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Crime, Transportation and Malignant Mixes

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Introduction

Crime sometimes concentrates in or near transit nodes, such as train stations. Yet it is a mistake to think that public transit is necessarily criminogenic. Nancy LaVigne’s (1996) classic dissertation on security in the Washington, DC, metro system documented a fundamental principle – that public transit systems need not be dangerous. Her study found the downtown nodes to be relatively safe; the greatest risk in that system was in the parking areas of suburban stations in which automobiles remained unattended during the daily commute. That finding helps raise a more general question: do transit facilities produce extra crime in combination with another type of facility, beyond what either facility would have produced alone? Even more generally, can different land uses interact to form malignant mixes, defined in this study as land uses or activities that, in combination, engender greater risk of crime?

Geographers move up and down a cone of resolution to study phenomena at varying levels of analysis, from macro-level studies to micro-level investigations (Brantingham et al., 1976). Each level of the cone provides unique and important perspectives about the phenomena under study. The present study, located at the macro level near the top of the cone, considers how transit stations and centres interact with other facilities to generate assaultive violence. This city-level study provides a distinctive vantage point, which complements the meso- and micro-level studies found in this volume. Considered together, they offer a comprehensive, multilevel overview of transit crime.

The main purpose of the current chapter is exploratory, and focuses on the conceptualization of malignant mixes. First, we develop the conceptual groundwork of malignant mixes using ideas and examples from environmental criminology, and studies of transit crime. Second, we present two case studies to illustrate those concepts empirically. The first case study identifies spatial and temporal patterns of robbery near transit stations in the Bronx, New York. The second case study involves aggravated assault in and around neighbourhood parks and transit centres in Houston, Texas.
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These cities are very different in their composition. The former, located in the northeast United States, is a small, but densely populated place with an extensive public transportation system. The latter location is a geographically diffuse metropolitan area in the southern United States, with a relatively low population density and a modest public transit system. Finding support at such disparate locations demonstrates that the concept of mixing may be replicable in a variety of situations beyond those of the study sites.

Conceptualizing Malignant Mixes

One should not assume, however, that all combinations of facilities would create a criminogenic environment. In Jane Jacobs (1961) classic book, Death and Life of Great American Cities, Jacobs argues for mixing land uses in order to put eyes on the street at different times. Indeed, mixed land uses are an essential feature of the new urbanism that traces to Jacobs work. Crowe and Zahm (1994) elaborate upon that idea by explaining that some mixing can produce more crime, while other combined uses produce less. They offer an interesting synthesis, suggesting that planners locate safe activities in unsafe places and unsafe activities in safe places. Thus, a parking lot should be placed in a visible spot where robbers would be reluctant to attack.

In contrast, a trash collection activity can be located on a side street, since it offers no significant crime target. This general principle helps explain why schools should not be near malls, or drug rehabilitation clinics placed near nightlife areas in which crime opportunities are abundant. The importance of connectivity and access to transportation has long been an important topic in crime analysis (Brantingham and Brantingham, 1984a, 1984b) We are not brushing connectivity aside, but are suggesting that land use combinations are also important, something of which the Brantinghams were clearly well aware.

Some studies have documented the relationship between crime and land use using ideas from social disorganization. For example, Stucky and Ottensmann (2009) demonstrated that not only does land use directly influence the level of crime but also interacts with socioeconomic disadvantage, an important precursor of social disorganization, to engender more crime. In a related study, Taylor et al. (1995) found that higher levels of non-residential land use are predictive of the physical condition of street blocks, which adds weight to Stucky and Ottensmann’s findings. Browning et al. (2010) examined the relationship between land use and aggravated assault, homicide and robbery. They concluded that land use is predictive of violent crime, although the process is different for robbery.

Brantingham et al. (1991) identified the significance of malignant mixing when they described how Vancouver’s elevated monorail, Skytrain, generated crime problems at a particular station very close to a shopping mall. Those going from the transit station to the mall or back traversed a parking