

Gathering Spaces: Lessons from Traditional Dutch Street Form in the Age of Peak Oil and Global Warming

Theorists believe that, currently, world populations are facing epochal changes heralded by Peak Oil Theory, in which the world supply of oil will peak and begin to decline, causing a dramatic shift in basic human activities in the absence of an alternate source of energy that matches the prolific nature of fossil fuels. Concurrently, worries about global warming serve as a reminder that we must reevaluate the dependence that we have developed on these technologies (Kunstler, 2005).

Even without these major concerns, it has become increasingly clear that sprawling patterns of development that dominated the latter part of the 20th century in the United States have alienated communities and degraded quality of life. Further, it is believed to be unlikely that major new energy sources will be developed to replace the pervasive utility of fossil fuels (Holmgren, 2009). While the dire warnings of the peak oil theorists are increasingly apocalyptic, others believe that we can avoid the wholesale collapse of human systems. To do this, we must learn to live smaller and more compactly, with basic needs required for daily living nearby (Newman et al, 2009). This paper asks: can features of older Dutch cities that promote walkability be transferred to communities in the United States?

There are reasons to examine European cities. Europeans have historically placed a heavy emphasis on compact urban form. Older European cities have also been able to preserve the forms and systems that are seen as exemplary models of sustainability such as alternate methods of transportation, compact form, and a mixture of uses. The Netherlands, in particular, place a high value on such practices (Beatley, 2000).

This study, while still ongoing, aims to research the viability of using traditional Dutch urban street form as a model for development by examining characteristics of streets and street pattern within the historic core of three Dutch cities that were settled prior to the industrial age. To insure consistency, the cities chosen for study are all water towns (cities that were developed on lakes or marshes) that all received their city charters between the years of 1245 and 1272. Historic maps were used to determine the study boundaries. Three types of street form were found to be predominant in the historic core: the canal street, the major road, and the minor road. The physical, cultural, and sociological aspects of these streetscapes as they relate to walkability are collected through measurements, mapping, observations, and photographic surveys. Characteristics of each street are examined, as well as the pattern of street form within the study area. This study is expected to result in recommendations that will be generated from the analysis of Dutch street form that could inform the planning of new and retrofitting of existing communities in the United States.

--Associate Professor Beverly Bass