

## Tilburg University

### Macro networks, collectives, and business processes

Spapens, A.C.M.

*Published in:*

European Journal of Crime, Criminal Law and Criminal Justice

*Publication date:*

2010

*Document Version*

Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

*Citation for published version (APA):*

Spapens, A. C. M. (2010). Macro networks, collectives, and business processes: An integrated approach to organized crime. *European Journal of Crime, Criminal Law and Criminal Justice*, 18(2), 185-215.

#### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# Macro Networks, Collectives, and Business Processes: An Integrated Approach to Organized Crime

Toine Spapens

Senior research fellow, Department of Criminal Law, Tilburg University,  
The Netherlands

---

## 1. Introduction

Over the last few decades, criminologists have devoted considerable attention to how the concept of organized crime should be theorized. At the end of the 1960s, organized crime was modeled in terms of functional and hierarchical *mafia* syndicates.<sup>1</sup> Although criminologists criticized this approach from the beginning, it profoundly influenced the public image of organized crime, the ideas of policy makers, law-enforcement agencies, and, ironically, the criminals themselves, who adopted it as a model of “how to behave”.

Since the 1970s, economists have been developing another approach by defining organized crime primarily in terms of the provision of illegal goods and services. Crime groups were approached as enterprises, and illegal activities were analyzed in terms of business processes. Because criminal groups continuously needed to compete for market share, organized crime was seen as “disorganized” rather than as being dominated by one or more syndicates such as the *mafia*.<sup>2</sup>

In the 1990s, a third school of thought emerged that approached organized crime from a social network perspective. Criminal organizations are considered social networks with specific characteristics, such as non-hierarchical, fluid and flexible

---

<sup>1</sup> D. Cressey, *Theft of the Nation, the Structure and Operations of Organized Crime in America*. (New York, 1969), Harper and Row.

<sup>2</sup> P. Reuter, *Disorganized Crime: Illegal Markets and the Mafia*. (Cambridge, MA, 1983).

internal relations, and are seen as collectives rather than as formal organizations.<sup>3</sup> An important research question has been how network-type organizations can be disrupted.<sup>4</sup> More recently, the embeddedness of criminal collectives in broader social structures has also been receiving attention.<sup>5</sup>

Although these approaches seem to be very different at first glance, they are also very much in line. There is, for instance, little discussion about the basic fact that organized crime is an economic activity intended to obtain financial profit. Instead of presenting conflicting comprehensive theoretical views on organized crime, the respective approaches mainly focus on specific aspects of organized criminal activity and predominantly differ about the question how criminal groups are structured and how they operate.

In this article, I will present an approach to organized crime that integrates the functionalist, economic, and social-network approaches by starting from theories stemming from economic sociology and organization sociology. Three central concepts will be developed here: the criminal macro network, the criminal collective, and the criminal business process.

In Section 2, the three aforementioned approaches to organized crime will be sketched in more detail, and the basic concepts of an integrated framework will be presented. These will be further developed in Sections 4–6. Section 7 will conclude this article.

---

<sup>3)</sup> Cf. P. Klerks, *Groot in de hasj, Theorie en praktijk van de georganiseerde criminaliteit*. (Antwerp, 2000) Samson/Kluwer Rechtswetenschappen; P. Klerks, 2001, “The Network Paradigm Applied to Criminal Organisations: Theoretical Nitpicking or a Relevant Doctrine for Investigators? Recent Developments in the Netherlands”, *Connections*, 24 (3): 53–65. M. Sageman, *Understanding Terror Networks*. (Philadelphia, PA, 2008). C. Morselli, *Inside Criminal Networks*. (New York, 2009).

<sup>4)</sup> Cf. M. Brienen and H. van de Bunt, *Georganiseerde criminaliteit in Nederland, Tweede rapportage op basis van de WODC-monitor*. (The Hague, 2002), Wetenschappelijk Onderzoek- en Documentatiecentrum, Ministerie van Justitie; C. Morselli and K. Petit, 2007, “Law-Enforcement Disruption of a Drug Importation Network”, *Global Crime*, Vol. 8, No. 2: 109–130; D. Schwartz and T. Rouselle, 2008, “Using Social Network Analysis to Target Criminal Networks.” *Trends in Organized Crime*, 12: 188–207.

<sup>5)</sup> Cf. J. McIlwain, 1999, “Organized Crime: A Social Network Approach”, *Crime, Law and Social Change* 32: 301–323; G. Robins, 2009, “Understanding Individual Behaviors within Covert Networks: The Interplay of Individual Qualities, Psychological Predispositions and Network Effects”, *Trends in Organized Crime* 12: 166–187; A. Heber, 2009, “The Networks of Drug Offenders”, *Trends in Organized Crime* 12: 1–20.

## 2. Theoretical Approaches to Organized Crime

### 2.1. *The Functionalist Approach to Organized Crime*

Organized crime is a concept that originated in the United States. One of the first who systematically addressed the subject was John Landesco in a report written in 1929 as a part of the Illinois Crime Survey.<sup>6</sup> In the 1950s and early 1960s, the Kefauver and McLellan Committees investigated organized crime, which was then predominantly seen as a nationwide activity or even a conspiracy of the Italian-American *mafia*. In 1967, the US President's Commission on Law Enforcement and the Administration of Justice created a Task Force on Organized Crime to address the question: what precisely was organized crime?<sup>7</sup> In 1967, criminologist Donald Cressey reported on the structure of organized crime groups. Some years later, he further developed his views in the well-known book *Theft of the Nation*.<sup>8</sup>

Cressey claimed that organized crime in the United States consisted mainly of a nationwide alliance of 24 tightly-knit criminal mafia "families" that had specific initiation rituals and a code of conduct. The image of the organizational structure of the *Cosa Nostra* – consisting of "families" led by bosses who commanded *capos*, "soldiers", "buffers", and "buttonmen" and were advised by *consiglieres* – depended largely on the accounts of Joe Valachi.<sup>9</sup> Valachi, who had been a member of the *Cosa Nostra*, was one of the first to break the code of silence and testified in this regard before the McLellan Committee in 1963.

Cressey based his conclusion that the mafia truly was a nationwide criminal organization on two important observations. First, although the mafia was not the only criminal organization in the United States, he believed that it had the power to control other criminal groups and specific activities, such as illegal gambling. Second, he concluded that a Commission or a Grand Council existed that coordinated all the activities of the locally based mafia families, settled disputes between them, and decided whether business deals could be struck with other organized criminal groups.<sup>10</sup>

Although it has been, and still is, highly influential, criminologists very soon began to question the "Cressey model". Already in the early 1970s, Joseph Albin

---

<sup>6</sup> J. Landesco, *Organized Crime in Chicago. Part III of the Illinois Crime Survey*. (Chicago, 1929) Illinois Institute of Criminal Justice.

<sup>7</sup> A. Wright, *Organised Crime*. (Cullompton, 2006) Willan Publishing, p. 4.

<sup>8</sup> D. Cressey, 1969, *op. cit.*

<sup>9</sup> *Ibid.*, p. x.

<sup>10</sup> D. Cressey, 1969, *op. cit.*, p. III.

concluded that organized crime groups were predominantly loosely structured instead of tightly organized. The members of these groups strived for personal gain instead of organizational goals, which Cressey had assumed.<sup>11</sup> However, Albini did observe forms of patronage, where key players supported less important criminals and dealt out favors, and also implied that one group may be able to exert some form of control over the other.

In the same period, Mary McIntosh studied gangs of safecrackers in the United Kingdom and concluded that these groups were neither permanent nor well-structured.<sup>12</sup> Instead, she characterized them as informal or project organizations created for the purpose of committing specific robberies. After finishing the job, the group usually disbanded, although the same persons would occasionally cooperate again if new opportunities arose.

Empirical research conducted in The Netherlands since the beginning of the 1990s has largely confirmed these findings.<sup>13</sup> These studies concerned mostly indigenous criminal groups that imported, produced, and exported narcotics. Although they were sometimes hierarchically structured, they were generally small and loosely knit cooperatives. Whenever new opportunities arose, deals were struck, with the business partners changing rapidly. Detectives investigating key criminal entrepreneurs were sometimes dazzled by the number of contacts they often maintained. One of them, for instance, averaged a daily total of over 300 telephone conversations with criminal relations, as well as with others in his social network. In the mid-1990s, the term criminal cooperative was introduced to underline the rarity in the Netherlands of long-lasting and stable criminal organizations.<sup>14</sup>

It must, however, be noted that Cressey did not deny the existence of informal and loosely knit criminal organizations. He just assumed that the

---

<sup>11</sup> J. Albini, *The American Mafia: Genesis of a Legend*. (New York, 1971) Appleton Century Crofts, p. 288.

