilities, for difference, for alternative futures, is precisely what is at stake in thinking critically about the futurings of the smart city. Using the lens of ‘futurings’ (Urry, 2016; Datta, 2019). What would be new visions, facets, methods,

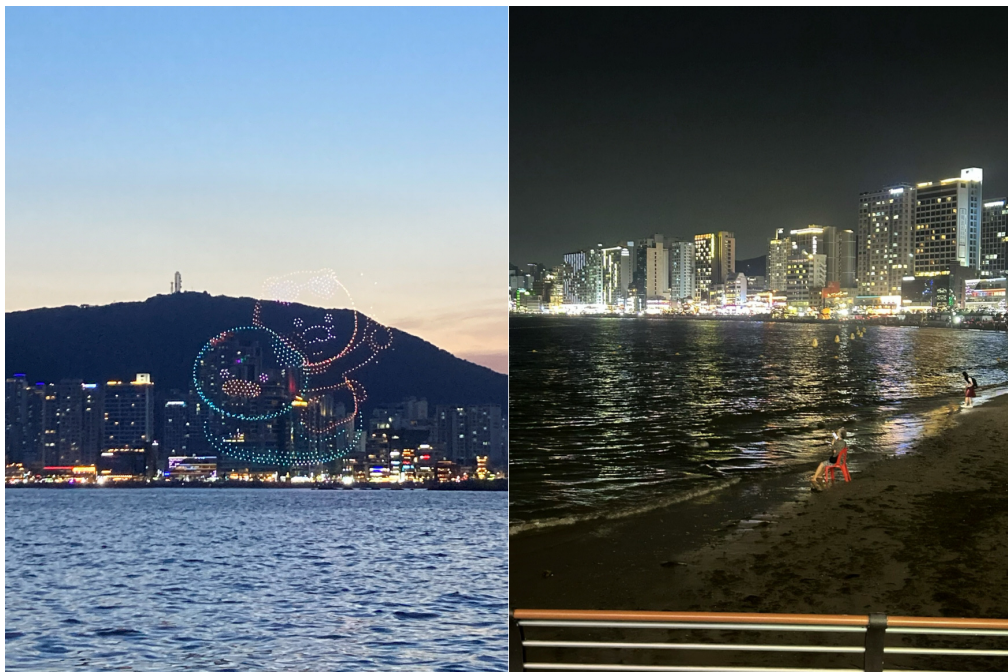


Fig. 1. A. Drone show in Gwangalli Beach, Busan, Korea (left); B. A woman sitting on a chair by the seaside, looking at her phone (right).

Source : Photos taken by the author, July 2025.

practices, and tools for enabling smart cities and smart urbanism? How can we re-imagine the connections between cities, innovation, technologies, and new collective visions and practices for enabling smart cities and smart urbanism grounded in place-based resources, priorities, and knowledge? We attempt to answer these questions by examining a practice of imagining as a way to rethink what alternative smart urbanism means, developing a critical techno-social praxis oriented towards alternative relations with data and cities. Drawing on theories of urban space and everyday life, it conceptualizes otherwise futures of the smart city while remaining attentive to the theories and practices currently taking shape.

II. Visions of Smart Cities, Citizenship, and Community-Centered Orientations

Smart cities are promoted as technology-enabled environments where data and digital infrastructures connect citizens to one another, to urban services, and to the broader urban environment and rhythms of life (Hall and Dávila, 2023). Advocates of smart urbanism have asserted their own visions extolling the functional and perhaps even liberatory potential of smart technology and smart citizens. Songdo, Korea, and Masdar City, Abu Dhabi, for instance, have been idealized as models of smart city planning (Easterling, 2014; Roche, 2014; Yang, 2020; Cugurullo, 2021; Kim, 2024). In urban spaces such as these—which have in some cases been built from the ground up completely with smart ideals in mind—the techno-social landscape has been rationalized not only in terms of efficiency and optimization, but as being in service to the public interest to the degree that “smart” is underscored as synonymous with “secure,” “safe,” “sustainable,” “green,” and “future.” Here, smartness becomes the organizing concept for an emerging form of technical rationality whose major goal is the management of an uncertain future through constant and iterative evaluation, perpetuation, and

self-referential data collection and monitoring. Critics of such smart city visions (i.e., Cardullo and Kitchin, 2019a; Dalton *et al.*, 2020; Leszczynski, 2020; Kitchin, 2022; van Ditmar, 2022; Cook and Karvonen, 2024) have sharply questioned the ideological-material power deployed in smart city discourse. Their critiques center on the fact that smart city frameworks reduce the complexity, messiness, and subjectivity of urban life to digitally legible, calculable, and classifiable systems oriented toward algorithmic and computational decision making. In doing so, they efficiently permeate common sensibilities and narrative socio-spatial imaginaries and narratives, reshaping and altering everyday life in ways that profoundly shape techno-social, techno-material, and social-relational futures in the image of narrowly defined normative rationality.

