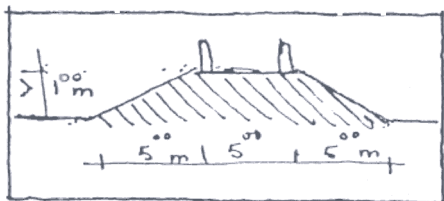
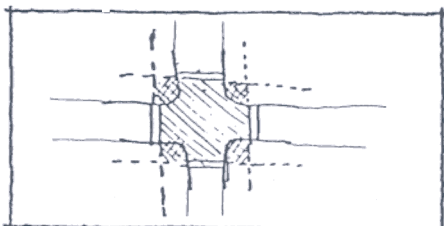
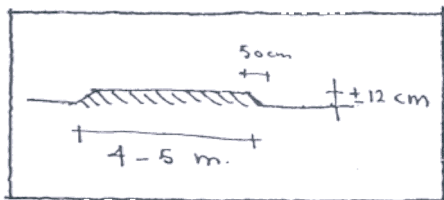


## RESTRICTING THE TRAFFIC IN RESIDENTIAL AREAS, AN EXPERIMENT IN HOLLAND



The problem of cars in areas where they mingle with pedestrians and cyclists is mostly the cars' speed. We must find methods to ensure that vehicles drive slowly, very slowly indeed. Car-drivers must adapt their speed to a given situation, and we can help them by making clear in what situation they find themselves. We must warn them in time that people may cross the road at any time, that children will be running and playing in the precincts. The car-drivers should behave as guests in our streets. If they do not behave in a civilised way, they should be warned and punished one way or the other. Slow-driving must become the "natural" way to drive in cities and especially in residential areas. Everybody must feel this, pedestrians and car-drivers alike. And the priority in the organisation of the spaces will then shift from cars to people.

In Holland, several means are used to make cars drive slowly through highly inhabited areas:

- a) physical barriers (bumps, poles, trees, concrete blocks, street furniture, etc.),
- b) visual "tricks" (winding streets, shadowing trees, parked cars, narrow passages),
- c) psychological "tricks" (tiles in the middle of the street, pavements that remind drivers of the existence of pedestrians),
- d) social influence (people walking freely in the middle of the road, children playing, so that the cars realize they have to wait their turn)
- e) laws (speed limits, parking regulations, rules for priority).

A combination of all these methods is now in use in Holland, some examples of which will be in what is called the "woonerf". Good and bad examples can be seen in most new and old cities.

Frequent repaving of the streets is made necessary by the regular sinking of the ground in cities like Gouda and Delft. This gives an opportunity every 3 or 4 years to modify the aspect of streets and crossings and enabled the local authorities to experiment these new methods of slowing down the car traffic.

In Delft we started to reorganise and repave traditional streets. We took advantage of the

necessary technical works to try out new methods at the beginning of 1970. The separation between carriageway and kerb disappeared (see photos). We planted a lot of trees in the streets, where there had been none since the war. Less space was allotted to the driving vehicles. The reorganisation of the spaces devoted to different functions, walking, driving, parking, playing, sitting, was important. Most of all it was clear to us that we needed to enlarge the semi-private territory in front of houses, shops, garages, etc. What happened in the buildings had an influence on the way the road was used and had to be visualized by the way of paving the street. Gateways, doors, windows, walls, all influenced the possibilities of using the outdoor space.

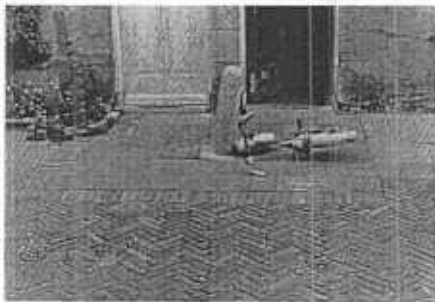
*Influences of people on their street and influence of public activities on people living or working nearby*

The involvement of citizens in what was done in their city or even in their street was next to zero in 1970, when we started. The important decisions were taken by the town council, but in Delft nobody cared. The technicians took the "small" decisions where they had to work on streets. People did not care as long as there wasn't any sand on their carpets. In spite of this, we started in 1970 to ask small groups of people about the way we could repave "their" street. The financial costs and technical possibilities were shown, often illustrated with sketches of old and proposed new situations. We made the first streets probably because nobody could imagine what would really happen. Once some examples were given, people started to ask for solutions they had seen nearby. The process of change had started.

There was at that time a general city program of renewal of the sewage system and the electric network. So we tried to influence these programs so as to get a renewal of the streets and first of all in the worst and oldest parts of the city.

