Co-creating transdisciplinary research – a designerly approach

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Introduction

Transdisciplinary sustainability research addresses complex problems by combining different bodies of knowledge in heterogeneous project teams. Various professional and cultural perspectives help to create a richer picture in understanding the context of the problem of concern and to find new ways dealing with it. Having more actors with diverse disciplinary and professional backgrounds in one team, can make communication and integration more difficult. To establish common ground, methods from design are applied in this research.

Research Question

How do ‚design drafts‘ facilitate the co-production of knowledge in transdisciplinary sustainability science?

Theoretical Framework

thinking/reflecting   epistemic   visioning

communicating

deciding

Functions of designing and ‚design drafts‘

Method

Design prototyping is used as an intervention for creating a shared understanding and increasing the level of integration within transdisciplinary processes. The research shows how design methods can include heterogeneous perspectives and knowledge stocks to foster processes of knowledge co-production and exchange. Designed artefacts represent coded knowledge and thus work as epistemological tools; their tangibility provides an alternative to written and spoken words and levels hierarchies, power, and rhetorical abilities.

Case Study

The method was used in a case study workshop with several NGOs in Southern Transylvania, Romania to foster sustainability transformation in the area. During the workshop design drafts were used in three steps: as a tool to imagine a future vision for the area, for individual reflection and creation of the current situation, and for a co-creation part in the group (see fig. 1-3).
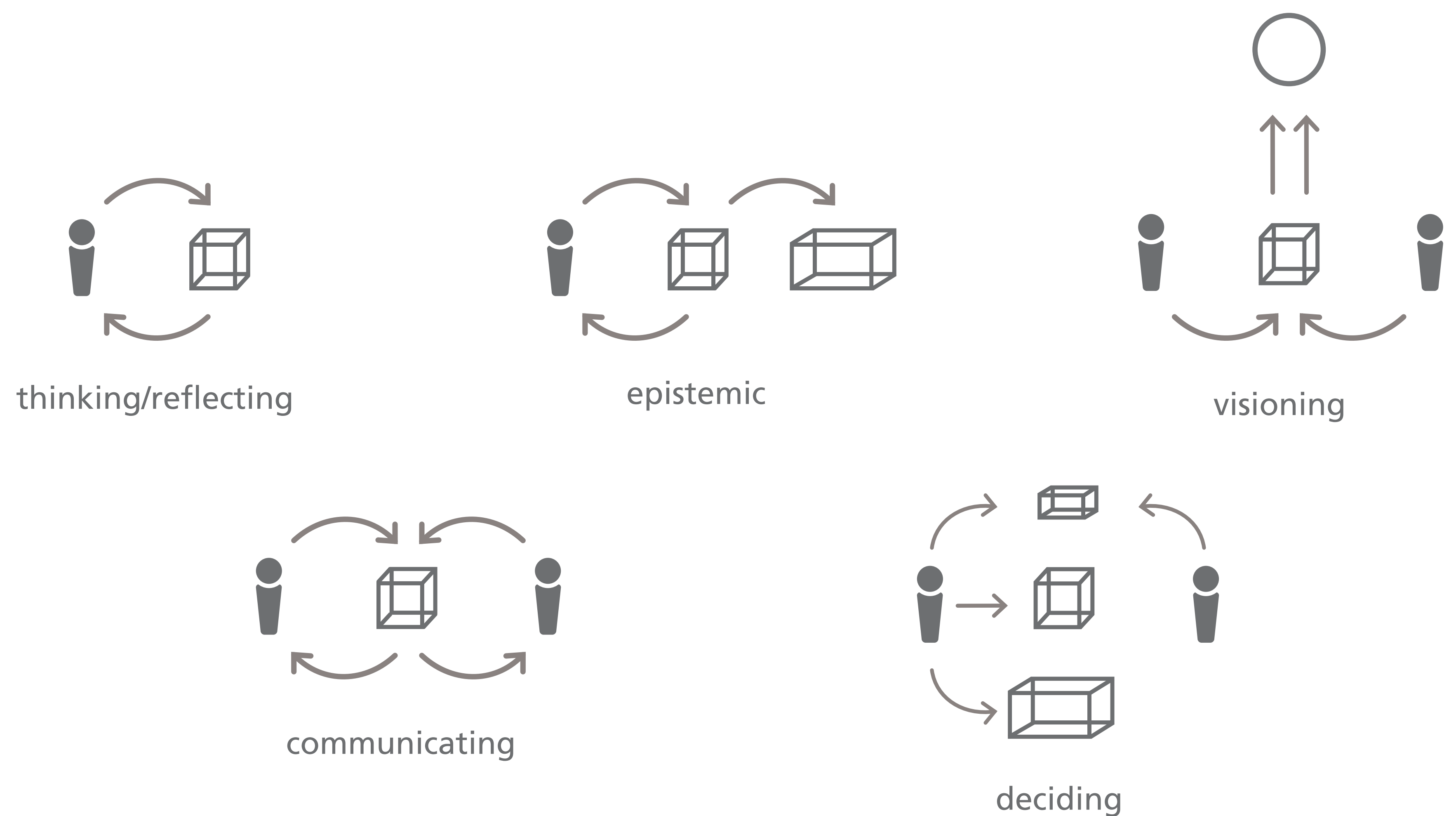
First findings

