SUMMARY

Zoo design is now a specialisation within architecture and related design professions. Yet it is a multi-disciplinary field, relying on the expertise of zoologists, keepers, horticulturists, educationists, managers, certain construction specialists, designers, not to mention information gleaned from visitor responses. If architects are to remain relevant in this growing industry, they require an understanding of the fundamentals of zoo design and the other disciplines.

This dissertation argues that design of exhibits helps form visitors’ attitudes to animals. The mission of Singapore Zoo is primarily recreation, conservation and education. Design can serve this through creating attractive exhibits, exhibits that hold visitors, present serious conservation messages and increase their desire to return. The designer must be aware of the unconscious messages exhibits convey and conform these to the conscious agenda of a given exhibit.

For the public, and for animals, development of new exhibits is vital. Visits to zoos fall off if the zoos do not introduce new exhibits. Expanding knowledge of animals means that exhibits will become out dated. Architects working with zoos with an understanding of the issues can use their problem solving, creative and project management skills to realise the zoo’s development goals.

Visitor responses to six exhibits in Singapore Zoo and the ‘Night Safari’ were gathered and analysed in an effort to: test assumptions about what is good zoo design; establish the link between design and the social objectives of zoos; and to give a needed local
and regional viewpoint. This is compared with the mainly Western literature on zoo
design and related subjects.

The results confirm the validity of the trend in the West towards increasing naturalism
and broader thematic display techniques. Cultural or social differences detected temper
this and suggest the context may not be as important, or that all visitors appreciate
exhibits in the same way. Evidence that design can overcome preconceived ideas about
animals is given. For example, the Jaguar Exhibit behind glass was regarded better than
the leopard behind mesh; while visitors liked the Crocodile Exhibit better while viewing
it than otherwise.

Design elements are related to a holistic view of exhibit design. For example 'the moat'
is treated as an opportunity for habitat simulation and landscape immersion as much as
an animal barrier. The body of scientific and architectural theory underpinning these
ideas is reviewed and their historical development traced.

The architect's role involves working with the zoo as both client and member of the
design team. Thus the zoo will direct the design process much more than is usual.

Nevertheless, the architect controls the physical realisation of exhibits and therefore
must be responsive to the needs of visitors, animals and operational staff. Architects
have always applied intuitive knowledge of human behaviour to design. It is argued
that this remains valid but their assumptions must withstand scientific scrutiny
especially when conservation education is a major argument for zoos' continued
existence.