The Interdisciplinary Dimensions of the Study of Organized Crime¹ Klaus von Lampe

published in Trends in Organized Crime 9(3), 2006, 77-95

Abstract

This essay and review systematically charts the various influences from other areas of scientific research, including economy, psychology and neurobiology, on the study of organized crime. Drawing on an analysis of American and international literature, metaphorical and substantive references to other disciplines are highlighted on five levels of observation: the individual "organized criminal", the activities these individuals are involved in, the associational patterns through which they are connected, the power structures that subordinate these individuals and collectives to common or particular interests, and the relations between these individuals, structures and activities on the one hand, and the legal spheres of society on the other. It is argued that a research program aiming at building up a cumulative body of knowledge is needed to overcome the shortcomings of the current eclectic use of concepts and theories from other disciplines.

Over the past 30 years the study of organized crime has developed into a separate subdiscipline with its own text books, journals and professional associations. Although the core subject is crime it has never been a uniquely criminological or even uniquely sociological endeavor. Given the broad scope of the concept of organized crime which according to varying interpretations encompasses such diverse phenomena as illegal markets, quasi-governmental criminal structures, corporate crime and state crime, the study of organized crime has attracted scholars with academic backgrounds other than criminology and sociology, including anthropology, economics, history, law and political science. Correspondingly, students of organized crime have borrowed concepts and theories from a variety of academic disciplines. However, the multidisciplinary dimension has not necessarily ensured a high level of theoretical penetration of the objects of study. Despite recent advances, the theoretical literature on organized crime remains fairly thin and fragmented. In fact, one might even go so far as to say that "organized crime theory", to the extent it exists at all, is largely an eclectic patchwork and that the various references to other disciplines have added to the confusion that already existed on the conceptual level rather than to clear the fog (Reuter, 1994). This is not to say that the interdisciplinary dimensions of the study of organized crime are necessarily a liability rather than an asset. On the contrary, it may prove fruitful to piece the conceptual and theoretical fragments together, provided it is done systematically and with careful attention being paid to the empirical evidence.

The ambition behind this paper is modest. The aim is not to pick up the loose ends and to integrate them into an overall theoretical framework, as this would be beyond the limited scope of a journal article, but merely to chart in a schematic order the various links to other disciplines outside criminology and sociology as a first step towards a more systematic use of these interdisciplinary influences. For this purpose a wide range of American and international literature on organized crime has been reviewed. An attempt has also been made to identify current trends in order to determine by what areas of research the study of organized crime might be influenced in the future.

The Study of Organized Crime and Other Disciplines

While the focus of this paper is on how the study of organized crime is influenced by other scientific disciplines it should not be overlooked that the relation is not strictly unidirectional.

There are essentially four types of links between the study of organized crime and other areas of scientific research when one looks, on the one hand, at the direction of influence and, on the other, at the perceived relation between the respective objects of study, more specifically, whether the relation is seen to be of a more or less metaphorical nature or whether an empirical overlap of the phenomena under investigation is believed to exist.

References to Organized Crime in Other Disciplines

In some cases, the study of organized crime has enriched other areas of research. This is most significant where organized crime has been addressed within a broader or partially overlapping context, with organized crime being regarded as an empirical facet of, or a basic condition for the phenomena under investigation. In these cases, organized crime is not the focal point of interest.

One example is provided by the classic research literature on juvenile delinquency, including Thrasher's "The Gang" (1927), Whyte's "Street Corner Society" (1943) and Cloward and Ohlin's "Delinquency and Opportunity" (1960), which pays considerable attention to organized crime phenomena. Thrasher, for example, treats organized crime, personified by the adult gang, as an outgrowth of the overall gang phenomenon, while Whyte and Cloward and Ohlin view organized crime more in terms of a systemic condition which has some bearing on the social position and patterns of activity of juvenile gangs.

Similar references can be found in the literature on politics, economy and culture wherever organized crime appears as an integral and formative part of the fabric of society, as is the case namely in the United States (see e.g. Lerner, 1957), Italy (see e.g. Barzini, 1964), and in post-soviet societies of transition (see e.g. Satter, 2003). An interesting variation of this kind of literature is presented by political writings from the Third Reich and the Soviet era that pounce on the issue of organized crime in an effort to expose the perceived weaknesses and contradictions of the system of Western democracy (Halter, 1942; Polkehn & Szeponik, 1985).

More specifically, in the case of the United States, the literature on American politics (Brogan, 1960), particularly city politics (Banfield & Wilson, 1963), immigration (Gambino, 1974) and the labor movement (Kimeldorf, 1992) would be incomplete without addressing the issue of organized crime. However, and this is true even for more recent literature, the study of organized crime is not widely recognized as a source of knowledge. Howard Kimeldorf's history of longshore unionism, for example, draws extensively on the literature on the labor movement but despite the catchy title "Reds or Rackets?" practically ignores the contributions from the study of organized crime which had already been available when this book was first published (e.g. Block, 1983; Block & Chambliss, 1982; Reuter, 1987).²

An example for the recognition of the organized crime literature, in the form of Arlacchi's analysis of the mafia phenomenon (Arlacchi, 1986), is a treatise on economic organization by German political philosopher Axel Honneth (1994). He discusses Japanese corporations and the Southern Italian Mafia as two manifestations of clannish forms of enterprise in modern societies.

It is more difficult to find an example where the study of organized crime has enriched other areas of research through metaphoric reference or, more elaborately speaking, through

analogy. What can be found are references to Mafia or the use of other organized crime related metaphors without drawing upon the scholarly literature on organized crime. Biologist Richard Dawkins, for instance, in his book "The Selfish Gene" is drawing an analogy between genes and "successful Chicago gangsters" (Dawkins, 1989: 2).³

References to Other Disciplines in the Study of Organized Crime

In general, it seems that the study of organized crime has profited more from other areas of research than the other way round. In these cases, concepts and theories have been adopted either on the assumption that organized crime is a facet of a larger phenomenon under investigation in other disciplines, or on the assumption that sufficient similarities exist between organized crime and the objects of study of other disciplines in order to permit the drawing of analogies.

One type of interdisciplinary link for the benefit of the study of organized crime is established when organized crime is viewed through the lens of, or rather within the paradigms of, another discipline. A good example is the economic analysis of organized crime which rests on the assumption that organized criminal activity is market based and that organized criminal structures are entrepreneurial structures. It is interesting to note that beyond a simple transfer of economics to the analysis of organized crime, the consideration of the specifics of illegality has led to the development of what may be regarded as a separate branch of economic research which is connected with names like Thomas C. Schelling and Peter Reuter.

Finally, findings and insights from other disciplines are introduced to the study of organized crime via analogies. In these cases, perceived similarities between organized crime and other social phenomena serve as a justification to borrow concepts and propositions from at first glance unrelated areas of research. A good example is provided by Letizia Paoli's treatise on

Southern Italian mafia associations in which she uses several metaphors and analogies for purposes of clarification and argumentation. For instance, Paoli draws upon anthropological literature like Sahlins' "Stone Age Economy" (1972) based on the assumption that there are analogies between mafia associations and primitive societies (Paoli, 2003a: 86). Another case in point is her reference to historical literature on oceanic commerce in the sixteenth century to illustrate her argument that mafia associations cannot be classified as exclusively governmental or business enterprise (Paoli, 2003a: 172).