Technology- and data-centered smart city frameworks, however, are closely interwoven with entrepreneurial and neoliberal agendas of urban development, which include visions of urban space shaped largely by the integrated platforms of large transnational corporations such as IBM, Siemens, Microsoft, Apple, and Alphabet (Hollands, 2008; Lorinc, 2022; O’Kane, 2022; Söderström and Datta, 2024). This conceptualization of the smart city and the efforts for implementation are seen as a way for private and corporate interests to further interject themselves into urban governance and development processes in a top-down, centralized manner and as iterations of capitalistic neoliberal urbanism. As a form of “instrumental rationality,” Shannon Mattern (2021) points out that smart cities promote a technocratic model of urban governance that presumes that various aspects of a city can be monitored and quantified as technical/technological problems. Mattern argues that these framings fail to take into account the experience of the actual people living in the city. Morozov and Bria (2018) similarly call this perspective “solutionism,” where urban problems could be redressed through technical solutions. These emerging discourses indelibly require a rethinking of smart citizenship by considering the relationship between citizenship and technological

infrastructure (Cardullo and Kitchin, 2019b; Shelton and Lodato, 2019; Chang and Chung, 2023).

Gabrys (2014; 2016), for example, captures this dynamic through the concept of citizens as sensors; rather than active civic participants, citizens become nodes in a monitoring network, feeding data back into the urban system. This reconfiguration becomes a form of constitutive (often passive) citizenship—citizenship transforming into citizen sensing, embodied through practices undertaken in response to and communicated with the algorithmic and computational environment and technological infrastructure. Kitchin, Lauriault, and McArdle (2016) further extend this critique, arguing that data-driven governance tends toward a reductive understanding of cities and their functions, tracking processes longitudinally through automated data collection and analysis while displacing the harder political questions of how they actually access, use, and own these urban data infrastructures.

There are also increasing concerns around pervasive surveillance and the creeping technocracy associated with the centering of big data in urban decision-making processes (Kitchin, 2014; Klauser, 2017; Dalton *et al.*, 2020; Thatcher and Dalton, 2022). Zuboff (2019) defines “surveillance capitalism” as the translation of human experience into raw data for behavioral extraction. The fundamental goal of these capitalist data practices is not to fully capture people’s experience, but rather to render them as a calculable data subject within systems of production and consumption. Similar to Mattern’s (2021) statement that a city is not a computer, the risk is that, in the drive to implement technological systems that maximize efficient movement of people through urban space, people (ironically) themselves are paradoxically left out (Leszczynski, 2016). What is needed then is the new urban ecology of the smart city, one that not only serves to optimize urban metrics but also catalyzes, supplements, and centers the awareness of the bodies [smart citizens] on the ground who are actually living within and impacted by these technical/technological urban data infrastructures (Larkin, 2013; Easterling,

2014; Tavmen, 2020).

Often emerging directly from the critiques of normative technocratic visions of smart cities, community-centered smart orientation targets to processes and applications of technology that might tap into urban inhabitants’ collaborative, democratic approaches in through which cities provide access to data and allow citizens to be part of the urban innovation (McLaren and Agyeman, 2015; Costa and Oliveira, 2017; Anderson and Jung, 2023; Hall and Dávila, 2023). However, these more participatory orientations often serve as commodifying interests and deepen structural barriers by treating urban inhabitants as sources of data to be mined, clicked, or consumed (Flynn, 2022), often exacerbating existing unjust power structures that leave many citizens out of smart city initiatives (Burns and Andrucki, 2021). Unfortunately, this could be considered a (re-)branding of smart cities as ‘citizen-focused’ or ‘citizen-engaged’ constructs (Cardullo and Kitchin, 2019a; 2019b), despite the fact that such re-branding may be simply reproducing the existing neoliberal smart city framework that deepens and perpetuates structural barriers to socio-political participation. Smart city, in this context, is an inspiring yet contradictory concept because it creates both prosperity and precarity.

