



founded in 1918

Modelling global flows: a challenge for theoretical and applied geography

*Professor Claude Grasland
University Paris 7 Denis Diderot*

The aim of the presentation is to demonstrate the fallacy of the opposition between the so-called fields of « applied » and « theoretical » geography through the example of the historical development of spatial interaction models and their contemporary application at global scale. The presentation starts with an outlook of the gravity model's development from Ravenstein to Zipf and Stewart, before examining its criticism by Hägerstrand and Stouffer and the generalization of the initial hypothesis with spatial interaction models taking into account different effects of distance (spatial, social) associated to barrier effects (political, cultural). We demonstrate that the theoretical elaboration of spatial interaction model has always been linked to empirical applications that contributed to enrich and to broaden the fields of application. The second part of the presentation will address the assumption of « the flat world » and « the end of geography » that was postulated by many gurus at the end of the 20th century.

The examination of current international flows (trade, news) demonstrates that Tobler's first law of Geography (« Everything is related to everything but nearer things are more related than distant things ») still remains accurate. But global flows are not only depending on distance but also on the belonging of states to world regions based on cultural, political or historical factors (« Everything is related to everything but things belonging to the same territory are more related than things separated by borders »). The author concludes in discussing the methods used in the identification of functional world regions in the contemporary world, a fascinating theoretical problem with major practical application in the field of economy and geopolitics.

Keywords : Globalization, Regionalization, Flows, Spatial Interaction Model, Trade, Media, Theoretical Geography, Applied Geography