

Sketching as a Key Tool in Promoting Creative Thinking and Aesthetic Solutions

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Introduction

This factsheet is the product of the students' work with Procedural Theory in the course Urban Landscape Design during the spring term of 2025. The aim of the assignment is to reflect on and communicate urban landscape design working processes, by studies of sketching processes and creative thinking. The procedural theory or design process is a step-by-step procedure and exploratory method that applies a problem-solving approach to landscape design. According to Murphy (2016), a clearly defined design problem increases the likelihood of a successful resolution, where information intake and knowledge-based thinking during the design process is a critical part in achieving a successful design outcome (Bursic and Altman, 1997; Murphy, 2016). This factsheet shows some examples of the design process, and focuses mainly on reflecting on and describing the role and importance of sketching as an investigative and communicative tool that permeates the students' attempts to describe selected aspects of the design process. In this context, the design process facilitates testing, evaluation and clarification of the creative development (Hoffman 2019). The students' suggestions regarding the design flow underline, to some extent, the sketch as a crucial tool in the search for design and aesthetic solutions.

The course Urban Landscape Design (LK0400) is an independent bachelor's level course focusing on design of urban green spaces, offered at the Swedish University of Agricultural Sciences, and run by the Department of Landscape Architecture, Planning and Management (LTV faculty). The

following abstracts and poster presentations present the students' thoughts and reflections through visualisations and descriptive text, and show attempts to verbalise the design process steps/phases. The assumptions made and described in this factsheet are based on literature studies of procedural theory, as well as on the students' previous experiences of the design process, and through individual and group reflections and discussions.



Navigating Design – The process of creative thinking in procedural theory

By *Tiwa A. N. Indrevoll, Maartje Frencken, Fatima Zahi & Nour Alhuda Mufleh*

Procedural theory is an essential part of landscape architecture. As a creative profession, it is important to have a clear structure that leads to a thoughtful design. While there are many ways to define the design process, Cross (2018) divides them into three main actions: clarifying the problem, searching for a concept, and fixing the concept. This process can be compared to navigating through nature. Like sketching and visualising help communicate, metaphors can explain a concept (Lawson 2005). The first action from Cross's definition, clarifying the task, can be likened to crossing an open meadow. You start by defining your goal and task. The road in front of you is clear, and your end goal looms in the distance as a faraway mountaintop. In Cross's research, he found that many landscape architects use too little time in this phase, which leads to them having to backtrack (Cross 2018).

A search for the concept begins. This step is complex and can feel like getting trapped in a forest where many paths present themselves yet none of them are clear. Sketching can help you escape this metaphorical forest. Hoffman (2019) explores how a sketch can work as a catalyst, evoking new ideas. The final action defined by Cross (2018) is fixing the concept, which entails detailing and testing the concept. In this phase it becomes clear to the designer what needs to be done to finish the project – the view to the mountaintop becomes clear. However, to finish the project there is a steep climb ahead until the design is finished and the top of the mountain reached. The designer can look back at the route taken, reflect on the design process, and look ahead to future projects with the new knowledge that was gained.

Supportive references: Cross (2018); Hoffmann (2019); Lawson (2005).

The Creative Clouds – Sketch to navigate your creative thinking

By *Gemila Hansson, Jay Anderson, Joshua Friese & Pamela Munsey*

*"Thoughts are free, who can guess them? No person can know them,
no hunter can shoot them and so it'll always be:
Thoughts are free"*

¹Die Gedanken sind frei

¹German song. The text as well as the composition remain of unknown origin, but its most popular version can be traced to Hoffman von allersleben who rendered it in 1842



The creative thinking and design process in urban landscape architecture is a problem-solving journey, navigating complex challenges that involve multiple layers of consideration. Hoffmann (2019) describes the process of design as not linear, but a constant recurrence of problem solving that is unique to each individual.

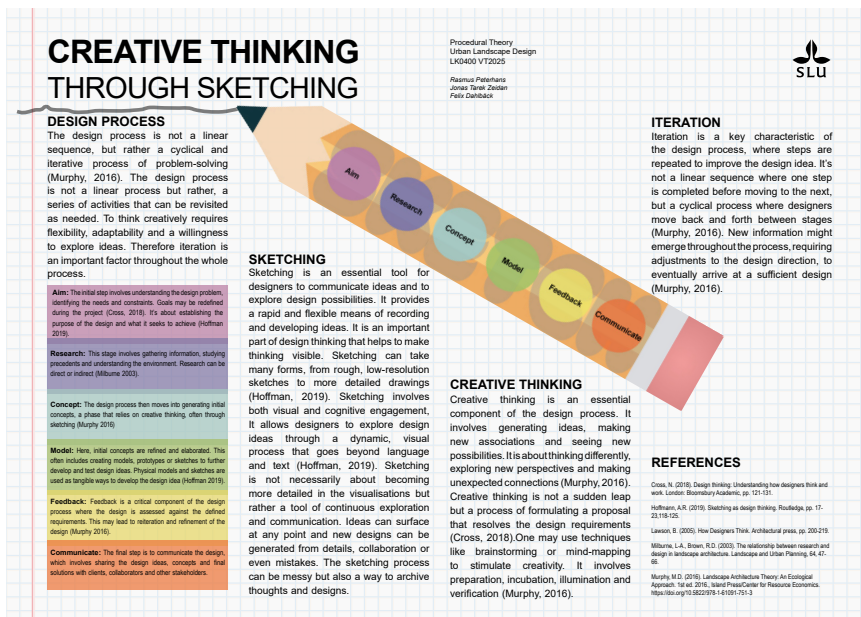
Often, thoughts and the creative process can feel unpredictable and directionless, similar to clouds passing across the sky. However, patterns can be seen in the clouds, where sketching can help control the direction of our thoughts. For the poster, design