III. Prospects for Smart Engagement

The promise of a smart city imagination is that of a predicted experiential algorithm designed to facilitate alignment with the operational infrastructure of the city while appearing customized enough to offset the regulatory reality of systems of control. It is the city that is imagined to be ‘smart’—adaptive, responsive, reliable, and ostensibly neutral—not the people themselves. We believe the opposite to be the case. The ideal smart citizen is someone who can constantly adapt, learn, and remain resilient to changing technologies and environments. The new behavioral norm of smartness and the construction of the smart citizen embed a new vision—

active engagement, contribution, participation, and immersion into the activity of sensing (Rose, 2020; Zandbergen and Uitermark, 2020; Tavmen, 2023). Drawing from participatory and collaborative planning theory and practices, the questions that emphasize ethical, responsible, and just uses of data and AI may further enhance smart engagement (Jang *et al.*, 2024; Lavista Ferres and Weeks, 2024; Williams, 2025).

*Better Reykjavik*²⁾ and *Active Citizen*³⁾ are open-source projects in Reykjavik, Iceland, that simplify civic participation by bringing AI algorithms and Virtual Reality (VR) to citizens for democratic and civic purposes. The projects establish participatory democracy and participatory budgeting in Iceland's capital and work to improve the legal environment. Through the Active Citizen platform, citizens, for example, communicate, debate, and participate in a structured decision-making process. This well resonates with ongoing municipalist experiments that have included the development of an overarching digital transformation roadmap grounded in citizens' ideas (Morozov and Bria, 2018). For example, an open-source platform, *Decidim*,⁴⁾ an open-source

platform in Barcelona, Spain, allows any resident of the city to submit their proposals and priorities for budgetary allocations. These examples illustrate emerging processes through which citizens and local municipalities share information, interact, and make collective decisions, forging collective identities and generating shared common resources along the way.

Seoul's *mVoting*⁵⁾ and Busan's *Smart Ocean Village Platform*,⁶⁾ developed by the Korea Institute of Ocean Science and Technology (KIOST), are exemplary data-driven and AI-powered smart engagement technologies and platforms in Korea. The mVoting is a mobile app for real-time citizen participation, used in participatory budgeting, urban project and policy polling. It enhances participatory and transparent (smart) governance via smartphones and a blockchain-secured platform. The Smart Ocean Village Platform delivers integrated marine-environment monitoring data—including information on floating debris, marine fine dust, and local marine industry trends—while providing location-based citizen participation services and supporting data-driven analysis (Figure 2). This platform operates on principles

