Fostering Inclusive Agentic AI for Cities

Foresight for FAIR cities - Exploring AI Risks and Mitigation Strategies

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Complex Systems Modelling and AI to Leave No One Behind | Responsible Computer Scientist

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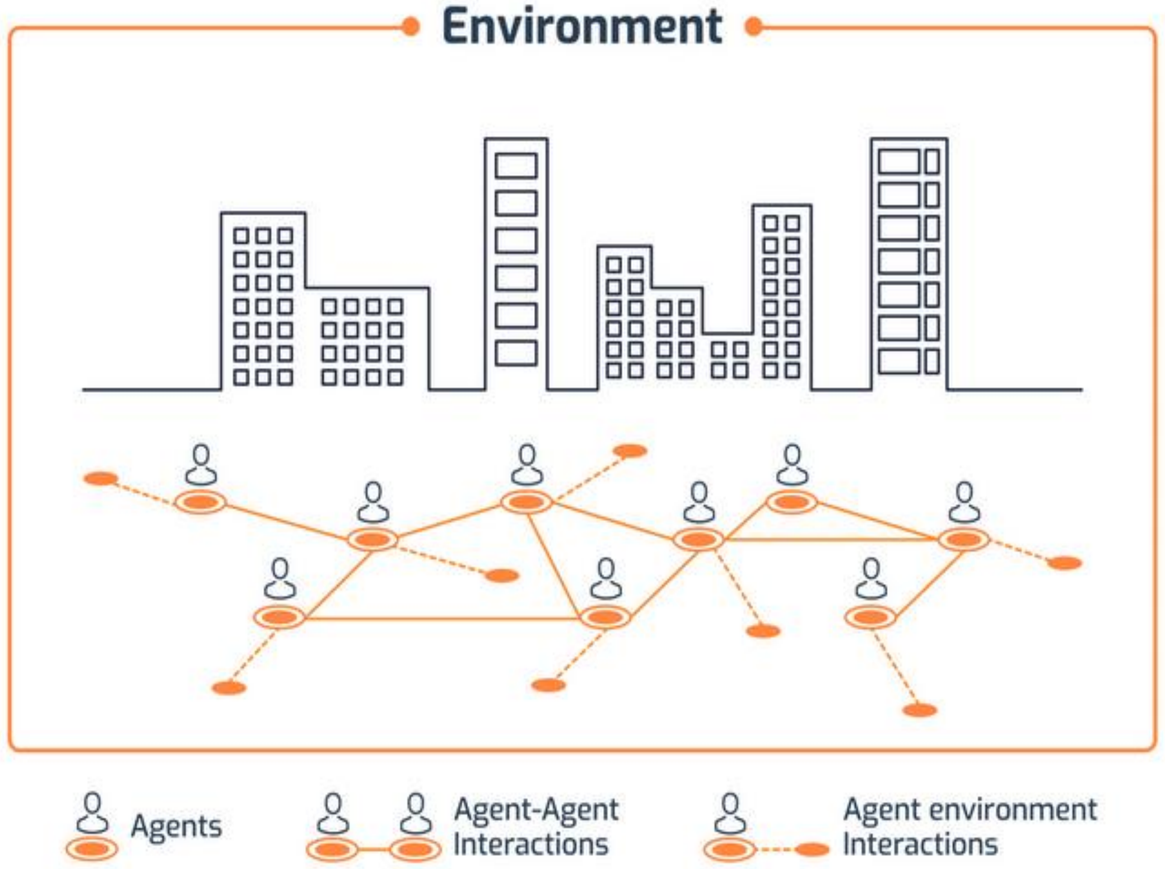
Simulating human behaviour with AI Agents for policymaking

- Possible to build simulation far more complex than traditional approaches.
- Agents are individuals, organisations or group of people, with specific characteristics and trying to mimic human behaviors.
- These social simulations aim to be useful to **explore foresight scenarios ("what-if questions").**
- Enable researchers and policymakers to test interventions and theories.
- **Examples developed at UNU: Next pandemic preparedness in local communities** (Kenya, Vietnam and Brazil) and **well being in cities** (15 minutes framework) (Hong Kong/Macau)**.**



