## Home to School Path - Wayfinding by Children Ages from 8 to 10

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## I. EXTENDED ABSTRACT

As a part of my dissertation topic at the Vienna University of Technology I am engaged in research with school children from one school in one urban neighborhood in Banjaluka, Bosnia and Herzegovina and two schools in one urban neighborhood in Vienna, Austria

Research in Banjaluka, Bosnia and Herzegovina was done between October 26th and November 1st, 2015. Research was conducted with 109 children participants ages 8 to 10.

In period from April 4th until April 28th, 2016 research with school children in Vienna was done. There were II2 children participants ages 8 to I3.

The research consisted of three parts:

- I. Drawing a path from home to school.
- 2. Drawing a favorite outdoor place to play.
- 3. Walk through neighborhood and visit to different playgrounds.

In all research parts discussion with each individual child was held. The voice was recorded and the discussion was written down. Walking through neighborhood and observing it was essential part of this research.

Here the focus is particularly on interpretations of school children drawings on their way from home to school. In this regard different parameters on wayfinding and attention focusing were observed.

Child was encouraged to submit the drawing when he/she thinks it is finished. It took approximately I5-30 minutes, in some cases up to 45 minutes, to do so. Children's individual participation was encouraged, meaning it was said that their own opinion is important and that drawings should be coming from them, their own thoughts, and not their colleagues. Children had freedom of using desired utensils and freedom of expression.

It was questioned what children remember the most on the path from home to school and which elements are important to them.

While being able to express their thoughts on paper, children also spoke about their environmental impression.

In interpretation of drawings the whole drawing was observed. This was done because the position of drawing on paper, color usage, drawing complexity, presence or absence of connection between elements, might show how well are children adjusted to their neighborhood.

It is questioned how form and color influence children's attention and their capability in finding ways and orienting themselves in their neighborhood by describing environment and the spatial structure of environment in particular.

Emotions and attachment to place play an important role in remembering of sequences and places visited as well as situations and actions that trigger imagination.

During research, and by analyzing children's drawings slight difference in the attention and environmental perception between younger and older children was noticed. Younger children pay more attention to details and use of color in their drawings than the older age group. Responses received from younger children were more descriptive and detailed in comparison to older children group.

Drawings are analyzed with the purpose of identifying parameters which would help in building and planning the child friendly environment.

Discussions held with each individual child about their drawings and environment they live in as well as theoretical analysis of the literature on the subject matter serve as a support in forming the conclusions.

On their way from home to school it seems that emotions play an important factor in forming a relationship with environment. Some orienting points for children were nature elements, threes ("There is that strange tree"), people ("There is that strange woman"), basically things which were out of "order". For children which were traveling to school via bus or a car, other things such as bus stop, river and bridge were orienting points. Sometimes bakery was referred as orienting point or even parking poles in front of the school yard. "There is the blue fence", meaning there is school. As an orienting point children would often refer to a house where their familiar (friend, aunt, etc.) lives.

Relationship between neuroscience and environment perceived by individual is without a doubt mutual and feedback happens all the time. As much as human being is able to change the environment, environment is able to change human being.

By choosing different path from home to school, a child could change thought pattern and experience different stimuli.

Society is based on information exchange. There are always informational inputs or outputs from individual to surroundings and VV. By improving people correspondence with architectural, natural, and biological environment within individual, the whole system, which we are part of, could properly function.

Ouestions for further research:

Can environmental diversity and staying in nature help in brain development? Can environmental diversity help in wayfinding and orienting? What kind of stimuli benefit brain development and problem solving capabilities?

## 2. AUTHOR BIOS

Dajana Rokvic was born in 1988 in Sarajevo, Bosnia and Herzegovina. She is a Master of Science in Architecture from Vienna University of Technology and Architecture Engineering graduate from University of Banjaluka, Bosnia and Herzegovina. For her study efforts she has received many scholarships including a prestigious Herder Stipendium im Rahmen des Alfred Toepfer Stiftung, F. V. S. Temporarily she is involved in Doctoral programme in Engineering Sciences Architecture at Vienna University of Technology.

A problem which Dajana addresses in her research is the lack of child friendly spaces, i.e., environmental conditions that provide possibility for unhindered creative and physical activities and free expression of a child by allowing socialization among peers and free exploration of their neighborhood. Dajana is interested in pursuing research on influence of architecture and built environment on human being, in this particular case, children. She is a member of IAPS (International Association for People–Environment Studies). In her free time, Dajana enjoys spending time in nature and writing.