Beyond Crime Generators and Crime Attractors

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• Support: Paul Brantingham, Richard Frank, Valerie Spicer and Justin Song
Theory: Geometry of Crime/ Crime Pattern Theory

- Individual
- Paths, nodes, edges
- Activity Space
- Awareness space
- Target Space, suitable target space

- From individual to aggregate
Awareness Space/ Individual Offender
Areas Fitting Crime Template

Work

Home

Shopping & Entertainment
Joint Awareness space and overlapping targets
Multi- Dimensional Crime Patterns

• Road network/ Mass Transit

• Land use

• City infrastructure

• Pushes and pulls

• Paths – nodes – edges

• Attractors – generators
Example of Data for Suburb of Vancouver
Directionality

- Awareness space
- Paths, nodes and edges
- Crime occurrences

- Directionality = towards
Criminal Activity Vectors- Attractiveness of City Centrers (2009)
Richard Frank and Patricia Brantingham
Angle Needed to Capture 50% of People's Crime Location

Percent of Crimes Captured (Cumulative vs Size of Angle (in Degrees))

- REAL
- RANDOM

Real
- 30°
- 80°

Random

0% 20% 40% 60% 80% 100%
0 45 90 135 180 225 270 315 360
Examples: Micro and Meso Level

- Designing a town
- Designing mass transit
- Designing parks
- Addressing existing attractor-generators issues
  - Known repeat offenders - low risk nuisance behaviour
  - Known repeat offenders - high risk assaults
  - Consider fear issues - reducing fear can sometimes increase risk
    - Dark alleys/laneways
    - Elevators
Tumbler Ridge

• Rural, Northern BC
• Was mining town (3); now resort area for northern Alberta
• Planning to reduce future risky places
Mass Transit
Future

- Impact of Covid
  - Shopping/work - types of crimes and where
  - Gathering - bigger divide

- Impact of technology
  - Cell phone apps - info about crime attractors, planning crime
  - Social networks
  - Computer crime - large and small
  - Social networks

- To awareness space and crime attractors/generators
  - add web nodes, internet attractors, internet networks,.....

- Computational criminology
Refs: (summit/sfu.ca) enter Brantingham; pick crime attractors....

- **Brantingham articles**


Thanks