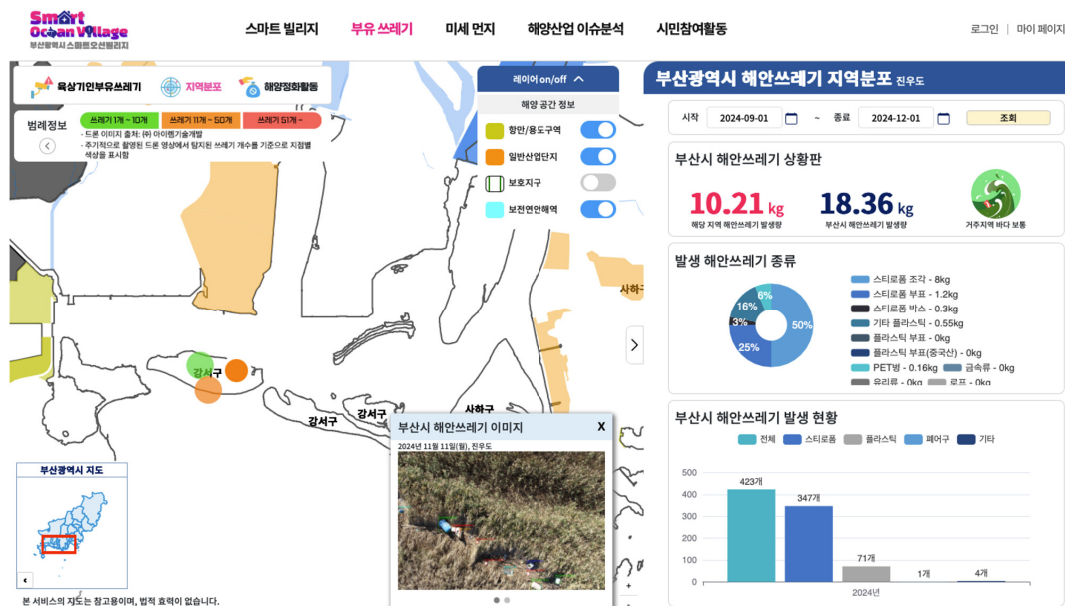


Fig. 2. Screenshot of Smart Ocean Village Platform: Floating Marine Debris Monitoring, KIOST, Busan, Korea
Source : Smart Ocean Village, <https://sov-busan.co.kr/marine-debris.do#>

of locally tailored environmental data services, leveraging technologies such as CCTV, satellite imagery, drones, and AI. These technologies enable citizens to share their information and stimulate engagement through an intelligent, data-driven platform. It is important to examine these efforts and their potentials for more collaborative and participatory orientations, ones that might be productively redirected toward the diverse and generative qualities of community life in already-existing urban spaces.

The Seattle of Tomorrow is often narrated as the Seattle⁷⁾ of Amazon, Microsoft, Boeing, Adobe, and numerous IT and biotech companies working to expand the technical possibilities of the future. However, the city has also shown serious interest in developing ‘smart’ initiatives that explicitly prioritize collective decision-making through processes that are tailored to the qualities, needs, and interests of existing people and

places, and that integrate the experiences of everyday citizens. *Smart Seattle* is a collaboration between the City of Seattle, King County, Microsoft, and the University of Washington (Seattle Department of Transportation, 2020) focused on smart transportation planning. This initiative has piloted free and publicly available crowd-sourcing apps through which residents can provide and benefit from real-time information on changing conditions. It explicitly targets what it calls “equity areas”—spaces with particularly important transit links for commuters trying to navigate the increasing spatial mismatch (Wilson, 1987) between the locations of affordable housing (increasingly on the periphery of the city and region) and jobs (largely concentrated in or near the areas with high-cost areas) (Figure 3A). These equity-centered areas align with historically marginalized areas and communities—including redlined neighborhoods⁸⁾ that remain most vulnerable to displacement from

