



# Intuitive and rational ways of thinking in design process steps

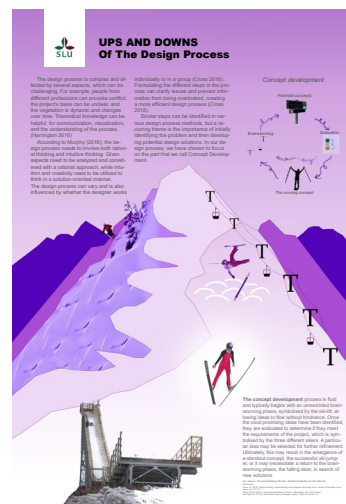
Petra Thorpert, Stefan Sundblad, Ivar Janson, Madeleine Mellby, Therese Malmberg Morales, Linda Sjöqvist, Sara Maksimov, Alexander J. Weisend, Eduardo Gómez, Lisa Jonsson, Alma Lindahl, Karoline Klingborg, Helena Gredvall & Takakazu Sonoki.

The transformation during the various phases in a design process may move from a broad context to detailed facts. According to Cross (2018), a frequent shift in attention or activity mood may influence the quality and overall result. By moving between rational/critical thinking and a flow of creative and intuitive flux, an essential give- and take approach for a successful design process arise (Murphy, 2016). This factsheet shows some essential phases of the design process, and focuses on intuitive and rational thinking as well as narrative design as a method for connecting essential phases in a design process (Lawson, 2005; Murphy, 2016).

The factsheet is the product of the students' work with *Procedural Theory* in the course Urban Landscape Design during the spring term of 2024. The aim of the assignment is to reflect on and communicate urban landscape design working processes, by studies of procedural theory. The assignment considers elements that, in various ways, affect the interaction between method development, analysis and conceptual statements, from sketching processes to the final design proposal.

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 course considers elements that, in various ways, affect the interaction between analysis and development of methods and concepts through studies of design theory, from sketching and doodling to the final design proposal. Landscape visualisation is an important theme throughout the course, and helps to increase the student's awareness of the interplay between contextual relations and concept development. The students are encouraged to apply experimental approaches, where analyses and evaluation are mixed with theoretical reasoning. The main aim of the course is to use different ways of working with design in the urban environment, and – supported by design theory and good examples – apply, document and present design processes, both individually and in group work.

The following abstracts and poster presentations present the students' thoughts and reflections through visualisations and descriptive text, and show an attempt to verbalise the sketching and doodling steps/phases and related mental activity during the design process. 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.



## Ups and Downs Of The Design Process

By: Ivar Janson, Madeleine Mellby, Therese Malmberg Morales & Linda Sjöqvist

The design process can take different shapes from person to person and varies depending on the number of participants involved. The process is complex since it is affected by several

aspects which can provoke conflict. Therefore, it is important to have theoretical design knowledge to use as a tool for communication and visualisation and to favour comprehending the process. The designer often starts with a structured approach, while the design process may begin with adding solutions to the problems. The design process can be decomposed into stages to highlight the problems and important information while making it efficient.

The two more significant stages are analysis and concept development. The analysis includes, amongst other things, function and user. This essay will focus on the concept development.



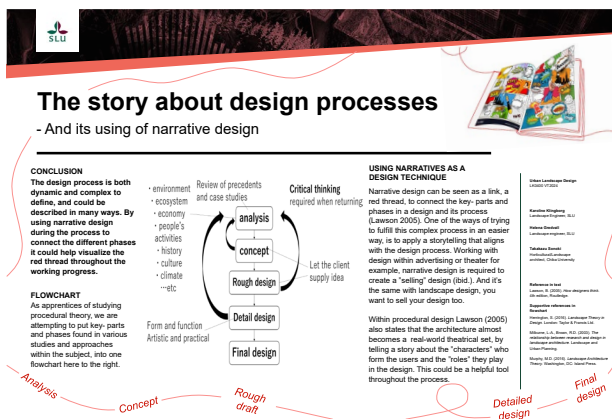
taken into account (Camora et al 2010). That being said, all projects are rather about redesigning a place and being flexible to future changing conditions (Herrington 2016).

What happens in a design process can be described in different ways. An analysis of the site, problem description and concept development. How it is visualized and which approach differs between different people and also in the literature (Milburne and Brown, 2003). Architects and landscape architects usually avoid presenting multiple options to a client because it will result in a disjointed and messy design that lacks integrity (Lawson 2005). On the other hand, multiple solutions create transparency and involve the clients perspective and to get more information (Lawson 2005). The multiple solutions that have been developed in parallel can be combined into one concept and create new experiences for the next project.

### Experiences

To summarize, a design process can be very diverse, as everyone has different experiences and preferences. There is no right and wrong. In a design process, it is important to constantly maintain a balance between being critical and realistic but also daring to be creative and try wicked ideas. The final design left behind continues to evolve over time and new experiences are added. New experiences, new threads, create other preferences for the next project. Studying design theory can give a better understanding of your own design process and allow for development through knowledge of other approaches.

*Supportive references:* Carmona et al. (2010); Cross (2018); Herrington (2016); Hoffmann (2019); Lawson (2005); Milburne and Brown (2003).



