Sanders L.(dir.), 2017, Peupler la Terre. De la préhistoire a l'ère des métropoles, Tours, PUFR, 528p.

## J. Raimbault

#### Abstract

This book is the outcome of an interdisciplinary research project with the ambition of understanding transitions of human settlements. The approach is unique in its temporal and geographical scope, the case studies included covering all history and the whole planet. In a balanced share of novel epistemological contributions mainly allowed by a reflexivity on disciplinary interactions during the project itself, of methodological and theoretical contributions on the concept of transition and modeling, and of thematic contributions with each case study, the book provides a highly integrated and diverse knowledge for the study of human settlements.

# Introduction

As the book is written quasi totally in French (at the exception of one chapter), this reading record will be particularly detailed on the description of the content in order to make it accessible to the whole research community.

# Description

## Discussion

Some advantages:

- Unique approach to target such a temporal and geographical span.
- Studying transitions tackles foundational questions of complex systems: exogenous/endogenous (system definition); spatio-temporal stationarity; scales and emergence

- Epistemological contribution: interdisc knowledge; knowledge domains Some weak points:
- clear positioning a but lacking? is it a report of the project? does not really acts as a textbook/handbook neither.
- frustrating def of transition from the formalized complex systems studies point of view even the tentative of application to other case studies seems to fail. finally seems ad hoc although aims at the contrary? can not know for now, a bet on the future and it is one crucial advantage of the book. also "interdisciplinary" does not include physicists not real computer scientists. less win-win interdisc than geodivercity. not an integrated geography.
- Part on model exploration/simulation is also a bit weak (although illustration on Young model is interesting from the point of view of comparing ontologies) BUT sensitivity analysis and model exploration does not follow best practices.
- disconnected from new trends in hpc for social simulation models  $\rightarrow$  impression of "bricolage". let hope it is just a starting point.
- similarly very few papers have actual and robust result looks like preliminaries only. does not advocate for such simulation approaches
- code not centralized / open