Visitor Circulation in Zoos

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Document presented as part of the Design Workshop "The Principles of Zoo Design and the Planning of a Night Safari", for SEAZA/ARAZPA Joint Conference "The Art and Science of Zoos" at Melbourne, Australia, May 2005.

1. Introduction

To have a successful visitor experience it is not enough to work at the level of each individual exhibit, but it is mandatory to organize visitor circulation for the whole zoo.

2. Definitions

Spatial Hierarchy (an ascending or descending order of significance): Major space vs. the minor; public space vs. the non-public; primary pedestrian path vs. secondary or auxiliary pedestrian paths; etc.
Distribution Space: A major plaza; minor plazas; nodes; etc.
Zone: Each zoo can be organized into zones, each one with a theme.
Themes: Historically, zoos have been organized by taxonomy and geography and, recently, by climate zones. But themes can be otherwise defined: e.g. animal colors and coat patterns, animal sounds, habitat strata, etc., as long as the selected theme is consistent.

3. Assumptions

For the purpose of our analysis, we will consider zoo schemes with only one entrance/exit and one distribution space/plaza. This concept can then be extrapolated directly to more complex projects wherein more elements are needed or already exist.

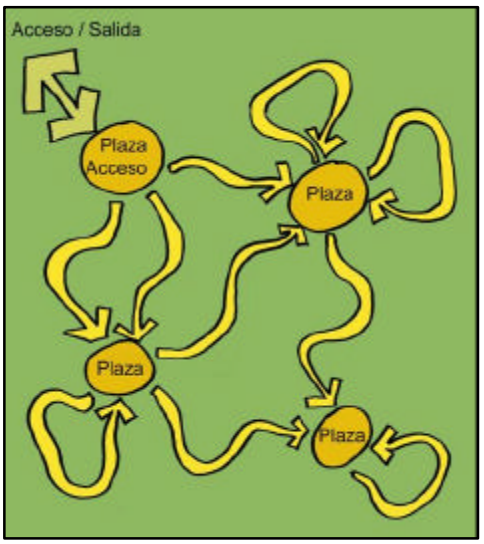
4. Development

There are infinite circulation configurations because each zoo has its own development history, mostly over a long period of time, with many small improvements, and without much planning. However, there are some basic schemes that tend to be repeated: those without hierarchy and those with some degree of hierarchy.

To analyze these schemes, we will consider three basic elements that will organize the visitor circulation: Access, Distribution Areas and Animal Exhibit Areas. Visitor services (toilets, restaurants, education facilities, etc.) are located around the Distribution Spaces/Plazas, leaving the Animal Exhibit Zones free from urban functions and resulting urban structures. One way pedestrian circulation is encouraged through appropriate planning and design.

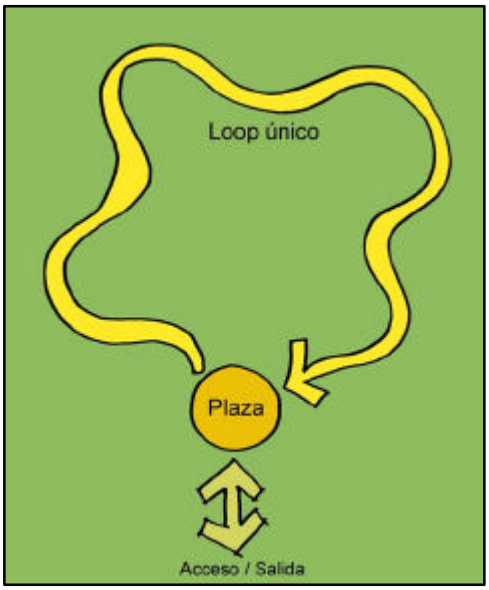
a. Without Hierarchy

This is the most common configuration of zoos that have been incrementally developed without appropriate planning. This presents multiple circulation options from a multitude of disparate distribution spaces. From the visitor point of view, a visit to a zoo like this is not efficient and quite often is an unpleasant experience. It is easy to be disoriented, one can become lost, and one can, as a result, miss many worthwhile animal exhibits. From the educational, interpretive point of view, it is consequently difficult to develop an appropriate story line that makes sense and is rational.