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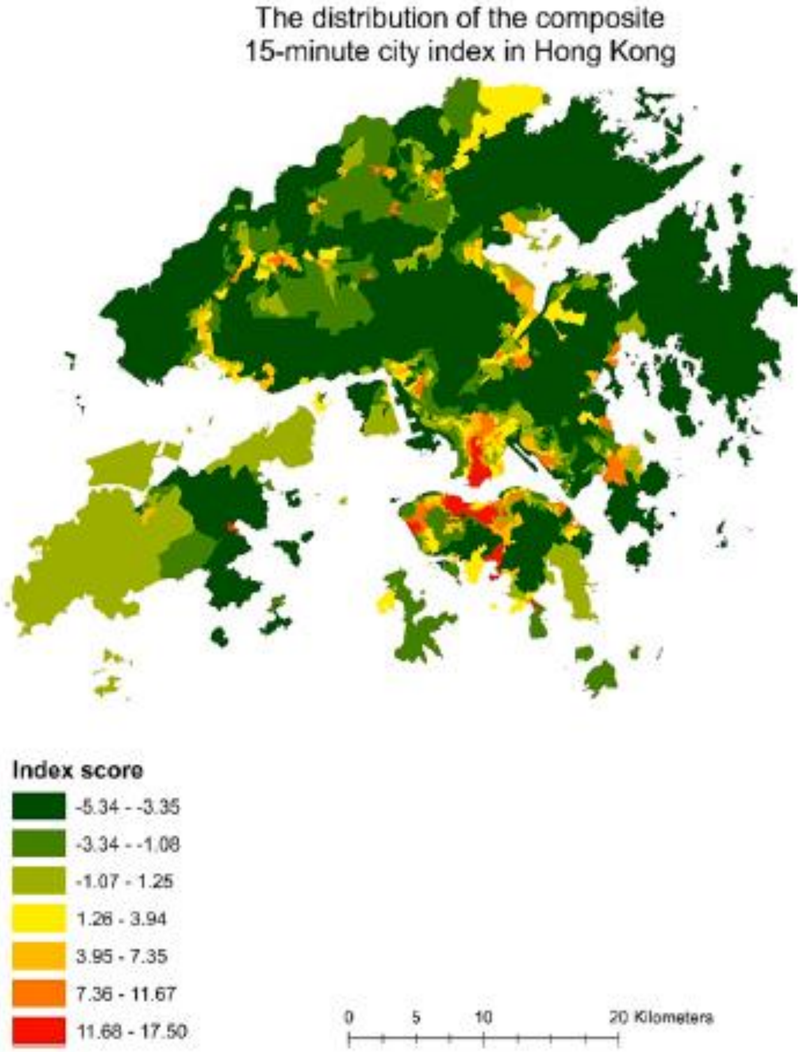
15-minute city principles: Putting people at the center of urban transformation

- Having all basic needs in a 15minutes walk.

- **Ecology** – Promoting sustainable urban living.
- **Proximity** – Reducing the need for long-distance travel.
- **Solidarity** – Fostering social connections among residents.
- **Democracy** – Encouraging citizen participation in urban governance.



Developing the 15-Minute City: A comprehensive assessment of the status in Hong Kong, Liu et al.

