



Graphics representation

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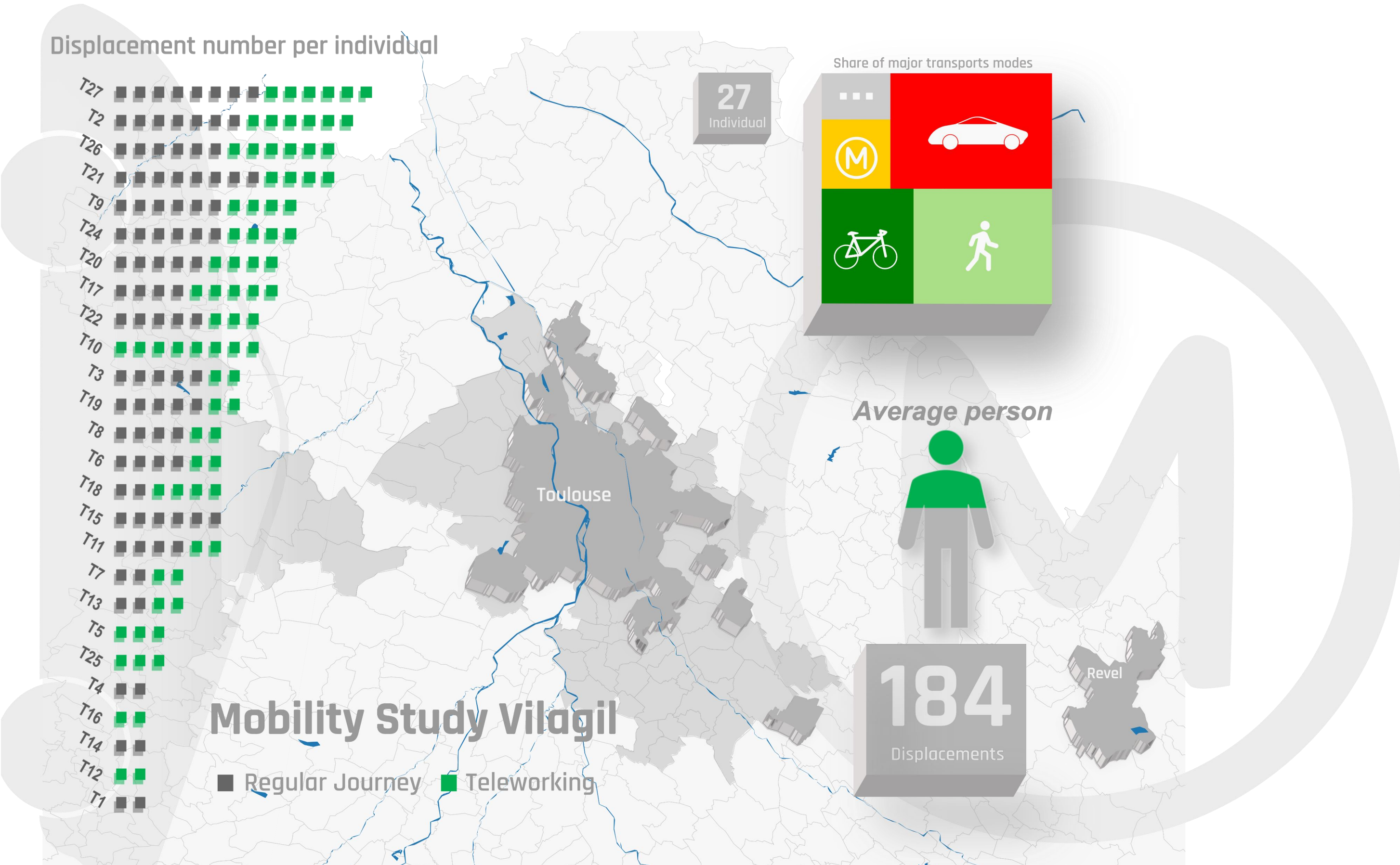
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Graphics representation

