

An agent-based model to investigate the effects of social segregation around the clock on social disparities in health attitudes and dietary behaviours.

Clémentine Cottineau¹, Julien Perret², Romain Reuillon^{3,4}, Sébastien Rey-Coyrehourcq⁵, and Julie Vallée³

¹Centre for Advanced Spatial Analysis, University College London, UK

²COGIT, IGN, Paris, France

³UMR 8504 Géographie-cités, Paris, France

⁴Institut des Systèmes Complexes Paris Ile-de-France, France

⁵UMR 6266 IDEES, Université de Rouen, France

Abstract

Keywords:

1 Introduction

1.1 The impact of the residential context and activity space on health behaviour of social groups

1.2 Agent-based modelling of spatial dietary practice

1.3 Spatio-temporal segregation in the Paris region

1.4 Social disparities of health behaviours

1.5 Neighbourhood effects on diet

2 Methods

2.1 Synthetique population generation

2.2 Individual data on dietary habits

3 Spatial Segregation of social behaviour: an agent-based model

3.1 Opinions and behaviour at initialisation

3.2 Changing behaviour

$$a^2 + b^2 = c^2$$

Equation 1

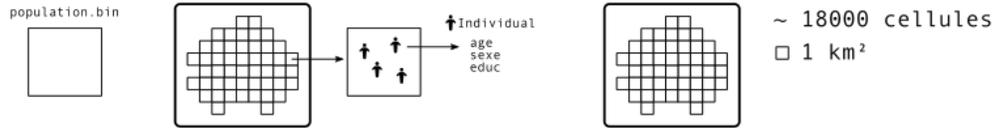
3.3 Parameterization

4 Results

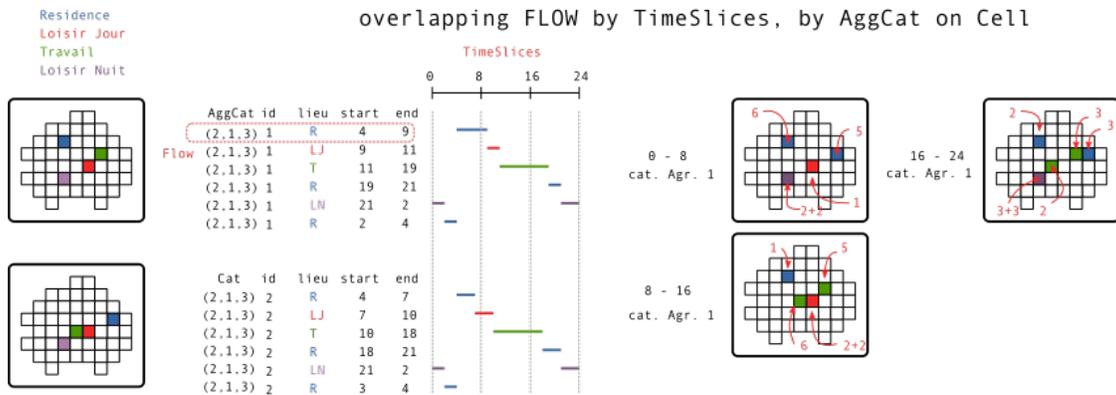
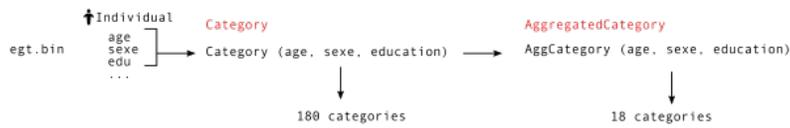
5 Discussion and Conclusion

