



Doctoral profile

Research framework

Work-Packages: "Networks and territories" and "Circulation of models and heterogeneity of developments"

Heads:

Philippe CADÈNE – CESSMA: *Centre d'Etudes en Sciences Sociales sur les Mondes Africains, Américains et Asiatiques* [Center for social sciences studies on the African, American and Asian worlds] (UMR 245)

Jean DEBRIE – *Geography-cités* (UMR 8504)

Nora MAREÏ – Prodig: *Pôle de Recherche pour l'Organisation et la Diffusion de l'Information Géographique* [Research Unit for the Organization and Dissemination of Geographic Information] (UMR 8586)

Elisabeth PEYROUX – Prodig (UMR 8586)

Position description

Urban mobility and transport networks in the digital age: travelling policies, new practices and territorial restructuring

In recent years we have observed a remodeling of the stakeholder landscape and the range of infrastructures and services in the urban transport and mobility sector. The impacts of these changes on citizens' practices and the restructuring of urban territories are difficult to grasp, especially in the Southern countries. The sector is marked by rapid innovations against a backdrop of swifter social adoption of new Information and Communication Technologies (ICT) and in particular geo-technologies (Geographic Information Systems, spatial modeling and simulation tools, satellite geo-positioning services, sensors, etc.). Southern cities are experiencing technological leaps (digitalization, dematerialization and demonetization) and a technological convergence that is more recent and more rapid than in Northern countries, and which are accelerating the pace of innovation (the use of traffic-optimization algorithms, aids for the choice of transport modes, searching for multimodal itineraries, collaborative platforms, the creation of user communities, digital maps, etc.). These innovations are resulting in the arrival of new stakeholders who challenge the modes of governance: transnational stakeholders with ties to major Internet groups in the North and the South alike (Uber, the Chinese-based Mobike and soon Google, among others), major globalized urban transport operators (such as RATP, Transdev, Keolis as well as Decaux and Clear Channel), formal, informal or even hybrid local stakeholders, and civic stakeholders. Innovations circulate from one international city to another through networks of stakeholders (local governments, global city networks, professional networks and so on) (Peyroux and Sanjuan, 2016). Processes of creation, transfer, borrowing and local adaptations are at work, some of them challenging the traditional North/South transfers and replacing them by South/South or



Laboratoire d'Excellence Dynamiques Territoriales et Spatiales

Cluster of Excellence *Territorial and Spatial Dynamics*

+33 (0)1 53 55 28 24

contact@labex-dynamite.com

South/North flows, as Southern countries become innovation laboratories for the rest of the world (following the example of the Bus Rapid Transit system in Curitiba).

Based on field work and quantitative and qualitative methods, the thesis will aim to grasp and qualify the remodeling at work in the transport and mobility sector and its socio-territorial impacts. We propose a dual relational and territorial approach (McCANN and WARD, 2012). On one hand, the aim is to question the production, circulation and local adaptation of innovative models for transport and urban travel management, notably through the role of networks of cities. On the other hand, the aim is to question the way in which these innovations contribute to socio-territorial remodeling in sprawling, fragmented, segregated cities where urban planning and developing struggle to meet the needs. The latter will be approached through an analysis of practices and customs, in particular linked to geo-technologies and their socio-territorial impact on the metropolitan scale and on the local district scale (reducing urban fragmentation, providing access to outlying districts, making urban services and amenities more accessible, reducing commuting distances, etc.). More generally speaking, the aim will be to ask how stakeholder diversification and these innovations challenge traditional representations of the network as a large, centralized technical system. In this respect, the thesis will contribute to three major theoretical debates: international circulation and local grounding of urban models (McCann and Ward, 2010, 2012; Peck and Theodore, 2010); the role of international city networks (ACUTO, 2013; BOUTELIGIER, 2014), the relationships between networks and territories (OFFNER and PUMAIN, 1996; DUPUY, 1991) and the post-network city (COUTARD and RUTHERFORD, 2013).

The choice of case studies will be left to the candidates' discretion and agreed on beforehand with the supervisors. Candidates are expected to make a comparison of two cities, one in an industrialized country (Europe, North America or Asia), the other in an emerging economy (Sub-Saharan Africa or Asia), comparable in size, and in which the public and private transport sector has undergone far-reaching changes in recent years (production or adoption of international models, such as Transit-Oriented Development and BRT, emergence of a private transport offering, development of mobile applications by public, private or citizen stakeholders). The methodology will be qualitative and quantitative, and based on interviews of key stakeholders and users, questionnaire-based surveys on access to and use of transport, mobility practices, notably in connection with new technologies, the analysis of available statistical data, the collection of gray literature and the production of press reviews. Spatialized data must be entered into a GIS that can be used to map and analyze mobility practices (itineraries, times, services, co-modality, etc.) and the access they provide to urban services and resources. The analysis will also be based on an analysis of the content and discourse of policy documents and urban planning documents.



Planned collaborations

The candidate's project will lie within the framework of the research conducted by the "Circulation of models and heterogeneity of developments" and "Networks and territories" Work-Packages. It will contribute to both the study of innovative models in the field of urban development and transport networks, and their dynamics of international inter-city travel.