The proposed design-based method extends the methodological framework for integration and collaboration within transdisciplinary processes, by bridging different communicative skills, knowledge cultures, languages and methodological backgrounds. Considering design methods for transdisciplinary research practice as well as for research on transdisciplinary integration and intervention processes, opens up a promising methodological approach for working in heterogeneous teams.

Working with ‚design drafts‘ in transdisciplinary research settings...

... creates visibility of different perspectives,
... levels hierarchy, power and language,
... promotes interaction,
... extends verbal and written communication,
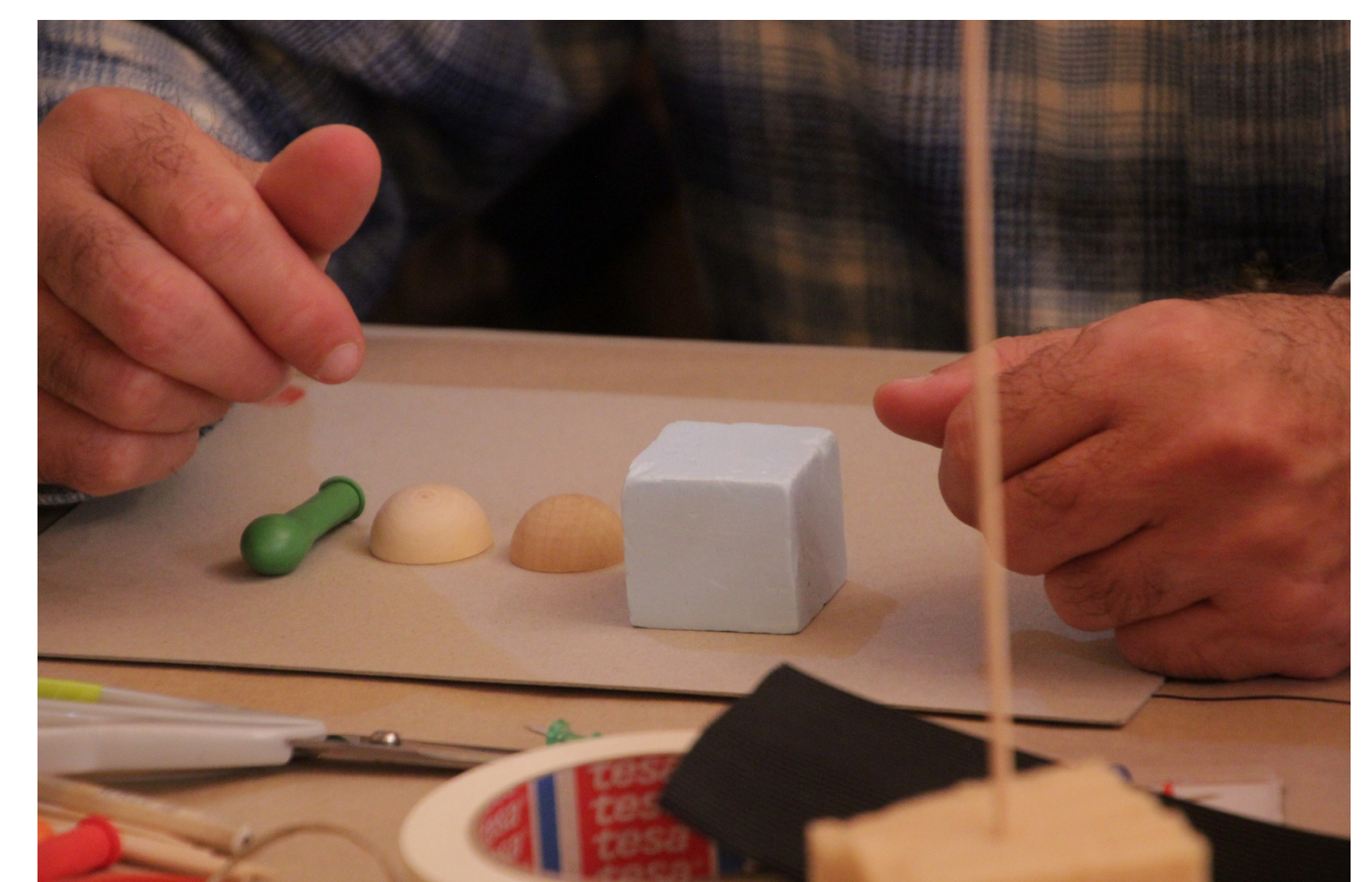... supports mutual understanding and learning.

