## AMSTERDAM — SPEED KILLS AND SHARED SPACE 02

American traffic laws require pedestrians to cross most streets in marked crosswalks, and painted and protected bike lanes are all the rage in United States cities today. But in Amsterdam, walkers, bike riders and drivers share the streets. Any pedestrian or cyclist may legally walk or ride anywhere on a vast majority of the streets in the center of the city.

These "shared spaces" evolved after the 1950s and 1960s, when the Dutch economy boomed after decades of hardship and cars overwhelmed Amsterdam's streets. In 1954, the Amsterdam police chief, Hendrik Kaasjager, proposed paving over several canals and a part of the harbor to make more room for cars.

Amsterdammers fought back. The city had been a cycling capital since the early 20th century. By the 1920s, more than 80 percent of city trips were made on bicycles, but increases in automobile traffic in the decades after World War II led to many conflicts and collisions on the small streets. Traffic deaths in the city rose to a peak of 3,300 in 1971, including 400 children. So Amsterdam's urban designers transformed entire streets—all the space between the buildings, in other words—into unified "public realms" for city life.

In changing thoroughfares into shared places, Dutch designers and engineers learned three lessons:

 When drivers slow down to 20 m.p.h. or below, they are less likely to hit people and much less likely to seriously injure or kill people if they do hit them.

The best way to slow cars down is to throw away all the techniques that little higher than the roadway but a little lower than the sidewalk. The slight level changes, low curbs and subtle paving patterns physically and visually separated the different areas. Frequently, the designs gave as much or more of the space to the use of pedestrians and cyclists as to motor vehicles.

When American engineers started adding bike lanes to American streets about a decade ago, they changed the model, creating a "protected" bicycle lane once misleadingly called "the Co-

penhagen lane."

We see examples on many Manhattan avenues, with parked cars sitting awkwardly between moving traffic and grossly striped bike lanes. Every planner and urban designer I've talked to in Denmark and the Netherlands says their countries would never build such ugly, over-engineered streets, which diminish the pedestrian experience and give high priority to traffic flow at 35 m.p.h. and above.

LONDON AND STOCKHOLM — REDUCING TRAFFIC

London and Stockholm came to the problem of making streets for people later than Amsterdam and Copenhagen. As they grew rich in the late 20th century, both cities built urban highways to speed cars in and out, rebuilt city streets to make traffic flow faster and turned city squares into parking lots for the new traffic.

But by the early 21st century, congested streets, traffic deaths, air pollution and new ideas about climate change persuaded city leaders they needed a faster fix than the decades-long evolution of policies and designs Amsterdam and Copenhagen went through.