Crime Script Analysis

Benoit Leclerc
School of Criminology & Criminal Justice
Griffith University

Symposium – Developing New Approaches to Prevent Crashes among Young Drivers
May 11\textsuperscript{th}, 2018
Crime Scripts

- Origin
  - Concept of schemas (Schank & Abelson, 1977)
  - Event schemas = scripts
  - Examples
    - Movie script
    - Novel script
    - Theatre script
Crime Scripts

- Origin

  - Crime scripts (Cornish, 1994)

  Crime script

  =

  More or less... Offender modus operandi but revisited for prevention applications
Crime Scripts

- Objectives of crime scripts
  - 1- Framework for entire crime-commission process
  - 2- New opportunity for situational crime prevention (SCP)
Crime Scripts

- Theoretical Framework
  - Study of crime events as opposed to offenders themselves
Crime Scripts

How is crime committed?
Figure 5: A Simple Crime Script Example: (Suburban Burglary)

(1) Preparation
- Keep ears open for tips about likely local targets
- Get van, tools (guns, gloves), co-offender (if needed)
- Take drugs/alcohol
- Select general area for crime
- Assume plausible role for setting (e.g. delivery/repair person)

(2) Enter Setting
- Drive into development

(3) Precondition
- Drive around and loiter unobtrusively in development

(4) Target Selection
- Scan for cues relating to rewards, risks and effort (e.g., potential “take,” occupancy, surveillability and accessibility)

(5) Initiation
- Approach dwelling and probe for occupancy and accessibility

(6) Continuation
- Break into dwelling and enter
- Search for goods

(7) Completion
- Select and steal goods

(8) Finish up
- Load up goods and drive away from house

(9) Post Condition
- Maintain plausible role for location

(10) Exit Setting
- Leave Development

(Adapted from Cornish and Clarke, 2006)
Crime Scripts

How is crime disrupted?
Figure 5: A Simple Crime Script Example: (Suburban Burglary)

1. Preparation
- Actions
- Keep ears open for tips about likely local targets
- Get van, tools (guns, gloves), co-offender (if needed)
- Take drugs/alcohol
- Select general area for crime
- Assume plausible role for setting (e.g., delivery/repair person)

2. Enter Setting
- Actions
- Drive into development

3. Precondition
- Actions
- Drive around and loiter unobtrusively in development

4. Target Selection
- Actions
- Scan for cues relating to rewards, risks and effort (e.g., potential "take," occupancy, surveillability and accessibility)

5. Initiation
- Actions
- Approach dwelling and probe for occupancy and accessibility

6. Continuation
- Actions
- Break into dwelling and enter
- Search for goods

7. Completion
- Actions
- Select and steal goods

8. Finish up
- Actions
- Load up goods and drive away from house

9. Post Condition
- Actions
- Maintain plausible role for location

10. Exit Setting
- Actions
- Leave Development

(Further stages (if needed))

(Adapted from Cornish and Clarke, 2006)
Crime Scripts & SCP

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>SCRIPT ACTION</th>
<th>SITUATIONAL CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>Buy spray-can</td>
<td>Sales regulation</td>
</tr>
<tr>
<td></td>
<td>Find good setting</td>
<td>City paint-out program</td>
</tr>
<tr>
<td>Entry</td>
<td>Enter setting</td>
<td>Access control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Entry/exit screening</td>
</tr>
<tr>
<td>Precondition</td>
<td>Loiter</td>
<td>Surveillance</td>
</tr>
<tr>
<td>Instrumental Precondition</td>
<td>Select target</td>
<td>Remove target</td>
</tr>
<tr>
<td>Instrumental Initiation</td>
<td>Approach target</td>
<td>Surveillance</td>
</tr>
<tr>
<td>Instrumental Actualization</td>
<td>Reach target</td>
<td>Protective screens</td>
</tr>
<tr>
<td>Doing</td>
<td>Spray graffiti</td>
<td>Graffiti-resistant paint</td>
</tr>
<tr>
<td>Postcondition</td>
<td>Get away quietly</td>
<td>Moisture-activated alarm</td>
</tr>
<tr>
<td>Exit</td>
<td>Leave setting</td>
<td>Entry/exit screening</td>
</tr>
<tr>
<td>Doing (later)</td>
<td>&quot;Getting up&quot;</td>
<td>Rapid cleaning</td>
</tr>
</tbody>
</table>