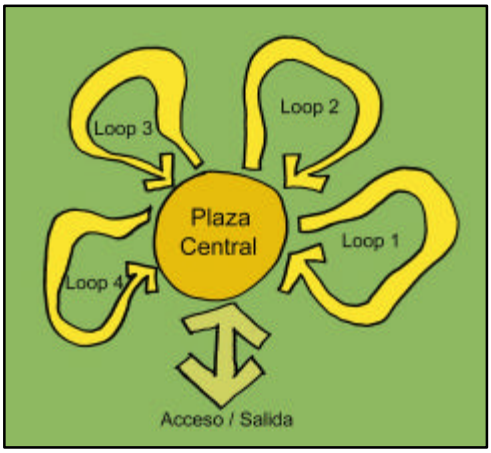
b. With Hierarchy, unique *loop*

If we are to analyze circulation patterns that emphasize hierarchy, the simplest example is that which has one access, one distribution space and one loop through a complex of animal exhibits. It works well for small zoos that have one a single theme; for example: endemic, native fauna. For larger zoos with many parallel themes, a single, unique loop system is not practical since the animal exhibits along the loop become excessively and exhaustively long.



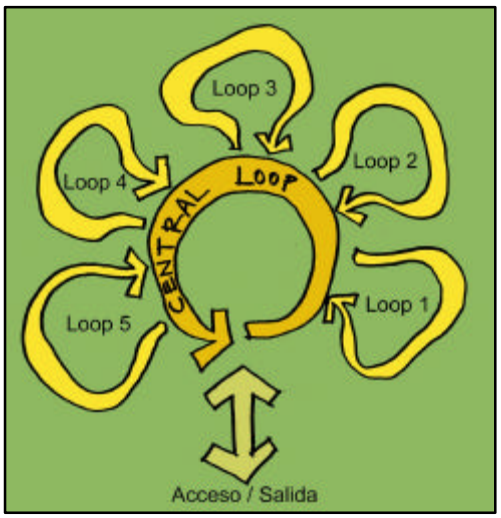
c. With Hierarchy, multiple *loops*

For the largest and most complex of zoos, the hierarchy can be extended to have several exhibit loops that begin and end at one distribution space. This scheme provides structure to develop a different theme for each loop, with the distribution space as the transition from one theme to the other. The visitors can select the zones they wish to visit and the sequence of visitation depending on the time and energy they have, always encountering the visitor services and the exit in the distribution space. Another positive aspect of this type of organization is that service circulation can be located on the periphery of the zoo, thereby minimizing the conflict of crossings with visitor circulation.



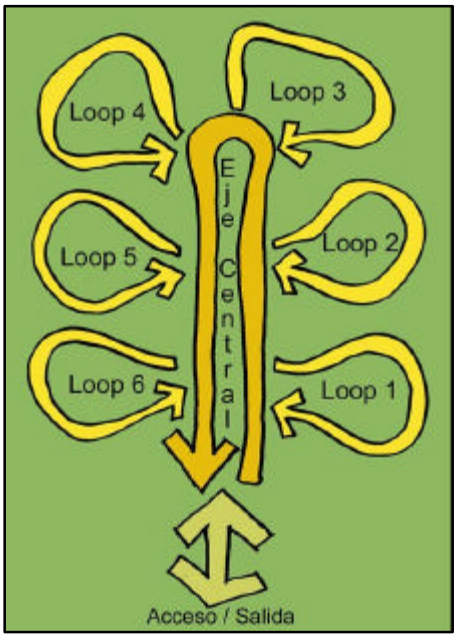
d. With Hierarchy, central main *loop*

A variation of the multiple loop type described above is a main loop that functions as the distribution space. This is typical for zoos that have an icon in the middle, such as a lake or a heritage structure, or a space that provides a traditional activity.



