CHILDREN'S STREET CROSSING STRATEGIES - AN OBSERVATION TECHNIQUE

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In this part of the project, the goal was to find out which are the most relevant behaviour variables of children in traffic. In studying essential variables there were two important points of view:

- 1. Children's behaviour should not be examined in isolation from its environment. This means both the traffic and the social situation of the children.
- 2. Increasing attention should be paid to the children's own thoughts and rationality.

A new method

A new method for investigating children's behaviour when they are crossing a street was developed in the study. The method involves making video-recordings of children and traffic situations and two interviews with the children. The first interview took place immediately after a child had been filmed crossing the street, the other on the following day in school. Each child could then first watch his/her behaviour when crossing the street the previous day on the video. The child was encouraged to freely comment on his/her own behaviour and thoughts. After that, a more structured set of questions was presented.

A new method for analysing data was also developed. In the analysis, children's behaviour was monitored both with regard to time and place with the help of large-scale maps where the children's movements had been drawn. Their walking speed was apparent on the maps at intervals of one second. The method of analysis proved to be illustrative and efficient, especially when studying the group behaviour (fig. 1) of children and the consistency (fig 2) of the children's behaviour

In all, 39 children in the neighbourhood of three schools were filmed and interviewed. The number of subjects is small and the preliminary results have not been confirmed with a sufficient amount of data.

Street crossing strategies

On the basis of the video-films and interviews, some hypotheses concerning children's street crossing strategies were formulated. In all, eight alternative strategy types were defined, namely: waiting, hurrying, dealing tasks, following, withdrawing, acting like an adult, taking responsibility, and panicking.

Head movements

The study also provided new information about head movements. Children were asked where they had been looking in the case of each head turns observed on the video-film. While 77 % of the children had turned their head left, only 69 % of the children had been looking at the traffic. The respective percentages were 90 % and 85 % for the head turns to the right.

Concluding remarks

While developing countermeasures it is important to know how the children themselves regard their walking in traffic. What information do they think they need, how do they plan to get that information and how will they use it. The proposed strategies differ in those respects from each other. Moving in groups and listening in traffic came up as important subjects for future study.

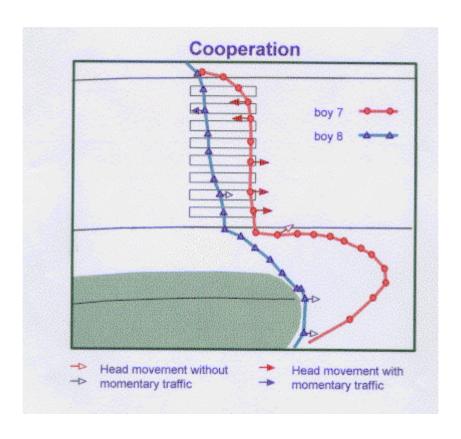


Figure 2. The co-operation of the children. The movements of boys are drawn by second. Head movements are presented with small arrows. Boy number 7 on the right in the walking direction thinks both of them should mind his own side. The other boy hasn't got the same idea, co-operation doesn't work.

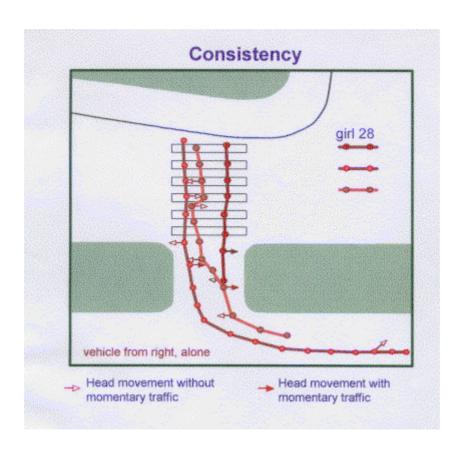


Figure 2. Consistency of the behaviour. The girl's route choice is presented second by second on three different days. Head movements are also drawn with small arrows in the picture. On each day the girl came alone and there were cars approaching. The behaviour is not consistent.