

SCANNING THE TERRAIN: CREATIVITY AND EMBODIMENT EXPLORING THE USE OF BADIDEAS, IMPROVISATION, REFLECTION AND REPLAY

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Abstract:

This paper focuses on a research proposal to test the effects of a creativity method called RePlay. An embodied approach towards creative process is put forward as an opportunity to observe creativity in action as well as induce reflection both inserted in the process as well as afterwards. This conceptual method builds upon Alan Dix BadIdeas as well as improvisation techniques and the use of props in collaborative and creative process. Theoretically it considers the writings of biologist, neuroscientist and philosopher Francisco Varela regarding embodiment. Research questions are also raised regarding the importance of context and reflection as part of the creative process and the role of embodiment.

Keywords: props, BadIdeas, RePlay, creativity, improvisation, embodiment, reflection, design research, design methods, context.

1. Introduction:

This paper describes a proposed pilot study to observe the creative process using an experimental design method called RePlay. RePlay as the title suggests, is a relaxed and playful however reflective approach to collaborative creative process. At first glance it combines Alan Dix's method BadIdeas with that of improvisation and the use of props. However on a secondary level the technique is embedded with opportunity for reflection both within the moment and after the fact. The rationale behind this is as an early stage researcher wanting to create a playful environment where by creativity could be observed in action in essence, a method as the title of this paper suggests that would allow one to scan the terrain of creative process. There is also a strong motivation to explore the value of reflection and context as something that can be incorporated in early stages of the creative process rather than later. Some of the research questions that are being explored are context and how an individual's creativity is situated in as much the object they are creating as the audience/client and environment for which and in which they create. In this case context meaning the circumstances, this could be situational or environmental and therefore calling for an embodied approach. Another opportunity for exploration is to observe whether inducing reflection early on in the creative process influences creativity and creates new directions and requirements (Schon, 1997). Reflection not only about process but also regarding embodiment meaning, experience and the influence phenomenological aspects play in the cognitive and in turn, the creative process. Varela *et al* (1991) suggest that embodiment is a concept that has been missing in traditional cognitive sciences. The design method described in this paper accounts for the value of experiential information in this case via the conceptual process of idea making or designing. This paper is useful for other researchers engaged in qualitative design research or perhaps a phenomenological approach as well as the importance of embodiment in the creative process. Perhaps in the future RePlay could be useful for creatives, clients, stakeholders, designers, technicians, engineers and scientists wanting to explore design methods that work towards innovative leaps. What follows is a brief description of Dix's design method and how I propose to experiment with the coupling of improvisation techniques and reflection, via audio protocol and the use of a prop using the method RePlay. I will also explain the concept of embodiment and its relevance to design research and creative processes and how this in turn relates to a phenomenological approach. I propose that by emphasizing context and reflection via improvisation and the use of a prop there will be a strong emphasis on an embodied approach to the creative processes and therefore an enhanced creative process.

2. Detailed Description of RePlay

Through the use of a prop¹ as a catalyst in the creative process, participants will be asked to improvise use cases based upon my supervisor Alan Dix's BadIdeas method. Dix's method BadIdeas is a technique that uses a 'bad' or 'silly' idea approach to inspire creativity and teach critical thinking in the design process. One of the characteristics of BadIdeas is that it encourages divergent thinking. Later participants are led through a process of reflecting upon their ideas in a more convergent or analytical way. Dix *et al* (2006) describe one of the ways the process could be structured is through the use of prompts one of which is role play whereby the participant considers a use case where a BadIdea might be useful.

One of the goals of combining Dix's method with that of the bodily via improvisation as well as verbal externalization is to induce reflection early on in the creative process and observe whether doing this type of exercise at this early stage influences creativity and creates new directions or requirements for the process. Dix *et al* (2006) describe this process as body storming through a use case. Keith Sawyer a professor of psychology and education has done a great deal of research on the theatrical history and the applicability of improvisation to the creative process. In particular his research focused on the use of improvisation by Jazz musicians (Sawyer, 1999). I wish to explore improvisation as a way to extend upon Dix's use of body storming and reflection by embedding one of the actors in the group as a reflector. The role of the reflector being to verbally externalize what is going on in the improvisation as a kind of verbal protocol of the process. Another element that will be added is a prop as discussed earlier in the introduction of this paper. The prop will work as a constraint in order to guide the improvisation towards exploring the properties of a BadIdea.

