In the introduction problems of criteria in road-safety-research are discussed mainly by pointing out shortcomings of the accident-criterion. After a historical survey on former conflict-research in various countries the present investigations concerning reliability and validity as well as various possibilities of application are critically analyzed.

For studying conflict-technique and its practical application a very complex intersection which was characterized by an increasing accident rate and poor structuring and which was described in a public-opinion poll as the spot in town where drivers as well as pedestrians felt subjectively specially at risk was chosen by the Road Safety Board in Graz.

At this intersection conflicts were recorded by a trained observer. The conflict-definition applied is similar to that used by the TRRL and distinguishes between slight and severe conflicts: a slight conflict was defined as controlled, but rather powerful braking or a dodging manoeuvre to avoid a collision; there is enough time before a possible accident to carry out the manoeuvre in a controlled way.
A severe conflict was defined as an abrupt retardation or change of direction which is necessary to avoid an impending collision; there is not enough time for moving in a safe and controlled way.

The study was based on the principle of before-and after-comparison. The observation-period per phase of the project was 8 hours which were distributed over time of day and day of week.

Phase 1:
Without any changes at the intersection observations of conflicts were conducted and the following conflicts were recorded: The total number was 61, of which 47 were slight and 14 were severe conflicts.

Phase 2:
In order to reduce the conflicts the following measures - based on the findings of the first observation-phase - were carried out: Channelizing of traffic by lane lines with directional pavement markings and islands delineated by pavement markings as well as improvement of visibility by means of no-parking areas. By this a reduction of conflicts of 57% was obtained. The total number was 35, of which 31 were slight and 4 were severe conflicts.

Another accumulation of conflicts resulted in consequence of a badly organized area ("swimming traffic area"). Obviously a weaving area still was not clearly defined for the drivers.
Phase 3:

To reduce conflicts still more streetcar clearance lines as well as an island delineated by pavement markings in the area traversed by the tram were painted as additional delineation and information for traffic-participants. In general, by these measures the number of conflicts could be reduced only insignificantly. The total number was 27, of which 24 were slight and 3 were severe conflicts.

According to the findings of phases 2 and 3 the islands delineated by pavement markings shall be constructed as permanently built in directional channelizing island.

Summarizing the results of this study it can be stated that by means of the conflict-technique the efficiency of measures of traffic-regulation and -guidance at an intersection can be measured in a short time and therefore modifications can be carried out quickly and systematically and without high costs.