

Creating ambiance

Urban design and its social spatial impacts

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Abstract. *The aim of the present study is to demonstrate that research focusing merely on economic and physical effects in a given area, and ignoring the social aspects and ambiance of new transport infrastructure, inevitably suffers a loss of quality. The special characteristic of the present study lies in the way in which it assesses infrastructure developments, in regions that were previously peripheral, on the basis of urban development phenomena, social phenomena and ambiances.*

Keywords: *ambiance, social spatial transformation, moving methods*

Introduction

The increasing expansion of transport infrastructure is taking place in more and more countries. This trend, strongly encouraged by the globalization process, is reflected in ever-shorter journey times in both national and international travel. During such developments, extensive urban-planning alterations in areas that are being provided with new transport infrastructure tend to be viewed purely in terms of economic and efficiency benefits – and particularly in terms of the time saved when travelling the distance from starting-point to destination. An interesting aspect here is that the importance of time appears to be superseding the importance of space. However, there has been little research on the socio-spatial effects of new transport infrastructure systems. This appears to be mainly due to the fact that the changes in ambiance do not become visible as quickly as changes in the actual urban architecture; in addition, there is no awareness or sensibility for such changes, and as a result hardly any methods are available to investigate phenomena of this type. Ambiance in the present study means social perception of traveled space and ambiance effects of different travel behavior, because of different spaces and infrastructures/tracks. The present study is therefore intended to add a new level to research on the efficacy of new transport facilities – namely, the socio-spatial effects of infrastructure. The new Lötschberg Base Tunnel in Switzerland is to be taken as an example case for the purpose.

Case study

When the 34.6 km Lötschberg Base Tunnel opened for scheduled operations in December 2007, the rural communes in the Upper Valais region acquired a strong new link with the catchment area of Berne – both the canton of Berne and the city's metropolitan and economic area. For example, the train journey between Visp (in Upper Valais) and Berne was shortened from 2 hours to less than 1 hour. In addition to the link with Berne, internal public transport connections in Upper Valais were also tremendously improved and extended. Interchange links were improved, connections were better organized, high-frequency timetables were introduced and services were substantially increased. The rural area of Upper Valais thus acquired a strong link with Berne as an urban centre, on the one hand, while on

the other hand urban-quality transport facilities were also provided within the area itself – transport facilities that are every bit as good as an urban railway network.



Figure 1. Entrance Lötschberg base tunnel

Questions and objectives

One characteristic is that crossing the Alps is always unconsciously viewed as a process of overcoming an obstacle, with the minimum possible effort and with the maximum time-saving. However, this ignores the fact that the altered time perception during the journey to Upper Valais is already a socially constructed shift in spatial perception – namely, a change in the sense of nearness and distance and in ambiance feelings. “Near” is now no longer defined by the distance that is crossed, but instead by the time needed to traverse it.

Looking at the problem in this way, the aim of the present study is to establish the following points of emphasis. In an initial step, the newly created infrastructure and the expanded public transport system will be examined in greater detail. These analyses, providing a better appreciation of the new transport infrastructure, then lead into the first main part of the study, the urban development investigation.

In addition, alterations in the social perception of the area due to shorter journey times when crossing the Alps will also be investigated. The technologization and creation of constantly new infrastructure facilities for crossing the Alps leads to alterations in socio-spatial conceptions here.

The aim of the study is to demonstrate that research focusing merely on economic and physical effects in a given area, and ignoring the social aspects, inevitably suffers a loss of quality.

State of research

When one looks for methods of analyzing the newly created public-transport connections in Upper Valais, it immediately becomes apparent that no methodological instructions are available, or only very few, on how to conduct an analysis of this type. The present study will therefore attempt to close this gap with an intensive description of the methodological procedure.

There is an aspect of geographical perception that is immanent in the public transport structure itself. This involves the perception of the area traversed. Descriptions of this can already be found in the age of Goethe (Goethe, 1998). A notable feature of Goethe's travel writing is a way of describing the landscape that is almost incomprehensible to us today – not merely discussing its formation, but even going into the tiniest details. For example, the quality of the road, difficult climbs, rapid descents, and the subsoil are always being noticed. When the railway era came, this type of description was gradually lost. Schivelbusch (Schivelbusch, 2004), for example, writes that one can now only recognize the geological structure through which one is travelling, but nothing more. A sense of the details of the area being traversed is lost and a more panoramic gaze emerges:

“All that he [the traveller] can do is to overlook the objects and parts of the landscape that lie closer and direct his gaze towards objects that are more distant and are therefore passing by more slowly.” (own translation based on: Schivelbusch, 2004)

The railway also stages a new type of landscape, particularly when it passes over bridges or through tunnels, revealing a view of previously unknown places in the surroundings – although in tunnels, of course, it is the loss of the landscape that is primarily evident. In the tunnel journey taking 15 minutes through the Lötschberg Base Tunnel – underneath an hour's worth of countryside that could have been “experienced” by crossing the mountain road over the Lötschberg – this loss of landscape is destructive. The time gained is experienced as shrinkage of space – an idea that is still predominant today, as can be seen from Axhausen's publication (Axhausen, 2005) on time maps of Switzerland from 1950 to 2000, in which the map of Switzerland is adjusted in proportion to travel times. This ideal of obstruction-free travel, associated with a one-sided view of technology as a means of overcoming nature, still forms the basis for planning in Switzerland and Europe: “The recent logic of Europe's transport system is now uncompromisingly based on eliminating the Alps as an obstacle to transit.” (own translation based on: Diener, 2005)