Points of Entry for Interdisciplinary Influences

When one talks about organized crime and how it can be better understood through the use of concepts and theories from other disciplines, it must be emphasized that organized crime as such is not the object of study. Organized crime does not exist as a clearly discernable, coherent empirical phenomenon. Instead, it is first of all a construct. A myriad of aspects of the social universe are lumped together in varying combinations within different frames of reference depending on the respective point of view of each observer (von Lampe, 2003a: 9). Before this background it is problematic to draw on criminological theories to try to explain organized crime without specifying and systematically differentiating the various reference points within the broad picture of organized crime (Kelly, 1987; Kenney & Finckenauer, 1995; Lyman & Potter, 1997).

In describing the object of study, one should speak about a number of different empirical phenomena which are examined in a rather loose conceptual context. These phenomena include certain individuals, the activities these individuals are involved in, the associational patterns through which they are connected, the power structures that subordinate these individuals and collectives to common or particular interests, and the relations between these individuals, structures and activities on the one hand, and the legal spheres of society on the other. These facets of the fuzzy overall picture may also be understood as different levels or focal points of analysis. When one looks at the body of organized crime literature it becomes apparent that the infusion from other disciplines has not been evenly distributed in the past.

Individual Level

On the level of the individual "organized criminal" it would be obvious to find some references to psychology. However, given the scant attention the individual offender receives in the study of organized crime, especially in comparison with other areas of criminological research (and also in contrast to personality centered gangster and mafioso stereotypes), the influence of psychology has so far only been marginal. This also applies, as Van Duyne (2000) has noted, to organized crime investigations by law enforcement agencies. For the most part, where attention is paid to individual characteristics of organized criminals at all, the emphasis tends to be on the importance of capacities, skills and attitudes (see e.g. Beare, 1996: 52; Van Duyne, 2003: 292; Homer, 1974: 46-62; von Lampe, 1999: 318; Levi, 1998: 424; Moore, 1987: 54). Psychological concepts and typologies have been used, most notably, by Frank Bovenkerk (2000). Drawing on the "Big Five" dimensions of personality (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience), which are widely recognized in psychology as capturing the most salient aspects of human personality (Huffman, Vernoy and Vernoy, 1995: 479; Morris, 1993: 488), he discusses the personality characteristics required for underworld leadership. More elusive references to psychological concepts can be found, for example, in Patricia Adler's description of the "dealing personality" of high-level drug dealers and smugglers (Adler, 1993: 94-97).

Structural Patterns of Association

The question of how "organized" organized crime is probably lies at the heart of most studies on organized crime since the 1960s. Triggered by Donald Cressey's claim that organized crime in the U.S. is synonymous with Cosa Nostra and that Cosa Nostra is "both a business organization and a government" (Cressey, 1969: 110), there is an ongoing controversy about the degree to which patterns of criminal cooperation resemble organizational entities in the legal spheres of society and how to best capture the patterns of association that do exist. In the debate references have primarily been made to two major lines of research, organization theory and network analysis.

Organization Theory. Concepts from organization theory have been used both to corroborate and to refute the notion of criminal organizations, or, in a more sober way, to thoroughly analyze empirical structures in their own right. Key concepts from organizational theory (see Hall, 1982) that have variously been used in these respects include size, formalization, centralization, vertical and horizontal differentiation and vertical integration (see e.g. Best & Luckenbill, 1994; von Lampe, 1999; 2003b; Liddick, 1999; Paoli, 2003b; Southerland & Potter, 1993; Varese, 2001; Zaitch, 2002; Zhang & Gaylord, 1996). For the same purpose of systematically describing criminal structures, Sieber and Bögel (1993) have drawn on the concept of business logistics. They dissected particular areas of crime, like trafficking in stolen motor vehicles and illegal gambling, each with a view to different logistics aspects: procurement-logistics, production-logistics, marketing-logistics, investment-logistics and comprehensive logistics (e.g., the flow of information or the concealment of activities).

Some analyses go beyond mere description. Dwight C. Smith, for example, has employed the Transaction Cost Economics approach in an effort to explain the emergence of criminal organizations (Smith, 1994; see also Dick, 1995). Smith, in borrowing from Oliver Williamson (1985), argues that in illegal markets just as in legal markets it is a question of relative costs whether a transaction is market-based or occurs within the framework of an organization. He further argues that the factors determining transaction costs in the legal sphere are also decisive in an illegal setting, these being bounded rationality, opportunism and asset specificity. Smith concludes that when the parties of a transaction operate under conditions of uncertainty, when they are prone to self-interest seeking with guile, and when they are making investments that cannot be easily redeployed to other purposes some form of organization is inevitable (Smith, 1994: 135).

Next to the question of the emergence of criminal organizations is the question of how criminal organizations, to the extent they exist at all, are shaped and structured. Once again it is Dwight C. Smith who has made a significant contribution by transferring the open-system perspective in organization theory to the analysis of illicit enterprises. Drawing on James Thompson (1967) he has argued in his "spectrum-based theory of enterprise" that the structure of an illicit enterprise is largely determined by the core technology it uses to produce goods or services and by the task environment which comprises external conditions that enable it to function and, at the same time, offer hazards to its continuance (Smith, 1975; 1978; 1980). Later, Smith re-emphasized this point with a reference to Multiple-Constituencies Theory according to which organizations are not the initiators but the result of action, being continuously shaped and reshaped in exchanges between various stakeholders (Smith, 1994: 132-133; see also Halstead, 1998). Potter and Southerland (1993), in a similar vain have applied key concepts of organization theory to grasp possible variations in the structure of illegal enterprises and to develop propositions about how this structure is affected by a variety of factors. They have particularly

refined the analysis of environmental conditions, using concepts including market diversity, complexity, stability, and hostility (see also Potter, 1994).

Network Analysis. References to organization theory have become less prominent in recent years as organized crime is increasingly viewed in terms of criminal networks. The underlying notion is that "(o)rganized crime is, at its most basic level, a product of overlapping and interrelated social relationships" (Potter, 1994: 116; see also McIllwain, 1999: 304).

When the network concept was first introduced to the study of organized crime it was adopted from anthropology as a descriptive tool to explore the essential features of interpersonal relations. This was done either because of the intention not only to examine criminal organizations in the true sense of the word, as in Ianni's study of black and Hispanic crime groups in the New York Area (Ianni, Fisher & Lewis, 1973; Ianni, 1974), or it was done with a view to rejecting the notion of criminal organization, as is the case with Hess' study of the Sicilian Mafia (Hess, 1998). The network concept continues to be widely used for descriptive purposes (see e.g. Bruinsma & Bernasco, 2004). However, since its modest beginnings in the 1950s and 1960s, network analysis has developed into a more sophisticated, computer based methodology suitable for the handling of large data sets (Scott, 2000). As such it has been used, for example, in the study of Russian immigrant crime in the U.S. by Finckenauer and Waring (1998) who have analyzed different types of law enforcement and open source data to establish webs of interpersonal relations between criminals, or in an analysis of organized crime in Switzerland by Nicolas Giannakopoulos (2001).