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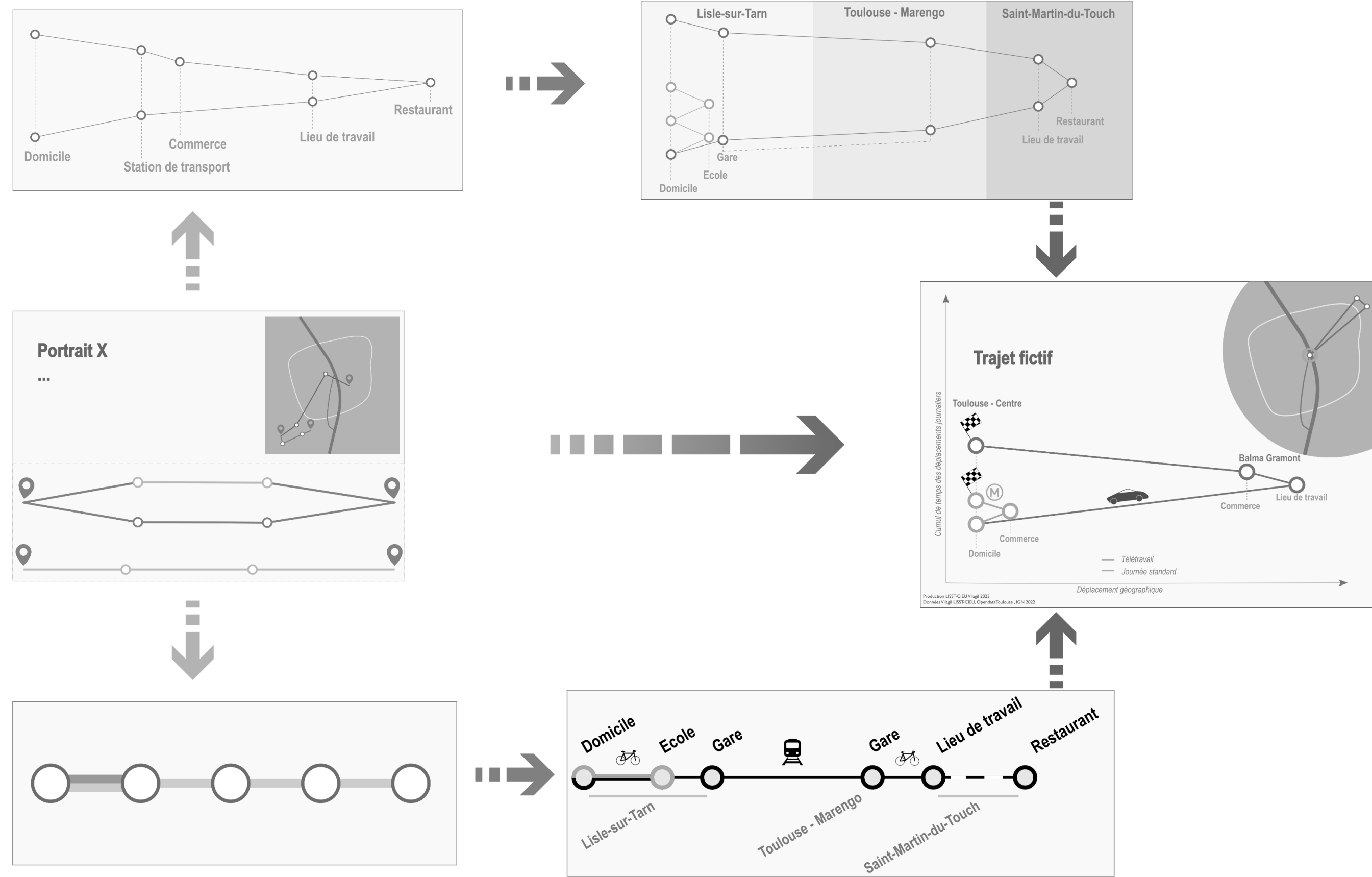
How to visualize and compare individuals space-time data ?