e. With Hierarchy, central axis

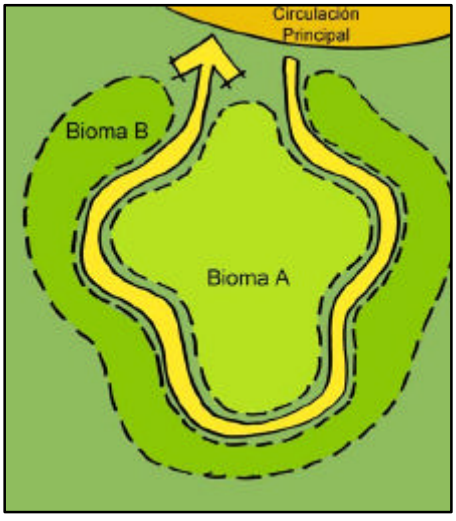
Another variation incorporates a main axis, or corridor, which functions as the distribution space. Its primary benefit is that it allows a long, distribution corridor that provides the opportunity for more loops originating from it and ending in it. This allows greater dispersion of visitors into the various exhibit zones.



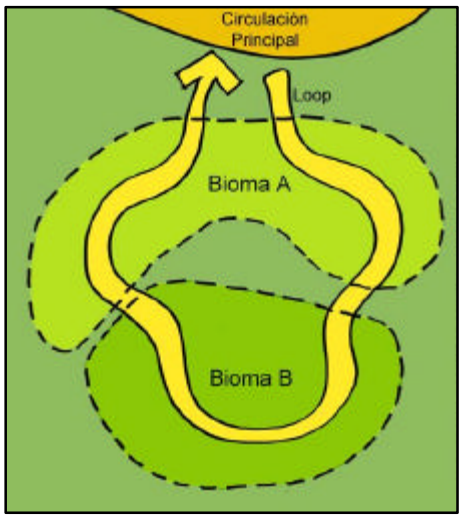
5. Sub Theme Zones

If we analyze the exhibit loops, the analysis would reveal sub themes within each theme zone. The principal challenge is to divide a themed loop into two sub theme zones.

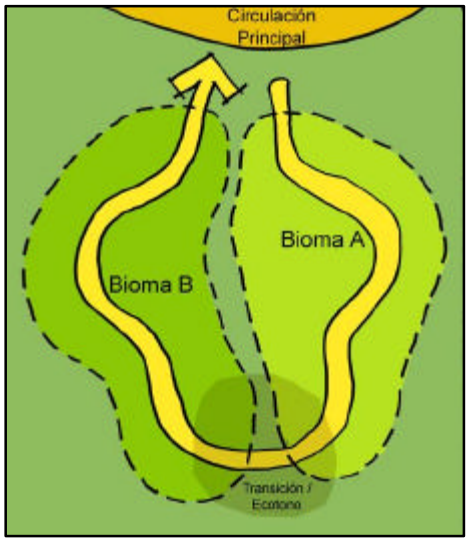
One common solution is to place one theme on one side of the visitor path and another theme on the other side. This is most definitely not recommended since attempts to create an immersion experience is lost, since it is impossible to immerse the visitor in two, parallel, often conflicting themes and/or environments. Attempts at interpretation of the parallel story lines are doomed to failure.



Another solution is to pass through one theme on a unique loop and then enter another theme. This presents an unfavorable problem in the return to the original distribution point, wherein it is necessary to again traverse and retrace the path of the originating theme.



The most practical and useful solution is to position one theme at the beginning of a loop, succeeded by a transition zone (if we are working with habitats, this transition can be interpreted as the ecotone). The transition zone would allow a succession into a second theme zone. This concept can be repeated so that the visitor can pass through any number of theme zones.



6. Conclusion

Since visitor circulation is a key element that defines the visitor experience, it must be planned and designed to maximize the zoo experience and to provide the structure for a coherent story line. This structure guides the visitor through the Zoo and enables the visitor to absorb the Zoo message subliminally and directly.

Landscape immersion can further add to circulation coherency by providing a landscape surround consistent with each theme. A seemingly natural, often disorienting, meander of the circulation system helps in further convincing the visitor of the reality of the unreal. It is also important for the visitor to have periodic contact with the original distribution spaces to allow re orientation. This re contact provides access to visitor services as the need occurs.