The network concept has not only been used for description, but also in a more analytical sense. Peter Lupsha (1983), for example, in a network analysis of a criminal group, has challenged some widely shared views on organized crime, while Carlo Morselli has attempted to

develop hypotheses drawing on recent contributions to network theory, including Burt's Structural Hole Theory (Burt, 1992). Morselli analyzed the biographies of two prominent criminals, Welsh dope dealer Howard Marks and American Mafia figure Sammy "The Bull" Gravano, to explore which features of personal networks may account for a successful career as crime entrepreneur. Morselli argues that not so much the size but the overall structure of the criminal network and the position occupied within it determine the extent of success of a given criminal (Morselli, 2005).

Overarching Power Structures

Following the distinction of different levels of analysis set out earlier, there are criminal structures that overarch entrepreneurial individuals and collectivities. For these structures Alan Block has coined the term "power syndicates" as opposed to "enterprise syndicates" (Block, 1983: 13). The phenomenon of extortion gangs that prey on illegal enterprises has been discussed by a number of economists, most prominently by Thomas C. Schelling (1967; 1971) and by Peter Reuter (1983). Schelling and Reuter essentially explain the emergence of power syndicates with the need for non-violent conflict resolution. While Schelling points to the general advantage of internalizing the costs of violence, underscoring his argument with an analogy to the whaling industry (Schelling, 1967: 118), Reuter argues that the demand for arbitration may vary between market levels and between different types of illegal markets (Reuter, 1983).

Another noteworthy contribution to the discussion has been made by Skaperdas and Syropoulos (1995) who have used a game theory model resting on an analogy between power syndicates and primitive states to explain the emergence of criminal groups specializing in the monopolistic use of violence. Yet another approach is taken in a paper by Chang, Lu & Chen (2005) who propose a three-stage game model to explain individual choices to join a power syndicate. Their underlying concern is optimal law enforcement. An earlier paper by Nuno Garoupa (2000) falls into the same mold.

Activities

Looking at structures of association as the focal concern is only one option in the study of organized crime. Alternatively one can look primarily at structures of activity (Cohen, 1977: 98). This perspective has paved the way for yet other concepts and theories from economics to be introduced to the study of organized crime.

Crime as Market. Perhaps the most long lasting and most broadly based discussion within the parameters of the economic analysis of organized crime is about the monopolization of illegal markets (Buchanan, 1973; Hellman, 1980; Luksetich & White, 1982; Reuter, 1983; 1985; Rubin, 1973; Schelling, 1967). Two issues are at the center of the debate. One issue concerns the degree to which a tendency towards monopolization is inherent in illegal markets. The other issue refers to the social costs and benefits of illegal market monopolies. Empirical research, of course, suggests that this debate is largely theoretical because monopolies seem to be the exception rather than the rule in illegal markets (See e.g. Desroches, 2005; Gruppo Abele, 2003; Johansen, 2005; Paoli, 2003b; Reuter, 1983; Reuter & Haaga, 1989).

Crime as Business Sector. Phil Williams has widened the scope of analysis from the narrow issue of market concentration to the more general issue of industry structure. Drawing on Michael Porter's industry analysis model (Porter, 1980) he analyzed heroin and cocaine trafficking with a view to five major factors believed to determine the profitability of an industry: the extent of the rivalry among existing firms, the number and kind of potential

entrants, the bargaining power of the buyers or consumers, the bargaining power of suppliers, and the threat of substitute products or services (Williams, 1995).

A different perspective has been adopted by Vincenzo Ruggiero in his analysis of the illegal labor market. Ruggiero argues that major trends in the illegal economy, like the emergence of a "criminal reserve army", have precedents in the historical development of the legal economy (Ruggiero, 2000).

On a more metaphoric level H. Richard Friman (2004) has looked at the consequences of law enforcement intervention on drug markets with a view to vacancy-chain effects, a concept originally developed to explain upward mobility in organizations and sectoral labor markets.

Legal/Illegal Nexus

The individuals, structures and events associated with organized crime do not exist in a social vacuum. Rather they are tied in with their surroundings in some ways or other. One aspect is the "social embeddedness of organized crime" (Kleemans & Van de Bunt, 1999) in certain social strata, milieus or ethnic communities (see e.g. McIllwain, 2004; Rockaway, 1993). Anomie theory has been one obvious choice to explain this connection with regard to migrant communities (Bovenkerk, 1998; O'Kane, 1992), whereas concepts and theories from social and cultural anthropology have been applied to indigenous organized crime phenomena like the Sicilian Mafia (Cottino, 1999; Hessinger, 2002).

Many discussions of the links between illegal and legal spheres of society tend to have some overlap with political science issues. Accordingly, some more or less intense references to political science concepts and theories can be found, such as those relating to policy, legitimacy, governance and governability. This is true, for instance, regarding research on criminal policy (Bullington, 1993), regulatory policy (Clapp, 1999; Koser, 2000), corruption and criminalpolitical alliances (Bellis, 1985; Block & Griffin, 1997; Chambliss, 1978; Gardiner, 1970; Karklins, 2002; Nelken & Levi, 1996; Schulte-Bockholt, 2001), criminal activity of insurgency movements (Naylor, 2002), state support for criminal groups in the context of foreign policy (McCoy, 2002), globalization and state power (Helleiner, 1999; Mittelman & Johnston, 1999), and on societies in transition (Volkov, 2000). The latter issue is also addressed by Michael Keren (2000), but from an economic perspective, using a model of career choice to explain the weakening of state power by the underworld in Eastern European countries.

An economic perspective is also adopted in some analyses of business and labor racketeering, the two areas where organized crime is most intrinsically linked with the legal economy (Ichniowski & Preston, 1989; Reuter, 1987).

Meta-Level

Assuming that the five identified levels of analysis (individuals, patterns of association, overarching power structures, activities, and legal/illegal nexus) essentially cover the main aspects commonly subsumed to organized crime, there is an additional, rather important line of research within the study of organized crime which deals not with the reality of organized crime but with its social construction. This issue has been addressed from different vantage points and with different focal interests.

Some studies take an interest in the debate on organized crime merely to explore broader contexts, such as American popular culture (Ruth, 1996), the history of the United States in the Cold War era (Bernstein, 2002), the "sociology of sociology" (Reynolds, 1995) or international politics (Edwards & Gill, 2002), while other studies are motivated by a primary interest in the empirical side of organized crime (Albanese, 1988; 1991; Albini & Bajon, 1978; Bell, 1963; Van Duyne, 2004; von Lampe, 1999; 2001; Smith, 1975; 1991; Woodiwiss, 2001).