Initial data



The data to be represented	Spatio-temporal trajectory				
	Stages		Displacements		
	Places Municipalities, neighborhoods	Label home, Workplace ...	Transport mode	Duration	

Creative process



Perspective

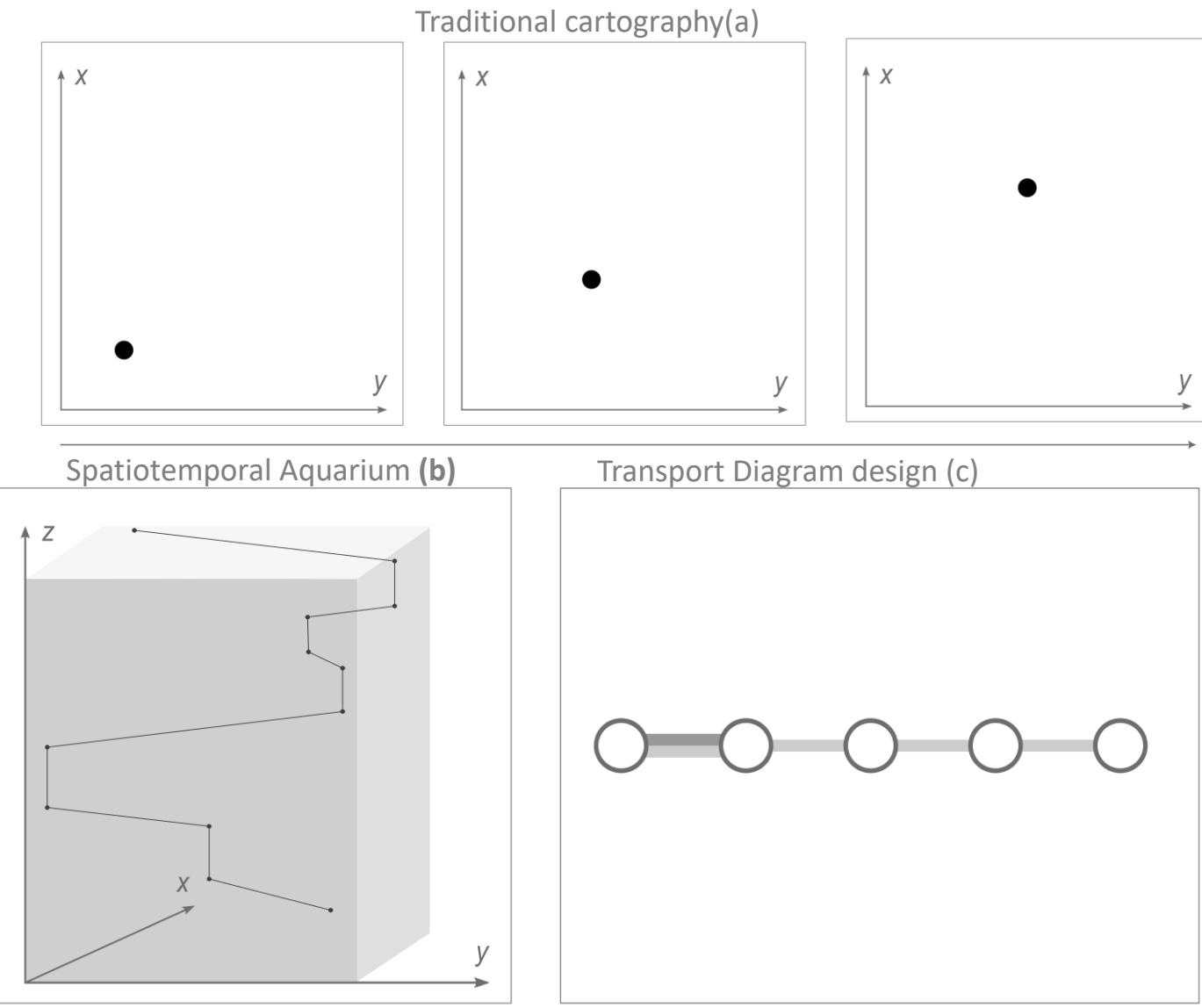
This representation opens up new perspectives and, according to our research, could be an effective decision-making tool if development continues in a more dynamic and automated direction. The theoretical foundations have been laid, but a web-oriented approach has yet to be developed.

Global analysis

The teleworkers we interviewed save a considerable amount of travel time when they are not at office. However, the greater the degree of mobility is, the more this time saving tends to decrease. Moreover, among these people we can observe a more significant persistence of transport mode. The graphical representations are therefore relevant, and seem all the more suitable for other themes that would deal with people's spatiotemporal trajectories.

