

# MODELING AND SHIFTING FOCUS AS A FACILITATOR FOR INTENTIONAL EMERGENCE IN TRANSFORMATION DESIGN

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## ABSTRACT

In this paper we discuss the phenomenon “intentional emergence” in a transformation design context. We examine modeling and play enablers for intentional emergence and report on experiences with the Lego Serious Play method. The empirical observations are based on a real-time transformation design project called The Good Elderly Life, in which we focus on especially initial project scoping and problem investigations. Based on an analysis of video-material and interviews, we have found indications which suggest that intentional emergence - in relation to project scoping and problem investigation - can be facilitated by a constant shift between a project mindset and a modeling mindset. This is, a constant shift between focusing on the overall scoping of the project and focusing on fitting together the details of making different models which represent various insights on the project.

*Keywords: transformation design, intentional emergence, collective modeling, serious play*

## 1 INTRODUCTION

Today there is a growing community of practice which combines design, social science, and business as a way of approaching strategic and social challenges [1]. This community seeks answers to the ‘what’-questions. For Instance, *What should television be used for in the future? What can hospitals do to improve children’s experiences during hospitalisation? What are the greatest challenges faced by kindergartens in the future?* etc. [1] This community of practice carries many different names, for instance, Concept Design [1], Transformation Design [2], Design of Business [3], and Strategic Design [4]. There is no clear boundary between these definitions, but for the sake of clear communication, we will use the name Transformation Design consistently.

We may describe Transformation Design as an intentional activity. It refers to actions that are deliberately directed towards the achievement of a specific purpose. Some authors underline intention as an important part of the Transformation Design process, for instance the intention to change or transform the current situation [1], [2]. Alternatively, we may view Transformation Design as emergent. Some authors underline the unintended and surprising as core elements of the Transformation Design process. For instance Roger Martin [3], who describes Transformation Design as a step out of the present realm of logic and thereby allowing a new exploration and understanding of the problem or solution to emerge. In this article we use the two extremes – intentional and emergent – as important frameworks for a better understanding of the Transformation Design process. Presently, there is very little research in Transformation Design. So far, it has been a practice driven - and practice oriented field [1]. This means that there is not much material on project scoping in Transformation Design either. In the present research it is therefore attempted to bring forward some of our initial insights on this part of the Transformation Design process, based on our first and brief review of a large set of empirical data.

The empirical data (selected for this paper) comes from a real-time project called: The Good Elderly Life, which was initiated by the Copenhagen Municipality. The project is focused on the question: *What can be done to improve the quality of elderly people’s lives in nursing homes?* In this paper, we will pay particular attention to the initial project scoping and problem investigations; and more specifically to the so-called ‘scoping workshop’.

The scoping workshop was placed in the beginning of the project and involved participants with very different background and different experiences with elderly people. In order to facilitate the interaction between the different participants in the workshop, it was decided to apply an adjusted version of the LEGO™ Serious Play method (LSP). One of the reasons for this was that LSP is praised for its ability to bring forward different people's insight, knowledge and ideas, as well as raise team's commitment and responsibility in relation to a given project [5]. Another reason was that LSP has been acknowledged for its potentials, when it comes to facilitating intentional emergence in previous research [6], [7].

In the first part of this paper we will try to unfold intentional emergence as a phenomenon and its connection to the Transformation Design context. This is followed by a presentation of the method LEGO™ Serious Play – and its application in The Good Elderly Life project. In the next section we will dive into the empirical experiences from the workshop and try to identify patterns in relation to the emergence of new and different insights. Finally, the results of the research will be presented and the implication of the research will be discussed, pointing out that intentional emergence in relation to project scoping and problem investigation can be facilitated by a constant shift between a project mindset and a modeling mindset. That is, a constant shift between focusing on the overall scoping of the project and focusing on fitting together the details of making different models, which represent various insights on the project.

## **2 EMERGENCE AND INTENTIONAL EMERGENCE IN THE TRANSFORMATION DESIGN CONTEXT**

Emergence has been theorized extensively within the field of complex adaptive systems [8]. Here, the idea is that complex systems, defined as systems of agents, experience non-linear interaction among themselves and tend to exhibit sudden and often surprising behavior at another scale. Just as the pattern of the ground appears to change as you take off in an airplane and gain height, complex adaptive systems exhibit the same kind of shift of patterns. This “emergent” effect is seen in natural as well as in social systems [9].