After Ledo and Abelson, 1986; Clarke 1992
Crime scripts so far…

Scripting Crime Scripts
Research

- Birth of crime scripts (Cornish)
- Check fraud (L&T)
- Empirical application to interpersonal crime (B et al.)
- Organised crime (B, T & C) + victim scripts (S)
- Various crime, int. scripts (L&W)

- Theoretical application to interpersonal crime (Cornish)
- Suicide bombing scripts for SCP
- Merge with SNA (M&R)
- Empirical scripts for SCP (L et al.; T&C; C et al.; B et al., etc.)
- Guardianship Scripts (L&R)

Example 1: Sexual Offences vs Children

Figure 1. Child sex offending protoscript.
Example 2: Drug Dealing in Amsterdam’s Red Light District

A. Search customer: Walk to spot lone white male, 30-49 years of age

B. Solicit customer: Say type of drug(s) for sale when face-to-face

1. Agree on terms: Agree to provide 1 gram of cocaine for €50

2. Make exchange: Fulfill agreement

C. Arrange place/time: Tell customer to walk together to nearby place ASAP
Example 3: Human Trafficking from Eastern Europe to Italy

Source: Authors’ elaboration of the information contained in the arrest warrant referred to case-study n.1
Example 3: Human Trafficking from Nigeria to Italy

Source: Authors’ elaboration of the information contained in the arrest warrant referred to case-study n.2
### Example 4: Suicide Bombing/Terrorism

**Table 5.3 Steps in Suicide Bombing: Actions, Resources, Facilitating Conditions and Interventions**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Action needed</th>
<th>Resources needed</th>
<th>Facilitating conditions</th>
<th>Points of intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Find safe house(s) for operations</td>
<td>- Identify friendly locality for safe house. &lt;br&gt;- Arrange its use.</td>
<td>- House for HQ. &lt;br&gt;- Warehouse for storing bombing apparatus (explosives, suits, etc.).</td>
<td>- Community collusion to support safe houses, provide information on housing market, who to ask, etc.</td>
<td>- Install surveillance to identify safe houses. &lt;br&gt;- Identify friendly locations by interviewing unsuccessful bombers. &lt;br&gt;- Reduce community support by exploiting community ambivalence about suicide bombing.</td>
</tr>
<tr>
<td>2. Select target or targets</td>
<td>- Find attractive targets according to EVILDONE that fit mission Chapter 7). &lt;br&gt;- Select targets who match bomber in appearance (e.g., young, mostly male). &lt;br&gt;- Choose appropriate route to target. &lt;br&gt;- Visit target to assess accessibility, etc.</td>
<td>- Maps and reconnaissance of target areas.</td>
<td>- Existence of attractive targets, especially those undefended. &lt;br&gt;- Intelligence sources from target location and proposed route to target.</td>
<td>- Frequently change design of entrances at coffee houses—move doors, etc. &lt;br&gt;- Construct barriers or walls. &lt;br&gt;- Install surveillance CCTV at key points. &lt;br&gt;- Train guards at entrance to recognize bombers.</td>
</tr>
</tbody>
</table>
Example 4: Suicide Bombing/Terrorism

3. Select bomber candidates
   - Use network to select candidate, maintaining secrecy.
   - Match candidate to target (male/female, youthful, etc.).
   - Begin indoctrination of bombers.