<sup>12</sup> M. McIntosh, "Changes in the Organization of Thieving" in S. Cohen (ed.) *Images of Deviance* (London, 1971), M. McIntosh, "New Directions in the Study of Criminal Organization", in H. Bianchi, M. Simondi and I. Taylor (eds.), *Deviance and Control in Europe, Papers From the European Group for the Study of Deviance and Social Control* (London, 1975).

<sup>13</sup> P. van Duyne, R. Kouwenberg and G. Romeijn, *Misdaadondernemingen: ondernemende misdadigers in Nederland*. (Arnhem, 1990). P. van Duyne *Het spook en de dreiging van de georganiseerde misdaad*. (Den Haag, 1995) Sdu Uitgeverij; C. Fijnaut, F. Bovenkerk, G. Bruinsma and H. van de Bunt, *Inzake Opsporing, Enquêtecommissie opsporingsmethoden, Eindrapport georganiseerde criminaliteit in Nederland*, (Den Haag, 1996) Sdu Uitgeverij; E. Kleemans, E. van den Berg and H. van de Bunt, *Georganiseerde criminaliteit in Nederland* (Den Haag, 1998), Wetenschappelijk Onderzoek- en Documentatiecentrum, Ministerie van Justitie.

<sup>14</sup> C. Fijnaut *et al.* (1996), *op cit.*, p. 26.

Italian-American mafia represented a more advanced form of organization. According to Cressey, this was also furthered by the requirement of the types of crime the American mafia was involved in, particularly illegal gambling, which needed more structured and stable forms of organization than, for instance, a bank robbery. In a later work, he used the term “corporate crime” to define the organizational form of the mafia.<sup>15</sup> This concept is used in social anthropology, where a “corporate body” describes a collection of people who are recruited on the basis of recognized principles and who have common interests and rules fixing the rights and duties of the members in relation to one another and to these interests, as opposed to informal organizations or even quasi-groups or action sets.<sup>16</sup> Understandably, Cressey concluded that this definition fit Valachi’s testimony. In the end, however, the empirical basis for some of his descriptions, notably with regard to the “Commission” and the famous mafia code of conduct, seems meager to say the least.<sup>17</sup>

## 2.2. *The Economic Approach to Organized Crime*

The second important school of thought with regard to organized crime is the economic approach. Scholars in this domain pointed out the importance of the dynamics of supply and demand in illegal markets,<sup>18</sup> and economists compared criminal organizations to enterprises, their leaders to criminal entrepreneurs, and illegal activities to business processes.

Markets for illegal goods and services thrive whenever government intervention prevents the supply and demand as well as prices from reaching a natural equilibrium.<sup>19</sup> Pino Arlacchi defined an illegal market as a “place or situation in which there is a constant exchange of goods and services, whose production, marketing and consumption are legally forbidden or severely restricted by the majority of states. Moreover, the activities of that illegal market are socially and institutionally condemned as an inherent threat to human dignity and the public good. Typical markets of this kind ... include hard drugs, illicit arms sales, trade

---

<sup>15</sup> D. Cressey, *Criminal Organization: Its Elementary Forms* (London, 1971), pp. 3–11.

<sup>16</sup> L. Mair, *An Introduction to Social Anthropology*. (Oxford, 1965), p. 13. The term quasi group or “non-group” was introduced by Jeremy Boissevain to define a collective positioned between an (informal) organization and the individual. J. Boissevain, 1968, “The Place of Non-Groups in the Social Sciences”, *Man*, New Series Vol. 3, No. 4 (Dec. 1968): 542–556.

<sup>17</sup> What does not help either is that there is no methodological account of the data sources used.

<sup>18</sup> P. Williams and R. Godson, 2002, “Anticipating Organized and Transnational Crime”, *Crime, Law & Social Change* 37: 311–355.

<sup>19</sup> Cf. R. Naylor, 1997, “Mafias, Myths, and Markets: On the Theory and Practice of Enterprise Crime”, *Transnational Organized Crime*, Vol. 3, No 3: 1–45.

in economic and sexual slavery, capital originating from criminal activity, and deals involving secret information and intelligence.”<sup>20</sup>

Peter Reuter concluded, based on empirical research of the illegal gambling market in New York, that no single criminal organization, such as the mafia, controlled the business. Instead, a number of smaller and larger criminal groups competed with each other for market share and also with law enforcement agencies trying to terminate their activities. Therefore, Reuter introduced the term “disorganized crime” to describe organized criminal activity.<sup>21</sup> That crime-markets were predominantly disorganized was confirmed by additional research in Western countries.<sup>22</sup> More recently, however, the role of law enforcement in keeping organized crime disorganized has received considerable emphasis. In a recent study of the world heroin market, Letizia Paoli et al. concluded that criminal organizations may indeed have the opportunity to grow in states where enforcement is lax and may even be able to establish control over certain illegal activities in some parts of the country. An example of this is the control exerted by the FARC over cocaine production in parts of Colombia where the government has difficulty in enforcing its authority.<sup>23</sup>

The market concept of organized crime provides a useful theoretical framework for the study of activities concerning illegal goods and services. It is, however, a less appropriate tool for the analysis of predatory crime. Systematic extortion, for instance, is obviously one of the classic types of organized crimes, but it is difficult to define this activity in terms of supply and demand. In the end, no victim has willingly volunteered to be extorted, even if it is redefined as “protection,” because we may assume that the threat was non-existent until the criminal organization that wanted to be remunerated for this “service” showed up.

<sup>20</sup> P. Arlacchi, “Large Scale Crime and World Illegal Markets”, in *Organized Crime: International Strategies, Report of the International Seminar on Policies and Strategies to Combat Organized Crime held under the auspices of the United Nations and the University of New Mexico*. (Albuquerque, New Mexico, 1987): 47–61, p. 49. Cited in P. Williams en R. Godson, 2002, *op. cit.*

<sup>21</sup> P. Reuter, 1983, *op. cit.*

<sup>22</sup> M. Dorn, K. Murji and N. South, *Traffickers, Drug Markets and Law Enforcement*. (London/New York, 1991) Routledge; H. Hess, 1992, “Rauschgiftkriminalität und desorganisiertes Verbrechen”, *Kritische Justiz* Vol. 24, No. 3: 315–336; D. Hobbs, 1998, “Going down the glocal”, *The Howard Journal of Criminal Justice*, volume 37 (4): 1–19; L. Paoli, 2002, “Paradoxes of Organized Crime”, *Crime, Law & Social Change* 37: 51–97; L. Paoli “Märkte der Kriminalität”, in D. Oberwittler en S. Karstedt (eds.), *Soziologie der Kriminalität*. (Wiesbaden, 2004) VS Verlag für Sozialwissenschaften: 356–383.

<sup>23</sup> L. Paoli, V. Greenfield and P. Reuter, *The World Heroin Market: Can Policy Reduce Supply?* (New York, 2009).

Another problem is that economists use the concept of the market only in an abstract sense: as an arena where supply meets demand and prices are set. However, it is not discussed at any length in most works on economic theory or history. Therefore, the market concept is sometimes criticized as the “hollow core at the heart of economics”.<sup>24</sup> Criminologists who study organized crime find it hard to start from an abstract notion of the market, particularly because they lack the quantitative data with which classical economists work. Consequently, criminologists usually define markets in terms of groups or individual actors engaged in specific types of crime.

In addition to the concept of the market, economists made a second important contribution to the criminological theory of organized crime by comparing organized crime groups to licit enterprises. As in normal business, key figures within criminal groups were to be viewed as entrepreneurs aiming at maximizing their financial profit but not primarily seeking political influence.<sup>25</sup> Moreover, economists have pointed out that there is no clear-cut distinction between licit and illicit firms. Criminal organizations may well be involved in legal economic activities too, whereas “respectable” companies and their managers may also readily engage in acts prohibited by law.

This enterprise model also implied that specific illegal activities could be analyzed as a business processes. By definition, organized criminal activity requires a coordinated effort of more than one person over a certain period of time with specific resources and skills.<sup>26</sup> The effective organization and efficient management of the business process is as important for criminal entrepreneurs as it is for legitimate companies.<sup>27</sup>

In Europe, Ulrich Sieber and Renate Bögel were the first to analyze different types of organized crime – human trafficking for the purpose of prostitution, the fencing of stolen commercial vehicles, and the operation of illegal casinos – as

---

<sup>24</sup> J. Lie, 1997, “Sociology of markets” *Annual Review of Sociology* 23: 341–360, p. 342.