To pay so much attention to repaving the streets influenced the way the inhabitants kept "their" streets and maintained "their" houses. Not only were the scrubbing and cleaning

4. Technical means of slowing down the traffic



5, 6, 7. Suppression of kerbs: before and after

8, 9, 10. Street corners: before and after.

around the front door activated. People could ask for a tree in front of their houses. Small plants with flowers were planted by the inhabitants themselves. Pots and baskets with plants appeared everywhere. Even climbing plants were guided across streets and covered walls. In two or three years streets changed completely. People started to paint their front doors, windows, houses and everything they could paint, even things that were normally in "public" care. Shopkeepers often got more facilities to put merchandise in the street. A kind of street-life started again.

#### *Parking*

It was very clear that there would be some difficulty in parking following these changes. The car to park gave us more trouble than the driving one. Posts had to be put everywhere to prevent car parking, but the lack of parking

spaces was enormous. Money or space to build small garages was lacking. So the cars were pushed from one street on to the next, as it often happens in pedestrian areas. Parking space had been free and people did not want to pay for it. So a whole new system for paying for parking space must be found. There are areas where one cannot own a car because it cannot be parked and that should be accepted as a different way of living.

#### *The house*

Not only did street renewal start a renewal in the maintenance of the outdoor spaces before the houses, but it reacted also on the houses themselves. Once sure the street and the neighbourhood would not change, people started again investing in their houses or even those of their landlords.



11, 12, 13. - Street improvement in Delft through private initiative.

#### *Speculation*

And then came the inevitable rising of house prices. So what could we do? Leave the old areas in the city in a neglected state to keep the prices down or improve them with higher rents and run the risk of speculation? We wanted to improve the living conditions for the existing inhabitants but quite unwillingly we stimulated a change of population.



14. A residential street.

Laws to keep house prices under control failed. The city or the housing societies could not buy or were often not quick enough.

The inhabitants did not have enough money. In Holland we have a system of tax reduction for people who get loans to buy their own house. It is advantageous for people who pay heavy tax, but they are the ones who earn most. So the fortunate people can buy houses on loans and become still richer. The poor people have to move. They are often offered large sums of "black" money to move out and leave an empty house that can then be sold.

On the other hand, private enterprise with free market mechanisms means that old parts of the city can be restored. (Ex. Jordaan in Amsterdam.) But it is dangerous for those who rent their house, as an empty house in that particular area is worth a fortune.

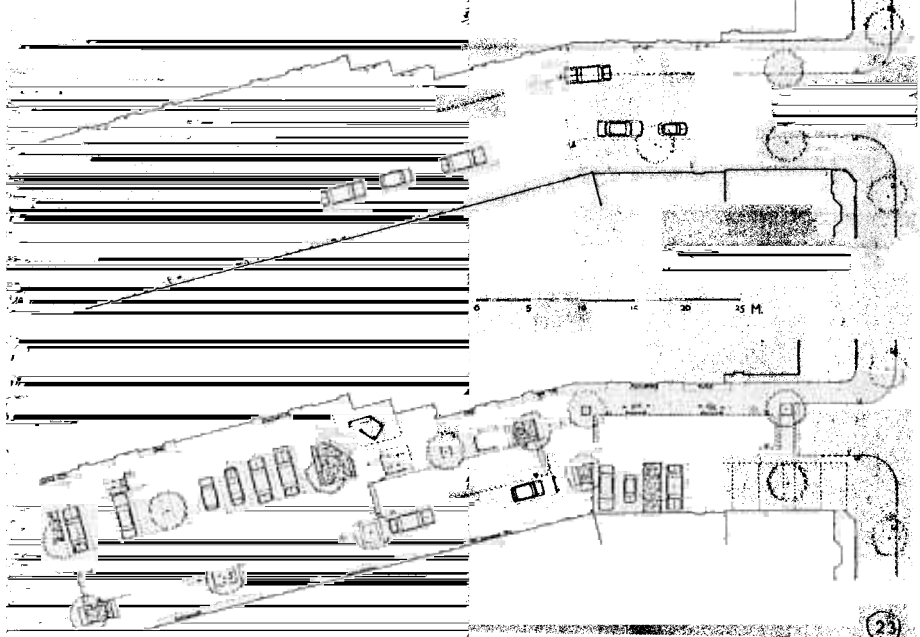
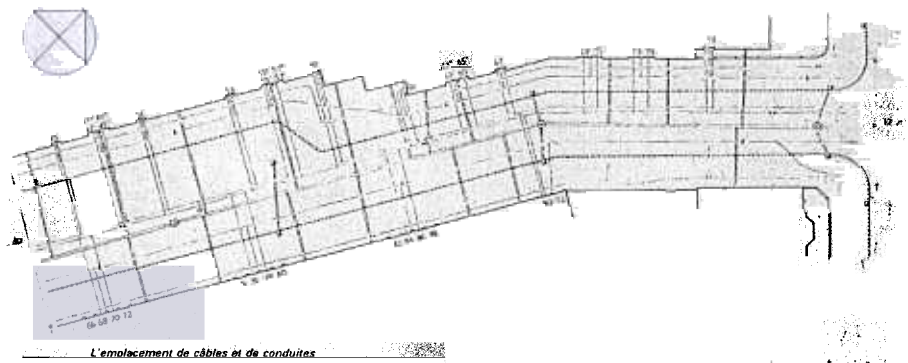
#### State influence