## The story about the design processes

By Karoline Klingborg, Helena Gredvall & Takakazu Sonoki

### Procedural design

As students in landscape architecture and landscape engineering, in this assignment we really got to experience the complexities of this dynamic field. The design process consists of various complex phases and steps, which could start with a problem statement and where the procedural theory is used to guide the designer towards the best solution. Procedural theory may not fully represent the true reality of the design process but can be used as guidance without constricting creativity.

### Flowchart of the design process

A flowchart is included which for us synthesizes key-parts and phases from various procedural design studies. The flowchart we made includes the steps *analysis, concept development, rough drawing, detailed design, and final design*. The design process begins with a thorough *analysis* of the site, including its physical characteristics, historical context, climate and existing ecological systems etc. This analysis guides the development of a *conceptual framework* that establishes the goals and principles of the design, including the clients input and collaboration. The implementation phase of the design process involves translating the conceptual framework into a first *rough design* proposal. When you move the first draft into the *detail design* phase, the balance in the design between form and function begins, and where management and maintenance must also be implemented. Through all these phases, critical thinking is important in making the right choice of design by re-analyzing the steps various times to arrive at the *final design*.

### Narrative design

In this assignment the role of adding narrative design is explored in the overall design process. We argue that narratives can bring depth and meaning to designs, helping to convey a story and establish an emotional connection with the users. Narrative design allows designers to create a cohesive and engaging experience for both users and the design team by integrating storytelling principles into the design process. The storytelling within a design practice also seems to help cement the design team together around this shared world and story. By integrating storytelling principles, landscape architects can create designs that not only respond to the functional requirements but also engage and resonate with the users on a personal level. The narrative design can help evoke emotions, create memorable experiences, and communicate the intended message. As they also do in advertising and on theatrical sets for example.

For example, a landscape architect working on a project can incorporate a narrative design that tells the story of the park's historical significance or cultural heritage. By creating a design that reflects the site's narrative, the architect can foster a sense of place and cultivate a deeper connection between the users and the park. This narrative can be conveyed through various design elements such as interpretive signage, thematic planting, and spatial arrangements that reflect the historical context, or the cultural values associated with the site. This integration of narrative design into the design process could enhance the overall quality and impact of landscape architecture projects.

### Supportive references:

Herrington (2016); Milburne, L-A. (2003); Murphy, M.D. (2016); Lawson, B. (2005).

### Conclusion

In various forms of site design, designers must identify effective methods and tools that serve the goal of creating meaningful solutions for both people and the environment. The students' exploration of the processes they navigate around, while tackling design tasks across different courses, contexts, and scales has resulted in a diverse range of approaches.

It is intriguing to delve into the students' varied methods of describing intricate mental processes, where they emphasize strategies to foster creativity and personal expression. Each group has attempted to construct a model, drawing from literature and personal experience, generating generalized statements about different phases in the design process to varying degrees. However, there is a risk in articulating the design process in overly defined steps, as this may create unrealistic expectations for a universally functional model. Each mission and location is unique, necessitating partially distinct processes, as emphasized by all the abstracts in some way.

A common thread among all the groups is the recognition of the iterative nature of working, where the described phases interact. They all highlight the importance of evaluation not only after completing work but, more crucially, throughout the process. This underscores the design process as inherently iterative.

This factsheet emphasized that both rational and intuitive approaches play significant roles in the design process. However, to enhance the possibility of creating an 'avant-garde,' one must allow the intuitive segments of the mind to be an integral part of the process. It also stress the importance of finding a balance between creative and critical thinking (Murphy 2026). Furthermore, the potential of using a narrative approach to evoke emotions, create experiences and as a communication method is highlighted. This offers an interesting means of communication with a site, stakeholders, and users to create places with unique meaning and experiential value.

In summary, the students show a nuanced view of the complexity of the design process, where both an intuitive, creative and rational approach is an important tool in the journey to find their own unique working process. 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 design process, and development of their critical approach. We, as teachers on the course and practicing landscape architects, would also like to take the opportunity to thank the students for interesting and fruitful discussions about the mental progressions, sketching and drawing procedure during the design process.

**Further information about the course Urban Landscape Design, see <https://www.slu.se/en/education/programmes-courses/course/LK0400/30239.2122/Urban-Landscape-Design/>**

### References:

- Carmona, M., Heath, T., Tiesdell, S., and Oc, T. (2010). *Public Places - Urban Spaces: The Dimensions of Urban Design*. 2. uppl. New York: Routledge.
- Cross, N. (2018). *Design Thinking: Understanding How Designers Think and Work*. London: Bloomsbury Academic.
- Herrington, S. (2016). *Landscape Theory in Design*. London: Taylor & Francis Ltd.
- Hoffmann, A.R. (2019). *Sketching as design thinking*. London: Routledge.
- Lawson, B. (2005). *How Designers Think*. Architectural press, 200-2019.
- Milburne, L-A., Brown, R.D. (2003). The relationship between research and design in landscape architecture. *Landscape and Urban Planning*, 64, 47-66.
- Murphy, M. (2016). *Landscape architecture theory*. Washington, DC, USA: Island Press.



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