

Data for the Night: Digital Rights, Trust, and Responsible Engagement with Data in 24-Hour Cities

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1 Context

The emergence of a field called “Night Studies” over the last 15 years brought to light a much-needed approach to how urban governance is applied to the 24-hour cycle (Celis and González, 2020; Gwiazdzinski et al, 2020; Gwiazdzinski, and Straw, 2015 Kyba et al, 2020; Straw, 2020; Straw and Pearson, 2016). The urban night is a complex ecosystem encompassing policies and data related to mobility, healthcare, media, culture, entertainment, service industries, and much more (see fig. 1 on page 4). The closing down of the nighttime economy was one of the first and most dramatic social effects of the COVID-19 pandemic’s arrival in the West, following a decade in which the night of cities was a significant focus of interest from several quarters (Straw and Reia, 2021). These included city administrators and urban planners, data activists, institutions in the cultural field, and scholars engaged in measuring, understanding, and evaluating the night.

Beginning in the 1990s, various actors had pushed cities to acknowledge the role of their nighttime economies in fostering economic growth and attracting tourist spending. From 2000 on, municipalities seeking to develop their nights or resolve the conflicts that increasingly made the night a contentious time had developed a range of governance instruments – from night mayors and night councils to comprehensive multisectoral policies (VibeLab, 2021; Seijas and Gelders, 2020).

Even if the increasing datafication of urban spaces has impacted the city after dark, this aspect of urban life is rarely addressed by the overlapping debate of data and policy beyond public lighting and surveillance in smart cities. While certain cities rely heavily on big data to understand and manage their territories in real-time, the lack of (open, public) data to comprehend the night is still an issue. For years, discussions of the night have happened in isolation from discussions of data policy and various forms of urban intelligence (Goelzer, 2022). The lack of data focusing specifically on the nighttime economy, and broader analyses of the impact of a smart city agenda beyond daylight, leave

stakeholders – municipal governments, small business owners, neighbourhood associations, night-shifters, advocates, and communities – navigating challenging circumstances without essential information.

It is worth highlighting that the night is also a space for various marginalized communities whose exposure through open datasets and thoughtless policies might cause harm to its members, notably unhoused people, sex workers, queer communities, and undocumented immigrants (Reia, 2019, 2021). Keeping in mind the ethical issues (Davis et al, 2021; Raji et al, 2020; Zuiderwijk et al, 2021) that arise when using data – and considering the possibilities of self-determination to build trust between different stakeholders while incorporating civic engagement into this agenda – this paper presents an applied approach to urban data policies for the 24-hour city.

2. Research and policy question

The three main questions of this paper are:

1. How does the lack of access to consistent data about the nighttime ecosystem affect policymaking, urban governance, and citizen-centred data interactions?
2. What are the harmful practices in data collection, publishing and assessment concerning digital rights and who are they harming?
3. How would an agenda for responsible, trustful and ethical engagement with policy data interactions for the night look like?

3. Research methodology and data

This paper is based on both a three-year applied research project that aimed to understand responsible data science practices for the night in Montreal (Canada) and two years of experience as a member of the MTL 24/24 Night Council in the same city – where the author engaged with various

policies, such as the digital data charter (Montreal Urban Innovation Lab, 2020) and the nightlife policy, and contributed to efforts to open datasets for the residents.

The work presented here draws from fieldwork conducted in Montreal since 2019, featuring a combination of qualitative methods: interviews with key actors; participant observation at government departments and public consultations; policy and legal analyses; and mapping and analyzing open datasets related to the nighttime economy at the municipal, provincial, and federal level.

A significant part of this project was dedicated to translating research findings to broader audiences (Bélanger et al, 2020; Petrovics et al, 2021), including policymakers and citizen-centred initiatives. Navigating different contexts through a discussion anchored in responsible data science and digital rights allowed the author to design policy recommendations and participate in drafting regulatory frameworks.

4. Research and policy question

The main key findings are:

- The growing interest in ways to measure, understand and assess the urban night has been reflected in multiple publications – especially in the pandemic context, such as the Global Nighttime Recovery Plan and Creative Footprints – and in transnational networks of stakeholders collaborating to rethink data ethics, trust, and policy in the 24-hour city. This fact points out an opportunity to further discuss responsible policy data interactions across sectors and interests.
- Often, local governments already have a variety of datasets about the operation of their territories on a 24-hour basis. However, these are not openly or publicly available, deemed less relevant, or hard to identify. Residents were unaware of the existence of certain information, for example. Frequently, these datasets are not labelled or understood as crucial to nighttime economy stakeholders.
- Integrating databases across departments is a major challenge, with public agencies and services refusing to publish datasets (police, public transit). Civil servants have many questions and concerns about regulatory frameworks, gray areas, and digital rights. An ongoing conversation among different stakeholders about responsible policy data interactions is essential to advance this agenda.
- During fieldwork, industry-led policymaking around data and the nighttime economy was an

issue since it shapes regulatory frameworks (principles and charters) and decision-making processes. An exercise of identifying whose voices are heard (or not) in the process helps to anticipate and mitigate harms and design a public interest agenda.

