

Experiences Catalyzing Circularity in Business Networks: The Case of Concrete Reuse in the Construction Industry

Experiences catalyzing circularity

The change towards circular economy (CE) and sustainability necessitates that business networks and even whole ecosystems adopt new circular principles and practices. However, this may require radical transformations in business models, production systems, and especially in mindsets and attitudes. When actors move through their value creation processes, their interactions with other actors and resources trigger multidimensional experiences feelings, thoughts, and sensations - which affect the flow of resources as well as attitudes and behaviours. To understand how experiences may catalyze or hinder the adoption of circular practices, our study explores business actors' experiences both within business networks that transform towards circularity, and towards circulating material.

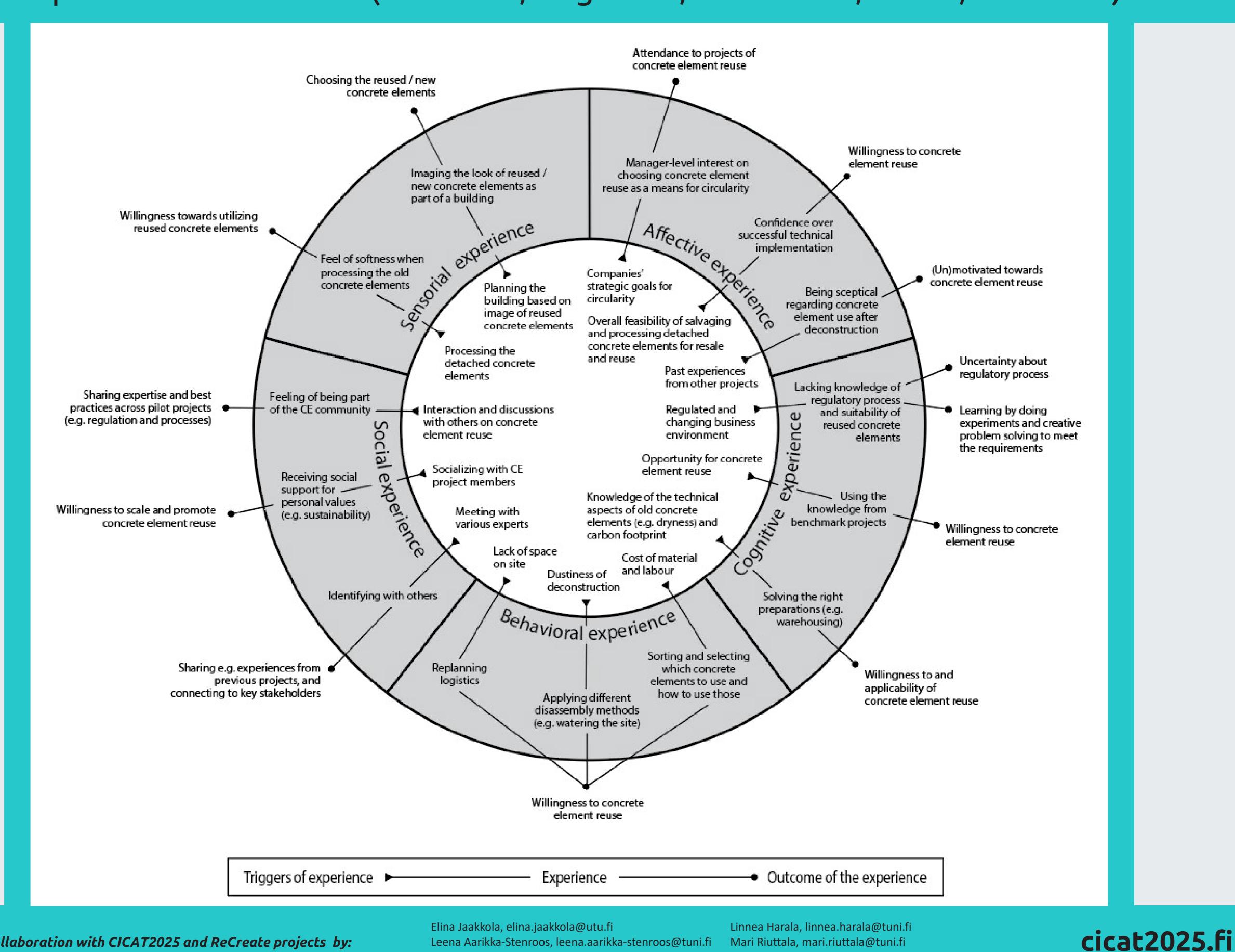
This poster summarizes the tentative findings of an empirical singlecase study concerning the reuse of precast concrete elements – the material-intensive and prevalently linear construction sector provides a fruitful context for studying experiences, as construction typically occurs through complex, long-term project networks, where actor relationships play a crucial role. The case comprises of a pilot project in which an office building is deconstructed, and the detached building components are reused at several sites. The data

includes primary interviews from the diverse actor groups involved in the project, observation and secondary sources.

Diverse experiences as building blocks for change

Our findings reveal how the circulating material triggers a range of reactions and responses from the business actors, and how different experience dimensions manifest and are reflected on in the business network, in turn affecting other network actors' experiences. The findings suggest that actors emphasize different experience dimensions, ranging from cognitive responses to feelings aroused by the material – furthermore, alignment and complementarity of actor experiences can act as a catalyst for interaction, whereas misalignment can complicate companies' collaboration around a CE project. Moreover, different experience dimensions seem to interact: For example, actors' increased knowledge on reuse of concrete elements (cognitive dimension) may lead to increased positive or negative emotions (emotional dimension). Experiences and their alignment thus appear to be critical drivers for CE-friendly attitudes in the business network - fathoming the emergence and interrelations of network actors' experiences may help us harness experiences as a tool for enhancing the adoption of circular practices in various industries.

Experience dimensions (Affective, Cognitive, Behavioral, Social, Sensorial)







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