Public Prototyping
A participatory design process exploring the application of co-creative sketching

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A thesis presented in partial fulfilment of the requirements for the degree of Master of Design. Massey University, Institute of Communication Design, College of Creative Arts, Wellington, New Zealand.
The objective of this research is to demonstrate that co-creative sketching as a part of the participatory process has the potential to support the developmental nature of a visual communication tool used to promote the exchange of experience. The tool is intended to create an informative hub that influences a travellers experience of a location.

Ethnographic research as reflective sketching was conducted in the Tongariro National Park. Within this setting reflective sketching located the kitchen and common area of traveller specific accommodation as an ideal collaborative environment to conduct participatory design research. In this collaborative environment snowboarders and skiers who are aged between 20-30 years are identified as the target audience. This specific audience participated in co-creative sessions throughout the design process, resulting in the participatory design of the tool.

The design aim of the visual communication tool was to promote the exchange of experience between snowboarders and skiers about a specific location. This was achieved by adapting generative tools made up of a visual language which supported the word of mouth exchange and individual expression. The exchange of experiences was facilitated by co-creative sketching with the visual language during a state of play. Playful co-creative sketching supported word of mouth dialogue between the snowboarders and skiers in a way that co-created an informative visual representation of the dialogue or contextmap. The resulting contextmap represented an image for experience which was beyond an individuals conception and made individuals tacit-knowledge accessible to audiences within and outside the moment of exchange, creating an informative hub which influenced the specific audiences view of experience for a location.

An action research methodology is used during the course of this research, informed by the approaches of co-creation, context-mapping and generative tools. These approaches constructed a theoretical framework for the participatory development and co-creative sketching of the communication tool. This supportive thesis discusses the context, the theoretical concepts and provides an in depth account on the research through design process: the week-by-week participatory process undertaken to develop the visual communication tool.

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This thesis investigates the use of co-creative sketching in participatory design methods in the context of travel, specifically focusing on the travel activities of snowboarding and skiing.

Section 1: Will explain the research objectives - what the research is attempting to understand through participatory design research. This sections will outline the goals and results the research achieves. (p. 1)

Section 2: Introduces and explains the context to which the research is applied to. Exploring links between information seeking, image construction, sketching, play and how these relate to travel and co-creation via participatory research. (p. 9)

Section 3: Introduces the research question and explain how this research question drives an action research methodological approach and design development of the project. (p. 17)

Section 4: Expands on the use of an action research methodology supplying a detailed week-by-week description of the undertakings in the participatory design process needed to reach the final design objectives. (p. 43)

Introduction
Definitions

Action-Research:

“Action research is a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purpose. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities (Bradbury & Reason, 2007, p. 4).”

Co-creation:

“Participatory design in which all the relevant stakeholders are direct participants in the process throughout the entire process. The role of the non-designer participants will change throughout the process. For example, when the idea has been embodied in a visual and semi-functional prototype, the potential end-users would be involved in usability testing the prototype rather than doing design refinements (Sanders & Van Patter, 2003, p. 15).”

Context-mapping:

“A contextmap is an explorer’s map: incomplete, ambiguous, diverse. (…) like the proverb ‘the map is not the terrain’, ‘maps grow because the traveler adds to it’, ‘maps facilitate discussion and planning’, ‘maps are used with other tools’ (Steeuwijk Visser & Stappers, 2006, p. 22).”

Generative tools:

“Generative tools” refers to the creation of a shared design language that designers/researchers and the stakeholders use to communicate visually and directly with each other. The design language is generative in the sense that with it, people can express an infinite number of ideas through a limited set of stimulus items (Sanders & Chan, 2007, p.1).”

Play:

Definition 1; “Play constitutes as training (…) for the serious work that life will demand (Huizinga, J, 1970, ).”

Definition 2; “Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy, and the consciousness that is ‘different’ from ‘ordinary life’ (Huizinga, 1970, p. 47).”

Sketching:

Definition 1; “Because the design problem it’s self is ill-defined and ill-structured, another key feature of design sketches is that they assist problem structuring through solution attempts (prototypes)

We have seen that sketches in corporate not only drawings of tentative solution concepts but also numbers, symbols and text as the designer relates what he knows of the design problem to an emerging solutions (Cross N, 2006, p. 37).

Definition 2; “Drawings, diagrams and sketches are aids to internal thinking as well as aids to communicate idea and instructions to others (Ibid).”

Travel:

To make a journey; to go from one place to another; to journey (Travel, 1989).

Tagging:

The action or process of decorating with graffiti tags; also, these tags collectively. slang (orig. U.S.) (Tagging, 1980).

Creative Leader:

Someone who supplies a scaffold or a set of tools that facilitate and helps a group or an individual achieve creativity. This Individual supports the process by assisting and participating in the correct use of the tools during the creative process. The creative leader facilitates peoples expressions through leading, guiding, and providing scaffolds (Sanders & William, 2001). They lead people through the doing aspect of the process, guide people on adapting and provide scaffolds for those on making level and supply a clean slate for those real to create.

Visual Communication:

Communication that uses a common visual context made either or a combination of icons, images and word images to convey meaning or a message from one person to another.

Participatory Design:

Participatory design is a field that focuses on designing with people and places them as experts of their experience. Sanders & Chan (2007).
Section 1

Section 1 will explain the research objectives - what the research is attempting to understand through participatory design research. The following sections will outline the goals and results the research achieves.
1.0 Main Question

To what extent can co-creative sketching promote specific audiences to exchange accounts of experience, influencing their view of experience?