Crime and Networks
Edited by Carlo Morselli

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Chapter 1: The Importance of Studying Co-offending Networks for Criminological Theory and Policy
Jean Marie McGloin and Holly Nguyen
Though the group nature of much crime and delinquency has been well documented for decades, there is relatively scant research on co-offending networks. This chapter argues that attending to the ways in which co-offending networks shape and affect criminal behavior, as well as how individual and situational attributes shape the tendency to join such networks and adopt certain roles within them, has broad and important implications for criminology and criminal justice.

Chapter 2: Sex and Age Homophily in Co-offending Networks: Opportunity or Preference?
Sarah B. van Mastrigt and Peter J. Carrington
Homophily, the tendency for individuals to associate with similar others, has been demonstrated across a wide range of social relational forms, including co-offending. One of the most widely cited ‘facts’ about group crime is that it is typically carried out in homogeneous groups, particularly with respect to age and sex. The findings in this chapter provide evidence for inbreeding homophily and indicate that the bias for offending with similar others is most pronounced amongst males and youths in co-offending networks.

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Natalia Iwanski and Richard Frank
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Martin Bouchard and Richard Konarski

The dynamic and sometimes diffuse nature of membership makes gang boundaries difficult to discern. The current study draws on social network analysis of co-offending data to assess its utility in identifying the “core” membership of a youth gang active—the 856 gang—in a rural region of British Columbia, Canada. Findings reveal that a total of 60 offenders were potential members of the 856 gang and 13 offenders could be defined as core members.

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Andrew Papachristos and Chris Smith

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Sheldon Zhang

Chinese human smugglers (or snakeheads) are mostly enterprising individuals who use their social networks to provide underground travel service to facilitate the migration of their compatriots to their destination countries. These circles of social contacts resemble a series of cartwheels connected through their central nodes in which a chain-like smuggling process hinges heavily on the successful delivery of required services at each stage. While the enterprise of human smuggling as a whole exhibits much flexibility and resiliency towards market
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Andrea Giménez-Salinas Framis

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David A. Bright, Catherine Greenhill, and Natalya Levenkova

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Francesco Calderoni

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Chapter 10: Drug Trafficking Networks in the World Economy

Rémi Boivin

Transnational drug trafficking requires trade networks that often overlap with legitimate markets, however, countries that are active in the drug trade rarely occupy key positions in the global legitimate economy. Based on data collected by the United Nations Office on Drugs and Crime from 1998 to 2007, this chapter examines separate networks of exchanges between countries involved in the trafficking of cocaine, heroin, and marijuana. Findings demonstrate, in several ways, transnational drug trafficking is structured inversely than legitimate trade economies.
PART III: CYBERCRIME NETWORKS

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Benoit Dupont

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David Décary-Hétu

This study focuses on how hackers shape their personal communications in order to gather information on potential victims. Using logs of online Internet Chat Relay (IRC), ego networks of hackers that visited hacking chatrooms and talked about hacking with others are examined. Hackers interact with each other in small and dense networks where direct connectivity is more important than indirect connections. The number of contacts in the ego networks is limited in most cases and the number of brokers is fairly poor. Such communications evolve in cliquish networks where everyone knows each other and in which novice hackers are able to hone their skills in a variety of areas.

Chapter 13: Usenet Newsgroups, Child Pornography, and the Role of Participants

Francis Fortin

The availability of Internet services has greatly facilitated the production, reproduction, and dissemination of child pornography as well as the creation of communities or support networks to conceal underground activities. Following a description of the newsgroup internet service Usenet, this chapter analyzes how this service is used by cyberpedophiles to share child pornography material as well as ideas and experiences concerning their illicit activities, creating a virtual subculture. An analysis of 45 days of text-based communications shows that this community is built through messages that provide moral support, deal with conflicts and disputes, or provide technical information, as well as those that promote pedophile-oriented content.
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Aili Malm, Andrea Schoepfer, Gisela Bichler, and Neil Boyd

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Robert R. Faulkner and Eric Cheney

The Watergate scandal is used to model the social structure of political conspiracy and to predict which specific conspirators defect from Nixon's cadre. Block modeling the sociomatrices of the Watergate corruption reveals political conspiracies to be organized by decentralized cabals coordinating with a core cadre. Intermediating roles/positions and betweenness centrality predict defection as well as the probability of conviction in court and prison time served. Findings show that brokers benefit individually from their structurally autonomous position, but the autonomy of the individual brokers is a liability for the overall group level conspiracy as it is the structural position of the broker where the conspiracy collapses.