Props have a history of use in design research as a way to collect feedback and other pertinent information regarding use. Carroll and Tobin (2003) have used props and body storming as part of their research on design innovation through the use of technology. They refer to this process as 'envisionment'. However this process is focussed more on a user centered design approach directed towards the interaction of users and technology as can be seen in Fig.1 (Carroll and Tobin, 2003). As a result the props used as part of the creative process in this case have been endowed with technological functionalities such as GPS, video and audio. Carroll and Tobin (2003) have also acknowledged the importance of constraints and in this case the design team provides constraints through real-time input to the players regarding the props being used in the performance. Below is a schematic of how Carroll and Tobin (2003) suggest the envisionment process operates.

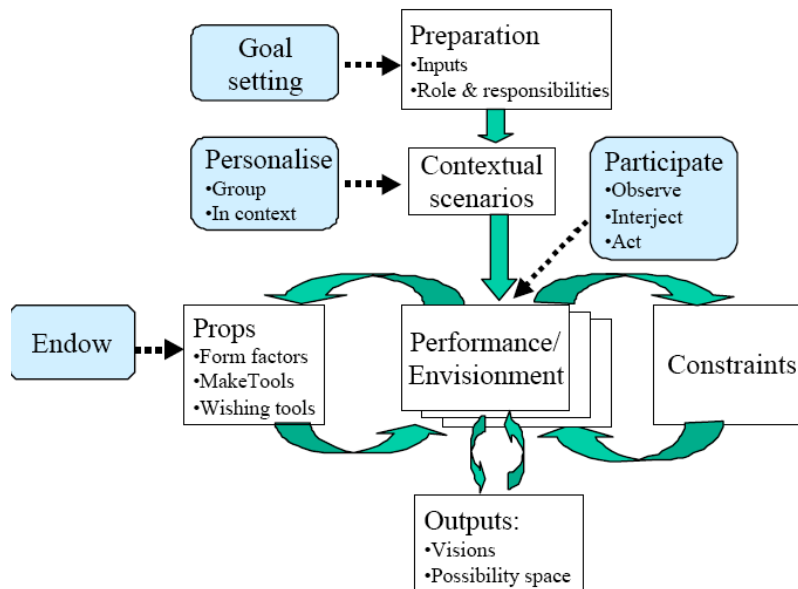


Figure 1.0 The revised envisionment process (Carroll and Tobin, 2003).

¹ "For a full dictionary definition, see the online cambridge dictionary at <http://dictionary.cambridge.org/define.asp?key=63430&dict=CALD>"

For this proposed study the design/creative team is improvising the situation and given that they have completed Dix's BadIdea method they have verbalized properties and therefore also some constraints regarding the use of the prop. However this is not to say that more constraints may not arise as this is part of the nature of improvisation due to audience feedback during the performance. Yet since it is the design/creative team that is body storming they will be doing on the fly creativity in a cross- disciplinary situation as type of embodied creativity.

In their paper Caroll and Tobin (2003) describe some improvements that could be incorporated into the 'envisionment' process. One suggestion has to do with the concept of 'emotional make tools' such as scissors, glue, scrapbooks, cameras and stickers; Lego and building blocks. "These are either emotional or cognitive. Emotional Make Tools are used to create artefacts that show or tell stories, for example collages or diaries. Users explain their artifacts to express feelings, dreams, fears and aspirations." (Caroll and Tobin, 2003). By selecting props with materials that are open -ended they can function to better facilitate rather than narrow the possibilities of interaction.

So far the criteria by which I have selected materials is by their universal design and flexibility. It is important that these materials be tactile and allow for different structural shapes easily and quickly. This would be useful in terms of fast proto-typing due to time constraints. It is also significant that the props create experiential associations to 'play' since I would like the creative team to experience a relaxed and open atmosphere. Keeping in mind the spirit of openness in this activity, it is also important to consider materials that have little or no cultural references since this could imply a strong symbolic language in terms of use.

