The notion of ‘smart cities’ is increasingly visible in discourses on the future of cities. Driven by an optimistic and firm belief in what ‘smart’ technologies can bring to the efficient governance of urban public spaces, energy flows, mobility patterns and so on, city officials and industrial actors around the world have joined forces to promote the endless possibilities of new ICT innovations in world expo’s, demonstration cities and smart city partnerships. This desire to design and construct smart cities is driven by an optimistic view of technological innovation. Implementing smart technologies, it is argued, will lead to more innovative and sustainable cities, and dramatically improve urban life through better health, greener living spaces, and more democratic modes of governance.

This techno-optimism is increasingly criticized by urban social science scholars, who highlight risks such as increased private control over public spaces or the neglect of participation and engagement of civil society in formal decision making processes (Kitchin, 2014; Greenfield, 2013, Gibbs et al., 2014). Smart cities, some argue, is the latest in long-standing modernistic planning approaches, and there is a need to shift focus from smart cities towards smart urbanism – highlighting the social, entrepreneurial and community aspects of livable and resilient cities (Hajer and Dassen, 2014). Generally, there is utterly disagreement about what a smart city is or should be, which mystifies public debates and obscures the current interests at play (Hollands, 2008).

Despite the academic debates on smart cities and smart urbanism highlighted above, academic work on smart cities often dwells on the same examples and has yet to deliver thorough empirical analyses of smart cities, compromises the potential of critical approaches to science and technology to question important developments in present-day urban governance (Kitchin 2014; Luque-Ayala and Marvin, forthcoming).

This thesis project takes rankings of smart cities as its starting point. Such rankings should not be taken at face value as objective ways to distinguish ‘smart cities’ from other ‘cities’, but enact a taxonomy of cities by framing urban developments in a particular way. A few rankings exist, each using a different set of indicators. Although insightful, these rankings frame the smart city debates in particular ways by highlighting certain ways of seeing the city whilst obscuring others. Moreover, existing rankings tend to focus on a few major (often capital) cities, with limited attention for small-to-medium sized cities. Dutch rankings do not exist yet.
In this project you will work with the PBL Netherlands Environmental Assessment Agency. Depending on your own and your supervisors’ interests, the following questions are to be explored (in 1 or more MSc thesis projects):

- **Critical analysis of existing rankings.** Which smart city rankings exist? What kind of understanding of smart cities is behind these rankings? How are they similar or different, with which kind of limitations?

- **Developing (a) meaningful ranking(s) for evaluating Dutch cities.** Given the critical analysis of existing rankings, and a review of smart cities literature, what could be a meaningful ranking for evaluating Dutch cities? How do different lists of indicators shape different rankings among Dutch cities? What does this tell us about what smart cities and smart urbanism are or should be?

- **Analysis of Dutch cities.** Why are some cities performing in particular smart ways, and how is this different from others? How can differences in institutional conditions such as quadruple helix collaborations between government, industry, science and civil society explain the differences? What can we learn from this about ways of organizing smart cities and smart urbanism in more socially inclusive and desirable ways?

**References**

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Hajer, M., Dassen, T., 2014. Smart about cities. Visualising the challenge for 21st century urbanism. PBL