<sup>25</sup> Cf. D. Cressey, 1969, *op. cit.*; C. Fijnaut et al., 1996, *op. cit.*; H. Abadinsky, *Organized Crime 3rd Edition*. (Chicago, 1994).

<sup>26</sup> Cf. T. Spapens and C. Fijnaut, *Criminaliteit en rechtshandhaving in de Euregio Maas-Rijn Deel 1* (Antwerp/Oxford, 2005) Intersentia; T. Spapens, *Interactie tussen criminaliteit en opsporing*. (Antwerp/Oxford, 2006); T. Spapens, H. van de Bunt and L. Rastovac, *De wereld achter de wetteelt*. (Den Haag, 2007) Boom Juridische Uitgevers; W. Huisman, H. Huikeshoven, H. van de Bunt, J. Van Wijk, A. Meijer, G. Boelens, M. Jagt and J. Spijkerman, *De zwakste schakel*. (Amsterdam, 2003) VU Amsterdam/Politie Amsterdam-Amstelland.

<sup>27</sup> P. Van Duyne and M. Levi, *Drugs and Money, Managing the Drug Trade and Crime-money in Europe*. (London/New York, 2005) Routledge, p. 57.

business processes.<sup>28</sup> Indeed, analysis of criminal logistics is a regular activity of law enforcement agencies in order to identify weak spots in the business process where effective and efficient countermeasures can be taken.<sup>29</sup> Business-process analysis, however, has its limitations. Generally, the necessary steps required by an illegal activity can be easily identified, but the degrees of freedom are usually considerable when it comes to actual execution. The business process may, for instance, require that an illegal good be smuggled from one country to another, but this can be done in many different ways. Predicting which route or method a particular crime group will choose is virtually impossible.

### 2.3. *The Social Network Approach to Organized Crime*

The third dominant approach to organized crime is the social network approach, which was introduced in the 1990s. Originally, the concept of social networks was used by sociologists to describe the importance of social relations for governing companies, in addition to formal structures and command lines.<sup>30</sup> Later on, the idea was also applied to other settings such as networks of personal relations within local communities and types of informal organization.<sup>31</sup> Among the important research questions posed by social-network analysts are how networks are structured, how they develop over time, and how the role of individuals can be assessed on the basis of their position within the network.

In the late 1980s, the network concept began to be approached from a different angle, namely to describe a particular organizational form. Organization sociologists expected that developments in information and communication technology would result in new forms of organization. These would eventually replace existing functional hierarchies and large-scale companies.<sup>32</sup> Instead, the future organization would be non-hierarchical and allow for shifting relations of internal and external cooperation. Furthermore, the importance of existing boundaries of time and place was expected to decrease, which allowed for high levels of flexibility. Methods already developed by social-network analysts to chart informal organizations were, of course, very suitable for studying these types of fluid organizations.

---

<sup>28)</sup> U. Sieber and R. Bögel, *Logistik der Organisierte Kriminalität*. (Wiesbaden, 1993) Bundeskriminalamt.

<sup>29)</sup> T. Spapens, 2006, *op. cit.*

<sup>30)</sup> This research was started in the 1950s in the United States, based on the work of the German sociologist Georg Simmel. See: G. Simmel, *Soziologie*. (Leipzig, 1908).

<sup>31)</sup> An overview of studies of different types of social networks can be found in K. Faust and J. Skvoretz, 2002, "Comparing Networks Across Space and Time, Size and Species", *Sociological Methodology*, Vol. 32: 267–299.

<sup>32)</sup> See for instance M. Castells, *The Rise of the Network Society*. (Oxford, 1996).

In the early 1990s, the network paradigm started to attract the attention of criminologists, particularly when consensus grew that organized crime groups were to be seen predominantly as flexible and loosely knit collectives. Malcolm Sparrow was one of the first to point out the relevance of social network analysis for mapping criminal organizations varying from narcotics supply networks to terrorist groups.<sup>33</sup> Dutch scholars applied network analysis to indigenous criminal organizations.<sup>34</sup> Particularly after the September 2001 attacks on the World Trade Center, this approach quickly gained momentum when it became clear that terrorist groups could be better described as networks instead of organizations.

Although criminologists broadly agree that networks are very important and while the number of publications in this field is rapidly increasing, the network approach is still very much a work in progress. To begin with, authors seldom use clear definitions of the term “network”.<sup>35</sup> Most commonly, this term is reserved to criminal groups with specific characteristics, such as non-hierarchical structures and flexible and regularly shifting coalitions revolving around different criminal projects.<sup>36</sup> It may, however, also be defined in terms of an activity: criminal entrepreneurs need to network on criminal markets.<sup>37</sup> Finally, the criminal markets themselves may be viewed as networks of individuals and independent small groups, as noted above.<sup>38</sup> The lack of a clear definition gives rise to much confusion. Apart from this, the social-network approach to organized crime also has to cope with methodological problems.

One problem is the question of how to define the boundaries of a social network. In theory, a network could include everyone.<sup>39</sup> This makes it difficult to assess who is a member of a network-type criminal collective and who is not. It is precisely this problem that bothered special investigation teams of the Dutch police in the 1990s. While collecting evidence, they were constantly confronted with new network contacts of the subjects under investigation, who in turn also had contacts, and so

---

<sup>33</sup> M. Sparrow, 1991, “The Application of Network Analysis to Criminal Intelligence: An Assessment of the Prospects”, *Social Networks* 13: 251–274.

<sup>34</sup> E. Kleemans et al, 1998, *op. cit.*; P. Klerks, 2000, *op. cit.*; P. Klerks, 2001: *op. cit.*

<sup>35</sup> N. Dorn, M. Levi, L. King, M. Defruytier, F. Van der Laenen, N. Lalam, L. Boellinger, P. Monzini, I. Germán and X. Arana, *Literature Review on Upper Level Drug Trafficking*. Home Office Online Report 22/05 (London, 2005).

<sup>36</sup> United Nations Office on Drugs and Crime, 2002, *op. cit.*, p. 41.

<sup>37</sup> N. Dorn et al., 2005, *op. cit.*, p. 9

<sup>38</sup> J. McIlwain, 1999, “Organized Crime: a Social Network Approach.” *Crime, Law and Social Change* 32: 301–323; A. Heber, 2009, “The Networks of Drug Offenders.” *Trends in Organized Crime* 12: 1–20.

<sup>39</sup> C. Morselli, 2009, *op. cit.*

on. From this, they concluded that the criminal organization under investigation was apparently much larger than first expected. Adding new suspects in the end led to mega-investigations that took years to be completed. Later on, the police management, from an efficiency point of view, opted for much more focused investigations limited to specific individuals. From a practical perspective, it is almost always necessary to limit the network that is being studied, for instance, to a particular location or to specific individuals. From a theoretical point of view, such arbitrary choices are, however, not very satisfactory.

Another and more serious problem for criminologists is data collection. Sociologists studying connections within organizations, communities, or animal habitats have ample opportunities to make observations, and they may also employ lengthy questionnaires about social or professional relations to the network members. Neither of these techniques is feasible for researchers of organized crime. Generally, they have to make do with data collected by law enforcement agencies during criminal investigations.

Large scale investigations often produce many significant details, which the police themselves use to produce extensive relational graphics with the aid of *Analyst Notebook* or comparable tools. However, it is very difficult to interpret the connections shown in the graphs without contextual information, which is not always available.<sup>40</sup> This is illustrated by an example where a police analyst showed the present author the ease with which a huge dataset of cell-phone traffic data could be graphed to conclude that one specific person seemed to be the kingpin in the network because he was in contact with almost all other members. In practice, however, the number of contacts one member maintains with other network members alone says little about his importance in the business processes.<sup>41</sup> In this case, the “kingpin number” belonged to a message service used by most members of this particular group.

Finally, the prospective value of social-network analysis is limited. Its tools are, indeed, very useful for reconstructing how criminal or terrorist collectives have developed in the past for explaining how crucial relations were established. An essential factor in the Madrid terrorist attacks of 2003, for instance, was the emergence of a link between a cluster of ideologically-inspired people and a cluster of minor drug dealers, who also happened to have contacts with other criminals who were able to deliver explosives.<sup>42</sup> Of course, it is almost impossible to foresee such developments.