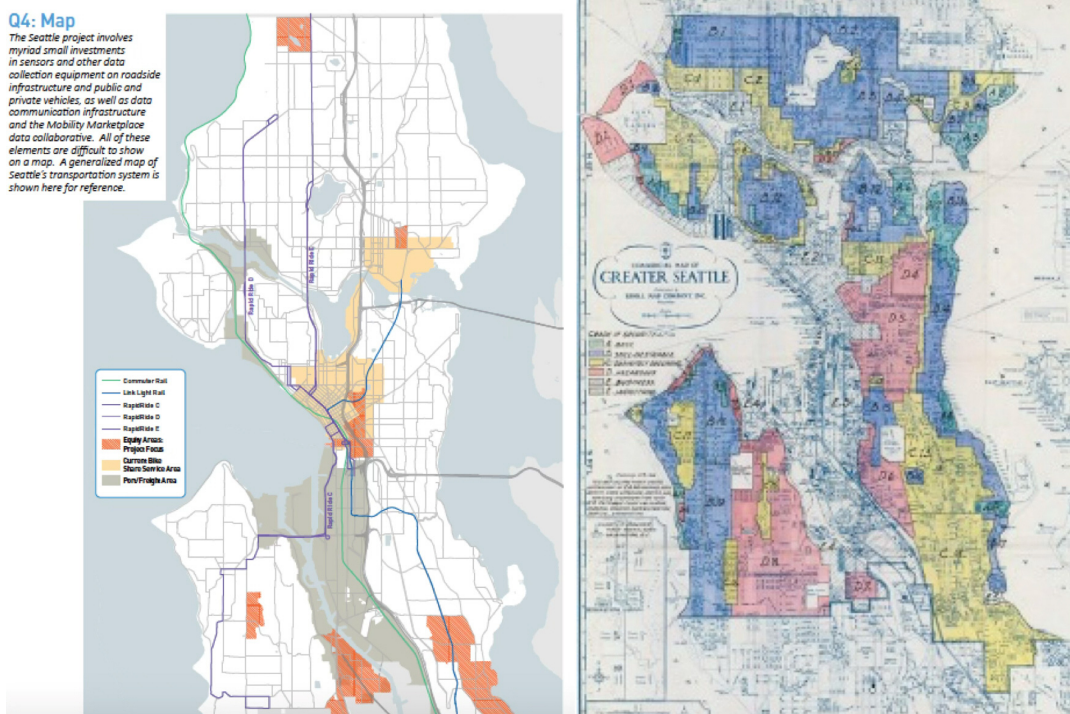


Fig. 3. A. Equity-centered areas in *Smart Seattle* Plan (left); B. Historic Redlining Map of Seattle (1936) (right)

Source : Seattle Department of Transportation, 2020:13 (left); Home Owners' Loan Corporation Security Map and Area Descriptions, 1936 (right).

gentrification and redevelopment (Figure 3B).⁹⁾ The Digital Equity Initiative seeks to ensure that all residents and neighborhoods have access to and know how to utilize information technologies that are increasingly essential for accessing information and economic opportunities. *Smart Seattle* explicitly names potential forms of technologically mediated civic engagement as one of its core priorities.

An accompanying Innovation Advisory Council facilitates information and technology sharing between the local tech industry and the City to better address ongoing crises of homelessness, affordable housing, and mobility, as well as services provision, with a stated priority on racial, social, and spatial justice. In December 2023, the city unveiled a new strategy, *One Seattle Data Strategy*, as its vision for the future data policy and smart city planning (City of Seattle, 2023). Six key focuses shape its data plans: innovation, evidence, collaboration, community, stewardship, and equity and inclusion. The project, *P-Patch Equity Analysis*, that demonstrates how data power can help communities identify resources for applying for a new community garden location and streamline that process. Another project, the *Racial and Social Equity (RSE) Index* project, supports data-driven decision-making and optimizes resource use and allocation by providing relevant socio-spatial and demographic

information about communities.

Beyond city-led initiatives, existing urban place-based knowledge, community-embedded capacities, institutional frameworks, and relationship, and social infrastructure offer rich resources for a “smart engagement” approach. These assets allow us to imagine how and what “smart” approaches could be re-tooled to enliven, support, and sustain participatory and inclusive processes, diverse economic and planning activities, and collective structures of data and processes of cooperative data analysis and representation within already-existing communities. Wa Na Wari¹⁰⁾ is a local community organization in Seattle’s Central District that creates community space in and through community events and activities explicitly counter to what its members see as the creeping naturalization of gentrification and the erasure of Black presence and history in the neighborhood¹¹⁾. The organization deliberately facilitates opportunities for contact and connection, holding space for Black sociality, relationships, and organizing plots, despite and against the space-time expansion (Katz, 1996) that the Black community has experienced in the wake of gentrification.¹²⁾ Wa Na Wari constantly showcases Black creativity and hosts events of different varieties and scales, including an annual event that shuts down a 10-block area and invites the public to come to experience and imagine



Fig. 4. 2023 Walk the Block, Organized by Wa Na Wari, Seattle, WA.

Source : Photos taken by the author, October 2023.

what the space of the neighborhood could look like if this vision were scaled up to a larger district for Black culture and arts (Figure 4). *Walk the Block*, organized by Wa Na Wari, is the annual event, indeed creating space for ownership, possibility, and belonging through art, historic preservation, and community connection with different forms of gathering, celebration, and innovation.

The Seattle Black Spatial Histories Institute (SBSHI)¹³⁾ trains cohorts of community researchers—not university-based researchers, but people from the community who get selected through a competitive application process—in archival, oral history, mapping, and place-based methods, and then supports them through stipends and workshops as they develop, conduct, and share research. This work is framed explicitly as collective, public-facing spatial history work—an intervention in the narratives, sensibilities, and indeed place-based knowledges that circulate in and about spaces and, in turn, shape the kinds of futures and social relations that can be imagined for and from them. The Institute’s work centers on studying spatial histories and patterns, gathering community data, and activating particular knowledges to highlight certain capacities, practices, and relations, and in the process engaging different communities and publics in thinking critically and carefully about these processes and their stakes. This approach directly invokes the Detroit Geographic Expedition and Institute (DGEI) (Horvath, 1971; Heyman, 2007) and reflects a commitment to activating spatially gathered data through university-community partnerships as a model for smart engagement.

