

# Management of Sequential Space Experiences

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## Abstract

In this contribution a way of combining endoscopy with architectural notations will be presented. Endoscopy is regarded as a tool to visualize sequences from a model in order to demonstrate how the environment will look like from the pedestrian's or driver's view. But while using it, its limitations must be considered. The model is mostly too small to present distant landmarks, districts, nodes and edges of importance. And most important, experience of space is not only visual. It is a complex process where many aspects must be taken into consideration. These aspects can be presented with architectural notations on physical drawings of the situation. The resulting "storyboard" is most useful in analyzing the situation and making better solutions possible.

## Introduction

Endoscopy is one a tool for visualizing the impact of the future. Nevertheless its limitations must be considered. Actual *space experience* is a very complex feeling where all our senses and our mind cooperate. Looking at an endoscopic video is not the same as actually being there. You sit passively, as a spectator, looking at a two-dimensional screen. Of course, sight and sound can be simulated to some extent, but the active sense of your body while moving is not there and smell, touch and, most important, the spatial experience in all dimensions and in time cannot be simulated. Many aspects of what forms *space experience* in our minds are invisible. For a planner of the future, all these aspects must be taken into consideration. When presenting a future environment, the goal must be to evaluate the situation. In what respect should changes be made? Combining ENDO (endoscopy), which can say something about what will be seen and heard in the future with PAD (pencil aided design) in the form of architectural notations on the projection drawings is a way of making the presentation more informative and achieving a more well-grounded evaluation.

Information about the cause can mostly be found in the projection drawings of the physical objects. The experienced and used effect on man can be described with the help of architectural notations on these drawings, in different colors or on transparent paper placed on top of the drawing. With them, all important aspects concerning the solution can be taken into consideration and be evaluated. Notations are used in all professions, in choreography, music,

film-making, in order to demonstrate man's experience of something presented and dealt with in the future. Why is it so seldom used in architecture? Notations are signs to think with. They are, properly used, a good mental tool which helps the planner to gain an insight into the situation of the future user. They are a partner in the dialogue between planner and project, but can also be used to point out to the authorities and the builder what is most important in the design.

I would like to present a basic set, consisting of only six nonverbal signs which have proved very useful. Being so few, they can easily be remembered and dealt with simultaneously in planning. They should be complemented with verbal notations. And with with one's own signs if necessary. The resulting storyboard can often contain much valuable information. The first five notations are the well-known Kevin Lynch orientational signs [1]: *path landmark, node, edges* and *district*. They clarify how one mentally utilizes one's perceived surroundings in order to orientate oneself. They can be derived from the *gestalt laws* and can therefore, interestingly enough, be used to describe all spaces perceived by man, not only the city space [2]:



- **Paths**

Linear elements which are used for man's movement in space; e.g. streets, pavements, biking paths, corridors, etc. They can also be used in a transferred sense (e.g. sightlines).



- **Landmark**

Single objects which are observed because they differ from the surroundings. They are used as points of support for the movements in space. Size, colour, different shape, meaning can make them be observed. A church, a monument, a blue door can act as a landmark.



- **Nodes**

Places where paths cross, from which movements start and end.



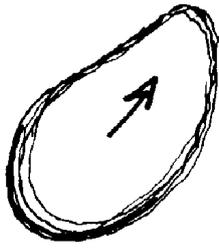
- **Edges (Dividers, Barriers)**

Linear elements which you cross, for example the edge of a district, a channel, a road with heavy traffic (if you are driving on the road it is a path).



- **Districts**

Areas which have one or more elements in common, so that they are experienced as coherent. For example, the object's height, colour or shape.



- **Experienced Spaciousness**

This symbol is both a mental model and a nonverbal sign for spaciousness experienced. It is of utmost importance, believing that architecture is the art of defining space. The invisible bubble often has a direction, a dynamic character, which in different ways may affect the visitor of the room. This sign for the extension of space in all directions makes for a discussion possible on the dynamics and contents of experienced space.

These six signs help the planner to manage the defining of *experienced space*. In Sweden an environment audit has to be made for each important project (so called *miljökonsekvensbeskrivning*). So far, this mostly refers to what can be described in physical terms, e.g. pollution problems. A *space analysis*, nonverbally noted with architectural notations and verbally described, complemented with an endoscopic demonstration is now being used as one of many audits for this purpose.

Concludingly, the possibility of combining endoscopy with architectural notations has to be regarded as useful. It is an interesting fact, that when two media are combined [3], a third one emerges, having more possibilities than the addition of each one. The future of serious planning has to do with combinations of media, not the single use of one of them. ENDO and PAD is one useful combination; CAD and PAD have also many possibilities. MAD (model aided design), combined with CAD, PAD, and ENDO, will probably be the ultimate design tool of the future.

## Notes and References

- [1] Lynch, Kevin. *The Image of the City*. Cambridge: MIT Press, 1962.
- [2] Dyrssen, Catharina. *Musikens rum : metaforer, ritualer, institutioner*. Gothenburg (Diss. Chalmers University of Technology), 1995. In this Ph.D thesis on Music and Architecture, Kevins symbols where used to analyse the progression in Chopin's Fantasie-Impromptu op. 36.
- [3] The misuse of the term *multimedia* is depressing, since it is mostly used for 100% CAD presentations.