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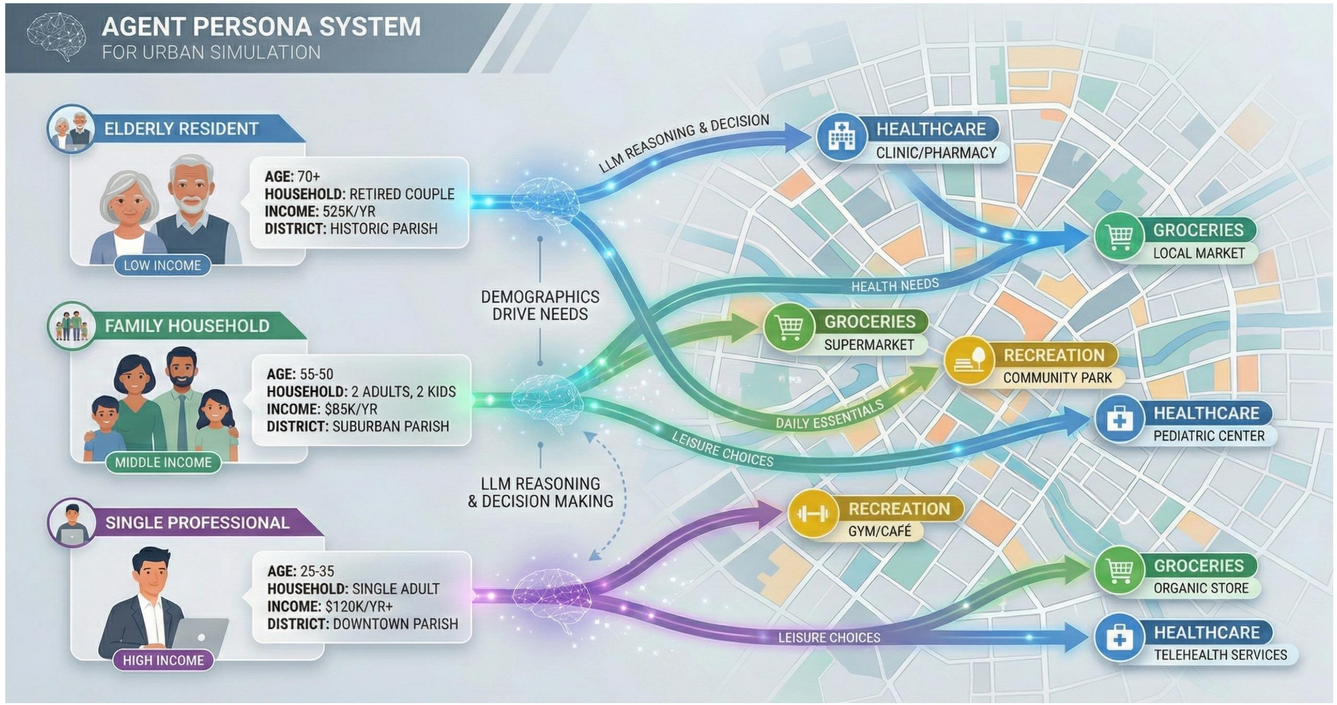
Liu, D., Wang, J., Song, J., Kwan, M.P., Fang, D., Ariga, T., Chen, Y. and Stinckwich, S., 2025. Exploring the inequality in fine-grained primary healthcare accessibility in Macau based on high-resolution geospatial data under the 15-minute city framework. *Applied Geography*, *174*, p.103473.

QuarterSociety: An agentic-based simulation for testing policies of the 15-min city



- Urban policies: Dynamic zoning reform
- Crisis management: assessing evacuation path
- Economic policies: basic income
- Environmental policies: limiting the use of carbon intensive means of transportation
- Healthcare policies: reducing cost of healthcare

