ROAD DESIGN? He calls it a revolution

By Sarah Lyall

The New York Times

Saturday, January 22, 2005

DRACHTEN, Netherlands "I want to take you on a walk," said Hans Monderman, abruptly stopping his car and striding - hatless, and nearly hairless - into the freezing rain.

Like a naturalist conducting a tour of the jungle, he led the way to a busy intersection in the center of town, where several odd things immediately became clear. Not only was it virtually naked, stripped of all lights, signs and road markings, but there was no division between road and sidewalk. It was, basically, a bare brick square.

But in spite of the apparently anarchical layout, the traffic, a steady stream of trucks, cars, buses, motorcycles, bicycles and pedestrians, moved along fluidly and easily, as if directed by an invisible conductor. When Monderman, a traffic engineer and the intersection's proud designer, deliberately failed to check for oncoming traffic before crossing the street, the drivers slowed for him. No one honked or shouted rude words out the window.

"Who has the right of way?" he asked rhetorically. "I don't care. People here have to find their own way, negotiate for themselves, use their own brains."

Used by some 20,000 drivers a day, the intersection is part of a road-design revolution pioneered by the 59-year-old Monderman. His work in Friesland, the district in northern Holland that takes in Drachten, is increasingly seen as the way of the future in Europe.

Variations on the shared-space theme are being tried in Spain, Denmark, Austria, Sweden and Britain. The European Union has appointed a committee of experts, including Monderman, for a Europe-wide study.

His philosophy is simple, if counterintuitive. To make communities safer and more appealing, Monderman argues, you should first remove the traditional paraphernalia of their roads.

That means the traffic lights and speed signs; the signs exhorting drivers to stop, slow down and merge; the center lines separating lanes from each other; even the speed bumps, speed-limit signs, bicycle lanes and pedestrian crossings. In his view, it is only when the road is made more dangerous, when drivers stop looking at signs and start looking at other people, that driving becomes safer.

"All those signs are saying to cars, "This is your space, and we have organized your behavior so that as long as you behave this way, nothing can happen to you,"" said Monderman. "That is the wrong story."

The Drachten intersection is an example of the concept of "shared space," a street where cars and pedestrians are equal, and the design tells the driver what to do.

"It's a moving away from regulated, legislated traffic toward space which, by the way it's designed and configured, makes it clear what sort of behavior is anticipated," said Ben Hamilton-Baillie, a British specialist in urban design and movement, and a proponent of many of the same concepts.

Highways - where the car is naturally king - are part of the "traffic world" and another matter altogether. In Monderman's view, shared-space plans thrive only...
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in conjunction with well-organized, well-regulated highway systems.

Monderman is a man on a mission. On a daylong automotive tour of Friesland, he pointed out places he had improved, including a town where he ripped out the sidewalks, signs and crossings and put in brick paving on the central shopping street. An elderly woman crossed slowly in front of him.

"This is social space, so when Grandma is coming, you stop, because that's what normal, courteous human beings do," he said.

Planners and curious journalists are increasingly making pilgrimages to meet Monderman, considered one of the field's great innovators, although until a few years ago he was virtually unknown outside of Holland. Hamilton-Baillie, whose writings have helped bring Monderman's work to wider attention, remembers with fondness his own first visit.

Monderman drove him to a small country road with cows in every direction. Their presence was unnecessarily reinforced by a large, standard-issue European traffic sign with a picture of a cow on it.

"He said, 'What do you expect to find here? Wallabees?'" Hamilton-Baillie recalled. "They're treating you like you're a complete idiot, and if people treat you like a complete idiot, you'll act like one.'

"Here was someone who had rethought a lot of issues from complete scratch," Hamilton-Baillie said.

"Essentially, what it means is a transfer of power and responsibility from the state to the individual and the community."

Dressed in a beige jacket and patterned shirt, with scruffy facial hair and a stocky build, Monderman has the appearance of a soccer hooligan but the temperament of an engineer, which indeed he trained to be. His father was the headmaster of the primary school in their small village; Hans liked to fiddle with machines. "I was always the guy who repaired the TV sets in our village," he said.

He was working as a civil engineer building highways in the 1970s when the Dutch government, alarmed at a sharp increase in traffic accidents, set up a network of traffic-safety offices. Monderman was appointed Friesland's traffic safety officer.

In residential communities, Monderman began narrowing the roads and putting in design features like trees and flowers, red brick paving stones and even fountains to discourage people from speeding, following the principle now known as psychological traffic calming, where behavior follows design.

He made his first nervous foray into shared space in a small village whose residents were upset at its being used as a daily thoroughfare for 6,000 speeding cars. When he took away the signs, lights and sidewalks, people drove more carefully. Within two weeks, speeds on the road had dropped by more than half.

In fact, he said, there has never been a fatal accident on any of his roads. Several early studies bear out his contention that shared spaces are safer. In England, the district of Wiltshire found that removing the center line from a stretch of road reduced drivers' speed without any increase in accidents.

While something of a libertarian, Monderman concedes that road design can do only so much. It doesn't change the behavior, for instance, of the 15 percent of drivers who will behave badly no matter what the rules are.

Nor are shared-space designs appropriate everywhere, like in major urban centers, but only in neighborhoods that meet particular criteria. Recently, a group of well-to-do parents asked him to widen the two-lane road leading to their children's school, saying it was too small to accommodate what he derisively
calls "their huge cars."

He refused, saying that the fault lay not with the road, but with the cars. "They can't wait for each other to pass?" he asked. "I wouldn't interfere with the right of people to buy the car they want, but nor should the government have to solve the problems they make with their choices."

Monderman’s obsessions can cause friction at home. His wife hates talking about road design. But work is his passion and his focus for as many as 70 hours a week, despite quixotic promises to curtail his projects and stay home on Fridays.

The current plan, instigated by Mrs. Monderman, is for him to retire in a few years. But it is unclear what a man who begins climbing the walls after three days at the beach ("If you want to go to a place without any cultural aspect, go to the Grand Canaries," he grumbled) will do with all that free time.

"The most important thing is being master of my own time, and then doing things that we both enjoy," he said. "What are they? I don't know."