4. Specify exact location for detonation
   - Choose location (e.g., "at bus stop X in front of busy market Y").
   - Choose alternate location in case thwarted.
   - Work out exact routes and methods of getting there (bus, taxi, walk).
   - Decide on best route and alternates.

5. Specify route to target
   - Group commitment sessions to bond bombers to each other, make mutual commitment.

6. Establish group commitment
   - Detailed information from local inhabitants at target location, or reconnaissance.
   - Detailed knowledge of target area and routes to target.

- Supply of young zealots.
- Organizational network to secretly identify candidate.
- Handlers to do indoctrination.
- Donations of money to support organization.
- Payments to parents of bomber.
- Trusted volunteers to help in indoctrination.
- Availability of maps, plans on Internet or libraries.
- Support of local inhabitants helpful.
- Network of trusted volunteers.

- Trace payments and cut off money supply both to handlers and to families of suicides.
- Close down schools that educate young zealots; dismantle recruiting organizations.
- Locate handlers through interviews with failed bombers and their families.
- Identify specific locations of detonation and fix accordingly (e.g., move bus stop from busy market).

- Change traffic flow, close off streets, divert pedestrian and car traffic on daily basis.
- Close off streets to reduce number of possible routes terrorist can take to targets from point of departure.
- Identify volunteers through interviews with failed suicides.
- Dismantle training operations.
Table 5.3 (continued)

<table>
<thead>
<tr>
<th>Steps</th>
<th>Action needed</th>
<th>Resources needed</th>
<th>Facilitating conditions</th>
<th>Points of intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Train bombers</td>
<td>- Bombers must be familiarized with bomb vest, detonation procedures.</td>
<td>- Appropriate explosives and covering garments.</td>
<td>- Donations of money</td>
<td>- Identify suppliers of explosives and shut down.</td>
</tr>
<tr>
<td></td>
<td>- Must rehearse routes to target.</td>
<td>- Detonators.</td>
<td>to purchase items.</td>
<td>- Identify stores of explosives and destroy.</td>
</tr>
<tr>
<td></td>
<td>- Familiarize with target and alternate locations.</td>
<td>- Safe house for training.</td>
<td>- Supplies of explosives</td>
<td>- Identify origins of specially sewn garments to cover explosives.</td>
</tr>
<tr>
<td></td>
<td>- Send bomber along routes and to targets as practice.</td>
<td>- Bomb experts to assemble bomb vest, train bomber</td>
<td>- Availability of light</td>
<td>- Identify sources/manufacturers of detonators mechanisms and shut</td>
</tr>
<tr>
<td></td>
<td>- Learn to dress and behave to blend in with target setting.</td>
<td>in detonation technique.</td>
<td>small-size explosives.</td>
<td>down or cut off supplies.</td>
</tr>
<tr>
<td></td>
<td>- Warn bomber against detonating too soon.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Prepare propaganda, reinforce individual commitment</td>
<td>- Prepare poster with bomber’s photograph, other announcements proclaiming his/her martyrdom.</td>
<td>- Video camera, computer and editing software.</td>
<td>- Family may provide</td>
<td>- Work with video companies to track video cameras, provide means of identifying cameras.</td>
</tr>
<tr>
<td></td>
<td>- Shoot video of bomber expressing commitment to carry out the mission.</td>
<td>- Writing materials, cardboard for poster.</td>
<td>photograph, although</td>
<td>- Work with stores that supply services for photograph, poster needs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Photographs of bomber.</td>
<td>usually does not know</td>
<td>- Work to make sure candidates find out about their intentions before they can act.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>child has martyred hims/ herself until after act.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Suppliers of photographic materials and processing, etc.</td>
<td></td>
</tr>
</tbody>
</table>
## Example 4: Suicide Bombing/Terrorism

### Getting There

1. **Dispatch bomber**
   - Get bomber from safe house to different location to begin journey to target.
   - Intelligence on any recent changes in checkpoints, traffic patterns, etc.
   - Car or taxi for transportation of bomber to departure point.
   - Detailed intelligence, careful training of bomber.