---

<sup>40</sup>) P. Klerks, 2001, *op. cit.*

<sup>41</sup>) M. Granovetter, 1973, “The Strength of Weak Ties”, *The American Journal of Sociology*, Vol. 78, No. 6: 1360–1380

<sup>42</sup>) M. Sageman, 2008, *op. cit.*

#### 2.4. *Towards an Integrated Approach to Organized Crime*

Now that I have outlined three important approaches to organized crime, I will now turn to the question of whether they might be integrated. Firstly, there is little discussion between the three schools of thought about whether or not organized criminal activities can be described in terms of business processes.

Secondly, it is also obvious that organized criminal business processes require some form of cooperation, and this basic point is also accepted by functionalists as well as by economists and social-network theorists. Instead, the discussion mainly revolves around the question of how organized crime groups are structured.

Finally, although all three approaches focus on the group level, it is accepted, usually implicitly, that different crime groups interact with each other in the broader theatre that economists define as the market. As we have seen above, classic economists use the market concept in an abstract sense. Economic sociologists, however, operationalize markets in terms of social networks, which are the starting point of all economic activities. Introducing this concept into organized-crime theory allows us to integrate economic and social-network thinking about organized crime.

I will now introduce an approach based on three pillars: the criminal macro network, the criminal collective, and the criminal business process. The first concept, *the criminal macro network*, I define as the set of individuals who have the motivation, the skills, and the access to the resources needed to engage successfully in organized criminal activity. These individuals need to be directly or indirectly connected by criminal relations. Criminal relations are defined as the social links that enable individual members of the network to freely exchange information about potential illegal activity.

Second, the *criminal collective* is defined as a subset of members of the criminal macro network who are, at a given point in time, actively executing a criminal business process.

Finally, the *criminal business process* is defined as a collection of related and structured activities designed to produce a specific illegal product, service, or other output prohibited by law, such as theft or fraud. The successful conduct of a criminal business process requires a coordinated flow of goods, information, and money.

I will describe the basic concepts in the next sections and illustrate them with findings from a number of empirical studies of organized crime in the Netherlands and its border areas in which I have been involved in recent years.<sup>43</sup>

---

<sup>43</sup> M. den Boer and T. Spapens (eds.) *Investigating Organised Crime in European Border Regions* (Tilburg, 2002) IVA; T. Spapens and M. Bruinsma, *Illegale vuurwapens in Nederland: smokkel en handel* (Zeist, 2004) Uitgeverij Kerckebosch; T. Spapens and C. Fijnaut, 2005, *op cit.*; T. Spapens, 2006, *op. cit.*; T. Spapens et al., 2007, *op. cit.*; T. Spapens, *Georganiseerde misdaad en strafrechtelijke samenwerking in de Nederlandse grensgebieden* (Antwerp/Oxford, 2008) Intersentia.

### 3. The Criminal Macro Network

The least common denominator of organized crime is the set of human relations.<sup>44</sup> Anyone who wants to engage in an illegal activity requiring a coordinated effort will first need to establish personal contacts with counterparts. Therefore, before one can become a member of a criminal collective, one will first need to join the criminal macro network. In this section, I will address the question of how criminal relations, which tie the members of the macro network, are developed. Second, in Section 3.2, I will discuss the structure of the criminal macro network, which is theoretically a worldwide network. Finally, I consider the stability of the criminal macro network over time.

#### 3.1. *Developing Criminal Relations*

The idea that economic activity is embedded in ongoing networks of personal relations is one of the keystones of economic sociology.<sup>45</sup> Economic sociologists define markets as networks of individuals involved in a particular economic activity.<sup>46</sup> Therefore, markets are viewed as a network made up of real people involved in real activities. Not surprisingly, economic sociologists have paid a great deal of attention to how this social network functions and thus have contributed significantly social network theory.<sup>47</sup>

To begin with, I assume that all organized criminal activity is embedded in a criminal macro network. However, I also assume that not every member of the macro network is actually involved in criminal acts all the time. This is best illustrated by the individuals in prison who are perfectly able to establish and maintain criminal relations even though they are not able to participate themselves in criminal acts. The concept of the criminal macro network, therefore, extends beyond the idea of markets being networks. The criminal macro network is present before the actual illegal activity commences, and it remains in place after the criminal business process is completed. Furthermore, members of active criminal

---

<sup>44</sup> J. McIlwain, 1999, *op. cit.*, p. 319.

<sup>45</sup> R. Swedberg and M. Granovetter, "Introduction to the Second Edition", in M. Granovetter and R. Swedberg Eds., *The Sociology of Economic Life* (Boulder CO, 2001), Westview: 1–28, p. 11.

<sup>46</sup> Cf. N. Smelser and R. Swedberg (eds.), *The Handbook of Economic Sociology*. (Princeton, NJ, 1994). M. Granovetter and R. Swedberg (eds.), *The Sociology of Economic Life* (Boulder, CO, 2001), Westview; N. Smelser and R. Swedberg (eds.), *The Handbook of Economic Sociology 2nd Edition*. (Princeton NJ, 2005).

<sup>47</sup> In this field, the work of in particular Mark Granovetter and Ronald Burt has been highly influential. Cf. M. Granovetter, 1973, *op cit.*; M. Granovetter, 1985, "Economic Action and Social Structure: The Problem of Embeddedness", *The American Journal of Sociology*, Vol. 91, November 1985: 481–510; R. Burt, *Structural Holes*. (Cambridge, 1992).

collectives will usually also maintain relations with individuals with whom they are, at that specific time, not involved in criminal acts.

Social relations are essential for bringing together the skills and resources required for executing a specific illegal activity. Before individuals are able start a criminal business process or participate in one, they need to establish a connection with like-minded counterparts who possess qualities additional to their own or have access to specific resources. Such links, however, are not equivalent to normal social relations, their *raison d'être* being primarily to exchange information about potential illegal activities. Consequently, a criminal relation requires a degree of like-mindedness and trust. Before one can talk freely about potential criminal activity, one must be sure that the other party does not see this as reason for immediately ending the relation and that, in any case, he or she will keep the secret. How then are criminal relations established?

Take, for example, the “ecstasy network” in the south of the Netherlands: it has become clear that members of criminal collectives were often long-time friends or family members. Therefore, it is difficult to assess the moment when their normal social relation changed into a criminal relation because this often coincided with the decision to engage in actual illegal activity. In one case, a youngster whose uncle was involved in ecstasy production kept asking him for a part in the illegal activity, until he was finally given a job helping out at the laboratory and dumping waste. In another case, a school teacher became involved in firearms smuggling because he saw most of his long-time friends, who were living in the same village, making a lot of money with criminal activities and spending it on houses, expensive cars, luxurious holidays, and other pleasures of life.<sup>48</sup> Later on, he developed into a very successful criminal entrepreneur producing himself, synthetic drugs and, after having served a substantial prison sentence, he is presently involved in cannabis cultivation.

In other cases, a normal social relation between a person and a member of the criminal network may turn into a criminal relation when the newcomer is, for instance, in trouble or when an important caesura has occurred in his life. An example of this is a chemist whose dispensary ran into financial difficulties. His already existing social relation with a criminal entrepreneur turned into a criminal one when the latter offered him an opportunity to earn “easy money” by setting up a laboratory and producing synthetic drugs.<sup>49</sup> In another case, a Dutch businessman developed a friendly relation with a criminal entrepreneur who frequented the same

---

<sup>48</sup>) This person was interviewed in prison in 2001 in the course of a study of illegal firearms smuggling into the Netherlands. T. Spapens and M. Bruinsma, *Vuurwapens gezocht. Vuurwapengebruik, -bezit en -handel in Nederland 1998–2000*. (Tilburg, 2002) IVA.