https://github.com/UNU-Macau/QuarterSociety

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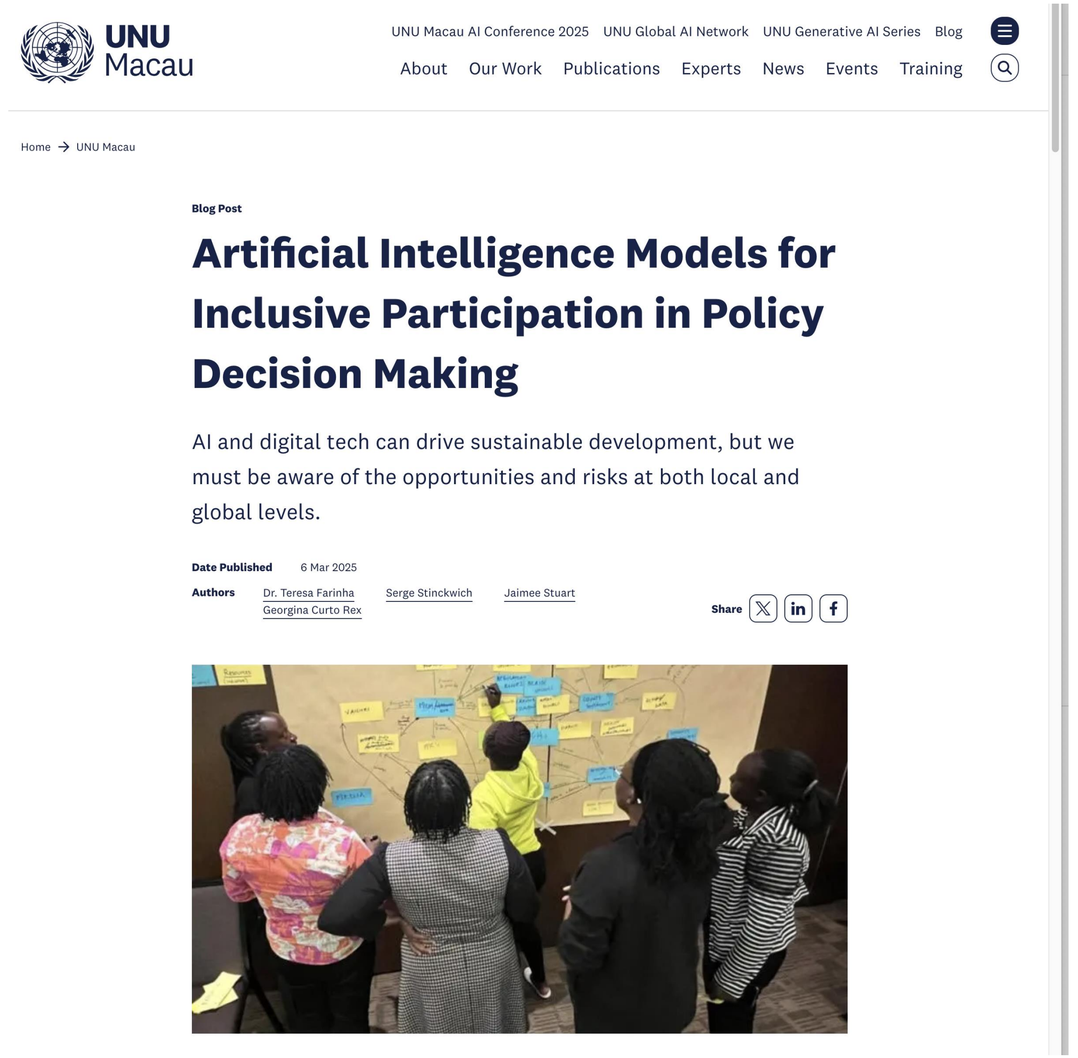
How AI can speak on behalf of Humans?

- AI Voice: AI systems are taking decisions on behalf of people
- Decision-making often lacks perspectives from unheard stakeholders, such as **nature** or **future generations**, but also the most **excluded persons**
- How AI systems can act as proxies for those who cannot advocates for themselves



Scheuermann, K. & Aristidou, A. (2024). Could AI Speak on Behalf of Future Humans? *Stanford Social Innovation Review*. https://doi.org/10.48558/N4BW-ND72

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Involve people in the design of decision making though Participatory Modeling

Participatory modelling seeks to foster stakeholder participation to **enhance understanding of problems**, mutual learning, democratic engagement, citizen empowerment, and better attune models to their decision-making and policy contexts, thereby leading to **improved collective intelligence**.

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S. Stinckwich and al. "Applying participatory modeling methods in pandemic preparedness and response: Pilot study in Brazil, Kenya and Vietnam" (Submitted to Game and Simulation Journal) 2026

If you want to collaborate on AI Agents for policymaking, let’s continue the conversation on LinkedIn

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