These latter studies provide examples for the influence of other disciplines to the extent they have borrowed concepts and methodologies, such as the anthropological concept of belief systems (Albini & Bajon, 1978), the methodological tools of discourse analysis (Edwards & Gill, 2002), or the conceptual history approach (von Lampe, 1999; 2001; see also Smith 1975) which was borrowed from historical research (Koselleck, 1972).

Methodology

The application of methodologies that have been developed in other disciplines is a widespread phenomenon beyond the analysis of the social construction of organized crime. One example is provided by methods originally developed to support strategic and tactical management decisions. These methods include environmental scanning (See e.g. Black et al., 2001; Vander Beken & Defruytier, 2004) and the scenario approach (Wagner, Boberg & Beckmann, 2005).

Another example is the borrowing of population estimation methods from zoology for estimating the size of illegal markets (Bouchard & Tremblay, forthcoming).

Critique

Borrowing from other disciplines can be useful in different ways. Transferring concepts can help in describing and categorizing organized crime phenomena, and transferring theoretical notions can contribute to the formulation of testable propositions. But there is also the danger of forcing inadequate conceptual frameworks onto the analysis of organized crime. The uncritical transfer of concepts and theories may unduly narrow or shift the focus of attention, or may lead to an over-interpretation or misinterpretation of findings.

The use of concepts from organization theory, for example, may mislead observers into assuming the existence of organizational units where in fact they do not exist (Sieber & Bögel, 1993). Reversely, the fact that patterns of association lend themselves to network analysis should not automatically lead to the conclusion that organizations in the true sense of the word do not exist (Finckenauer & Waring, 1998).

Likewise, concepts and theories should not be transferred to the study of organized crime without duly taking into account the inherent differences between legal and illegal spheres of society. Network analysis provides a good example in this respect as well. Granovetter's popular concept of weak ties, for instance, which is often referred to in the literature on criminal networks, does not necessarily fit the reality of crime. Granovetter assumes, based on empirical and theoretical considerations that social networks will tend to consist of dense clusters of strong ties which in turn are connected by few weak ties (Granovetter, 1973). In illegal markets the need for secrecy and trust may result in a different picture, one that is characterized more by chains rather than clusters of strong ties with weak ties, marked *inter alia* by a lack of trust, being far less useful for linking actors and mobilizing resources.

It appears necessary, therefore, to transfer concepts and theories from other disciplines with great caution. Ideally, borrowing from other disciplines should occur only after careful naturalistic observation and a tentative ordering of the objects of study.

Outlook

Impulses for Interdisciplinary Influences in the Future

There is no reason to believe that in the future insights from other disciplines will become less important for the study of organized crime. Two factors in particular will continue to have an impact. On the one hand, trends and fashions in science have a tendency to spread across the boundaries of a particular discipline so that whatever scientific concepts and theories become fashionable in the future can be expected to have some bearing on the study of organized crime. On the other hand, trends within the study of organized crime are bound to fan new desires to borrow from other disciplines as the focus of attention shifts from well researched aspects to hitherto neglected or newly emerging phenomena.

Current Trends

The question, then, is not whether or not the study of organized crime will be influenced by other disciplines in the future but in what way this influence will occur. Looking at current trends some cautious predictions can be made.

From Organization, to Network, to Individual Criminals. There is one trend in particular that gradually seems to become prevalent in organized crime research today. This trend involves the shift from a focus on criminal collectivities, initially on organizations and later primarily on criminal networks, to the individual "organized criminal". This trend, to the extent it is real, marks a departure from the notion of relatively static structures to the notion that in a chaotic and ever changing criminal world the least common denominator is the individual offender who may or may not link up with other offenders. It should be noted that efforts in this direction would find support in current social psychology. Recent research indicates that psychological traits or

predispositions of individuals have an effect on the development and structure of social networks (Kalish & Robins, 2006).

Until now the individual "organized criminal" is probably the most under researched component of the overall picture of organized crime, not least because individual explanations of crime in criminology tend to focus on psychopathic and sociopathic offenders, thereby ignoring many kinds of offenders that have been observed in connection with organized crime. It can be expected that this will change in the future, if only in a desire to be original, and that along with a stronger emphasis in empirical research on personal characteristics and capacities of "organized criminals" more attention will be paid to possible contributions from other disciplines, especially psychology.

At the same time, with advances in genetics and neurobiology there is a renaissance of approaches in criminology that center on the individual offender while sociological perspectives are on the defensive (Siegel, 2006). This trend may eventually have an impact on the study of organized crime as well.

Explaining Co-Offending. The second, related trend is to no longer take the existence of criminal organizations and criminal networks for granted but to explore the conditions under which patterns of criminal association and co-offending emerge (see e.g. Weerman, 2003). An important concept in this respect which currently enjoys broad attention in the social sciences, including economics, and which is frequently though not consistently referred to in the organized crime literature is the concept of trust (von Lampe & Johansen, 2004). It is likely that this issue will receive more attention in the future and that in this context additional influences from social psychology and other disciplines will take an effect on the study of organized crime.

The issue of trust can also serve as an example of how findings from the natural sciences, specifically neurobiology, may have direct relevance for organized crime. Recent research shows that a hormone, the neuropeptide oxytocin, affects an individual's willingness to accept social risks arising through interpersonal interactions without generally increasing the readiness to bear risks (Kosfeld et al., 2005). This, however, does not automatically lead to deterministic explanations of trusting behavior as neurochemistry, including the oxytocin system, are strongly affected by social factors (Pedersen, 2004; see also Aragona & Wang, 2004).

Other fields of research that concepts and theories may be borrowed from for the purpose of analyzing co-offending and criminal association include sociobiology with a view to cooperation under adverse conditions (Wuketits, 1997), and gender studies with a view to the aspect of male bonding. There already is some literature on the role of women in organized crime that challenges the view that it is an exclusively male affair (Allum et al., 2003; Calder, 1995; Denton & O'Malley, 1999; Graziosi, 2001; Kleemans & Van de Bunt, 1999; O'Kane, 1992; see also Miller, 2001). But considering that organized crime nonetheless appears to be primarily about male association, there is a good chance that in the future the literature on male bonding patterns (see e.g. Tiger, 1984) will receive increasing attention among organized crime researchers.

Finally, the concept of social capital should be mentioned in this context as one which could gain importance in the study of organized crime (Morselli, 2005). Social capital refers to social networks and the norms of reciprocity and trustworthiness that arise from them that affect the productivity of individuals and groups (Putnam, 2001: 19). The concept may be particularly interesting before the background of efforts to measure social capital (see e.g. Stone, 2001). This

could pave the way for a measurement of the capacities of individuals and collectivities to successfully commit crimes on a continuous basis.

Conclusion

When one looks at organized crime research in general and its interdisciplinary dimensions in particular, a contradictory picture emerges. There are on the one hand a multitude of references to other disciplines that would suggest that the study of organized crime is keeping pace with scientific progress. At the same time, these infusions are uncoordinated and the eclecticism adds to the already existing confusion over what is to be analyzed. In other words, borrowing from other disciplines cannot alleviate the fundamental problem confronting the study of organized crime, the lack of a shared understanding of its object of study.

