

GOING DUTCH

More than 80 per cent of accidents in which a child is killed occur in the immediate vicinity of its home on low-volume traffic streets. The Dutch solution is to create a 'Woonerf' (residential precinct). Could this be a pattern for inner London streets? *Mira Bar-Hillel* reports.

To say that people, especially children, are more important than motorcars may sound like a truism, but there is a wide gap in this respect between theory and practice.

The motorcar and its driver have come to dominate our residential streets, especially in towns and cities, and pedestrians of all ages have had to settle for what they can. Even footpaths and pavements are often taken over by parked cars, and they are usually the first victims of road-widening schemes.

The fundamental fault in the present approach to residential design, according to the authors of the Woonerf idea, is the failure to realise that the most important activity in residential areas is the movement not of vehicles but of people. Yet the greatest part of the area in the immediate vicinity of their homes is forbidden territory for most children.

What is required is a reorganisation not a revolution. The Woonerf is not intended to cast out the motorist — after all, he is probably the father of the children wishing to play. Nor does it bury the car underground, elevate it above head level or banish it far away. It merely readjusts the priorities of life, in fact it is a Great Dutch Compromise.

The compromise was not easy to achieve. It took some five years of experiments, in which traffic engineers and lawyers worked closely together, to compile a set of new traffic regulations and an appropriate set of design stan-

dards. Together they define the Woonerf.

A Woonerf is, firstly, not a traffic-free area or a pedestrian precinct. All types of vehicles are allowed within it but its design must make it clear that here the pedestrian is king. The streetscape must be pleasant using trees, a variety of paving materials, plant tubs and street furniture. Racks for bikes and mopeds could indicate the preferred scale of transport, while cars may be parked in certain places, indicated in the design of the paving. To reduce the temptation to park elsewhere, carefully designed and placed obstructions can be useful.

The basic idea is to incorporate the car into the landscape, not segregating it but, as it were, putting it in its place. Features should therefore be incorporated in the design to ensure that speed limits are observed not because the signs say so but because of humps in the road, sharp bends and narrow passages.

Co-ordination is vital

Once the decision has been taken, it is necessary to think in terms of carrying out the conversion with the minimum disruption. Again, co-ordination between all people involved, from town planners and traffic engineers to the police and the services maintenance people, is vital.

The question of costs is complicated, since in the Netherlands reconstruction of highways has to be done regularly because of the con-



A Woonerf... showing interest in this safer design for our streets have been the

The 14 articles of Woonerf:

1. A Woonerf must be primarily a residential area.
2. Through traffic must be discouraged to the point of near-exclusion.
3. An absolute maximum of 300 vehicles per hour during the peak period is specified for the very widest Woonerf.
4. There should be no continuous difference in cross-sectional elements along the length of the road — kerbing should be broken.
5. Plant tubs and shrubs must not restrict visibility.
6. Entrances and exits of Woonerfs must be clearly recognisable.
7. The boundaries of parts of

tinuing settlement of the suburb, and the costs of conversion need to be incorporated into this process. However, it is pointed out that in the case of building new Woonerfs (in new towns) it is no more expensive than creating conventional streets.

The Dutch experience is that the main drawbacks of the Woonerf apply not internally but externally — such as creating unreasonable expectations for a similar environment from residents of high-density areas where Woonerfs are not possible... There is also concern that children brought up in Woonerfs will be less prepared to face the real world

outside with its unfriendly, high-speed vehicles.

On the whole, however, the advantages seem to outweigh these considerations.

Needless to say, not every street is suitable for conversion into a Woonerf. Streets which form an essential part of a local distribution network must be left open to free traffic flow. These routes often form the boundaries of Woonerfs.

The ultimate success of the Woonerf is based on the expectation that drivers will adjust their normal pattern of behaviour. Although it can be easily demonstrated that the reduction of speed within the



GLC's Fred Pooley and Shelagh Roberts who have already interested three London boroughs.

highway intended for parking should be clearly shown, preferably with corners marked "90".

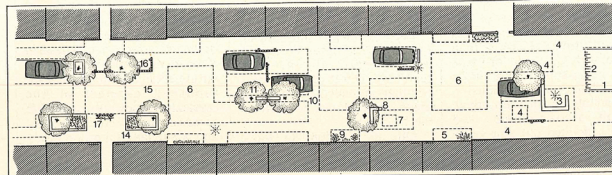
8. There must be adequate parking for all residents, although some overspill can be established just outside it.
9. Speed-restricting features must be introduced, no

more than 50 metres apart.

10. These features should not be located so as to cause vehicles to pass close to housing which fronts directly on to the road.
11. They should also not endanger traffic passing over them (in the case of humps).
12. Adequate street lighting

must be provided so that all speed-restricting features are always clearly visible.

13. Play areas must be clearly identified and, where possible, separated physically from the vehicle passageways.
14. The word Woonerf must be displayed below the appropriate traffic sign.



1. no continuous kerb
2. private access
3. bench around low lighting column
4. use of varied paving materials
5. private footway
6. bend in the roadway
7. empty parking lot: place to sit or play in
8. bench/play object
9. on request: plot with plants in front of facade
10. no continuous roadway marking on the pavement
11. tree
12. clearly marked parking lots
13. bottleneck
14. plant tub
15. space for playing from facade to facade
16. parking prevented by obstacles
17. fence for parking bicycles etc

Woonerfs from an average 35kph down to 15kph does not result in meaningful time loss, because of the short distances involved, it is also known that the driver's willingness to keep his high speed down will diminish the further away he is from his destination.

The thinking behind Woonerf has succeeded in avoiding common traps of assuming that people will do what is good for them; instead allowances are made for human nature.

It has been found that people generally identify their neighbourhood as being an area within 500 metres of their home. That distance has therefore been set as the maximum that any point within a Woonerf should be from the local distribution network — the road where traffic flow can flow fairly speedily.

Pious hopes

It is also acknowledged that if people need to park their cars, they will not be dissuaded by signs and pious hopes. It is therefore not recommended to develop a Woonerf in areas where demand for parking is particularly high.

Woonerfs have been established in the Netherlands for several years now, and some experience has resulted from their practical use. It has been found that one-way traffic is neither desirable nor necessary. Humps in the roads designed to cut down speeding, require further research, and studies are also in progress on other anti-speeding devices. It has been less successful to restrict the speeding of motorcycles and mopeds, and they continue to be a safety hazard which is being investigated. Best use can be made of parking areas if they are used as daytime play areas.

The initiative for creating a Woonerf can come either from the local authority or from the residents, but mutual co-operation is vital in any case. A high degree of public participation must be maintained throughout, and all residents should be able to see the plans and comment on them. If agreement cannot be reached between residents and designers, the local authority must decide whether to proceed, and along what lines. □