Housing societies renovate houses and the State gives money for private renovation or restoration. The Ministry of Housing is controlling the housing societies. After the renovation by these societies, the Ministry is now giving a large amount of money (2,400 F per dwelling) to renew the streets as well.

#### Residential precincts (Woonerf)

At the end of 1976 came the law on "woonerf" (living streets), with strict rules on both the use and the installation of protected living areas. Why was this law passed so quickly in the House of Parliament? Well, the traffic engineers were happy and not frustrated, because it concerned only the residential areas. The politicians were happy because the common uneasiness about unsafe streets could be calmed down a bit. Action groups saw the beginning of something beautiful.

Quicker than ever, Delft, Gouda, and Leiden became a kind of school, the "bump-school". People began to ask for bumps in their streets everywhere. The city of Rotterdam even had a special fund to make bumps on request. People started to understand better that everybody has to be forced to drive slowly. The environment of schools and homes for the aged, the routes children were taking to schools, became subjects of discussion. We are now making in Holland more or less isolated, safe "living islands"



from a publication, *Woonerf*, 1977).

vers (waiting in peak hours) but for people. It is a pity or a shame to invest so much money in road systems that never function as suggested and are never finished as planned.

(If you try to solve car problems by removing bottlenecks and other so-called obstacles, there will always be another next obstacle. For if there is no obstacle any more, the whole city will be a way (= away).

First we should use money to improve basic living conditions for people who do need it. (And for example have no car at all.) Therefore we must limit the use of cars slowly and with care. Slowly because we cannot stop this "war industry" with so much money and workers involved all of a sudden. With care, because it will cost a lot of attention to rebuild cities where the car is not needed because everything is at walking distance.

Joost Vahi

**LIMITATION DE LA CIRCULATION DANS  
LES QUARTIERS RESIDENTIELS - UNE  
EXPERIENCE TENTEE EN HOLLANDE**

*Les centres urbains et les quartiers du 20<sup>e</sup> siècle peuvent être améliorés si la priorité est donnée aux hommes et non aux voitures. Il faut limiter la circulation automobile et les parkings.*

*En Hollande beaucoup de rues sont maintenant repavées de façon qu'il soit impossible aux voitures de dépasser 15 à 30 km/h. Les bicyclettes, les piétons et les enfants reprennent possession des rues, et en conséquence les habitants commencent à apporter des améliorations à leurs rues et leurs maisons.*

*1.2.3.4. Moyens techniques de ralentir la circulation.*

*5.6.7. Suppression des bords de trottoir: avant, et après.*

*8.9.10. Coins de rues: avant, et après.*

*11.12.13. Amélioration de la rue à Delft, grâce à l'initiative des particuliers.*

*14. Une rue résidentielle.*

*15. Cornelis Trompstraat à Delft (dessin tiré de la publication « Woonerf », 1977).*

**ORGANIZACIÓN LIMITATIVA DE LA  
CIRCULACIÓN AUTOMÓVIL EN LOS  
BARRIOS DE RESIDENCIA: LA  
EXPERIENCIA HOLANDESA**

*Las entradas en las poblaciones, tanto como en los barrios del Siglo 20, pueden ser mejoradas si la prioridad dada al automóvil se la da al hombre. El uso y el aparcamiento de los vehículos deben ser reglamentados. En Holanda se ha cubierto numerosas calzadas de un revestimiento que impide la circulación automóvil a más de 15 a 20 km horarios. Las bicicletas, los peatones y los niños vuelven a tomar posesión de las calles y los vecinos emprenden la mejora de las calles y de las casas.*