processes described in literature were compiled into four steps: analyse, generate, refine, and communicate. The use of sketching can significantly help develop the creative process through these steps (Hoffmann, 2019; Murphy, 2016; Milburne, 2003).

Sketching serves as a vital tool throughout the steps, helping to explore, develop, and clarify ideas while ensuring effective communication of concepts. *Analyse*: Identifying problems and gathering research.

- Sketching can improve research and is a quick way to gather information on site.
- Drawing helps connect to long-term memory, enabling recall of small details.

Generate: Developing ideas and solution approaches.



(2019), Lawson (2005), Milburne & Brown (2003), and Murphy (2016), combined with our personal experiences of creative processes, to conclude the steps of the design process as being: Aim, Research, Concept, Model, Feedback, and Communicate.

Sketching is an integral tool throughout all stages of this process, and should not be defined as a separate phase. The foundation of the design process is creative thinking, which enables designers to produce responses to challenging issues. We emphasise how sketching is an essential tool to support and improve this process, as a critical role of

creative thinking in landscape design. Sketching is a dynamic, exploratory and iterative process that encourages creativity and problem-solving rather than a static act. Designers may quickly produce and visualise ideas by sketching, which allows for iterative explorations. Sketching promotes divergent thinking by combining visual and motor memory. Important elements of creative thinking are flexibility and originality, which can be supported by the flexibility of sketching. It offers possibilities for testing, allowing for refinement of partial solutions through iterative cycles. Drawing is also a useful communication tool that helps to bridge the gap between external collaboration and internal ideation. It enables designers to successfully communicate concepts to stakeholders and clients. This poster demonstrates how sketching and creative thinking can interact in the design process. It is situated as an essential tool that enhances the critical creative process.

Supportive references: Murphy (2016); Cross (2018); Hoffmann (2019); Lawson (2005); Milburne and Brown (2003).

Conclusion

In all forms of site design, the designer needs to find working methods and tools that work and serve as the goal of creating aesthetic and relevant solutions for people and the environment. Common to all the groups is that they emphasise the iterative way of working, where sketching opens up for creative ideas and solutions. Sketching can also bridge the gap between internal ideation and external collaboration, where the sketch outline becomes the tool to communicate at different levels in the process and provides an opportunity for understanding complicated relationships.

To varying degrees, the students' work has highlighted the importance of a fundamental analysis

- The process of sketching can help further develop ideas. Each stroke works as a catalyst to think of new concepts and designs.
- When drawing, the brain releases dopamine which increases creativity.

Refine: Involves processing feedback and viewing developments and design problems from a different perspective.

- Returning to analogue material like sketching after using digital software can help the brain to process refinements more effectively.
- Sketching is the quickest way to test potential solutions/refinements.

Communication: Critical throughout the creative design process in order to efficiently and effectively produce a solution in response to a brief or client.

- Sketching as a language can help avoid miscommunication.
- Easier to communicate niche aspects of the design with visual information.
- A picture says more than a thousand words.

Supportive references: Hoffman von Fallersleben (1842); Hoffmann (2019); Milburne and Brown (2003); Murphy (2016)ersleben who rendered it in 1842

Creative Thinking Through Sketching

By Rasmus Peterhans, Felix Dahlbäck & Jonas Tarek Zeidan

The design process is a complex and multifaceted activity that requires a blend of rational analysis, creative thinking and practical skills (Murphy, 2016). This poster shows the key components of the design process, emphasising the role of creative thinking and the importance of sketching as a tool for exploration and communication. In accordance with the task assigned in the course *Urban Landscape Design*, we have drawn from various authors such as Cross (2018), Hoffmann

and creative thinking during the design process, using a methodology based on a cyclic process of varying degrees (Murphy 2016). The work presented in this factsheet shows a few different ways of mentally relating to the design process. The ways of approaching design work are deeply personal (Lawson 2005; Cross 2018), and the intuitive process takes place on an unconscious level (Murphy 2016).

From the perspective of a group activity and the task of working with a personalised process, the students have performed well and been successful in demonstrating the ability to extract the principal ideas of procedural theory. The presentations in this factsheet show the students' increased understanding of their own assumptions in the sketching process and the procedure of creative thinking. As teachers on the course and practicing landscape architects, we would also like to take the opportunity to thank the students for interesting and fruitful discussions about the mental progressions and the sketching and drawing procedure during the design process.

For further information about the course Urban Landscape Design, see

<https://www.slu.se/en/education/programmes-courses/course/LK0400/30044.2425/Urban-Landscape-Design/>

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The fact sheet has been prepared within the LTV faculty's area Department of Landscape Architecture, Planning and Management

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