Within the framework of the work of the "Circulation of models and heterogeneity of developments" WP, the thesis will contribute to discussion on the stakeholders and procedures of international travel and the local grounding of development and urban planning practices and models.

Within the framework of the work of the "Networks and territories" WP, the thesis will contribute to discussion on the current developments under way in the various networks as part of the digital transition and the circulation of urban models.

The PhD student will work at both the *Géographie-cités* UMR and the Prodig UMR. He/she will join the Geography-cités' CRIA team (which researches networks, industry and spatial planning), where he/she will be involved in work on focus areas No. 3 "Words and concepts: usage, circulation and context", No. 4 "Urban fabric: processes, stakeholders and practices" and No. 5 "Data and protocols in the digital humanities". He/she will therefore be working in a propitious scientific environment alongside other researchers and PhD students interested in studying the spatial dimension of technologies and networks in urban settings. For example, we can cite the work currently being conducted on the "post-car" city or on shared mobility (the "Shared-Mob" project funded by *Université Sorbonne Paris Cité*).

The PhD student will also work in close collaboration with the members of the UMR Prodig whose research lies within the framework of topic 1 "Changes in territories, productive processes and globalization", and more specifically sub-topics 1.2 "Circulations and mobilities", 1.3 "Metropolization, outskirts and globalization relays" and 1.4 "Urban governance". He/she will be involved in the WP's seminar "Circulation of urban references and local assemblages".

In a broader perspective, the thesis will be part of an international collaboration driven by the network "Geo-technologies, urban governance and the politics of sustainability in Southern cities", formed by colleagues from France, the Netherlands, the United States, India, South Africa and Brazil (working on the SAR-Dyn *Soutien aux actions de recherche collectives du LabEx Dynamite* project "Rethinking the territorial development of the outskirts of Southern cities in the light of digital technologies (REDEV-SUD) (2016-2017)" and the ensuing calls for projects, which could be sources of funding for this doctoral research. The PhD student will be able to draw on a network of doctoral and post-doctoral researchers working on these questions. He/she will also be able to apply for funding for his/her field research from his/her host UMR.



Required skills and abilities

- a Master's degree (in geography, spatial planning or political science) and an interest in interdisciplinary urban studies;
- experience in using qualitative methods to conduct interviews of local stakeholders;
- ability to write and speak in English;
- experience in using quantitative methodologies, GIS and spatial analysis, or willingness to develop these skills, especially in georeferenced database management, would be appreciated;
- solid prior knowledge of at least one of the main terrains.

Additional information

Contract start date	01/09/2018 or 01/10/2018 (as desired)
Length of contract	3 years
Host laboratory	<p>Laboratory name: UMR <i>Géographie-cités</i> and UMR Prodig Address: <i>Université Paris-Diderot</i> – Olympe de Gouge building</p> <p>Thesis supervisor:</p> <p>Nicolas DOUAY, Assoc. Prof. at <i>Université Paris Diderot</i> with Accreditation to supervise research, UMR <i>Geographie-cités</i></p> <p>Élisabeth PEYROUX, research fellow at the CNRS, UMR PRODIG</p> <p>Thesis committee: Éric DENIS, research director at the CNRS, UMR <i>Geographie-cités</i>; Olivier NINOT, research engineer at the CNRS, UMR Prodig</p>
Assigned university	<p><i>Université Paris Diderot</i></p> <p>PhD School 382 "Economies, Spaces, Societies, Civilizations: Critical thinking, politics and social practices"</p>



Net monthly remuneration	Approx. €1,350 (additional teaching assignments possible) ¹
Contact	contact@labex-dynamite.com nicolas.douay@gmail.com elisabeth.peyroux@cnsr.fr

Recommendations for the candidate(s):

Recruitment procedure and schedule:

- **The application must be submitted electronically by application form** (<http://www.form-labex-dynamite.com/doc/en/>). It must demonstrate that the candidate fulfils the requirements indicated in the position profile (specified tasks and skills).

The application will include:

- a description of the doctoral project (2 to 5 pages maximum) indicating the theoretical basis of the research, the research-related issues, the methodology to be used, a feasibility report with a 3-years period and project schedule;
- curriculum vitae;
- transcript of higher education record for first year of masters studies (*Master 1*) and the first semester of research masters (*Master 2*);
- a letter of recommendation from the supervisor of the research master's thesis;
- a letter confirming the forthcoming defence of the candidate's master's thesis (prior to **31 August 2018**).

It is recommended for the candidate to establish contact with the thesis supervisor in advance.

- **The deadline for the submission of applications is Sunday, 22 April 2018 (inclusive).**

For your information: when the deadline for applications has passed, the LabEx Dynamite will contact the directors of the potential host units and will add one letter of invitation to the application.

- The candidate(s) appointed following the evaluation of the applications and interviews (which will take place during the week of 11 June 2018) will be informed of the results of the application process from 18 June 2018.

¹ Depending on the host/assigned establishment