### Low Appetite for High Tech: When the Indifference of Inhabitants to Digital Mobilities Impedes a Smart Suburbs Project

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### ABSTRACT

In low-density urban areas, technologies are expected to play a significant role in tackling the ongoing mobility transition. A multidisciplinary research project focused on how a smart suburbs project, in Loos-en-Gohelle, France, could be promoted through resident participation. However, both the low level of smartphone ownership and the lack of appetite for technological tools discredited the hypothesis that technologies were essential to a faster mobility transition in this periurban area. This experience raises questions about the feasibility as well as the coherence of an approach that seeks to combine public participation as an ethical commitment to research, with smart territories as a scientific and political project. The inhabitants engaged in the project expressed the need and a certain readiness for change with respect to mobility within the municipal area of Loos-en-Gohelle, but were significantly indifferent to technological solutions.

#### **KEYWORDS**

Digital Tools, ICT, Mobility Transition, Multidisciplinarty, Participation, Periurban Area, Smart Suburb, Social Innovation

### INTRODUCTION

The purpose of this contribution is to report on an action-research programme on sustainable mobility in Loos-en-Gohelle (France). The main hypothesis was that information and communication technologies could support a participation based mobility transition. This location was chosen for its morphological properties as a periurban, low-density municipality, and its sociological profile of inhabitants familiar with participatory processes, considering a 20 years experience of ecological transition in Loos-en-Gohelle, for the purpose of studying the mobility transition at the local scale. While our work led to the emergence of "low-tech" and "slow-tech" solutions in the field of sustainable mobility, emphasising slow modes of transport and avoiding solutions based on information and communication technologies, this was not exactly the aim of the programme. Indeed, one of its central hypotheses was that the new information and communication technologies would be essential tools to encourage and, support a mobility transition, alongside the paradigms of sustainability and participation (Carrel, 2013; Hall, 1992). This hypothesis was invalidated by the fieldwork. Local people – perceived as the main partners in our research design framework – took a different view, rejecting high-tech solutions in favour of more frugal resources. The purpose of sharing this experience is that the results may be enlightening to fellow researchers who are increasingly incited to take a

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multidisciplinary approach – a vague *leitmotiv* whose conditions of communication, production, realisation and success need to be questioned more often.

The regional research project<sup>1</sup> was named CISMOP, for "Co-construction & InnovationS for MObility in Periurban areas", and lasted 18 months, starting in 2017. The main research objective was to design and test a local approach to supporting the mobility transition with the inhabitants of a low-density periurban municipality. A social science researcher was recruited into the initial team of two engineers and a geographer. The goal was to work closely with the inhabitants of Loos-en-Gohelle, a small periurban town in the Pas-de-Calais *départment*. With them, new solutions would be codesigned and trialled to facilitate day-to-day mobility. The aim would be to replace the too often exclusive and solitary use of the private car with more social and sustainable solutions. The purpose of the project was to determine relevant approaches and tools to support local people in this mobility transition.

The main hypotheses we wished to test were threefold. First, whether local level participation was an effective way, both politically and from a research perspective, to engage individuals in changing their mobility practices (Rocci, 2015; Schwanen, 2015). Second, whether the use of multiple experimental formats would: 1) lead to a better appreciation of mobility needs; 2) attract populations that usually have little involvement in public participation. Finally, the third hypothesis was that Information and Communication Technologies would be key tools in helping to change mobility practices. This last hypothesis called for a smart suburbs approach.

It seemed a stimulating piece of research, since its location was Loos-en-Gohelle, a small town with a 20 year history of involvement in the ecological transition, a pioneer in perceived strategic niche management approaches such as renewable energy and eco-construction (Schot & Geels 2008). Nevertheless, research on travel practices in Loos-en-Gohelle, consistently with the rest of the surrounding territory of the former Mining Basin, showed the marked dominance of the private car (SMTAG, 2018). Our objective was therefore to incorporate a mobility component into the municipality's transition strategy, while taking into account the marked socio-spatial disparities between the city centre, the social housing districts and the incubation zone for innovative projects (Base 11/19).

However, meticulous field work, starting with an immersion phase followed by questionnaires and a series of experiments, framed by reference to the literature on community-led urban transitions (Bulkeley, Broto, Hodson, & Marvin, 2010; Grin, Rotmans, & Schot, 2010; Schot & Geels, 2008; Seyfang & Haxeltine, 2012), and inspired by the methods used in the urban living labs movement (Bulkeley et al., 2016; Voytenko, McCormick, Evans, & Schliwa, 2016), showed that the territory was, on the whole, "resistant" (Labussière & Aldhuy, 2008) to our third hypothesis. The low level of smartphone ownership and web connection, and more broadly the indifference to technology of the citizens involved in the project, prompted us to advocate low-tech solutions, drawing on resources that may initially have been underestimated: solidarity, flexibility, creativity, pragmatism. Democratic, social and organisational innovations overcame our appetite for digital mobilities, smartphone applications and connected objects.

While the programme succeeded in enrolling more than five hundred inhabitants and engaging local authorities in developing a territorial policy on sustainable mobility, the low-tech dimension of the co-constructed solutions was discouraging to the engineers on the team, who experienced this reorientation as a failure.

This contribution is therefore in the first place an opportunity to describe the protocol employed in the field research and the process of developing innovative low-tech mobility solutions with the inhabitants of Loos-en-Gohelle, and to present these solutions and their effects. Secondly, it is also an opportunity to discuss the reason for the initial decision to research and support the advent of smart suburbs. The field data revealed in the article show how the technological indifference of the inhabitants is consistent with national statistics (Bonneville and Lengyel, 2017) on the national population's attitude to digital mobilities. 11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart"

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