What is needed is a research program that would allow building up a cumulative body of knowledge (von Lampe, 2002). Within such a framework it would be a natural development to see the study of organized crime increasingly becoming intertwined with other areas of research, given that organized crime is not a separate empirical phenomenon but a construct that encompasses a multitude of facets of social reality that fall in the domain of different disciplines including psychology, sociology, economics, and political science. In this light one could describe the study of organized crime as an endeavor to systematically explore social phenomena under conditions of illegality. The end-result could be something of an extension of Smith's spectrum-based theory of enterprise towards a spectrum-based theory of society. The more this view takes root and the deconstruction of the concept of organized crime progresses, the more the study of organized crime should become a truly multidisciplinary endeavor.

Notes

- An earlier version of this paper has been presented at the annual meeting of the American Society of Criminology in Toronto, Canada, November 2005. The author would like to thank two anonymous reviewers for their valuable comments.
- 2. For more recent contributions by organized crime researchers to the study of labor racketeering see Block and Griffin (1997) and Jacobs (1999; 2006).
- More extensive references can be found in the management literature; see Anthony Schneider's "Tony Soprano on Management" (Schneider, 2004) and Deborrah Himsel's "Leadership Sopranos Style" (Himsel, 2004).

References

- Adler, Patricia A. (1995). *Wheeling and Dealing: An Ethnography of an Upper-Level Drug Dealing and Smuggling Community* (2nd ed.). New York: Columbia University Press.
- Albanese, Jay S. (1988). "Government Perceptions of Organized Crime: The Presidential Commissions, 1967 and 1987," *Federal Probation*, *52*(*1*), 58-63.
- Albanese, Jay S. (1991). Organized Crime: The Mafia Mystique, in: Joseph F. Sheley (ed.), Criminology: A Contemporary Handbook, Belmont, CA: Wadsworth, 1991, 201-217
- Albini, Joseph L., and Bajon, Bronislaw J. (1978). "Witches, Mafia, Mental Illness and Social Reality: A Study in the Power of Mythical Belief," *International Journal of Criminology and Penology*, 6(4), 285-294.
- Allum, Felia, Siebert, Renate, Ingrasci, Ombretta, et al. (2003), *Donne e mafie: il ruolo delle donne nelle organizzazioni criminali* [Women and mafia: the role of women in criminal organizations]. Palermo, Italy: Università degli Studi di Palermo, 2003.

- Aragona, Brandon J., and Wang, Zuoxin (2004). "The Prairie Vole (Microtus ochrogaster): An
 Animal Model for Behavioral Neuroendocrine Research on Pair Bonding," *ILAR Journal*, 45(1), 35-45.
- Arlacchi, Pino (1986). *Mafia Business: The Mafia Ethic and the Spirit of Capitalism*. London: Verso.
- Banfield, Edward C., and Wilson, James Q. (1963). *City Politics*. New York: Vintage Books. Barzini, Luigi (1964). *The Italians*. London: Hamish Hamilton.
- Beare, Margaret (1996). *Criminal conspiracies: organized crime in Canada*. Scarborough, ONT: Nelson.
- Bell, Daniel (1963). "The Myth of the Cosa Nostra," The New Leader, 46(26), 12-15.
- Bellis, David J. (1985). "Political Corruption in Small, Machine-Run Cities," In Herbert E.
 Alexander and Gerald E. Caiden (Eds.), *The Politics and Economics of Organized Crime* (pp. 99-126). Lexington, MA: Lexington Books.
- Bernstein, Lee (2002). *The Greatest Menace: Organized Crime in Cold War America*. Amherst,MA: University of Massachusetts Press.
- Best, Joel, and Luckenbill, David F. (1994). *Organizing Deviance* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Black, Christopher, Vander Beken, Tom, Frans, Bruno, and Paternotte, Marc (2001). *Reporting* on Organised Crime: A Shift from Description to Explanation in the Belgian Annual Report on Organised Crime. Antwerpes, Belgium: Maklu.
- Block, Alan A. (1983). East Side West Side: Organizing Crime in New York 1930-1950. New Brunswick, NJ: Transaction Publishers.

Block, Alan A., and Chambliss, William J. (1982). Organizing Crime. New York: Elsevier.

- Block, Alan A., and Griffin, Sean Patrick (1997). "The Teamsters, the White House, the Labor
 Department: A commentary on the politics of organized crime," *Crime, Law and Social Change, 27(1)*, 1-30.
- Bouchard, Martin, and Tremblay, Pierre (forthcoming). "Risks of arrest across drug markets: a capture-recapture analysis of "hidden" dealer and user populations," forthcoming in *Journal of Drug Issues*, winter 2006.
- Bovenkerk, Frank (1998). "Organized Crime and Ethnic Minorities: Is There a Link?," *Transnational Organized Crime*, 4(3&4), 109-126.
- Bovenkerk, Frank (2000). "Wanted: Mafia boss: Essay on the personology of organized crime," *Crime Law and Social Change*, *33*(*3*), 225-242.

Brogan, D.W. (1960). Politics in America. Garden City, NY: Anchor Books.

- Bruinsma, Gerben, and Bernasco, Wim (2004). "Criminal groups and transnational illegal markets: A more detailed examination on the basis of Social Network Theory," *Crime Law and Social Change*, *41*(*1*), 79-94.
- Buchanan, James M. (1973). "A Defense of Organized Crime?," In Simon Rottenberg (Ed.), *The Economics of Crime and Punishment* (pp. 119-132). Washington, DC: American Enterprise Institute.
- Bullington, Bruce (1993). "All about Eve: The Many Faces of United States Drug Policy," In Frank Pearce and Michael Woodiwiss (Eds.), Global *Crime Connections: Dynamics and Control* (pp. 32-71). Houndsmill, UK: Macmillan.
- Burt, Ronald S. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press.

- Calder, James D. (1995). "Mafia Women in Non-Fiction: What Primary and Secondary Sources Reveal," In Jay Albanese (Ed.), *Contemporary Issues in Organized Crime* (pp. 111-140). Monsey, NY: Criminal Justice Press.
- Chambliss, William J. (1978). *On the Take: From Petty Crooks to Presidents*. Bloomington, IN: Indiana University Press.
- Chang, Juin-Jen, Lu, Huei-Chung, and Chen, Mingshen (2005). "Organized Crime or Individual Crime? Endogenous Size of A Criminal Organization and the Optimal Law Enforcement," *Economic Inquiry*, 43(3), 661-675.
- Clapp, Jennifer (1999). "The Illicit Trade in Hazardous Wastes and CFCs: International Responses to Environmental 'Bads'," In Richard Friman and Peter Andreas (Eds.), *The Illicit Global Economy and State Power* (pp. 91-123). Lanham, MD: Rowman & Littlefield.
- Cloward, Richard A., and Ohlin, Lloyd E. (1960). *Delinquency and Opportunity: A Theory of Delinquent Gangs*. New York: The Free Press.
- Cohen, A.K. (1977). "The Concept of Criminal Organisation," *British Journal of Criminology, 17*(2), 97-111.
- Cottino, Amedeo (1999), "Sicilian cultures of violence: The interconnections between organized crime and local society," *Crime, Law and Social Change, 32*(2), 103-113.
- Cressey, Donald R. (1969). *Theft of the Nation: The Structure and Operations of Organized Crime in America.* New York: Harper & Row.