The first material considered as a possible direction for a prop is felt. Felt is easy to use and flexible for creating mock- ups due to its softness and tactile qualities. The second material is a toy called a Furb² that is basically a squishy ball that has rubber spikes on it. The rationale behind this was to inspire 'play' among the participants in a subtle and universal way by using an object that has little if no cultural associations besides an experiential association with childhood. The third object is Lego quite the opposite in terms of its cultural and social references since it has a strong symbolic language in terms of its use. However it also triggers memories of childhood and openness to creative process. Another benefit of Lego³ is its ability to be structural and an adaptable tool for quick prototyping. The fourth material is Play- doh⁴ a clay-like squishy material that can be modelled quickly and again is very tactile however can get messy and is not such an easy material to get people to use due to its stickiness and odour. At this early stage no decision has been made regarding the material to be used as prop as I would first like to play with different materials in different scenarios.

3. Evaluation and Theoretical Perspective on Embodiment

After completing this method participants will be asked to watch a recording of the improvisation as well as listen to the audio recording done by the reflective actor in the group. Participants will be asked to comment on the usefulness of RePlay as well to reflect on the kinds of ideas which came up through the process. Caroll and Tobin (2003) conduct reflection by asking the actors to reflect upon their actions goals and motives. It will also be useful to consider the use of props as part of the improvisation and whether they assisted or hindered the process.

The method I am proposing acknowledges the importance of situatedness as articulated by Lucy Suchman (1997) in *Plans and Situated Actions* and the role that embodiment plays in consciousness. It also acknowledges the value of 'reflection in action' as suggested by Donald Schon (1997). The approach which Varela *et al* (1991) suggest as a 'middle way' approach acknowledges both the concept of 'situatedness' as well as 'reflection in action' since this approach considers not only what is happening inside the mind but also how

² "For more product information, see <http://www.tobar.co.uk/>"

³ "For more product information, see <http://www.lego.com/>"

⁴ "For more product information, see <http://www.toysrus.com/product/index.jsp?productId=2326674>"

much of what becomes a mental representation is an adaptation of external circumstances. Varela *et al* (1991) call this adaptation structural coupling in that we create models of concepts based upon associating them with biological as well as cultural perceptions. The analogy used by Varela *et al* (1991) is color and how an understanding of color can have perceptual as well as cultural foundations. This line of thinking can also be applied to the idea of participatory design whereby the context for which something is designed as well as for whom the product is designed for should not be overlooked in the design process. Varela *et al* (1991) are influenced by a Buddhist psychological approach that acknowledges mind as a fluid embedded concept rather than only a biological machine. They are also influenced by Merleau-Ponty's idea that perception is not only a product of the mind but also that perception contributes to the enactment of our surroundings. Likewise in Buddhist practice mindfulness training is a process by which one trains to become more aware of mental processes.

How is it possible for something that exists only in our imagination to become a reality. It is a remarkable quality of the mind that we first create objects with our imagination and then bring them into our everyday reality. In fact everything starts in the imagination. For example the house we are living in was first created in the imagination of the architect. He or she made a blueprint for the actual building... In reality the mind is the creator of all experience... If we imagine something that could in theory exist and then familiarize our mind with it for long enough, eventually it will appear directly to our mind, first to our mental awareness and then even to our sense awareness.(Gyastso, 2001: 152).

4. Conclusion Future Work

Currently variables for observation as well as defined use cases are being explored for RePlay however at this stage it would be favourable to keep the research exploratory. By keeping things open ended there is a chance to explore formal goal oriented design environments as well as open-ended informal situations and involving practitioners outside of the design discipline. By having the participants engage in verbal communication as well as physical enactment my hope is that they will discover a level of brainstorming or problem solving and reflections that had not occurred previously in their creative process. My hope is that the use of a prop will provide constraints that function as guide for the creative process while at the same time beckon the creative team to consider context as part of the conceptual process. As a result a positive bi-product of RePlay could be the flagging of requirements that have been overlooked in the conceptual stage early on rather than later, for example target audience or other contextual or cultural information. If this method was successful then perhaps later improvisation techniques could be used again with a prop and or perhaps used as part of goal oriented product development or artistic process.

Acknowledgments. I would like to acknowledge Per Galle for his valuable feedback as well as Alan Dix for his supervision.

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