- Harmful practices in data collection were identified (such as the publicization of personal data from marginalized communities); it is also worth mentioning the biases in data collection (mostly related to gender identities, religion, race, and ethnicity).
- The lack of mechanisms for civic engagement in data and policy (broadly) for the night (specifically) that go beyond public consultations conducted via email diminishes the opportunities to rethink digital rights and trust in the use of data for planning (and governing) the 24-hour city.

Keywords

Night; Montreal; Urban Governance; Ethics; Open Data; Civic Engagement; Policymaking.

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References

- Bélanger, A., Reia, J., Straw, W. 2020. *Portrait diagnostique de la vie nocturne à Montréal*. Soumis à Déborah Delaunay, Commissaire au bruit et à la nuit - Service du développement économique, Ville de Montréal.
- Celis, A. M., González, E. H. eds. 2020. *Noche urbana y economía nocturna en América del Norte*. México: Universidad Nacional Autónoma de México, Centro de Investigaciones sobre América del Norte.
- Davis, J. L., Williams, A., and Yang, M. W. 2021. Algorithmic repairation. *Big Data & Society*, 8(2).
- Goelzer, L. 2022. *Night Governance and Urban Data*. Urban AI, Medium. Available at: <https://medium.com/urban-ai/night-governance-and-urban-da-71228382d3d>

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Gwiazdzinski, L., Maggioli, M., and Straw, W. eds. 2020. *Night Studies: Regards Croisés Sur Les Nouveaux Visages de La Nuit*. Grenoble, France: Editions Elya.

Gwiazdzinski, L., and Straw, W. eds. 2015. Habiter (la nuit)/Inhabiting (the night), Special Issue, *Intermédialités* no. 26.

Kyba, C. C., Pritchard, S. B., Ekirch, A.R., Eldridge, A., Jechow, A., Preiser, C., Kunz, D., Henckel, D., Hölker, F., Barentine, J., Berge, J., Meier, J., Gwiazdzinski, L., Spitschan, M., Milan, M., Bach, S., Schroer, S., and Straw, W. 2020. Night Matters – Why the Interdisciplinary Field of “Night Studies” is Needed. *J*, 3(1), 1-6.

Montreal Urban Innovation Lab. 2020. *Montréal's Digital Data Charter*. Available at: https://laburbain.montreal.ca/sites/villeintelligente.montreal.ca/files/25817-charte_donnees_numeriques_ang.pdf

Petrovics, N. Seijas, A., Catherall, R., Reia, J., Straw, W. 2021. *Nighttime Governance in Times of Covid-19: Capacity Building for Night Mayors and other Nighttime Governance Institutions*. VibeLab. Available at: <https://www.nighttime.org/recoveryplan/>

Raji, I. D., Gebru, T., Mitchell, M., Buolamwini, J., Lee, J., and Denton, E. 2020. Saving Face: Investigating the Ethical Concerns of Facial Recognition Auditing. *AIES '20: Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*.

Reia, J. 2019. Can we play here? The regulation of street music, noise, and public spaces after dark. In Botta, G., and Stahl, G. eds. *Nocturnes: Popular Music and the Night*. London: Palgrave Macmillan.

Reia, J. 2021. Coabitando a noite urbana: entre políticas públicas e (in)visibilidades de gênero. In: Fernandes, C., Reia, J., and Gomes, P. eds. *Arte, comunicação e (trans)política: A potência dos femininos nas cidades*. Belo Horizonte: Fafich/Selo PPGCOM/UFMG.

Seijas A. and Gelders M.M. 2020. Governing the Night-Time City: The Rise of Night Mayors as a New Form of Urban Governance after Dark. *Urban Studies*, 58(2), p. 316–334.

Straw, W. 2020. Night Studies: Thinking Across Disciplines. *Voices of Mexico*, no. 111, p. 7-10.