Dawkins, Richard (1989). The Selfish Gene (2nd ed.). Oxford: Oxford University Press.

Denton, Barbara, and O'Malley, Pat (1999). "Gender, Trust and Business: Women Drug Dealers in the Illicit Economy," *British Journal of Criminology*, *39*(4), 513-530.

- Desroches, Frederick J. (2005). *The Crime that Pays: Drug Trafficking and Organized Crime in Canada*. Toronto, ONT: Canadian Scholars' Press.
- Dick, Andrew R. (1995). "When Does Organized Crime Pay? A Transaction Cost Analysis," *International Review of Law and Economics*, 15(1), 25 - 45.
- Duyne, Petrus C. van (2000). "Mobsters are human too: Behavioral science and organized crime investigation," *Crime Law and Social Change*, *34*(*4*), 369-390
- Duyne, Petrus C. van (2003). "Organizing cigarette smuggling and policy making, ending up in smoke," *Crime, Law and Social Change, 39(3),* 285-317.
- Duyne, Petrus C. van (2004). "The creation of a threat image: Media, policy making and organised crime," In Petrus van Duyne, Matjaž Jager, Klaus von Lampe, and James Newell (Eds.), *Threats and Phantoms of Organised Crime, Corruption and Terrorism: Critical European Perspectives* (pp. 21-50). Nijmegen, Netherlands: Wolf Legal Publishers.
- Edwards, Adam, and Gill, Pete (2002). "The politics of 'transnational organized crime': discourse, reflexivity and the narration of 'threat'," *British Journal of Politics and International Relations*, *4*(2), 245-270.
- Finckenauer, James O., and Waring, Elin J. (1998). Russian Mafia in America: Immigration, Culture, and Crime. Boston: Northeastern University Press.
- Friman, H. Richard (2004). "Forging the vacancy chain: Law enforcement efforts and mobility in criminal economies," *Crime, Law and Social Change, 41(1),* 53-77.
- Gambino, Richard (1974). *Blood of my Blood: The Dilemma of the Italian-Americans*. Garden City, NY: Anchor Books.
- Gardiner, John A. (1970). *The Politics of Corruption: Organized Crime in an American City*. New York: Russell Sage.

- Garoupa, Nuno (2000). "The Economics of Organized Crime and Optimal Law Enforcement," *Economic Inquiry*, 38(2), 278-288.
- Giannakopoulos, Nicolas (2001). *Criminalité organisée et corruption en Suisse* [Organized crime and corruption in Switzerland]. Berne, Switzerland: Haupt.
- Granovetter, Mark S. (1973). "The Strength of Weak Ties," *American Journal of Sociology*, 78(6), 1360-1380.
- Graziosi, Marina (2001). "Women, the Mafia and Legal Safeguards," *Forum on Crime and Society*, *1*(2), 129-134.
- Gruppo Abele (2003). Synthetic Drugs Trafficking in Three European Cities: Major Trends and the Involvement of Organised Crime Final Report. Turin, Italy: Gruppo Abele.
- Hall, Richard H. (1982). Organizations: Structure and Process (3rd ed.). Englewood Cliffs, NJ:Prentice Hall.
- Halstead, Boronia (1998). "The use of models in the analysis of organized crime and development of policy," *Transnational Organized Crime*, *4*(1), 1-24.
- Halter, Heinz (1942). Der Polyp von New York: Die Geschichte Tammany Halls [The octopus of New York: The story of Tammany Hall]. Dresden: Franz Müller Verlag.
- Helleiner, Eric (1999). "State Power and the Regulation of Illicit Activity in Global Finance," InH. Richard Friman and Peter Andreas (Eds.), *The Illicit Global Economy and State Power*(pp. 53-90). Lanham, MD: Rowman & Littlefield.

Hellman, Daryl A. (1980). The Economics of Crime, New York: St. Martin's.

Hess, Henner (1998). Mafia & Mafiosi: Origin, Power and Myth. London: C. Hurst,

Hessinger, Philipp (2002). "Mafia und Mafiakapitalismus als totales soziales Phänomen: Eine vergleichende Perspektive auf die Entwicklung in Italien und Russland [Mafia and mafia

capitalism as a total social phenomenon: A comparative perspective on the development in Italy and Russia]," *Leviathan Zeitschrift für Sozialwissenschaft, 30(4)*, 482-508.

Himsel, Deborah (2004). Leadership Sopranos Style. Chicago: Dearborn.

- Homer, Frederic D. (1974). *Guns and garlic: myths and realities of organized crime*. West Lafayette, IN: Purdue University Press.
- Honneth, Axel (1994). Desintegration: Bruchstücke einer soziologischen Zeitdiagnose[Desintegration: fragments of a contemporary sociological diagnosis]. Frankfurt am Main,Germany: Fischer Taschenbuch.
- Huffman, Karen, Vernoy, Mark, and Vernoy, Judith (1995). *Psychology in Action* (3rd ed.). New York: John Wiley & Sons.
- Ianni, Franics A.J. (1974). Black Mafia: Ethnic Succession in Organized Crime. New York: Simon and Schuster.
- Ianni, Francis A.J., Fisher, Suzy, and Lewis, Jeffrey (1973). *Ethnic Succession and Network Formation in Organized Crime: Final Report*. New York: Columbia University.
- Ichniowski, Casey, and Preston, Anne (1989). "The Persistence of Organized Crime in New York City Construction: An Economic Perspective," *Industrial and Labor Relations Review*, 42(4), 549-565
- Jacobs, James B., with Coleen Friel and Robert Radick (1999). *Gotham Unbound: How New York City Was Liberated from the Grip of Organized Crime*. New York: New York University Press.
- Jacobs, James B. (2006). Mobsters, Unions, And Feds: The Mafia and the American Labor Movement. New York: New York University Press.

- Johansen, Per Ole (2005). "Organised Crime, Norwegian Style," In Petrus van Duyne, Klaus von Lampe, Maarten van Dijck, and James Newell (Eds.), *The Organised Crime Economy: Managing Crime Markets in Europe* (pp. 189-207). Nijmegen, Netherlands: Wolf Legal Publishers.
- Kalish, Yuval, and Robins, Gary (2006). "Psychological predispositions and network structure: The relationship between individual predispositions, structural holes and network closure," *Social Networks*, 28(1), 56-84.
- Karklins, Rasma (2002). "Typology of Post-Communist Corruption," Problems of Post-Communism, 49(4), 22-32.
- Kelly, Robert J. (1987). "The Nature of Organized Crime and Its Operations," In Herbert Edelhertz (Ed.), *Major Issues in Organized Crime Control Symposium Proceedings Washington D.C., September 25 26, 1986* (pp. 5 49). Washington, DC: National Institute of Justice.
- Kenney, Dennis, and Finckenauer, James O. (1995). *Organized Crime in America*. Belmont, CA: Wadsworth.
- Keren, Michael (2000). "The Mafia as a Principal Actor in Transition: An Outline of an Evolutionary Game," *Economic Systems*, 24(4), 360-364.
- Kimeldorf, Howard (1992). *Reds or Rackets? The Makin gof Radical and Conservative Unions on the Waterfront*. Berkeley, CA: University of California Press.
- Kleemans, Edward R., and Bunt, Henk G. van de (1999). "The Social Embeddedness of Organized Crime," *Transnational Organized Crime*, *5*(*1*), 19-36.
- Koser, Khalid (2000). "Asylum Policies, Trafficking and Vulnerability," *International Migration*, *38*(*3*), 91-109.