2. **Reach target**
   - Bomber must move as directly as possible via agreed route to target.
   - Time taken increases risk of being spotted.
   - Time arrival to suit target (e.g., if bus, get to stop as bus pulls in). If café, arrive at busiest time.
   - Poorly designed buses.
   - Predictable bus schedules.
   - Poorly placed bus stops.
   - Poor building and venue security.

- Friendly drivers and/or mechanics, car dealers, taxis.
- Change traffic patterns and checkpoints unpredictably and frequently.
- Monitor traffic patterns in departure locations.
- Make entry to target area difficult.
- Design bus doors so they can be slammed shut immediately if driver suspects bomber.
- Search entrants to cafes at busiest times.
- Locate search and entry points at safe distance from café dining area.

### After the Event

1. **Claim responsibility**
   - Contact news media to claim responsibility.
   - Convey video of bomber’s proclamation to media.
   - Post video on Web site.
   - Arrange payment for parents.

- Untraceable ways of contacting media.
- Computer and ISP to post video on Web.
- Money to pay parents.

- Donors to pay parents, untraceable money transfer system.
- Trace payments to parents.
- Interview parents for information on handlers.
- Surveillance of funeral events to identify possible handlers.
**Example 4: Suicide Bombing/Terrorism**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Action needed</th>
<th>Resources needed</th>
<th>Facilitating conditions</th>
<th>Points of intervention</th>
</tr>
</thead>
</table>
| 2. Review operation | • Assess whether bomber reached target and how.  
• Review approaches if thwarted.  
• Review criteria for selecting targets as appropriate. | • Detailed information on the attack process. | • Use cell phone to maintain contact with bomber up to point of detonation. | • Monitor cell phone use.  
• Study target selection and routes taken and entry methods; modify defenses accordingly. |
| 3. Plan new attack | Return to start. | | | |

**Notes:**

8See Orbach (2004) who argues that suicide bombing is spawned essentially by a range of facilitating conditions, not by the personal distress of the bomber.

9Bloom (2005); Dingley (2004); Merari (2004a, 2004b, 2004c); Pape (2005).

6Merari (2004a, 2004b, 2004c). There is consensus, although no definitive study, supporting the claim that the fence built along the U.S.-Mexican border near San Diego substantially reduced the influx of illegal aliens in that region.

7For a survey of financial support sources for suicide bombers in Israel, see Stork (2002).

8Berman and Laitin (forthcoming); Ganor (2002).

7Ganor (2003).

8Merari (1998).


8Chan (2005).
Crime Scripts

- Moving beyond offender scripts

What if you want to work from the perspective of those who could prevent crime (as opposed to offenders)?
## Crime Scripts

Table 12.2 The application of script analysis to the main actors of crime events

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Offender</th>
<th>Victim</th>
<th>Guardian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective pursued by actor during event</td>
<td>Commit crime</td>
<td>Avoid victimization</td>
<td>Prevent crime</td>
</tr>
<tr>
<td>Focus of script analysis</td>
<td>Crime-commission process</td>
<td>Self-precautionary process</td>
<td>Intervention process</td>
</tr>
<tr>
<td>Prevention goal</td>
<td>Disrupt script</td>
<td>Facilitate script</td>
<td>Facilitate script</td>
</tr>
</tbody>
</table>
Figure 1: Intervention script of capable guardians against crime in public settings.
School of Criminology and Criminal Justice
Table 1: Situational prevention strategies and techniques to facilitate guardianship at selected steps of the intervention script