Stacey [9] portrays emergence as the unintended, unpredictable outcomes of intentional behavior of actors in social systems *“that cannot be produced from the local rules of behavior that produce them.”*

The emergence phenomenon is closely related to decision making based on imperfect information. In situations like these, a variety of diffuse knowledge structures have been found to influence the decisions made [10]. Concepts like mental templates, mental models, or cognitive filters have been used to frame these diffuse knowledge structures. They provide the context in which individuals view and interpret new material, and help determine what information, already stored in their memories is applicable to the new situation. Although these diffuse knowledge structures enable the identification and selection of appropriate courses of action, they can also hinder the consideration of certain data outside the interpretive coverage of the knowledge structure. Thus, although they provide structure and reduce complexity, they can also be the source of blind spots.

Transformation design is indeed a process in which decision making is based on imperfect information and therefore it is also relevant to incorporate the emergence phenomenon when we discuss this. Emergence can be seen as a powerful way of breaking with conventional and/or habitual patterns of thought in the Transformation Design processes, as suggested by Roger Martin [3]. It is evident that emergence cannot be fully controlled. However, it appears that it can be facilitated to a certain extent [11]. Intentional emergence then becomes the sum of the factors which facilitate this emergence.

## **3 LEGO SERIOUS PLAY**

LEGO Serious Play (LSP) has been identified as potential method for facilitating emergence [6], [7], and consequently it is a potential way to work with intentional emergence in a Transformation Design context. The background for LSP is that the president and owner of LEGO was dissatisfied with the results of his strategy-making sessions with his staff. It was his experience, that while the business of LEGO was about imagination, the results from the strategy-making sessions were decidedly unimaginative.

LEGO created a separate subsidiary called Executive Discovery based on the seemingly simple idea of using building with LEGO bricks as means of tapping into unconscious knowledge and communicating this knowledge through narratives. [12] The development of the LSP concept has been an ongoing process. Most of the effort has been devoted to developing applications to facilitate strategy-making. In practice LSP is a facilitated workshop in which participants are asked different questions in relation to an ongoing project, task or strategy. The participants answer these questions by building symbolic and metaphorical models of their insights in LEGO bricks and presenting the models to each other. An essential part of the LSP workshop is the non-judgemental, free-thinking, and somehow playful interaction between the participants. [12]

Based on insights from previous research, we decided to apply LSP to the Transformation Design project The Good Elderly Life. This was done by adapting and developing further some of the main features of the original Serious Play. In the scoping workshop the adjustment of LSP was mainly based on the idea of open-ended and generative design questions. The workshop was divided into two parts, one focusing on reviewing and sharing different perspectives and understandings of 'the good elderly life'. The other one focusing on the combination and integration on the different perspectives and insights. In the first part, each participant builds and explains a metaphoric model. In the second part, the participants are asked to build their individual models into one model.

Before reviewing the insights and data from the workshop, we will briefly describe The Good Elderly Life project and the research design

#### **4 THE REAL-TIME TRANSFORMATION DESIGN PROJECT AND RESEARCH DESIGN**

The Good Elderly Life project is a collaboration between the Health and Care Administration in the Copenhagen Municipality, Denmark's largest Nursing Home - Sølund and the consultancy firm - Copenhagen Living Lab. The project started in October 2007 and will run until December 2010. Beside the steering group, the project involves partners such as Microsoft, Danish Industry, Danish Rehab Group, and Aalborg University.

Initially, the project had a twofold objective. On the one hand, it was concerned with the question *What can be done to improve the quality of elderly people's lives, when they living in nursing homes?* This involved an analysis of the nursing homes context, as well as initiating the development of new products and services, together with both private and public organizations. On the other hand, the objective of the project was to test and further develop Transformation Design methods, which could be useful and supportive to future Transformation Design projects.

The scoping workshop, which is the focus of this article, took place at one of the steering committee's initial meetings. It was introduced to ensure internal clarification within the steering group, and it became a significant part of the project scoping. Afterwards, the workshop was named the scoping workshop.

The Steering Committee included two project leaders from the Health and Care Administration, an ethnographer, who made observations in the nursing home, two deputy managers from the nursing home (both trained nurses), as well as a chaos pilot and a project manager from Copenhagen Living Lab. When the workshop took place, the steering committee had only met a few times. The workshop lasted approximately 6 hours including breaks and it was video-documented.

The research was conducted as a process driven research project with special focus on identifying the underlying drivers, which facilitated emergence in the workshop. Sometimes the research role was extended to that of a leaning coach or facilitator; however, in order to ensure the focus on the process, there was no interference in relation to the project content.

The analysis of the data was based on the video documentation from the workshop as well as informal meetings and interviews with some of the participants both before and after the workshop. Furthermore, we had full access to all documentation made in relation to the project.