<sup>49</sup>) T. Spapens, 2006, *op. cit.*, p. 215.

country club as he did. This particular businessman had spent considerable time in Shanghai and had developed contacts with prominent Chinese businessmen. After a while, the criminal entrepreneur made it clear that he was looking for opportunities to import chemicals from China, and asked if the businessman would be willing to act as an intermediary with his old contacts, which he did. Of course, the criminal entrepreneur was interested only in controlled chemicals. Because the background of this businessman was known to the regular visitors of the club, the Dutch police strongly believed that he had been purposely targeted by the criminal entrepreneur.<sup>50</sup>

These examples concern persons who entered the criminal macro network when an existing or newly created social relation turned into a criminal one. Thus, in such cases the network is strengthened with new “recruits”. New criminal relations may also develop between existing members of the criminal network who are not yet connected. To begin with, intermediaries may establish new contacts. In one example, a German who was convicted in the early 1990s for arson became friends with a Dutch wholesale drug dealer in prison. Some years after his release, he started frequenting a notorious nightclub in Düsseldorf, where he became friends with a cocaine dealer. When the latter was looking for a new supplier, the arsonist remembered his former Dutch prison-mate, and a new connection was easily established. A regular stream of cocaine and other narcotic drugs soon followed.<sup>51</sup>

In practice, prisons are very important places for establishing new criminal relations. Detainees, obviously, have the credentials of a former involvement in some sort of illegal activity. Moreover, given the circumstances, there is ample time to develop trust. The only drawback is that setting up actual criminal business processes needs to be postponed until release from detention. In several cases of ecstasy production, criminal entrepreneurs who met in prison agreed upon starting a criminal business process after having served their sentences.<sup>52</sup> In several other examples, persons who met in prison acted as intermediaries between organizers of illegal activities.

### 3.2. *The Structure of the Criminal Macro Network*

The criminal macro network is, in theory, a global network. There are no rules or regulations forbidding a member of the network to establish contact with a counterpart on the other side of the world. Practical issues, however, will restrict the number of connections per individual member of the criminal network.

---

<sup>50)</sup> *Ibid.*, pp. 334–335.

<sup>51)</sup> Toine Spapens “Case Report on the Rhein-Waal Euroregion”, in M. den Boer and T. Spapens (eds.) *Investigating Organised Crime in European Border Regions* (Tilburg, 2002) IVA: 73–92.

<sup>52)</sup> Toine Spapens, 2006, *op. cit.*

To begin with, social network theory predicts that any large-scale network is clustered locally.<sup>53</sup> One important reason for this is that the individuals have limited and mostly only local information about the network. Establishing and maintaining criminal relations becomes increasingly difficult as the geographical, social, and cultural distances increase. Research within regular social networks revealed that, even though mobility has exponentially increased and modern technology has eased international communication, most social relations are still maintained at the local level between people who speak the same language and are culturally related to each other.<sup>54</sup>

Second, members of the criminal network have an additional handicap in maintaining criminal relations: information about potential illegal activities cannot be exchanged openly via, for instance, e-mail or telephone, because of the risk of interception by law-enforcement agencies. Therefore, face-to-face meetings are essential. Of course, members of the criminal network can easily travel abroad for business meetings, but flying around the world just to maintain criminal relations is another matter. Furthermore, we must not forget that criminal relations are primarily economic relations.<sup>55</sup> From an efficiency point of view, maintaining long-distance relations with one's criminal counterparts is useful only when the connection represents an explicit added value to the potential criminal business process. For instance, it may be very useful for a Dutch criminal entrepreneur to maintain a relation with a Colombian who is able to provide batches of cocaine. However, he does not need a connection with a Colombian truck driver to pick up a container with hidden narcotic drugs in the Rotterdam harbour because an individual who possesses those skills will always be readily available.

All of this has a profound effect on the structure of the criminal macro network. To explain this, the term "network density" (or clustering coefficient) needs to be introduced. In social-network analysis, this factor is used to calculate the gap between the number of connections that could theoretically exist and the actual links. In a simple network of three persons, A, B and C, there is a maximum of three connections (AB – AC – BC). If all of these exist, the network density would be 1, namely the number of existing connections (3), divided by the potential links (3). If, however, one of the connections is missing, the network density would be 2/3, or 0.67. In every large-scale social network, parts can be distinguished where clustering coefficients differ from the average of the entire network. In practice,

---

<sup>53</sup>) J. Bruggeman, *Social Networks. An Introduction*. (London/New York, 2008).

<sup>54</sup>) L. Hamill and N. Gilbert, *Social Circles: A Simple Structure for Agent-Based Social Network Models*, University of Surrey, The Centre for Research in Social Simulation.

<sup>55</sup>) Of course, members of the criminal macro network may also enjoy their relation as such.

there are “boxes” in which the network density is higher than average and “structural holes” where clustering coefficients are lower or even much lower.

Successful completion of criminal business processes requires people with different qualities. Much of the criminal handwork, however, can be considered unskilled labor, such as transporting goods. Since those “workers” do not have to be sought outside a criminal entrepreneurs’ immediate circle of contacts, it follows that the criminal macro network density will generally be higher at the local and regional levels. In return, clustering coefficients will be far less at the national and international levels.<sup>56</sup>

In practice, the criminal macro network will show many “structural holes” that need to be bridged whenever the business process requires it. For some types of organized crime, such as the systematic extortion of local shopkeepers, international criminal relations are unnecessary. However, other illegal activities, such as importing narcotics from overseas, are impossible without such connections. Within the criminal macro network, as in any economic network, people who are able to bridge structural holes play an important role. They may use their key positions to their own advantage and themselves set up specific illegal activities.

However, initiating criminal business processes also requires contacts with members of the criminal network who can perform specific tasks and other personal qualities, which will be further addressed below. If a person who is able to bridge a structural hole lacks these contacts and skills, he may also limit himself to being an intermediary between those who do have it. For example, when a German and a Dutch drug smuggler met in a Spanish prison, they decided to bring their respective bosses into contact, instead of using their relation to start a business process of their own.

### 3.3. *The Stability of the Criminal Macro Network*

A conclusion derived from empirical research into organized crime in the Netherlands is that criminal collectives are often highly fluid.<sup>57</sup> However, when

---

<sup>56</sup>) There are, of course, exceptions to this rule. In densely populated European border areas, for instance, criminal relations may be highly integrated across the national borders. The same may be the case with regard to criminal relations between members of the criminal macro network who emigrated abroad and fellow countrymen who stayed or migrated to other countries. Cf. T. Spapens, “Policing a European Border Region. The Case of the Meuse-Rhine Euroregion”, in E. Guild and F. Geyer (eds.) *Security versus Justice? Police and Judicial Cooperation in the European Union* (Aldershot, 2008): 225–241.

<sup>57</sup>) Kleemans et al., 1998 *op. cit.*; P. van Duyne et al., 1999, *op. cit.*; P. van Duyne, 1995, *op. cit.*; C. Fijnaut et al., 1996, *op. cit.*; E. Kleemans, M. Brienen and H. van de Bunt, *Georganiseerde criminaliteit in Nederland. Tweede rapportage op basis van de WODC-monitor*. (The Hague, 2002) Ministerie van Justitie/WODC.

we look at the criminal macro network a very different picture emerges. Here, relative stability is typical. An empirical study by the present author of 48 major criminal investigations of ecstasy production conducted by the police from 1996 to 2004 revealed many connections between the subjects.<sup>58</sup> Later studies with regard to cannabis cultivation and cross-border criminal activity in the Dutch-Belgian border area revealed that key players in these lines of business were also connected to wholesale traders and producers of ecstasy.<sup>59</sup> Over the years, the names of key indigenous criminals and their extended families stayed very much the same. This stability of the criminal macro network can be explained in three ways.

First, it is not easy for a newcomer to become a member of the criminal macro network. Indeed, one first needs to establish some form of social relation with an individual who is already linked to the network, and it will usually take some time before one is sufficiently trusted and for the connection to develop into a criminal relation. Even so, a criminal entrepreneur will usually prefer to ask a more experienced or more trusted member of the network when it comes to actual illegal activity. In one case, a police infiltrator who managed to establish an intimate social relation with his target and even went on holidays together with him was still never invited to become involved in any of his criminal activities. The criminal entrepreneur was extremely careful and simply did not employ or do business with anyone except for a close circle of individuals whom he had known for decades. There are, however, exceptions. Someone with highly sought after specific expertise, such as knowledge about how to launder large sums of money, may quickly be able to establish criminal relations.

Second, it takes time for criminal entrepreneurs to build the criminal relations necessary for engaging in organized illegal activity. Indeed, one also needs to establish a reputation to keep from being scammed or ripped off by one's business partners. To acquire this status, organizers of criminal business processes need to be active for quite some time. Most key figures within the criminal macro network had their first contact with law enforcement at about the age of 15 and were at least 35 years old or older when they started to lead a criminal collective. Notable exceptions to the rule were sons (or sons-in-law) of criminal entrepreneurs, who were able to make use of the father's reputation and criminal relations. Still, they were usually not entrusted immediately with high-risk projects but, perhaps, started off with organizing a medium-sized shipment of narcotics to a foreign customer.