<table>
<thead>
<tr>
<th>Step of script</th>
<th>Situational crime-prevention strategy</th>
<th>Situational crime-prevention techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Availability to intervene</td>
<td>Reduce the effort</td>
<td>Encourage accessibility and usage of public setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Design spaces that are esthetically pleasing</td>
</tr>
<tr>
<td></td>
<td>Reduce the risk</td>
<td>Facilitate accessibility and encourage steady flow of users</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase surveillance and encourage safety</td>
</tr>
<tr>
<td>2. Capacity to intervene</td>
<td>Reduce the effort</td>
<td>Increase physical capacity</td>
</tr>
<tr>
<td></td>
<td>Reduce the risk</td>
<td>Provide free self-defence training sessions</td>
</tr>
<tr>
<td>3. Notice the offense</td>
<td>Reduce the effort</td>
<td>Facilitate Natural Surveillance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Create clear lines of sight</td>
</tr>
<tr>
<td>4. Monitor the offense</td>
<td>Provide excuses</td>
<td>Manipulate physical design to ensure windows face public space</td>
</tr>
<tr>
<td></td>
<td>Increase rewards</td>
<td>Use CCTV</td>
</tr>
<tr>
<td>5. Take responsibility</td>
<td>Provide excuses</td>
<td>Encourage Collective Awareness</td>
</tr>
<tr>
<td></td>
<td>Increase rewards</td>
<td>Use signage/announcements to promote vigilance and raise awareness of safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>precautions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use signage/announcements to promote civic responsibility to assist victims</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduce &amp; Promote Community Awards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide awards for civic engagement in the prevention of crime</td>
</tr>
<tr>
<td>6. Decide to intervene</td>
<td>Provide excuses</td>
<td>Promote active guardianship</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use publicity campaigns to encourage intervention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shaming of inaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensure that police contact information is readily available</td>
</tr>
<tr>
<td>7. Alert passers-by</td>
<td>Reduce the effort</td>
<td>Increase communication potential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Encourage presence of onsite place managers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install Emergency Alarm Systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promote citizen intervention laws</td>
</tr>
<tr>
<td>8. Approach offender</td>
<td>Increase the reward</td>
<td>Provide and raise awareness of citizens’ legal arrest powers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduce Incentives for intervention</td>
</tr>
<tr>
<td>9. Discourage offender</td>
<td>Provide excuses</td>
<td>Public Commendation and/or Monetary Reward/ Compensation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase social capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Publicize police guidelines to manage dangerous situations</td>
</tr>
<tr>
<td>10. Neutralize offender</td>
<td>Reduce the effort</td>
<td>Increase physical capacity</td>
</tr>
<tr>
<td></td>
<td>Reduce the risk</td>
<td>Provide free self-defence training sessions</td>
</tr>
<tr>
<td>11. Assist victim</td>
<td>Provide excuses</td>
<td>Create Social Pressure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Penalties for failing to assist victims in need</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use publicity campaigns to encourage victim assistance</td>
</tr>
<tr>
<td>12. Report the incident</td>
<td>Reduce the effort</td>
<td>Provide accessible channels of communication</td>
</tr>
<tr>
<td></td>
<td>Provide excuses</td>
<td>Increase availability of emergency phone booths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduce Incentives for reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public Commendation and/or Monetary Rewards/ Compensation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use mechanical surveillance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use monitored CCTV cameras</td>
</tr>
</tbody>
</table>

Notes: Adapted from Clarke (2009).
Crime Scripts –
Strengths of the concept via the acronym of SCRIPT

- (S) Systematic
- (C) Compatible
- (R) Resilient
- (I) Insightful
- (P) Practical
- (T) Theoretically grounded
Data sources for performing crime scripts

- Offender self-reports
- Victim self-reports
- Third party self-reports
- Police interviews
- Police reports
- Victim statements
- Court transcripts
- Coroner documents
- etc
Crime Scripts

- The bottom line
  - Map out “How” crime is committed (+ rationales behind actions) from start to finish
  - Enlarge opportunities for SCP
  - Boost capability to design effective SCP measures (adapted to each stage of the process)

- Script Analysis is applicable to any process involving a sequence of behaviours