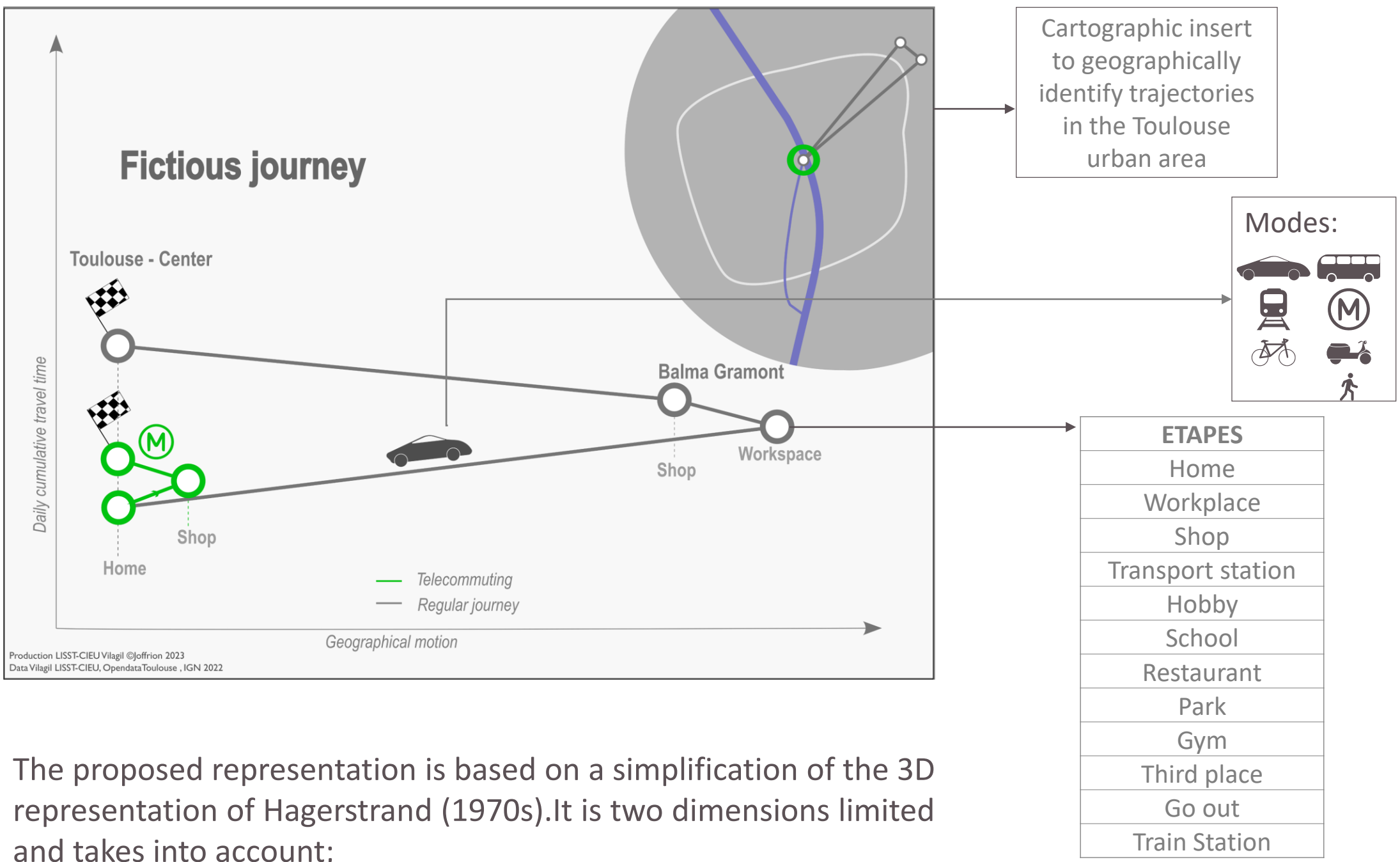
State of the Art

In traditional cartography, two proposals were put forward. A succession of cartoon-like images representing the different temporalities of a trajectory (a) or the tracing of changes in location over time. In 1970, Time Geography proposed a 3D representation of trajectories (b). The three-dimensional aquarium it proposes makes it possible to visualize approaches focusing on the individual, highlighting the temporal dimension of the data (Chardonnel & Thevenin 2012). Finally, design and graphic communication, with their transport plans and diagrams (c), provide unparalleled effectiveness in transmitting information (Allard, 2009). Each approach has advantages and limits in terms of legibility, data representation and communication objectives. But, the representation will mainly be based on the spatiotemporal aquarium and the graphic identity of transport diagrams, which are the most suitable.



