Deep Maps and Time Machines: Exciting Times for Collaborative Research on Port Cities

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This blog post continues the 'Mapping Maritime Mindsets' discussions by taking inspiration from new research initiatives and recent work in the fields of urban and landscape history. When tackling the topic of port cities, we need to be conscious that different research paths and types of outcomes can be pursued, especially when setting up sustainable collaborations with scholars from various disciplines.

Is science becoming more like science fiction? One might easily think so when hearing about a novel research network called Time Machine Europe, or other interdisciplinary collaborations on practices of 'deep mapping', for instance. Behind these imaginative keywords, however, are research endeavors that firmly rely on a thorough understanding of the past in order to take on the future. This deceptively simple, yet fundamental stance also shines through many blog contributions from the PortCityFutures team. We have to imagine, design, plan and assess the future of port cities by taking stock of their complex maritime urban histories.

Concretizing this ambition, whether for one city like Rotterdam or for multiple interconnected (port) cities, is not easy, but an audacious continent-wide initiative like Time Machine Europe can prove inspirational. Time Machine is instigating the establishment of a digital information system that functions as a historical simulator to navigate through Europe's century-long and multifaceted developments. To gradually realize this intended 'time machine', the network has been encouraging the formation of local research initiatives to foster collaboration among different actors on the basis of data and resources that pertain to a shared geographical area (Time Machine 2019). Such an area is often a particular city, and an example of such an urban 'local time machine' is the Amsterdam Time Machine, a public resource to which new datasets related to Amsterdam's past can be continuously connected. A first development phase brought together data from the divergent fields of media studies, socio-economic history, and



linguistics, in order to move towards the realization of a 'deep map' of Amsterdam's history (Noordegraaf et al. 2020).

As discussed in a previous blog post, deep mapping has recently been taken up in various interdisciplinary research contexts. It challenges researchers to go beyond classic cartographic means, and attempts to better reconstruct and grasp the complexity that has always imbued societies and cultures. By taking the act of mapping to another level, it allows for research to become more layered - both literally and figuratively - in its investigations of how past places were lived and experienced.

While projects like the Amsterdam Time Machine particularly illustrate the appeal of deep mapping for urban history, its potential also spills over to other domains, like landscape history and archaeology. In this regard, contributions from the recent volume *Mapping Landscapes in Transformation* reveal how the open-endedness entailed in deep mapping practices can manifest itself in diverse ways - especially when juxtaposed with the Amsterdam Time Machine. This diversity in outcomes is especially important to be aware of when assessing the viability of future Time Machine-inspired projects on Rotterdam and other port cities, which can be initiated around overarching themes like 'maritime mindsets' and the complex connections between port cities and surrounding landscapes.

Surprisingly enough, 'deep mapping' is only very sporadically mentioned in the *Mapping Landscapes* volume. In Cecilia Furlan's contribution on the historical transformations of a Belgian industrial landscape, the term is used alongside 'thick mapping' (Furlan 2019), invoking the key anthropological concept 'thick description' that emphasizes the integration of cultural context and human subjectivity in ethnographic practices. In a similar way, the Amsterdam Time Machine researchers speak of a 'thickening' of GIS-based maps by incorporating sources "on tangible or material aspects of space with attention for the way people attribute meaning to specific places" (Noordegraaf et al. 2020). This ties in with the understanding of deep mapping as relating both more 'objective' and 'subjective' methods and data together.

Cristina Purcar's study on railway landscapes in the *Mapping Landscapes* volume further acknowledges this when defining its own particular mapping approach as "the associative operation that topologically connects (…) historic railway photography to contemporary and historic cartography" (Purcar 2019). The end result in this case is a series of so-called 'image maps', presented as thematic photo galleries that can be explored and further enriched in various ways, depending on the perspective with which one approaches the collected material (Purcar 2019). Furlan's case study on the history of industrial wastelands yields an equally creative outcome, with maps functioning as collages of different types of information, from visual to statistical (Furlan 2019).

In contrast, the Amsterdam Time Machine does not necessarily strive for versatility through unconventional academic outputs. Rather, the project aims to achieve this with an expandable GIS-infrastructure built on uniform location points and harmonized data sources, which are converted into 'linked open data' to allow any other researcher to connect with the platform in the future (Noordegraaf et al. 2020). This invokes similar efforts that are currently being developed within PortCityFutures, in order to establish a holistic and iterative methodology that embeds the technical workflows of geo-spatial mapping into long-term comparative investigations of port city regions and water culture (Hein and Van Mil 2019, Hein and Van Mil 2020, Hein et al. 2020).

Ultimately, however, these disparate operationalizations of deep mapping boil down to the same objectives. Deep mapping allows us to foster and tackle new research questions with a multifaceted character, which might previously have been unsolvable or unimaginable. For the Amsterdam Time Machine, initial questions revolved around how cinema and theater locations related to occupational structures and dialect variation across city neighborhoods (Noordegraaf et al. 2020). In a port city context, one can for instance think how issues related to urban waterfront development, commodity chain operations and even historical sailor culture could come together in overarching inquiries. Collaboration across different disciplines, and even beyond academic institutions, is key in this respect.

The PortCityFutures community is well equipped for such a research context. However, we should bear in mind that, when investigating port cities and their hinterlands through the construction of new space-time narratives, different paths can be followed that veer between creative accessibility and technological prowess. Being conscious of these wide-ranging options helps us to better articulate which kind(s) of impact we want to achieve together, and how to structure our collaborations in order to pursue common goals and outputs.

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References

Coomans, T., Cattoor, B., and De Jonge, K., eds. (2019). *Mapping Landscapes*

in Transformation: Multidisciplinary Methods for Historical Analysis. Leuven University Press, Leuven.

Furlan, C. (2019). "Unfolding Wasteland: A Thick Mapping Approach to the Transformation of Charleroi's Industrial Landscape." *Mapping Landscapes inTransformation: Multidisciplinary Methods for Historical Analysis*. Coomans, T., Cattoor, B., and De Jonge, K., eds. Leuven University Press, Leuven. 131-148.

Hein, C., and Van Mil, Y. (2019). "Towards a Comparative Spatial Analysis for Port City Regions Based on Historical Geo-Spatial Mapping." *PORTUSplus* 8.

Hein, C., and Van Mil, Y. (2020). "Mapping as Gap-Finder: Geddes, Tyrwhitt, and the Comparative Spatial Analysis of Port City Regions." *Urban Planning* 5.2.

Hein, C., et al. (2020) (forthcoming). "The Waterwheel: A Socio-Spatial Method for Understanding and Displaying Holistic Water Systems." *Paper to be presented at EauMega 'Water, Megacities and Global Change' Pre-Conference 2020*.

Noordegraaf, J., et al. (2020) (forthcoming). "Semantic Deep Mapping in the Amsterdam Time Machine: Viewing Late 19th- and Early 20th-Century Theatre and Cinema Culture Through the Lens of Language Use and Socio-Economic Status."*Urban History and Digital Libraries Conference Proceedings, October 2019, Dresden*. Niebling, F., et al., eds. Springer, Cham.

Purcar, C. (2019). "Photography, Railways and Landscape in Transylvania, Romania: Case Studies in Digital Humanities." *Mapping Landscapes in Transformation: Multidisciplinary Methods for Historical Analysis*. Coomans, T., Cattoor, B., and De Jonge, K., eds. Leuven University Press, Leuven. 149-174.

Time Machine (2019). *Time Machine Manifesto*.

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