

EVALUATING ZOO DESIGN

The Importance of Visitor Studies

<http://www.zoolex.org/thesis92intro.html>

Editors' Note:

Monika Fiby is a European zoo designer whose name has become synonymous with teaching better zoo design in all aspects. Monika's website, called ZOOLEX (such as lex = lexicon or dictionary) has been featured countless times in this magazine in an attempt to lure more of our readers to access the amazing gallery of zoo exhibits with descriptions, explanations and photographs.

Monika gives training workshops at various professional conferences and is one among the very very best zoo design trainers in the world. She is unique in her grip of the subject and in her generosity of knowledge.

As a special New Year's gift to the zoo community in South Asia, we are sharing some of Monika's work in this first issue of 2008 in our ongoing attempt to stimulate more people to utilise the wonderful tools available on the World Wide Web.

Monika's Ph.D. thesis, entitled the Importance of Visitor Studies addresses the need for zoos to evaluate their exhibit designs by querying visitors. Her thesis was published in Vienna in 1992 and now in 2007, a Second edition has been brought out and announced on the ZooLex website. The book itself is for sale and although it is pricey in rupees, we highly recommend that zoos and libraries in universities in particular buy it. It is a worthwhile investment even for an individual. For those who simply can't afford it, and are yet to develop the web habit, we are including some of the material as a stimulus for you to learn more.

Information about the book begins this session followed by an Abstract and Introduction. We have also included Monika's glossary and bibliography of zoo design sources which should give a zoo design beginner a start. **Happy learning from Sally Walker**

The Importance of Visitor Studies

A thesis presented by Monika Ebenhöf (now Fiby) at the Universität für Bodenkultur
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Order:

Paperback A5, 170 pages, 23 figures, 4 tables, 25 pictures b/w. Please contact the author, Monika Fiby (previously Ebenhöf) at [<zoolex@zoolex.org>](mailto:zoolex@zoolex.org) or [<monika.fiby@chello.at>](mailto:monika.fiby@chello.at) to order a copy.

Abstract:

By evaluating zoo design these thesis not just consider visual outcomes of design decisions made by architects, landscape planners or designers because these depend on given resources and policies within the zoos' managements. Thus they discuss the underlying ideas of what tasks zoos are supposed to have and examine how these tasks may be fulfilled.

The emphasis of these thesis is dealing with visitor studies for several reasons:

1. Visitor studies are an important feedback for the planning and designing of zoos and similar institutions.
2. It is a relatively new field of research in zoos.
3. They are completed on a systematic basis and evolving into a new science in the United States.
4. It seems to be useful to engage more in this field in Europe.

For researchers typical questions of concern are:

- Who is the zoo audience?
- How are people reacting to exhibits?
- How are they orienting?
- What do people learn at the zoo?

Examples of visitor studies carried out at zoos or similar institutions in the United States illustrate their importance for decision making in zoo management and design and show ongoing trends in zoos.

Introduction:

The motivation to write a thesis on zoo design came from the idea that education of visitors is the only sufficient justification for exhibiting live animals in zoos. Neither recreational aims nor research on and conservation of wildlife seemed to necessitate zoos. The questions of interest therefore were

- *What can people possibly learn at the zoo?* - and
- *What actually do people learn at the zoo?* -

The hypothesis was that reasons for discrepancies between potential and real learning are management and design related. This thesis concentrates on the theoretical design aspect. Systematic observations of visitors at different zoos have shown that in fact distinguishing features of exhibits and facilities create different visitor responses although the original design aim might have been the same for these exhibits or facilities. Interviews with zoo staff have shown that it is mostly unknown what visitors really get from their visit to the zoo. This also means that common practice in planning and design of zoos does not use much direct feedback from visitors. However, scientists in the United States are developing evaluation instruments that should help designers decide more objectively and straightforward. A four months' stay in the United States of America was used for analyzing the

relevant literature. This thesis is structured according to the chronology of the approach to the topic and considers American literature almost exclusively. The first section

what zoos want to be - why evaluate?

describes what zoos in general stand for. It explains why evaluation processes are critical for the zoos' success and gives a general view concerning the tasks of zoos, their strengths and weaknesses. Besides some relevant American research institutions are listed.

what zoos are - how do we know?

is the main section of the thesis dealing with discrepancies between design intention and actual impacts upon visitors. Ways to find and evaluate

them are shown. Research methods and evaluation instruments are defined and exemplified. Finally, results of completed studies are discussed. In order to evaluate educational efforts in zoos there is a detailed chapter on learning psychology. Another chapter explores the American zoo audience. The last chapter discusses the visitor's response to zoo design. It analyses how people are orienting in zoos, reacting to exhibits and using support facilities and programs.

what zoos may be - do they change?

This section of the thesis draws conclusions from the preceding parts and gives an outlook. It summarizes current trends in zoo design and considers ecological requirements that may lead to a changing face of zoos.

Learn your ABC's of Zoo Architecture Z to A

Technical terms related to zoo design

<http://www.zoolex.org/glossary.html>

A

Advance Organizer: Advance or pre-organizers offer information on conceptual and topographic orientation. They can be provided by staff, posters, kiosks, self-testing devices, headline questions, films, computers, videodiscs, flip panels, and other means.

Alignment Principle: When a (vertical) map is aligned, then the upper part of the map corresponds to the area forward in the terrain.

Allocentric orientation: Allocentric orientation is maintained through the use of either environmental features such as landmarks, or coordinate systems (i.e., north-south, east-west), which are independent of the observer.

Animal welfare: physical and psychological well-being of animals. For the assessment of animal welfare, Dr. John Webster, Professor of Animal Husbandry at the University of Bristol, developed the concept of "five freedoms" for farm animals in the 1960's. The British Farm Animal Welfare Council has promoted the **five freedoms** and many organizations worldwide use them. (See F for Five Freedoms).

Attitude: The feelings and beliefs that predispose an individual to react in a certain way to an object or stimulus.

Attracting power: The ability of an exhibit to attract the attention of visitors usually is measured as ratio of the number of visitors who stop at an exhibit to the total number of visitors who pass by this exhibit. For example, if 10 out of 20 people stop at an exhibit, the attracting power is 50 %.

B

Browse: Branches, twigs, shoots, leaves, and blooms of various plants given to the animals for food.

C

Ceiling effect: When a sample of visitors respond so positively to a programmatic effort that little information is gained from an investigation, one may assume a ceiling effect. This has special significance for evaluations of theatrical shows, slide shows or film programs.

Concept learning: The ability to group or name a class of objects, events, or symbols that differ among themselves on some common characteristics.

Conceptual orientation: An overview of what can be seen, done and learned, a brief information about exhibits.

Cued testing: Method of formal analysis when subjects are aware they are to be observed and questioned; reflects ability of materials to communicate under motivated conditions.

D

Den: sleeping place

Dependent variable: Changing variable, assumably influenced by the independent variables.

Developmental evaluation: See formative evaluation.

Diurnal: daylight active

Dutch door: split door which allows to leave the top half open (for ventilation) and the bottom half closed.

E

Egocentric orientation: Egocentric orientation involves cues that depend upon the position of the observer (i.e., left - right, in front - behind). The relative absence of external cues maximizes the likelihood that subjects will rely on egocentric reference systems.