- Kosfeld, Michael, Heinrichs, Markus, Zak, Paul J., Fischbacher, Urs, and Fehr, Ernst (2005). "Oxytocin increases trust in humans," *Nature*, *435*(2), 673-676.
- Koselleck, Reinhart (1972). "Einleitung [Introduction]," In O. Brunner, W. Conze and R.Koselleck (Eds.), *Geschichtliche Grundbegriffe* (Vol. 1, A-D). Stuttgart, Germany: Klett-Cotta.
- Lampe, Klaus von (1999). Organized Crime: Begriff und Theorie organisierter Kriminalität in den USA [Organized crime: concept and theory of organized crime in the U.S.]. Frankfurt am Main, Germany: Lang.
- Lampe, Klaus von (2001). "Not a Process of Enlightenment: The Conceptual History of Organized Crime in Germany and the United States of America," *Forum on Crime and Society*, *1*(2), 99 116.
- Lampe, Klaus von (2002). "Organized Crime Research in Perspective," In Petrus van Duyne,
 Klaus von Lampe, and Nikos Passas (Eds.), Upperworld and Underworld in Cross-Border
 Crime (pp. 189-198). Nijmegen, Netherlands: Wolf Legal Publishers.
- Lampe, Klaus von (2003a). "Criminally Exploitable Ties: A Network Approach to Organized Crime," In Emilio C. Viano, José Magallanes, and Laurent Bidel (Eds.), *Transnational Organized Crime: Myth, Power, and Profit* (pp. 9-22). Durham, NC: Carolina Academic Press.
- Lampe, Klaus von (2003b). "Organising the nicotine racket: Patterns of cooperation in the cigarette black market in Germany," In Petrus van Duyne, Klaus von Lampe, and James Newell (Eds.), *Criminal Finances and Organising Crime in Europe* (pp. 41-65). Nijmegen, Netherlands: Wolf Legal Publishers.

- Lampe, Klaus von, and Johansen, Per Ole (2004). "Organised Crime and Trust: On the conceptualization and empirical relevance of trust in the context of criminal networks," *Global Crime*, 6(2), 159-184.
- Lerner, Max (1957). *America as a Civilization: Life and Thought in the United States Today*. New York: Simon and Schuster.
- Levi, Michael (1998). "Organising Plastic Fraud: Enterprise Criminals and the Side-Stepping of Fraud Prevention," *The Howard Journal*, *37*(*4*), 423-438.
- Liddick, Don (1999). *The Mob's Daily Number: Organized Crime and the Numbers Gambling Industry*. Lanham, MD: University Press of America.
- Luksetich, William A., and White, Michael D. (1982). *Crime and Public Policy: An Economic Approach*. Boston: Little, Brown and Company.
- Lupsha, Peter A. (1983). "Networks versus Networking: Analysis of an Organized Crime Group," In Gordon P. Waldo (Ed.), *Career Criminals* (pp. 59-87). Beverly Hills, CA: Sage.
- Lyman, Michael D., and Potter, Gary W. (1997). *Organized Crime*. Upper Saddle River, NJ: Prentice Hall.
- McCoy, Alfred (2003). *The Politics of Heroin: CIA Complicity in the Global Drug Trade, Afghanistan, Southeast Asia, Central America.* Chicago: Lawrence Hill.
- McIllwain, Jeffrey Scott (1999). "Organized crime: A social network approach," *Crime, Law and Social Change, 32(4)*, 301-323.
- McIllwain, Jeffrey Scott (2004). Organizing Crime in Chinatown: Race and Racketeering in New York City, 1890-1910. Jefferson, NC: McFarland and Company.
- Miller, Jody (2001). One of the Guys: Girls, Gangs, and Gender. New York: Oxford University Press.

- Mittelman, James H., and Johnston, Robert (1999). "The Globalization of Organized Crime, the Courtesan State, and the Corruption of Civil Society," *Global Governance*, *5*(*1*), 103-126.
- Moore, Mark H. (1987). "Organized Crime as a Business Enterprise," In Herbert Edelhertz (Ed.),
 Major Issues in Organized Crime Control Symposium Proceedings Washington D.C.,
 September 25 26, 1986 (pp. 51-64). Washington, DC: National Institute of Justice.
- Morris, Charles G. (1993). *Psychology: An Introduction* (8th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Morselli, Carlo (2005). *Contacts, Opportunities, and Criminal Enterprise*. Toronto, ONT: University of Toronto Press.
- Naylor, R.T. (2002). Wages of Crime: Black Markets, Illegal Finance, and the Underworld Economy. Ithaca, NY: Cornell University Press.
- Nelken, David, and Levi, Michael (1996). "The Corruption of Politics and the Politics of Corruption: An Overview," *Journal of Law and Society*, *23*(*1*), 1-17.
- O'Kane, James M. (1992). *The Crooked Ladder: Gangsters, Ethnicity, and the American Dream*. New Brunswick, NJ: Transaction Publishers.
- Paoli, Letizia (2003a). *Mafia Brotherhoods: Organized Crime, Italian Style*. New York: Oxford University Press.
- Paoli, Letizia (2003b). "The 'invisible hand of the market': the illegal drugs trade in Germany,
 Italy, and Russia," In Petrus van Duyne, Klaus von Lampe, and James Newell (Eds.), *Criminal Finances and Organising Crime in Europe* (pp. 19-40). Nijmegen, Netherlands:
 Wolf Legal Publishers.
- Pedersen, Cort A. (2004). "Biological Aspects of Social Bonding and the Roots of Human Violence," *Annals of the New York Academy of Sciences*, *1036*, 106-127.

