41: Unless properly designed and regulated, shared spaces can become chaotic and unsightly parking lots. In this example parked cars create hazards and inconvenience for pedestrians. Cologne, Germany. (Photo: T. Pharoah)

42: Shared surface "Woonerf" with spaces defined by mature trees and shrubs. Note the short forward views and severe lateral shift to ensure slow speeds. Nijmegen, Netherlands. (Photo: T. Pharoah)

3.21 SHARED SURFACES

OBJECTIVES

 To allow pedestrians freedom of movement within the street

DESIGN FEATURES

Pedestrian freedom to use the entire street surface in safety can only be achieved if vehicle volumes are relatively low, and speeds are kept to "running pace". These requirements dictate the circumstances in which shared surfaces are appropriate, and also determine the design elements. In



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particular, very low vehicle speeds need to be self enforcing through the use of lateral shifts, ramps, etc.



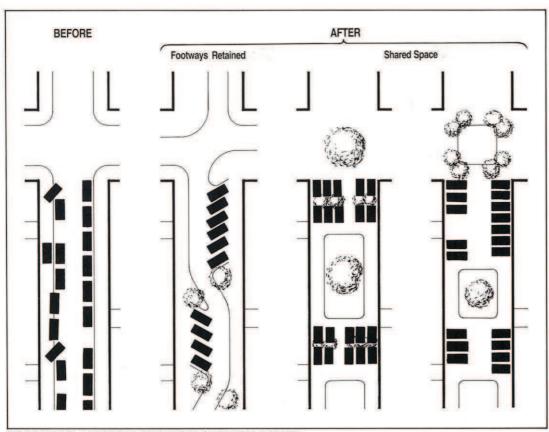


DIAGRAM 3.21.1 EXAMPLE OF SHARED SURFACE LAYOUTS

In original shared surface schemes (such as the Dutch "Woonerf") no demarcation was allowed between footway and carriageway. This can, however, lead to feelings of insecurity for pedestrians and especially people with a visual handicap. Some demarcation may often be desirable, and can be achieved without compromising the "precinct" objective. As an example, bollards or low kerbs can be used, while street furniture can be placed in such a way

as to separate areas where people walk from where vehicles pass.

Parking should be in identified bays. In the Netherlands, parking is permitted only in bays identified with a letter "P", but there are currently no comparable traffic regulations for shared surfaces in the UK.

Vehicles have to be kept away from doorways. Care needs to be taken to prevent the precinct becoming a "rat run" for two-wheelers. 43: In shared spaces, those with a visual handicap in particular can feel insecure. Here, vehicle space is defined by a low kerb to help them. Bad Godesburg, Germany. (Photo: T. Pharoah)

44: Shared space solution applied in a shopping area. Note the defined parking bays (served by a single, multiple parking meter to reduce clutter). Buses also use this street. The Hague, Netherlands. (Photo: T. Pharoah)

APPLICATION

Shared surfaces are suited to local streets with no through traffic and where traffic flow is no more than about 300 vehicles per hour, so that pedestrians can benefit from being able to cross from side to side frequently and in any place. They function best where there is intensive pedestrian activity and where traffic flow is less than 100 vehicles per hour. They can be applied to junctions and links.

Intensive pedestrian activity may occur where there are shops on both sides of the street, outside railway stations, at hospital or college entrances, etc. High density housing areas may also generate intensive pedestrian



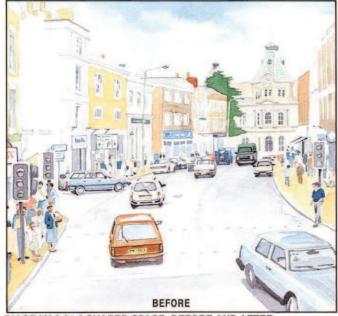
activity, especially if there are no off-street play areas for children.

Shared surface solutions are now used sparingly in some countries.









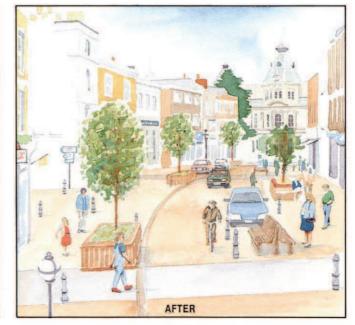


DIAGRAM 3.21.2 SHARED SPACE, BEFORE AND AFTER

45: A traditional "shared space access road", perhaps better known as a "Mews". Such mixed use areas function well if the volume of parked and moving vehicles is small. Kensington, London.

(Photo: T. Pharoah)

46: A pedestrianised area of Plymouth still allows limited servicing of banks and shops. (Photo: Devon County Council)

47: Modern housing area incorporating "Woonerf" shared spaces. Delft, Netherlands. (Photo: T. Pharoah)



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DIMENSIONS

The space should not be so large as to allow the presence of parked or moving vehicles to dominate the street scene. The distance between speed reducing elements should not be greater than about 30m. No part of a precinct should be more than about 300m-400m from a "normal" road. In some countries shared surface precincts must not



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join directly onto roads with speed limits higher than 30 mph.

SUPPORTING MEASURES

The design needs to include planting, paving, street furniture and other elements to create a "precinct" atmosphere.

POSITIVE FACTORS

 Well-designed schemes in appropriate locations have proved their popularity with residents and shoppers, and have the ability to provide safe and convenient conditions for all road users

NEGATIVE FACTORS

- Can be expensive to provide
- Unless properly designed and regulated, can become a chaotic and unsightly parking lot
- Pedestrians, especially those with a visual handicap, can feel insecure unless areas free from vehicles are retained.



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