6 References

injection population synthétique



Transform EGT category to Agregated harmonized category



list moves by TimeSlices, by Cell, by AggCat

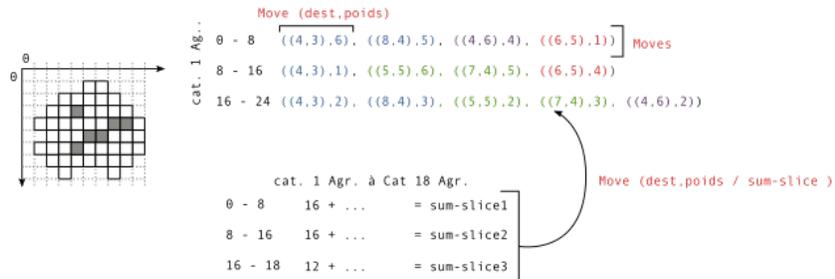


Figure 1: Description of synthetic population generation

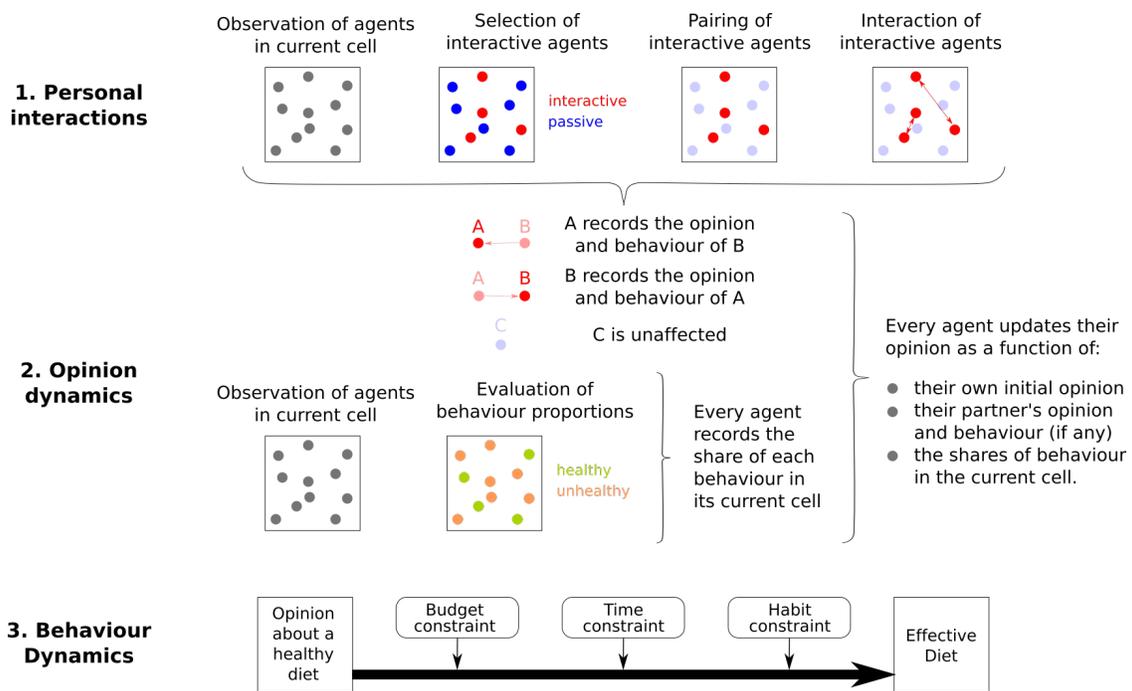


Figure 2: Description of interaction, opinion and behaviour dynamics

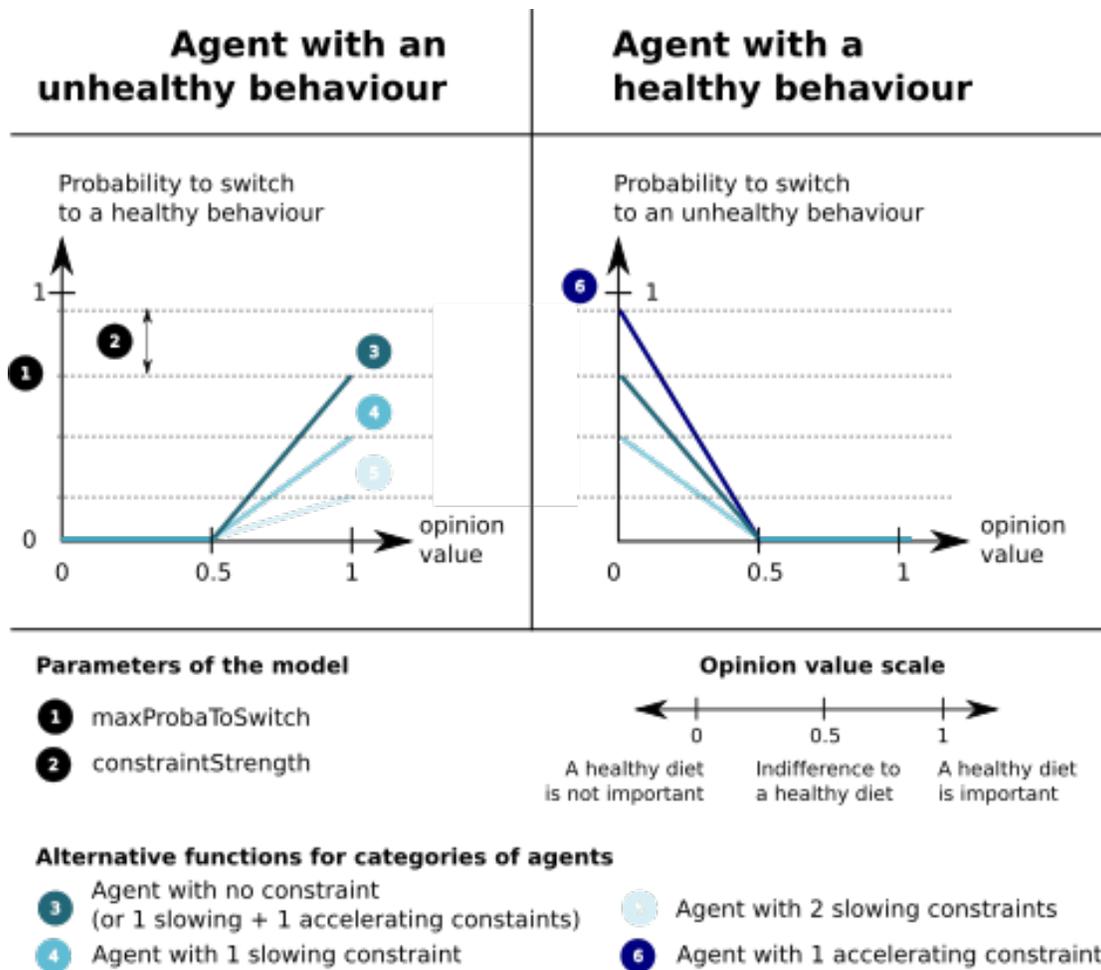


Figure 3: Details of behaviour change