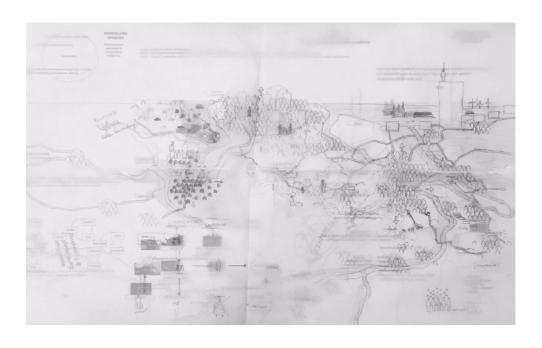
Representations of demographic shrinkage within growth: developing a graphic language for a peripheral context

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In a spatial context characterized by demographic growth, spatial planning and policy almost never take into account the possibility on a scenario of demographic shrinkage until it resulted in large scale urban decline (Haase, Nelle, & Mallach, 2017; Hospers, 2012). In particular, designers and spatial planners lack an understanding of indicators of future demographic change (Steinfeld & Maisel, 2012) and consequently, methods to reveal the opportunities of demographic shrinkage and apply design strategies that benefit from this condition.

Our research shows that places facing demographic growth contain a lot of locations with a high risk on demographic shrinkage (Segers, Devisch, Herssens, & Vanrie, 2018). Think of centers of municipalities that decline in inhabitants because of a continuous suburbanization, or of postwar urban developments with an outdated housing stock, or think of rural villages located in the periphery, similar to the ones studied as shrinking cities and regions (Oswalt, 2006). A decline in population densities often results in a, sometimes temporary, but in the case of villages often structurally, lower quality of life which even becomes an urgency for people with a small daily urban system. Even when statistics reveal population loss, when it is restricted to a few municipalities, or only to net population loss and not in households, a scenario of shrinkage is difficult to explicitly debate. Even when, together with demographic growth, the demand for spaces that take up a role beyond 'spaces for people' such as spaces for biodiversity, water and energy grows. A better understanding of the indicators for demographic change and methods to reveal the opportunities would make it possible to anticipate on shrinkage before it becomes an urgency for its inhabitants and work with the phenomenon, instead of against. As designers, this requires new representation techniques.



This cartographic mind map demonstrates a visual language as a result of conducting research into places with a high risk on demographic shrinkage in a region that faces demographic growth. It has been used as mnemonic tool and explains a process to structure research data in a visual way. The map allows representation of growth on a regional level and links them to the scale of small municipalities with a high risk on shrinkage. It groups types of contexts from the more urban to the more rural and zooms onto the one with the more structural risk on demographic shrinkage: the village. Furthermore, this research includes the creation of an iconography that integrates different levels of abstraction representing both the statistical data and the ethnographic observations, combining the information of trends and anecdotes.

Research into a complex phenomenon like demographic decline requires an open representation system that offers the possibility to explore locations and practices. By means of the designed representation techniques we can 'store' narratives and structure findings. Transformative practices and their reflection upon observations are denoted by means of visual ethnography. But the question remains how to communicate insights and provide tools for other practitioners? Further research goes into techniques of animation and the use of layers to structure narratives on design strategies. This graphic language can share insights regarding spatial context-analysis and design strategies for demographic shrinkage and provide an insight into the periphery of a region with demographic growth.

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