#### **5 EXPERIENCES FROM THE WORKSHOP**

At the beginning of the scoping workshop, the participants were asked to build individual models as answers to the question 'What is the Good Elderly Life?' In this process, many of the participants tried



together” process, when the participants were trying to combine and fit together the different models representing their different insights and perspectives. The ‘emergences’ were not separate from the shared model, but were actually an integrated part of it. However, once in a while one of the participants would suddenly stop the modeling process and reflect on what these ‘emergent’ insights and understandings meant, and how it would affect the project plans and project scope. In the following section, we will try to share a few examples of this.

The first example is linked to the emergent understanding that expectations and pre-conceptions have to be part of the elderly life investigations. During the first part of the workshop, the participants were mainly focused on the experiences within the nursing home. For instance, the ethnographer Josefine shared some of her presumptions about this based on her initial research at the nursing home:

*“(…) My point of departure is: What is the good elderly life for the elderly person. And I have tried to illustrate this as a pictogram. (...) Well it is about being physically active [points to the man on the skateboard]. (...) To have all one’s physical faculties [points to the magnifying glass] (...) To be able to go out and explore. [points to the backpack, camera and flippers] (...) And if you need it, to have the necessary assistive tools [points to the man with the sack trolley as a symbol of a walker] (...) and not to be afraid of the new things (...) and to be able to communicate with one’s relatives as communication is done today [points to the computer]. (...) To be mobile and to be somewhat economically independent (...)”*



Figure 2. The ethnographer’s initial model

During the second part of the workshop, when the participants were trying to build one shared model, one of the participants started to reframe the content of Josefine’s model. He explained it like this:

*“Well... the way I understand Josefine’s model – is that it is almost inside the elderly person. That we are almost down to what is important for the individual.”*

This initiated a discussion on what the model really represented, and in the end Josefine herself reframed the content of her model:

*“Maybe it is the expectations in relation to the good elderly life.”*

After Josefine’s model had been positioned in the shared model as “the expectations in relation to the good elderly life”, one of the participants started to address the issue of understanding the expectations of elderly people and creating room for these conceptions within the environments they live in. Furthermore, the idea of investigating pre-conceptions as well as present experiences became an integrated part of the ethnographic research design.

The second example, in which an emergent insight or perspective influences the project scoping, is linked to the issue of investigating ‘the good elderly life’ outside the nursing home context as well.

During the first part of the workshop, when the participants were creating their individual models, they were mainly staying within the nursing home context (For instance the model created by Lene reviewed in Figure 1). But, later on in the process, when the participants were asked to create one shared model – a new perspective emerged. It was Frida, a deputy manager at the nursing home Sølund, who initiated this new path:

*“You give me the idea that we are caught up in our own profession, because we use the nursing home as point of departure instead of “the good elderly life”. “The good elderly life” means that we do not necessarily have to build the institution – but built the assistance in relation to the need. We do not need the institution, but [instead] that the assistance is ready - out there.”*

This idea was supported by one of the other participants, who elaborates on the idea and reframes its focus to the individual elderly person.

*“I really like the thought (...) where the type of accommodation is just a frame. (...) What is important now is that: I am this type of elderly person and at this point I need this type of assistance or this type of help. It may be technological, other people or it may be safety (...) But it is not necessarily placed within a particular frame.”*

And accordingly, this understanding was built into the shared model.

Later on in the workshop Frida suddenly stopped the process and initiated a reflection in relation to new emergent perspective, when she said:

*“Well, I am thinking a little retrospectively. We had some ideas in the beginning, and are they also reflected [in the model]? (...) I mean, we came from a point where some of us were building nursing homes, and then we sort of shifted the concept, and positioned the person in the centre instead (...) But what happened to the original ide(...)? I have been part of leaving it, and it is okay, but still I am thinking what happened to the original idea? “*

This initiated a broad discussion in relation to the scope of the workshop. However, in the end all the participants agreed that this new emergent perspective was too important to leave behind. After the workshop this change in scope also affected the follow-on activities in the project.

## **7 IDENTIFYING PATTERNS**

When viewing the incidents from the workshops, when new insights or perspective emerge, it is clear that it happens in a certain pattern. As mentioned earlier, most of these emergent insights and perspectives were created in the ‘building together’ process, when the participants were trying to combining and fit together the different models, which represented their different insights and perspectives on the project. During this part of the workshop, the participants’ attention was mainly on the models. That is, the participants were all fully engaged in the construction of one shared model and finding out how to fit together the different perspectives and insights, represented in the individual models. In that process, the participants did not necessarily pay extra attention to the emergence of new insights or perspectives and in many cases, they also did not reflect on whether the shared model matched the original scoping. This was also evident in the fact that the ‘emergencies’ (new insights and new perspectives) were not themselves separate from the shared model. Instead they were an integrated part of it.