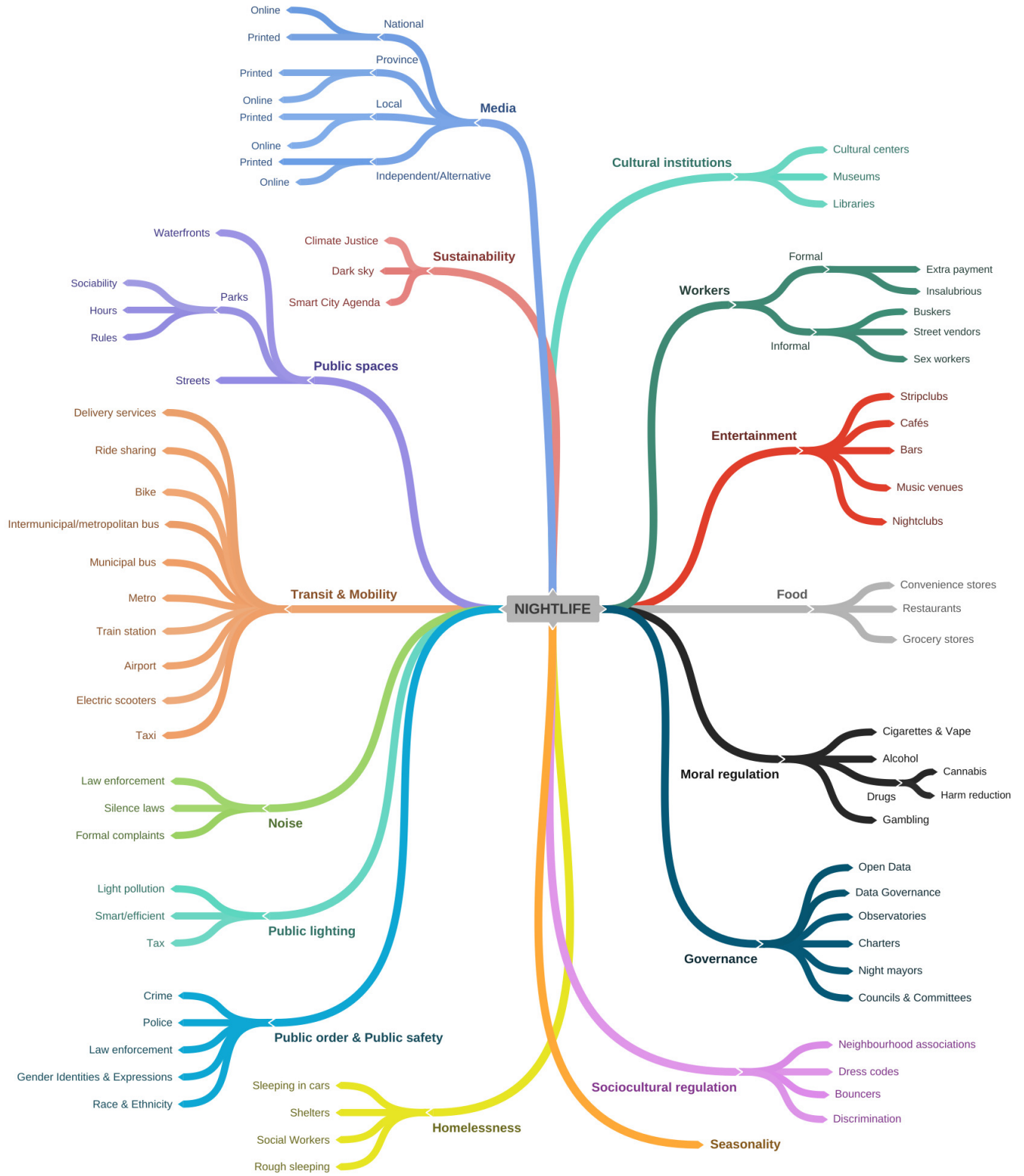
Straw, W., and Reia, J. 2021. Nightlife in a Pandemic. In Denis, J.L., Régis, C., and Weinstock, D. eds. *Pandemic Societies*. Montreal: McGill-Queen's University Press.

Straw, W., and Pearson, C. eds. 2016. “Night,” Special issue, *Scapegoat: Architecture, Landscape, Political Economy*, no. 10.

VibeLab. 2021. *Global Nighttime Recovery Plan*. Chapters 1 to 7. Available at: <https://www.nighttime.org/recoveryplan/>

Zuiderwijk, A., Chen, YC., and Salem, F. 2021. Implications of the use of artificial intelligence in public governance: A systematic literature review and a research agenda. *Government Information Quarterly*, (38)3.

Fig. 1 – Nightlife ecosystem



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