---

<sup>58</sup>) T. Spapens, 2006, *op. cit.*, pp. 192–196. T. Spapens, *Interaction between Criminal Groups and Law Enforcement: the Case of Ecstasy in the Netherlands* (forthcoming).

<sup>59</sup>) T. Spapens et al., 2007, *op. cit.*; T. Spapens, 2008, *op. cit.*

Third, network stability in the south of the Netherlands is also explained by the outflow being quite modest. Network members seldom cease all criminal relations with their counterparts, and many remain actively involved in illegal activities well past the usual age of retirement. Furthermore, although the members of the criminal network run a slightly higher than average risk of an untimely death, either because of violence or as the result of an unhealthy lifestyle, mortality does not have a profound effect on network stability. Finally, but importantly, in the Netherlands, prison sentences, which prevent members of the criminal macro network from active involvement in committing crimes, are generally quite modest. For instance, between 1996 and 2004, criminal entrepreneurs who were sentenced for ecstasy production usually received four to eight years, only two third of which actually had to be served. The less important members of criminal collectives usually receive much less severe prison sentences. Therefore, the members of the “ecstasy network” were soon available again for new projects. Some of them continued on the same criminal market and were apprehended and sentenced two or even three times in eight years. Others switched from ecstasy production to, for instance, large-scale cannabis cultivation, the investigation of which has a far lower priority with the Dutch police and judicial authorities than does the investigation of ecstasy production.

Now that I have outlined the basic prerequisite for organized illegal activity, a network of criminal relations, the next basic concept will be addressed: the criminal collective.

#### **4. The Criminal Collective**

An organized criminal business process requires coordinated effort over time, so a criminal collective needs to be established for its execution. In this section, I will first explore the basic roles to be distinguished within such a collective and then will describe the circumstances under which a criminal collective will be established. I will go on to address the question of its structure, and, finally, consider its stability.

##### *4.1. Roles within Criminal Collectives*

The successful completion of a criminal business process requires a range of skills, depending on the specific characteristics of the illegal activity. Obviously, setting up a complex VAT fraud scheme calls for other abilities than exploiting young women for sexual purposes. Still, four important roles can be distinguished within criminal collectives.

The first role is that of the organizer, the criminal entrepreneur, who possesses the qualifications necessary to initiate criminal business processes and to coordinate the activities of the people executing them. Therefore, within the criminal macro

network, an organizer needs to be associated with individuals who can execute specific tasks; who can provide the necessary resources and equipment, and who want to invest in the planned project if the entrepreneur is unable to finance it on his own.

The second role to be distinguished is that of the unskilled labourer or “worker”. These are the individuals who perform the illegal activities that do not require specific qualifications apart from some basic installation skills, or, for instance, some dexterity in driving or working on cars. More important qualifications are experience with being apprehended and the ability to withstand thorough interrogation by the police. Finally, availability is an important prerequisite, which usually means that workers cannot hold down a regular 9-to-5 job. Instead, they are usually involved in other small-time criminal activity on their own account, such as theft or burglary, low-level drug dealing, or, in the case of the Netherlands, running a cannabis plantation.

The third major role within criminal collectives is the facilitator who contributes particular skills to criminal business processes. Examples are chemists who can produce good quality MDMA, forgers who provide documents, and accountants who can set up money laundering schemes involving front companies in exotic tax havens. Facilitators whose expertise is particularly scarce are often associated with a number of organizers and may thus be part of more than one criminal collective at any one time.

Finally, there are also those who finance criminal activities. Importing a large amount of narcotics, for instance, requires a substantial investment. Sometimes a known criminal who has “retired” from the business will invest in such a shipment. Others provided their sons with investment capital. In the Chinese and Israeli diasporas, there are sophisticated informal systems for raising capital that may be used to finance both licit and illicit undertakings. Sometimes the people who raised the money will not even know precisely what the capital is being used for.<sup>60</sup>

#### *4.2. The Formation of a Criminal Collective*

Obviously, anyone who engages in a criminal business process is not protected by a legal system as there are no legally enforceable contracts underlying business deals and working relations. Moreover, the risk of being cheated is genuine because people do not become criminals because they want to do business honestly. How then can we explain why people risk participating in a criminal collective?

To begin with, it is important to realize that a criminal collective is not a monolithic organization. First, it involves individuals who engage in business

---

<sup>60</sup>) T. Spapens, 2006, *op. cit.* p. 183.

deals, such as an agreement to buy or sell quantities of illegal goods or services. Second, the collective consists of persons who contribute to the process, perhaps by manufacturing the goods to be delivered. When examining how a criminal collective is formed, therefore, it is essential to distinguish between these two types of internal relations, namely: “business relations” or relations between the entrepreneurs, on the one hand, and the “working relations” between the organizer, the workers, and the facilitators on the other.

Economic sociologists have addressed the question of how business relations are developed in circumstances where effective legal protection is absent, albeit solely with regard to legal economic activity. Not surprisingly, social relations between would-be transaction partners are brought forward to explain how economic transactions are possible even in such situations. In “upperworld” business transactions, it is also often difficult to encompass in contracts all of the complexity of economic transactions. Moreover, bringing a case to the court is expensive. As a result, contract disputes are seldom brought to court. Thus, companies will often accept a loss and simply refrain from doing business again with the contending party.<sup>61</sup>

This, however, does not imply that engaging in a complex business transaction is usually a form of Russian roulette. Instead, social relations are used to limit the risk of being lured into transactions with an insufficiently trustworthy partner. The potential business partners will use personal meetings to test each others’ expertise but also to establish a social relation. Intermediaries, i.e. individuals already trusted by each of the potential business partners, may facilitate this process. Another effective strategy is to start off with small projects and engage in larger scale and riskier transactions only when previous experiences have proven satisfactory.<sup>62</sup> As I will show in the next section, the same mechanisms often apply to criminal business deals, although some criminal entrepreneurs may also take high risks.

Experiences of police infiltrators who approached criminal entrepreneurs with business proposals have provided interesting empirical material that illustrates how criminal business deals are struck.<sup>63</sup> Sometimes infiltrators are able to build a criminal relation from scratch, but more often intermediaries are used to gain entrée. Even then, criminal entrepreneurs are usually cautious. Sometimes an infiltrator failed because organizers refused to do business with them altogether. Other criminal entrepreneurs did not want to be personally involved in business

---

<sup>61</sup> S. MacAuley, 1963, “Non-Contractual Relations in Business: a Preliminary Study”, *American Sociological Review*, Vol. 28, No. 1: 55–67.

<sup>62</sup> S. MacAuley, 1963, *op. cit.*, Y. Ben-Porath, 1980, “The F-connection: Families, Friends and Firms and the Organization of Exchange”, *Population and Development Review*, Vol. 6, No. 1: 1–30, p. 6.

<sup>63</sup> T. Spapens, 2006, *op. cit.*, p. 200.

negotiations and left this to a trusted accomplice. Some, however, did not refrain from engaging in large transactions immediately. Sometimes, they were motivated by greed, for instance when the police infiltrator pretended to be inexperienced and offered a price that was far too high for goods to be delivered. In other cases, criminal entrepreneurs took higher risks because they assumed they could hold the other party accountable in event of a dispute. Of course, “holding someone accountable” often means taking violent action against him, his wife, or another relative.

Next, a criminal entrepreneur needs to bring together the people who can actually do the work the business agreement requires. In licit economic transactions, potential business partners will usually represent an already existing firm. However, an organizer of criminal business processes will have to put together the collective. For this he needs to have access to a pool of individuals who may be employed for specific projects. As has been described in the previous section, workers who do not have a particular expertise will usually be recruited in the social and geographical vicinity of the organizer.<sup>64</sup> Interrogations of apprehended suspects in cases involving the production of ecstasy have revealed that people with important executive tasks already knew their “bosses” for many years, often from secondary school.<sup>65</sup> In one case, a worker involved his stepson in his illegal activities who, in turn, invited his best friend to join the excitement of helping out in a synthetic drugs laboratory.

Workers who run an extremely high risk of being apprehended, such as smugglers, are usually recruited from outside this immediate social circle, such as drug addicts or other persons in a marginal economic or social position. In one case, the people who smuggled ecstasy into the Dominican Republic and returned with cocaine to the Netherlands started to brag about their success to their friends, who in turn volunteered to make the trip. Key figures of the criminal collective manage risks by making sure that expendable workers have little or no information that may lead the police to them.