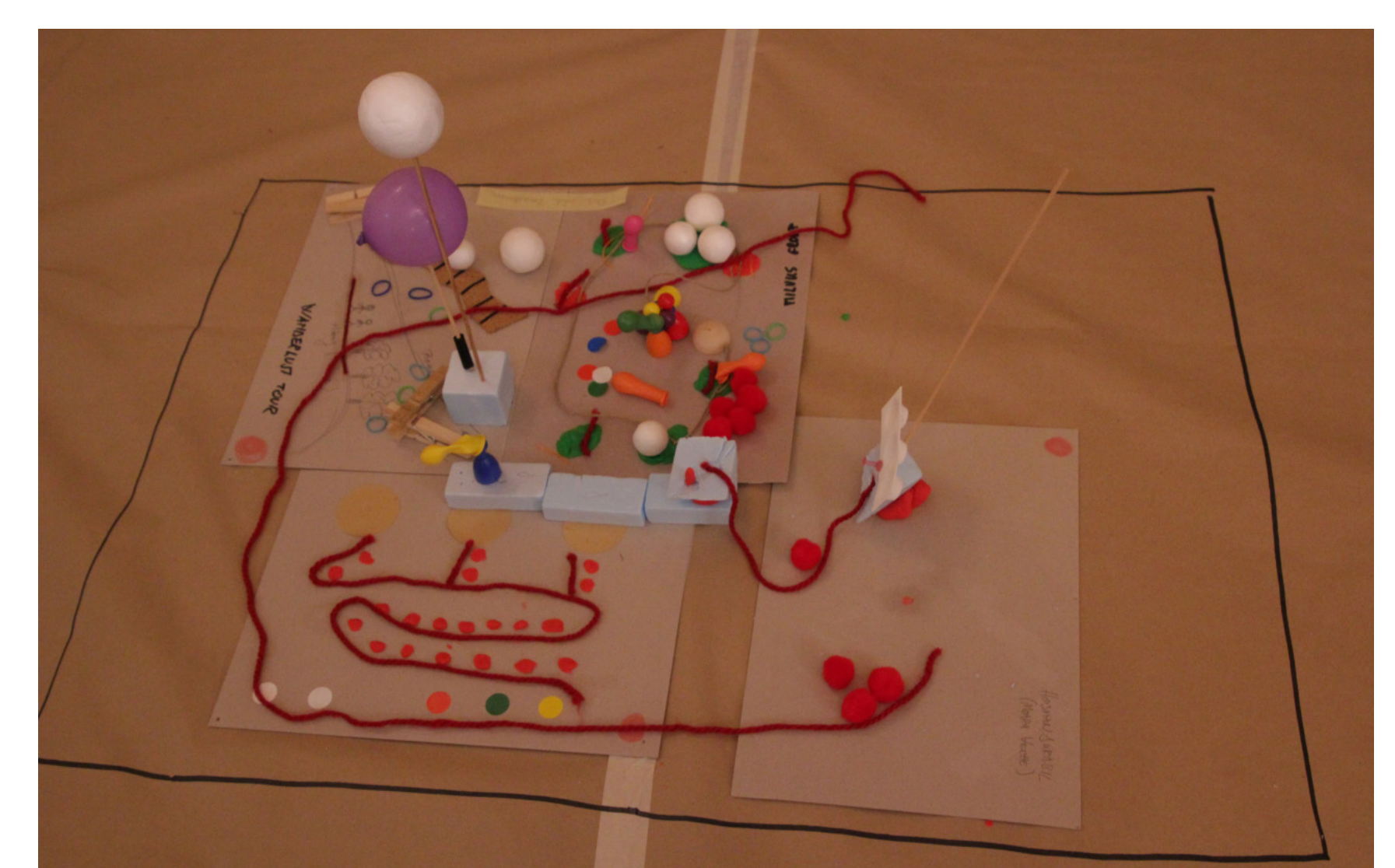Fig. 1: Individual reflection and creation

Fig. 2: Co-creating with other actors

Fig. 3: Final co-created ‚design drafts‘

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