Invisible Design Safari

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ABSTRACT

The visually impaired on a daily basis have to undertake analysis of our buildings and cities to safely survive, and hopefully thrive. They have not been asked to create and design new buildings and or communities, this is normally the preserve of professionals. There is no real reason why they should not, and with this in mind the author organised four summer schools at the University of Bristol to explore these issues. The design proposals/results were of the highest quality and the students found the experience stimulating.

1 INVISIBLE DESIGN SAFARI

“Desert Safari” offers a special one hour guided tour for the visually handicapped.

Persons who are able to walk without difficulty will be guided by one of our senior Guides who have created a tour that concentrates upon the sounds of the wilderness, the fragrance of its plants and desert air, and finally, touch.

This tour is conducted inside the Indian Canyons, which are on the Reservation of the Agua Caliente Band of Cahuilla Indians. As the Guide and Guest pass among the stately palms, the Guest will touch their many textures while the Guide describes their hearty existence. The Guest will touch the palm fronds, ancient Indian grinding mortars, and mosquite bush. All unique textures with wonderful descriptions and history. Often, if the Guest arrives first thing in the morning, they will be able to touch paw prints in the soil made by wild coyotes and other small animals. (1)

This rich visual picture and context of the desert is one that invites exploration and analysis of place, objects, scale and form.

Everyday the visually impaired are undertaking analysis of their own man-made context in which they live, in order to safely survive and hopefully thrive. But they traditionally have not been asked to synthesise, create and design a new building and community. This has normally been the domain of those who are not visually impaired and have professional training i.e. architects and city planners.

Why shouldn’t a visually impaired person create an interior design proposal, design a house, propose an urban community or village? There is no real reason why not, the process and the product presentation may be a little different, but will the end result
be worse or better? With this in mind the author proposed a Summer School for the Visually Impaired Adults at Bristol University (UK) called “So you want to be an Architect” to test the above premise.

Susanna Millar in her seminal book ‘Understanding and Represent Space” – Theory and Evidence from Studies with Blind and Sighted Children” discusses spatial development from the point of view of the visually impaired.

“Books on space perception are mostly synonymous with studies on vision. But it was done quite deliberately. The reason is very simple. We do not really know what role vision plays in understanding space. Its importance is usually taken for granted, and other sense modalities, and particularly touch and movement, are rarely considered in that connection.” (2)

For the severely visually impaired and totally blind this touch and sequence of movement through space in real time or in model simulation is closely linked to the ability to “read” a plan (to understand the concept and basic organisational configuration) in the horizontal dimension. It may not help a location of objects within a plan i.e. furniture, level changes or window opening, which may require additional learnt skills. Most difficult to “read” are sections surfaces and objects within the vertical dimension i.e. stairs, sloping planes like roofs or multi levelled planes.

Any fundament process of design involves analysis and synthesis. To keep things simple at the Summer School, the following basic model was utilised:

Analysis
- Brief formulation
- Information and research
- Goals and objectives
- Constraints

Synthesis
- Ideas and concepts
- Selection
- Development
- Presentation

In the analytical stage of the course student were taught how to “read” plans (horizontal) and sections (vertical), through the use of visual and tackle representation i.e. maps, plans, models etc. These plans and sections were often of interesting precedent design
schemes and proposal, which provided the basis for seminars and discussion where values, programme formulation, constraints, idealism etc were explored.

In the later synthetic stage ideas and concepts, brainstorming, role playing, testing, evaluation, realisation of a final product and presenting it for external and peer evaluation, were undertaken. This Summer School proved to be highly successful in terms of the quality of the work produced, applauded by external critics and achieved high overall student satisfaction level.

Over the next period further courses were developed:

- Village Planning
- Unseen Newcastle
- Room with a View (Sirootieries)

The author and instigation of these courses, felt it was necessary to undertake a student survey of all four courses in order to provide further insight in the way the visually impaired undertook the design process.

A lacunary summary of the findings are as follows:

Note:

- This survey was carried out in May 2001.
- The rating system was:

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<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
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- Students were asked to indicate the level of their visual impairment

**Q1** Could you draw a rough plan of your last design.

Evaluation of these plans by the author indicated a good overall understanding of the concept and its development.
Q2 Could you draw a rough plan of the meeting room or your bedroom at Bristol or Newcastle.

Evaluation of these drawings indicated a good understanding of shape, space, scale and detailed furniture in the room. Windows, doors and storage space were correctly located in all instances.

Q3 How did you get your ideas/concepts for the design of your last design project.

Student ideals/concerns included: Site and context, nature, user concerns (i.e. especially those of the visually impaired).

Q4 Was it difficult/easy to take these ideas/concepts into a realised design.

Most felt this not to be difficult, but considered it important that they had proper geometric instruments to work with (these were not supplied).

Q5 What were the major issues that you were concerned about when you designed these projects?

A wide ranging list of topics arose which include: \(360^\circ\) views, eyecatching, optimise the site opportunities, harmony, blends with the natural setting, location as a place of peace. Combining the artistic qualities of the house and garden with their sense of history into a design for today.

Q6 What were you pleased and disappointed with, in your final design solution.

Quoted responses include: “I was satisfied”, “delighted with the final effect”, “pleased that my ideas could be put into practice”, “pleased with my idea but not good at making models”, “it was gratifying to know that all works were going on display”, “pleased with the blending of colours and shapes in their traditional surrounds”.

Q7 Was there enough time to do the project?

The general consensus was that an extra half/full day would have been helpful.
Q8  Would you like the final review (jury) to be more rigorous or less critical?

Quoted responses include: “satisfied with the review”, “more critical”, “tell the truth”, “the final review was too long”, “I was intrigued by the jury (members) as it was obvious that they had not anticipated such high standards and diversity of results and I was filled with admiration re my classmates efforts. I firmly believe that the results illustrate that having loss of sight encourages much deeper thinking and powers of concentration”. “I expected the final review to be much more critical, but thinking about it, it would have been difficult as everyone has different sight problems”.

Q9  How would you rate the course overall?

On a score rating system (described above), out of a maximum possible score of 100, the courses achieved 86.6.

Quoted response: “one of the best I have ever done”

What commenced as an Invisible Design Safari seeming to do the impossible, suddenly become a Visible Design Safari with tangible results, which was applauded by student, staff, external professionals, and critics.

It is hoped that the visually impaired both young and old will soon be full participants in the design arena and that Universities may accept them onto design courses and degrees in the near future.

“The education of disabled people is an issue that creates much debate, and rightly so. The education that disabled people receive will determine their future opportunities in life. With all the challenges facing disabled people, a high quality education that meets their needs is essential. It will increase their chances of living independent and fulfilling lives; something which the rest of society regards as a right.

The research findings (3) that 61% of under-35 year olds said that they had no contact with disabled people are a reminder of how far there is still to go in achieving acceptance of disabled people as equal members of society. Inclusion of disabled people throughout their school and college life is one of the most powerful levers in banishing stereotypes and negative attitudes towards disabled people amongst the next generation. When disabled and non-disabled people are educated together, this sends powerful messages to the whole community about the potential for a truly integrated and diverse society”. (4)

The Bristol Summer School was a visible step into the previously deemed invisible.
2 REFERENCES

Millar, S, Understanding and Representing Space
Theory & Evidence from Studies with Blind & Sighted Children P3 Clarendon
Press, Oxford, 1994


URL’s
www.desertsafari.com