Finally, persons who possess specific expertise may be coerced into a criminal collective by more subtle methods than forcing them at gunpoint. A preferred strategy is to create some form of dependency. An example of this was a person who ran a small transport company. He unwisely bought a second-hand truck on credit from a dealer who was affiliated to the criminal network. When the buyer had

---

<sup>64</sup> P. Reuter and J. Haaga, *The Organizations of High Level Drug Markets: An Exploratory Study* (Santa Monica, Calif. 1989) RAND; G. Pearson and D. Hobbs, *Middle Market Drug Distribution* (London, 2001) Home Office Research, Development and Statistics Department; E. Kleemans et al., 1998, *op. cit.*

<sup>65</sup> T. Spapens, 2006, *op. cit.*, p. 202; G. Pearson and D. Hobbs, 2003, “King Pin? A Case Study of a Middle Market Drug Broker”, *The Howard Journal*, Vol. 42, No. 4: 335–347

trouble in meeting his monthly payments, a few “collectors” came to his house on behalf of the dealer and started threatening him, whereupon another acquaintance intervened and offered to pay his debts in return for a service, namely, organizing shipments of licit goods that could be used as a cover for smuggling illicit drugs.<sup>66</sup>

#### 4.3. *The Organizing Principles and Structure*

Once the criminal collective is formed, the criminal business process can commence. An organized criminal activity will require a coordinated effort by a group of individuals. The question is, therefore, which coordinating mechanisms are used.

Every organization or collective, licit or illicit, consists of individuals whose goals are only partly overlapping.<sup>67</sup> Coordinating mechanisms are needed to ensure that all of the participants contribute functionally to the business process. In organization literature, these mechanisms are defined as organizing principles.<sup>68</sup> To begin with, prices and wages are accepted as central principles.<sup>69</sup> In addition, it has been argued that, in specific circumstances, trust must also be considered an organizing principle.<sup>70</sup> Particularly in criminal collectives, because of absence of legal protection, coercion could also be applied to guarantee contributions to the business process.<sup>71</sup>

Organizing principles also determine the structure of the collective. In an organization dominated by the principles of price or trust, the internal relations will be predominantly egalitarian and non-hierarchical. If, however, coordination is primarily achieved through wages and coercion, this will result in hierarchical structures.

Successful completion of a business process almost always requires a combination of organizing principles. No organization or collective, whether licit or criminal, is completely hierarchical or fully non-hierarchical. In a collective aimed at stealing and fencing stolen cars, for instance, the individuals who actually do the stealing may be paid for their efforts, and commanded accordingly. In relations with an importer abroad who buys the stolen vehicles the price mechanism will dominate, so there is no hierarchical relation.

---

<sup>66</sup> T. Spapens, 2006, *op. cit.*, p. 215.

<sup>67</sup> W. Ouchi, 1980, “Markets, Bureaucracies and Clans”, *Administrative Science Quarterly*, Vol. 25, No. 1 (March 1980): 129–141, p. 130.

<sup>68</sup> B. McEvily, V. Perrone and A. Zaheer, 2003, “Trust as an Organizing Principle”, *Organization Science*, Vol. 14, No. 1, Jan-Feb 2003: 91–103.

<sup>69</sup> J. Podolny and K. Page, 1998, “Network Forms of Organization”, *Annual Review of Sociology*, Vol. 24: 57–76, p. 58.

<sup>70</sup> W. Ouchi, 1980, *op. cit.*; B. McEvily, V. Perrone en A. Zaheer, 2003, *op. cit.*

<sup>71</sup> T. Spapens, 2006, *op. cit.*, p. 65–66.

The particular mix of organizing principles applied in a criminal collective depends on two factors. First, it is determined by the characteristics of the business process. If the business process is exploitation of women for sexual purposes, coercion will inevitably be an important organizing principle. If a collective is buying wholesale quantities of narcotics and selling smaller amounts to middle-market dealers, the price mechanism will dominate. Within a group of bank robbers, trust will probably play an important role at least as long as the booty is not yet acquired.

Second, the personal preferences of criminal entrepreneurs will determine the internal structure of the criminal collective. One organizer may choose to employ workers and facilitators for every part of the business process because this allows him to gain higher profits. Another, however, may prefer dealing with people who complete parts of the business process on their own account because it reduces the risk of being prosecuted as the head of a criminal organization. For example, in one case of ecstasy production and wholesale dealing, the organizer preferred to tightly control all different aspects of the business process and so hired workers and facilitators for every step of it. However, the span of control of an organizer is rather limited because he cannot exchange information with his subordinates freely. In this case, “lieutenants” were assigned responsibility for different parts of the process (production, smuggling, delivering the pills to the customers, etc.). In another example, the criminal entrepreneur did not want to be bothered by the production part, so he contacted a facilitator to whom he offered 25 liters of PMK, an essential precursor chemical, which would ideally render 25 kilos of MDMA and proposed that he would deliver 18 kilos of MDMA and keep the rest to use or sell as he wished. This facilitator would need to acquire the necessary hardware and other raw materials himself as well as organize the production in return for 7 kilos.<sup>72</sup>

In practice, the same criminal business process can be executed by using different mixes of organizing principles. Consequently, criminal collectives operating in the same line of business may be structured very differently. In practice, a criminal collective may be either a non-hierarchical network or a functional organization along the lines described by Donald Cressey, although most will have “network” as well as “hierarchical” characteristics.<sup>73</sup>

#### 4.4. *The Stability of Criminal Collectives*

The boundaries of the criminal collective have been defined as the individuals involved in completing a specific criminal business process. Theoretically, therefore,

---

<sup>72</sup>) T. Spapens, 2006, *op. cit.*, p. 271.

<sup>73</sup>) United Nations Office on Drugs and Crime, *Results of a Pilot Survey on Forty Selected Organized Criminal Groups in Sixteen Countries* (Vienna, 2002), p. 4.

a criminal collective exists only for the time it takes to complete one business cycle. A collective may, after lengthy and careful preparation, rob a bank and seize ten million euros after which the individual members may never cooperate again. The same group of people may, however, also engage in similar or other criminal business processes if they deem further cooperation worthwhile, so their collective would remain active in virtually in the same formation and develop into a stable organization.

In practice, three main factors seem to determine the stability of a criminal collective: the extent to which business processes are successfully completed, the characteristics of the illegal activity and the associated business opportunities, and the absence of substantial intervention by law enforcement.

First, similar to a normal business process, executing a criminal activity comes with many different practical problems. Judging if difficulties are severe enough to refrain from further business agreements or if the relations are to be terminated depends on the participants. In one case, for instance, a dealer who bought 20,000 ecstasy pills which turned out to be of a very bad quality immediately decided to seek another supplier.<sup>74</sup> In another example, however, a customer who discovered that a supplier had delivered one kilo of MDMA less than agreed upon complained.<sup>75</sup> Thereupon the business partner apologized for the mistake. He offered to compensate for the missing kilo to by having ecstasy pills manufactured from the batch of MDMA at no extra cost, so the business relations simply continued.<sup>76</sup>

Working relations may also be problematic. An example of this concerned a chemist who worked in an ecstasy laboratory. He was, however, also a fervent visitor of raves and an enthusiastic user of party pills himself. Consequently, he was regularly unfit to work, which greatly annoyed the organizer of the criminal business process. The chemist's particular expertise, however, was absolutely necessary, so, instead of dismissing him, the criminal entrepreneur hired a chaperon to keep the chemist more or less sober.<sup>77</sup>

Of course, problems may also give cause to violence aimed at financial compensation. For instance, the kidnapping and beating up or torturing of the culprit or a relative is fairly common.<sup>78</sup> Workers or facilitators who fail to keep agreements may be threatened or forced to continue. Payment, of course, may also be refused.

---

<sup>74</sup>) T. Spapens, 2006, *op. cit.*, p. 208.

<sup>75</sup>) MDMA is the active ingredient in the pills. An ecstasy pill usually contains 80 or 100 milligrams of MDMA and also a harmless filler.

<sup>76</sup>) T. Spapens, 2006, *loc. cit.*

<sup>77</sup>) *Ibid.*, p. 209.

<sup>78</sup>) Cf. T. Spapens, 2008, *op. cit.*

In one example, a criminal entrepreneur provided an expensive car to a worker, who would pay for it from his “salary”. However, when the organizer became dissatisfied with the workers’ performance several months later, he discharged him and repossessed the car, thus leaving the employee with no payment at all.