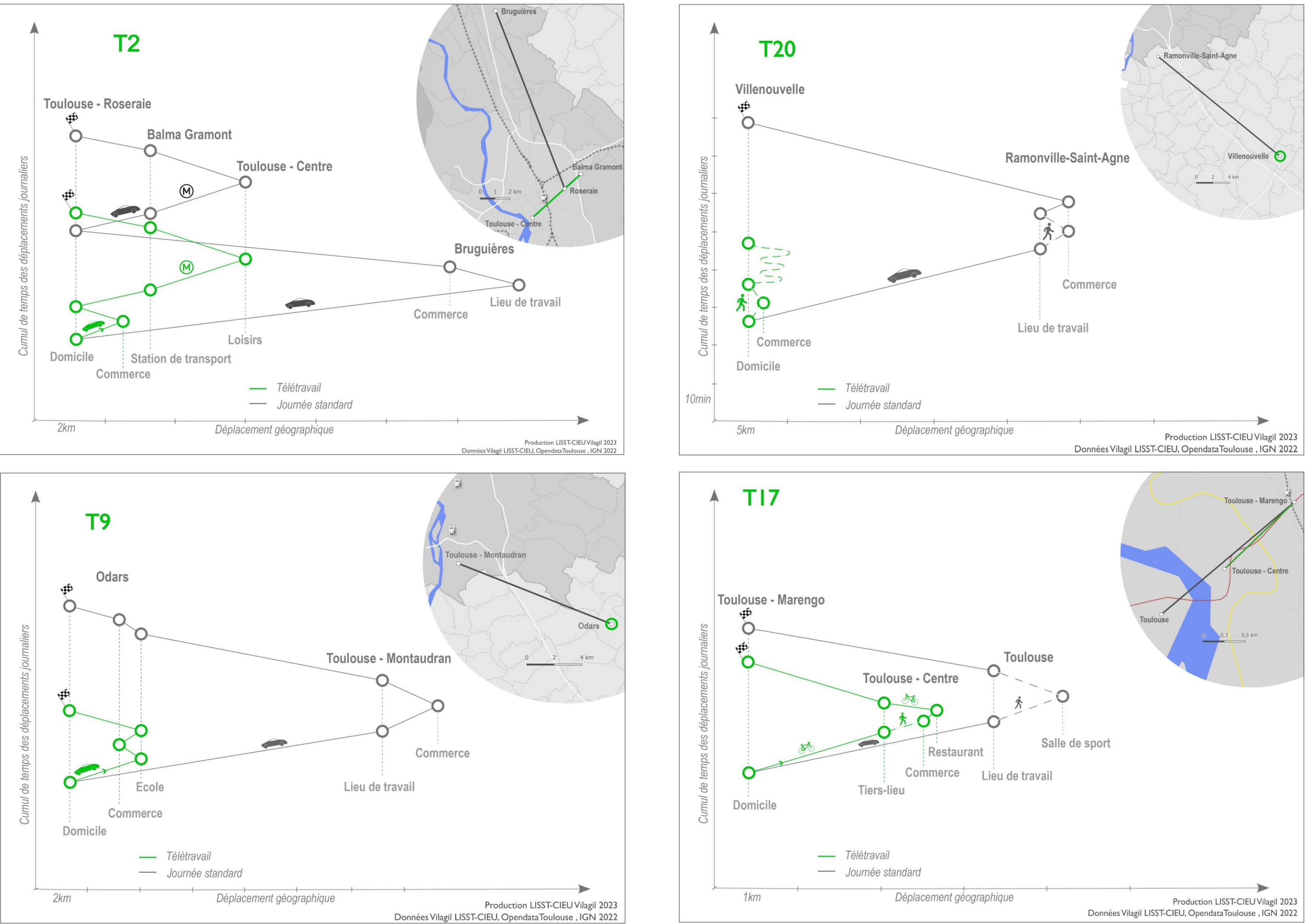
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Theoretical model



The proposed representation is based on a simplification of the 3D representation of Hagerstrand (1970s). It is two dimensions limited and takes into account; The cumulative travel time of individuals, Distances, Stages, Transport mode

Final result



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