While the effectiveness and impact of these initiatives remain open questions, the examples from Seattle, both city-led and community-led, signal a clear alignment with many of the values and practices of what we consider *smart engagement*—developing processes and technologies that facilitate, crowdsource, and freely share decision making power to and with communities; thinking about equity, inclusion, and justice in relation to technology; and making strategic investments in existing place and communities rather than treating

“smartness” as a technocratic *tabula rasa* of urban governance.

IV. Alternative Futures of Smart Cities and AI (Other Than Artificial Intelligence)

Any conversation about the smart city as a future-oriented socio-technical urban imaginary should be integrative, attentive to its spatiality and its people, while imagining space and communities of the future. Urban innovation is central to many conceptualizations of urbanism and cities, and it must incorporate the creativity and resourcefulness of the residents who have figured out how to persist and thrive despite historical discrimination, segregation, and other structural-historical barriers. A future in which already existing community-based knowledge and intelligence triggers urban innovation, where its future is not only dreamed or imagined, but also continues being realized, materialized, localized, and spatialized—brought to life in the larger context of intelligently and spatially generated futures, artificial or not. How can we think and act deeply and generatively about the processes, modes, and rules of shared engagement, forms of investment, technologies, and resource cultivation that could identify, describe, augment, and grow already existing urban place-based knowledge for smart cities? Elwood (2021) suggests approaching [smart] urbanism beyond “hope and fear” framings. It may also be time for us to make a difficult decision, for example, demoting the end goals of efficiency and optimization in favor of “meaningful inefficiency” that favors connection and reflection—the opposite of dominant smart urbanism trends—an opening toward alternative city-building or ‘other futurings’. Time and place are political claims, as we might unexpectedly be reminded by the billboard advertisement of the Korea Development Bank at Busan Train Station: “The future is a direction, not a (matter of) time.” (Figure 5).

To imagine or work toward a future is to make claims

about the lives, lands, and relations that comprise it (Elwood, 2024:1). Like the contrasting but co-existing images of the rendered future smart cities alongside living creatures and their habitats (Figure 6), we argue for a subtle yet integrative perspective and practice on

the smart city—one that holds together future-oriented imagination and present reality, materiality and digitality, physicality and environmentality. Like an ambient sound in the background, there may be a case for *Ambient Intelligence* (Fraser and Wilmott, 2020)—smart cities



Fig. 5. Korea Development Bank Billboard at Busan Station, Busan, Korea.

Source : Photo taken by the author, July 2025.



Fig. 6. Busan's Eco-Delta City Observatory Model, designed inspired by an organic form of a migrant bird's habitat (left); A Bird's Nest at Eco-Delta City Observatory

Source : Busan Eco Delta City Observatory, https://dajaud.com/?dt_portfolio=busan-eco-delta-city-observatory (left); Photo taken by the author, 2025 (right).

characterized by lots of messy materiality, residual media, and competing notions of intelligence that reflect diverse and often conflicting epistemologies and politics.

Indigenous futurism and Afrofuturism hold vital conceptual and analytic insights for thinking and realizing AI urbanism and smart city futures that assemble time, space, and digitality in just and life-sustaining ways. Ruha Benjamin (2019; 2022) has argued that technology is not a producer of bias; rather, societal [social] inequalities produce certain kinds of technologies, ones that are more biased. Technology is thus a symptom of underlying structural conditions, not a cause of inequality. Summers (2022) draws on utopian visions from these Afrofuturist authors to read the urban present, calling for attention to already-existing socio-technological practices of “intrepid urbanism,” a process already engaged in reclamation, repair, and repurposing from within urban ruination, demonstrating alternative futures to techno capitalist urban hellscape (Summers 2022:3). Redressing perpetuating inequality in society and attending to already-existing digitally mediated futurings that exceed the terms of hegemonic technoculture is the praxis of *Ancestral Intelligence*, as a manifesto for/of different imagination [of smart city].

Similarly, *Abundant Intelligence*¹⁴⁾ is an Indigenous-led research program that reimagines how AI might be conceptualized and designed based on Indigenous Knowledge (IK) systems that foster the flourishing of Indigenous communities. The project aims to integrate and adapt the existing knowledge we generate to help guide the AI development more broadly toward a more humane future.