This is associated with a loss of the sense of landscape and thus for the process of crossing the Alps, a loss of the sense of “this side” and “the other side”. Koenen (Koenen, 2003) also describes these intermediate areas as no longer having any quality of their own, or as having a quality that is no longer recognized. They are regarded merely as distances that separate or connect. They consequently represent a real spatiality that has become devoid of human agents and has thus lost its foundation. The areas are simply to be crossed in as energy-saving and economical a way as possible. The loss of social geography involved – which should not be regarded as equivalent to an ecologically motivated desire to recover a sense of slowness – is largely ignored in the process. Here again there is a need for further research, which is to be carried out in the present study.

Methods

Due to the nature of the task, the methodological approach used in this study is very wide-ranging and complex. In many areas, for example, no basic empirical research methods are available. In these cases, using a “grounded theory” approach (Glaser, 2005), new research procedures will be developed in order to obtain the data needed to answer the questions raised and, in a second stage, to establish new theoretical approaches. It is thus a verificatory investigation with limited theory generation.

Analysis of New Transport Infrastructure

To begin with, analyses of the timetables are to be carried out for all public transport lines in Upper Valais, affecting the hamlet of Goppenstein (the old Lötschberg crossing) and the towns of Brig and Visp. These analyses are to be repeated annually up to the end of the study at the time of the December timetable change. During the first phase of the study, the

timetable analysis was mainly used as a way of selecting an appropriate town for investigation – according to the criteria of which town had the greatest time saving relative to the connection to Berne, the expansion of services and improvements in interchange facilities. In addition to the actual choice of the research area, the timetable analyses also demonstrate the course of developments in public passenger transport in Upper Valais between the years 2006–07 until 2010–11.

Following on from this information about the nature of the transport infrastructure, investigations on the physical and social effects of the new infrastructure can then start.

Socio-spatial research methods

In this part of the study, changes in the journey across the Alps are described – i.e., the altered perception of the geographic distance due to the shorter journey time; and also socio-spatial changes in Visp – i.e., the effects of urban development changes on the socio-spatial structure. Hardly any sociological research methods are available for this field of study as yet. The present study is therefore entering largely new scientific territory and attempts to develop its own methods of obtaining the relevant data.

Ways of crossing the Alps have undergone many changes over the course of the centuries. As a basis for identifying these changes, travel literature will initially be investigated. This will involve a historical sequence up to present-day travel reports mentioning the new Lötschberg Base Tunnel and its ambiance. Analysis of the content of these reports is used to investigate the various ways in which the journey across the Alps is perceived spatially. In addition to these investigations, personal travel reports using sociological observation methods will also be included, conducted by the author of the study at various times of day and various times of year. These observations will be closely modelled both on those of the Chicago School (Capote, 1973; Sinclair, 1937), one of the foundational schools of thought in modern urban sociology, and on modern socio-spatial research work – for example, Löw's studies on the topic of prostitution (Löw, 2006). The aim of all these investigations is to present the various socio-spatial effects of the journey across or through the Alps and to demonstrate the changes in social perceptions of space.

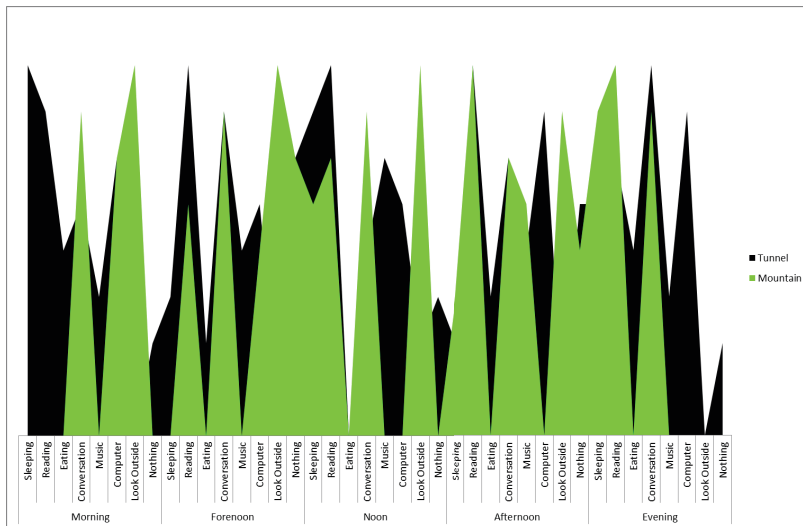


Figure 2. Travel behavior on different tracks

Conclusion

All of the methods mentioned above will respond in accordance with “grounded theory” to the results generated during the study – i.e., the study will always reserve the right to include new methodological investigations or alter previously described projects as a result of the initial research results obtained.

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