PART V: EXTREMIST NETWORKS

Chapter 16: Terrorist Network Adaptation to a Changing Environment
Sean F. Everton and Dan Cunningham

In this chapter, a unique longitudinal data set of the Noordin Top terrorist network from 2001-2010 is examined in order to explore how the network’s topography (e.g., centralization, density, degree of fragmentation,) and effectiveness (e.g., recruitment, number of quality network members) changed over time in light of efforts by Indonesian authorities to disrupt it. This analysis demonstrates how terrorist networks adapt to a hostile environment. While making them more effective, such adaptation can also create new vulnerabilities, particularly when terrorist groups that become too dense or fail to decentralize can become vulnerable to rapid deterioration in the event of a well-connected member’s capture.

Chapter 17: Understanding Transnational Crime in Conflict-Affected Environments: The Democratic Republic of the Congo’s Illicit Minerals Trading Network
Georgia Lysaght

Conflict-affected environments are prone to housing the ‘dirty’ end of illicit commodity markets and the protraction of violent conflict where illicit markets proliferate is indeed advantageous to the criminal networks that profit from them. This chapter demonstrates how social network
analysis constitutes a vital element toward a better understanding of the transnational organized crime and conflict nexus. While a network mapping of the linkages between trafficking groups and other significant actors highlights ‘the usual suspects’, such as political powerbrokers and militia leaders, the analysis also reveals the importance of actors beyond the immediate conflict environment, and particularly purchasers from the developed ‘West’ that play a critical role in shaping the conflict landscape.

Contributor Biographies
Preface

This book is comprised of a collection of studies by the top researchers in the area of crime and network analysis. Recent years have brought us a considerable expansion in innovative studies using various forms of empirical sources that have led to the development and refinement of the social network perspective within criminology. As a community of researchers, we concur that seeking the structure of crime and co-offending is always preferable to assuming such matters. Our principal aim in *Crime and Networks* is to establish more systematic methods and theoretical paths for identifying key patterns in a wide range of crime networks.

The book is divided into five parts. Each part addresses a specific criminal phenomenon: co-offending in Part I; organized crime in Part II; cybercrime in Part III; economic crime in Part IV; and extremist groups in Part V. Each chapter in this book addresses the problem, research tradition, data and methodological background, and empirical underpinnings for a specific analytical object. The chapters that make up this collection are all empirical contributions from the rapidly growing community of experts across a wide range of cultural settings in criminology.

*Crime and Networks* is the first book of its kind. With its unique focus on social networks across a diversity of crimes and theoretical outlooks, it surpasses the scope and comprehensive outlook of any past study in this field. The book is also designed to relate to newcomers and advanced researchers in this field, from either academic or practical research settings. Indeed, one of the more exciting expectations we have for this book concerns the array of replications and extensions that its various chapters will generate over the years to come. What the
community of researchers in this growing field have proven over the past decade is that the challenges of establishing an empirical repertoire and developing an increasingly uniform analytical focus may be overcome. A decade ago, several scholars were promoting the strengths of social network analysis and identifying promising qualitative and quantitative data sources for criminological research. Today, few are simply proposing what should be done. Indeed, such talk has been displaced by actual research, as researchers are increasingly accessing and organizing their empirical sources to demonstrate the many analytical paths and substantive issues that emerge when applying the social network framework to crime. In many ways, this rise is reminiscent of the development of social network analysis as a key sociological paradigm over the past fifty years.

Within the academic teaching community, Crime and Networks will be suitable for a variety of methodological and substantive undergraduate or graduate courses. There are a growing number of courses on criminal networks across criminology departments—many of these courses were created and continue to be taught by the authors in this book. While such courses are the ideal fit for this book, the diversity of topics, empirical sources, and methods covered across the chapters also make the book suitable for methodological courses in qualitative, quantitative, or mixed methods. Past experiences using such material for teaching have proven that even the novice researcher can easily grasp notions of matrices, dyads, cliques, or key players and design their first research attempt with this unique method. All it takes to begin is a keen eye for identifying relationships in a group setting, an appreciation for the social basis of crime, and a willingness to learn the basic applications of the many (and free) softwares that are available for such analyses. Crime and Networks is not simply a methodological reference. As a theoretical and substantive contribution, it would be suitable in any specialized
class on the crime phenomena that are the focus in each of the five parts. Finally, and at a more
general level, this book also has its place in traditional sociology of crime courses and in any
seminar that addresses new and innovative approaches to the study of crime.