There is also a community of people who explore artificial intelligence through tattooing—*Artificial INKtelligence*.¹⁵⁾ Knowle West Media Center in the U.K. invites local people to upload photos and stories of their tattoos to the center’s database, collectively archiving the personal stories and memories embedded/embodied in body art. Beyond its speculative dimension, the project prompts a broader exploration of data privacy and the potential to harness AI in the service of communities.

These are all already existing digitally-mediated “other futurings” that exceed the terms of hegemonic technocultures: futuring largely distanced from dominant normative smart city discourse and practice.

V. Closing

Attention to, cultivation of, and investment in incorporating humanistic values into the design of smart cities, such as rethinking of AI from artificial to ambient, ancestral, abundant, and a more playful iteration of intelligence like inkintelligence, can reveal how technologies both perform and produce particular social realities. This re-orientation can lead to the identification and enhancement of process and social, spatial, and technological innovation, not only for economic development, but also for inclusiveness, resilience, democracy, and collective smart citizenship. It allows us to continue thinking about and imagining how smart approaches could be reworked and repurposed to enliven, support, and sustain organizing and participatory processes of cooperative analysis among already existing community-based urban knowledge—a form of collective human (counter) intelligence. It is a foundation for building critical, mutually reciprocal relations with smartness that assemble sociality, spatiality, environmentality, and digitality in just and sustainable ways: aspirations for alternative/multiple [intelligently and spatially generated] other(wise) futurings of the smart city and reminders that the (smart) city has always been an epistemological infrastructure that has been entangled with and embracing of other knowledge, vision, and technologies.

Notes

- 1) A popular lineup of cartoon characters created by South Korea’s top messaging app, Kakao Talk (<https://www.kakaocorp.com>)

- 2) Better Reykjavik, https://citizens.is/portfolio_page/better_reykjavik/
- 3) Active Citizen, <https://www.citizens.is/wp-content/uploads/2017/11/Active-Citizen-Short-Description.pdf>
- 4) Decidim, Barcelona, <https://www.decidim.barcelona>
- 5) ‘Mobile Voting App’: m-Voting, <https://seoul.solution.kr/en/content/‘mobile-voting-app’-m-voting>
- 6) Busan’s Smart Ocean Village: A Data Driven Intelligent Marine Environment Management Platform, <https://www.busan.go.kr/eng/ai-translated-press-releases/1686205>; Smart Ocean Village Platform Promotion Video: <https://youtu.be/kgv2pGsBVhA?si=aIN-5OrRVfcy8DVj>
- 7) We focused on Seattle, Washington, as the main case study in this article. We used Burawoy’s (1998) extended case method to connect localized conditions and practices across both time and space, showing how an analysis of the examples of Seattle, not only relates to other places across the globe, but also how it can be connected with and contributes to a transnational perspective of alternative futurings of smart cities and smart urbanism.
- 8) Redlining as a term has its roots in government efforts to buttress faltering housing markets during the Great Depression. In the late 1930s, the Federal Homeowners’ Loan Corporation (HOLC) undertook a project to evaluate mortgage risks in cities across the U.S. It rated neighborhoods as “best,” “still desirable,” “definitely declining,” and “hazardous.” The idea was that by showing lenders neighborhoods that were good for lending mortgage. However, it also created a negative externality, such as racial housing discrimination (See, Kaplan, Holloway, and Wheeler (2014: 210–211)).
- 9) This will echo what has happened in other

cities and their urban contexts in the U.S. and across the world.

- 10) Wa Na Wari, <https://www.wanawari.org>
- 11) Central District is a historically Black neighborhood, and it is right in the heart of historically segregated Seattle and in the heat of ongoing displacement risk.
- 12) Wa Na Wari has been described “the house that fights displacement with art,” and the leadership cohort are fond of saying that the best way to fight gentrification is to throw parties. And that’s not a joke, because it gets at some really fundamental things.
- 13) One of the authors was lucky to be co-thinkers and collaborators in one of the many initiatives that Wa Na Wari has supported as it has grown, including the Seattle Black Spatial Histories Institute (SBSHI).
- 14) <https://abundant-intelligences.net>
- 15) Artificial INKtelligence, <https://kwmc.org.uk/blog/artificial-inktelligence/>

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