Then, once in a while one of the participants would suddenly stop the modeling process and start reflecting on what had just been built, or how the shared model matched the original scoping. During this part of the workshop, the participants would shift their attention from the models to the project scope. That is, they would raise their attention from the detail to a more overall viewpoint. In doing so, the interaction in the group would also shift from dialog-build-dialog-build to a typical meeting-style discussion – question-dialog-answer-question-dialog-answer. It was during these parts of the workshop that the emergent insight and perspectives would be named and discussed both in relation to

their appearance and relevance, but also in relation to the original project scope. There is an illustration of this below:

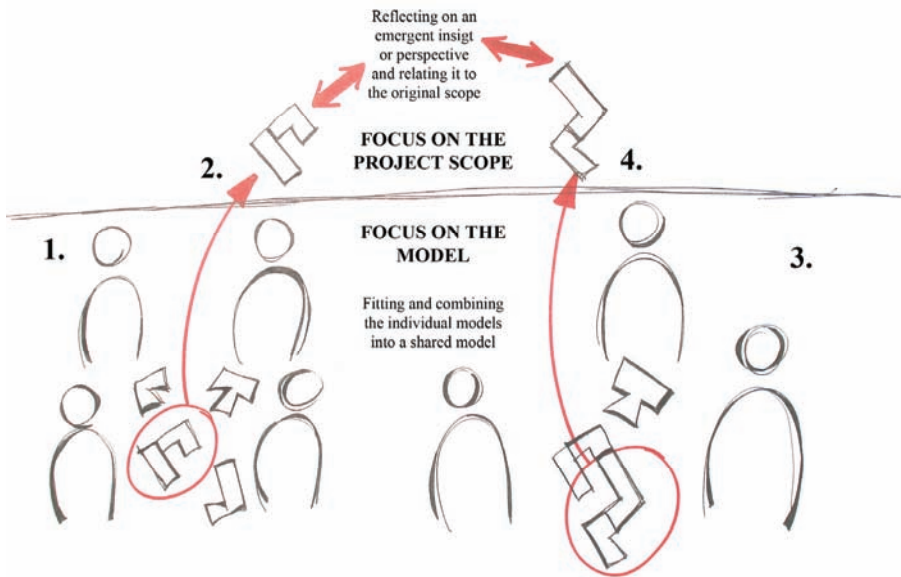


Figure 3. The pattern, which facilitates the emergence of new insights or perspectives

In number 1, the participants are focusing on the model, trying to fit and combine the individual insights and perspectives into a shared model and in the process of doing so – something new emerges. In number 2, the participants are focusing on the project scope. They are reflecting on the new insight or perspective, which have emerged in the model, and they are relating this to the original scope. In number 3, they resume to model and once again they focus on fitting and combining the individual insights and perspectives. In this process a second new insight or perspective emerges. In number 4, the participants are reflecting on this second new insight or perspective – and relating it to the original project scope. After this they once again resume to the model and so on.

As figure 3 reveals, the emergence of new insights and perspectives is facilitated by a constant shift in focus between the details in the model and the overall project scope. When the focus is on the model, the emergent insight or perspective is created. However, it is in the reflection, that the emergent insights and reflections are named and related to the project.

To better understand this shift in focus in the workshop, it can be useful to compare it with Schön's description of the 'reflective practitioner' [13]. The reflective practitioner is both reflecting *in-action* (in relation to a model or activity) and *on-action* (after the model or activity is done). The same thing is happening in the workshop. When the participants are focusing on the model, they are reflecting *in-action*, whereas when they are focusing on the project scope, they are reflection *on-action*. A difference between the setting of this workshop and that described by Schon is that here the participants are working collectively.

## 8 IMPLICATIONS AND CONCLUDING REMARKS

In this paper we have discussed the phenomenon of emergence and the Lego Serious Play method as a way to induce intentional emergence in the Transformation Context. We have found indicators suggesting that intentional emergence, in relation to project scoping and problem investigation can be facilitated by a constant shift between a project mindset and a modeling mindset. That is, a constant

shift between focusing on the overall scoping of the project and focusing on the details of fitting together different models, which represent various insights on the project.

As mentioned in the introduction, this paper is based on our first and brief reviews of a large set of empirical data. To further develop the indicators described in this paper, it will be necessary to go more deeply into the material to see how widespread the pattern is and if it can be generalized. Thus far, the indications that emergence can be facilitated in Transformation Design seem promising, both in relation to Transformation Design as a research area as well as an emergent practice.

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