- Polkehn, Klaus, and Szeponik, Horst (1985). *Wer nicht schweigt, muss sterben: Ein Tatsachenbericht über die Mafia* [He who does not keep silent must die: a fact-based report on the Mafia] (7th ed.). Berlin: Militärverlag der Deutschen Demokratischen Republik.
- Porter, Michael (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: The Free Press.
- Potter, Gary W. (1994). Criminal Organizations: Vice, Racketeering, and Politics in an American City. Prospect Heights, IL: Waveland Press.
- Putnam, Robert D. (2001). Bowling Alone: The Collapse and Revival of American Community.New York: Simon & Schuster.
- Reuter, Peter (1983). *Disorganized Crime: The Economics of the Visible Hand*. Cambridge, MA: MIT Press.
- Reuter, Peter (1985). *The Organization of Illegal Markets: An Economic Analysis*. Washington, DC: National Institute of Justice.
- Reuter, Peter (1987). Racketeering in Legitimate Industries: A Study in the Economics of Intimidation. Santa Monica, CA: RAND.
- Reuter, Peter, and Haaga, John (1989). *The Organization of High-Level Drug Markets: An Exploratory Study*. Santa Monica, CA: RAND.
- Reuter, Peter (1994). "Research on American Organized Crime," In Robert J. Kelly, Ko-Lin
 Chin, and Rufus Schatzberg (Eds.), *Handbook of Organized Crime in the United States* (pp. 91-120). Westport, CT: Greenwood Press.
- Reynolds, Marylee (1995). From Gangs to Gangsters: How American Sociology Organized Crime, 1918-1994. Guilderland, NY: Harrow and Heston.

- Rockaway, Robert A. (1993). But He Was Good To His Mother: The Lives and Crimes of Jewish Gangsters. Jerusalem: Gefen.
- Rubin, Paul (1973). "The Economic Theory of the Criminal Firm," In Simon Rottenberg (Ed.), *The Economics of Crime and Punishment* (pp. 155-166). Washington, DC: American Enterprise Institute.
- Ruggiero, Vincenzo (2000). Crime and Markets: Essays in Anti-criminology. Oxford, UK: Oxford University Press.
- Ruth, David E. (1996). Inventing the Public Enemy: The Gangster in American Culture, 1918-1934. Chicago: The University of Chicago Press.
- Sahlins, Marshall D. (1972). Stone Age Economics. Chicago: Aldine.
- Satter, David (2003). *Darkness at Dawn: The Rise of the Russian Criminal State*. New Haven, CT: Yale University Press.
- Schelling, Thomas C. (1967). "Economic Analysis and Organized Crime," In *Task Force Report: Organized Crime, Annotations and Consultant's Papers* (pp. 114-126). Washington, DC: Government Printing Office.
- Schelling, Thomas C. (1971). "What Is the Business of Organized Crime?," *The Journal of Public Law*, 20(1), 71 84.
- Schneider, Anthony (2004). Tony Soprano on Management. New York: Berkley,
- Schulte-Bockholt, Alfried (2001). "A Neo-Marxist Explanation of Organized Crime," *Critical Criminology*, *10*(*3*), 225-242.
- Scott, John (2000). Social Network Analysis: A Handbook (2nd ed.). London: Sage,
- Sieber, Ulrich, and Bögel, Marion (1993). *Logistik der Organisierten Kriminalität* [Logistics of organized crime]. Wiesbaden, Germany: Bundeskriminalamt.

Siegel, Larry J. (2006). Criminology (9th ed.). Belmont, CA: Thomson Wadsworth.

Skaperdas, Stergios, and Syropoulos, Constantinos (1995). "Gangs as primitive states," In
Gianluca Fiorentini and Sam Peltzman (Eds.), *The Economics of Organised Crime* (pp. 6182). Cambridge, UK: Cambridge University Press.

Smith, Dwight C. (1975). The Mafia Mystique. New York: Basic Books.

- Smith, Dwight C. (1978). "Organized Crime and Entrepreneurship," International Journal of Criminology and Penology, 6(2), 161 - 177.
- Smith, Dwight C. (1980). "Paragons, pariahs, and pirates: a spectrum-based theory of enterprise," *Crime and Delinquency*, *26*(*3*), 358-386.
- Smith, Dwight C. (1991). "Wickersham to Sutherland to Katzenbach: Evolving an "official" definition of organized crime," *Crime, Law and Social Change, 16*(2), 135-154.
- Smith, Dwight C. (1994). "Illicit Enterprise: An Organized Crime Paradigm for the Nineties," In Robert J. Kelly, Ko-Lin Chin, and Rufus Schatzberg (Eds.), *Handbook of Organized Crime in the United States* (pp. 121 - 150). Westport, CT: Greenwood Press.
- Southerland, Mittie D., and Potter, Gary W. (1993). "Applying Organization Theory to Organized Crime," *Journal of Contemporary Criminal Justice*, *9*(*3*), 251-267.
- Stone, Wendy (2001). *Measuring social capital: Towards a theoretically informed measurement framework for researching social capital in family and community life*. Australian Institute of Family Studies, Research Paper No. 24.

Thompson, James D. (1967). Organizations in Action. New York: McGraw-Hill.

- Thrasher, Frederic M. (1927). *The Gang: A Study of 1,313 Gangs in Chicago*. Chicago: The University of Chicago Press.
- Tiger, Lionel (1984). Men in Groups (2nd ed.). New York: Marion Boyars.

- Vander Beken, Tom, and Defruytier, Melanie (2004). "Measure for measure: Methodological tools for assessing the risk of organised crime," In Petrus van Duyne, Matjaž Jager, Klaus von Lampe, and James Newell (Eds.), *Threats and Phantoms of Organised Crime, Corruption and Terrorism: Critical European Perspectives* (pp. 51-84). Nijmegen, Netherlands: Wolf Legal Publishers.
- Varese, Federico (2001). *The Russian Mafia: Private Protection in a New Market Economy*. Oxford: Oxford University Press.
- Volkov, Vadim (2000). "The Political Economy of Coercion, Economic Growth, and the Consolidation of the State," *Problems of Economic Transition*, *43*(*4*), 24-40.
- Wagner, Norbert, Boberg, Martin, and Beckmann, Uwe (2005). "Analysen zum Gefährdungspotenzial Organisierter Kriminalität [Analyses on the threat potential of organized crime]," *Kriminalistik*, 59(2), 85-91.
- Weerman, Frank M. (2003). "Co-offending as Social Exchange: Explaining Characteristics of Co-Offending," *British Journal of Criminology*, 43(2), 398-416.
- Whyte, William Foote (1943). *Street Corner Society: The Social Structure of an Italian Slum*. Chicago: The University of Chicago Press.
- Williams, Phil (1995). "The International Drug Trade: An Industry Analysis," In Graham H.
 Turbiville (Ed.), *Global Dimensions of High Intensity Crime and Low Intensity Conflict* (pp. 153-183). Chicago: Office of International Criminal Justice.

Williamson, Oliver E. (1985). The Economic Institutions of Capitalism. New York: Free Press,

Woodiwiss, Michael (2001). *Organized Crime and American Power*. Toronto, ONT: University of Toronto Press.

- Wuketits, Franz M. (1997). Soziobiologie: Die Macht der Gene und die Evolution sozialenVerhaltens [Sociobiology: The power of the genes and the evolution of social behavior].Heidelberg, Germany: Spektrum Akademischer Verlag.
- Zaitch, Damián (2002). *Trafficking Cocaine: Colombian Drug Entrepreneurs in the Netherlands*. The Hague, Netherlands: Kluwer Law International.
- Zhang, Sheldon X., and Gaylord, Mark S. (1996). "Bound for the Golden Mountain: The social organization of Chinese alien smuggling," *Crime, Law and Social Change, 25(1)*, 1-16.