Second, the stability of criminal collectives is also influenced by the characteristics of the illegal activity and the business opportunities. As observed by Cressey, exploiting an illegal gambling activity requires a more stable criminal collective than does robbing a bank. Running a weekly numbers game, for instance, would be almost impossible without a regular group of individuals taking bets, manufacturing lottery forms, calculating the odds, and so on. This, of course, leaves open the possibility that individual members of the collective may be dismissed and replaced by others from time to time.

In addition to characteristics of the illegal activity, business opportunities themselves influence stability. For instance, a collective consisting of producers of one million ecstasy pills per month and a customer who is able to purchase and sell the entire amount may be highly stable. Other manufacturers, however, may not have customers who can take large amounts of pills regularly, so they are compelled to switch between business partners frequently.

Finally, interventions of law enforcement agencies, resulting in apprehension and conviction of members of the criminal collective, have a highly destabilizing effect. In one example, a criminal collective exporting ecstasy from the Netherlands to the United States was disrupted when a wholesale customer was apprehended in the latter country. The Dutch part of the collective remained intact but decided to redirect its activities to Australia instead.<sup>79</sup> The apprehension of the entire collective will, of course, terminate all criminal business processes.

In principle, the same collective might rejoin again after every member has served his time in prison. In practice, however, this is difficult. Sentences will, as has been explained above, differ with how the judges assess the individual’s role in the business process. Workers will usually be punished less severely than organizers. In cases of ecstasy production, most of the experienced workers decided not to wait until their former boss was also released but started working for another criminal entrepreneur. As a result, none of the criminal collectives effectively stopped by the police returned in their original formation.<sup>80</sup> Consequently, criminal entrepreneurs had to find new apprentices within the criminal macro network after being released. Exceptions to the rule were sometimes close relatives who had worked with them before. One notorious criminal entrepreneur, for instance, was able to fall back

---

<sup>79</sup>) T. Spapens, 2006, *op. cit.*, p. 250–251.

<sup>80</sup>) *Ibid.*, p. 198.

several times on his brother and two of his long-time friends. His accomplices refused to work for others when he was imprisoned, although it may be presumed that he also kept paying them in order to ensure their fidelity.

Finally, the third central concept of the approach to organized crime presented here, the criminal business process, will be elaborated.

## **5. The Criminal Business Process**

A business process can be defined as a collection of related, structured activities designed to produce a specific product, service, or other output such as a robbery or a swindling scheme. The idea of describing criminal activities in terms of business processes was launched already in the 1920s by the researchers of the Chicago school. In Europe, Ulrich Sieber and Renate Bögel were the first to systematically analyze different types of organized crime in terms of business processes.<sup>81</sup> They distinguish four constituent processes. The first stage is the process of acquisition. Here, the necessary investment capital, resources, and working power are brought together. Next is the manufacturing process, which sums up all actions needed to complete the product or service. The third stage is defined as the sales process. This not only involves selling the ready-for-use products or offering a service, but also the reinvestment of proceeds in a subsequent business cycle or in other legal or illegal activities. Finally, the sub-process of completion is distinguished. This concerns money laundering as well as disposing of waste, such as packaging or waste chemicals in the case of synthetic drug production.

A somewhat different approach, more common to organization science, is to model the business process in terms of flows.<sup>82</sup> To be successfully completed, every business process requires a coordinated flow of goods, money, and information.

First, the goods flow can be described as the supply chain in which the goods or services are actually produced. It includes all the necessary resources and actions required by the characteristics of the particular criminal activity. In the case of indoor cannabis cultivation, for instance, the goods flow includes finding a suitable growing location, acquiring grow equipment, acquiring cuttings or seeds, constructing a grow room, diverting electricity, growing the plants, cutting the flowering tops, drying the tops, offering the harvest to a buyer, and, finally, disposing of the hemp waste.<sup>83</sup>

---

<sup>81</sup> U. Sieber and M. Bögel, 1993, *op. cit.*

<sup>82</sup> T. Spapens, 2006, *op. cit.*, pp. 57–61.

<sup>83</sup> T. Spapens et al., 2007, *op. cit.*

Second, the money flow can be separated into two parts. To begin with, it comprises all the investment and payments necessary in function of the business process, whether in cash, scriptural money, or payment in kind. Next, the sub-flow of laundering the proceeds in order for these to be used for licit purposes can be distinguished. The first stream can be further divided into the money for buying and selling of resources, products, or services and the money for payment to members of the criminal collective for specific contributions to the business process.

Finally, the information flow can be defined as all the information that needs to be exchanged between the members of the criminal collective in order to complete the business process, so it is in function of the flow of goods and money.

Any economic activity, even if it is legal, needs to be screened off from the outside world to some extent to prevent competitors from using critical knowledge about business processes to their own advantage. Keeping the business process a secret is, of course, also crucial when the activity is illegal. To begin with, people who are involved in organized crime run a substantial risk of being robbed or assaulted themselves because they cannot turn to the police. Locations of storage facilities for drugs or essential chemicals, for instance, need to be kept secret. Of course, a criminal business process must also be screened off from law enforcement agencies. Moreover, if parts of the criminal business process are discovered, damage must be kept to a minimum. To these purposes, organized criminal groups may deploy a variety of measures. Three main types can be singled out.<sup>84</sup>

First, criminal groups can take measures to make it difficult or impossible for the police to gather evidence using specific investigative methods. One example is to refrain from talking about illegal activities over the phone, which makes tapping a pointless exercise. In cases of ecstasy production, any matters relating to illegal activities were not discussed openly on the phone or a code was used. A majority of the criminal collectives also tried to use new communication technologies, such as satellite phones or Internet telephony (VoIP) hoping, or knowing, that these new systems could not be tapped, although they were never sure when the police would be able to close the gap. Another strategy used by ecstasy producers and traffickers was to buy new pre-paid mobile phones regularly in order to prevent the police from tapping them until the new numbers were identified. In drug transactions, the buyers, vendors and couriers would sometimes all purchase a new mobile telephone for one drug delivery and then dispose of it immediately after the shipment had arrived.

---

<sup>84</sup> T. Spapens, *Interaction Between Criminal Groups and Law Enforcement: the Case of Ecstasy in the Netherlands* (forthcoming).

Observation activities by the police have also been hindered by the use of locations that were difficult for police surveillance teams to approach. Key members of criminal groups in the south of the Netherlands often live in deprived neighborhoods or trailer parks, where outsiders stand out like a sore thumb. To avoid being confronted with pseudo-buyers, wholesale ecstasy dealers in the south of the Netherlands often did not personally negotiate prices nor did they deliver the ecstasy pills themselves but instead had others do it for them.

Second, members of criminal collectives can take measures to minimize the consequences of discovery of parts of the business process by the police, other officials, or members of the public. This might mean that some criminal operations are carried out in different locations or that the leaders of a criminal group split it up into several cells whose members do not know one another. Such compartmentalization is used in ecstasy production, where the MDMA synthesis process is consistently kept apart from pill manufacture. These stages of the production process almost always take place in separate locations. Besides the need for protection, another factor is that making pills required different machinery, raw materials, and expertise than does the synthesis process.

Third, members of criminal groups can actively seek information about the activities of the law enforcement agencies and use it to prevent the police gathering evidence. To begin with, corrupting government officials can provide useful information. In recent investigations the Dutch police conducted in collaboration with the Australian police, detectives were often amazed at unexpected developments during investigations. The explanation came in June 2008, when a high-ranking Australian police officer, Mark Standen, was arrested on suspicion of corruption. Another option may be counter-surveillance measures. In the 1990s, a Dutch criminal collective specialized in identifying and following police-observation teams and selling the information to members of the criminal macro network.<sup>85</sup> In other cases, local residents or members of the extended family tipped off the group if they saw (or thought they saw) police observers or if they witnessed any other unusual police activity in the neighborhood.

## **6. Conclusions and Discussion**

In this article, I have attempted to merge the key concepts of the functional, economic, and social-network approaches into an integrated approach to organized crime, starting from individual relations between criminals and potential criminals.

---

<sup>85</sup>) Kleemans et al., 1998, *op. cit.*, p. 167.

First, I have described how economic sociological theories can be used to operationalize the abstract concept of a criminal market as a social network of individuals engaging in organized criminal activity. This allows us, as economic sociologists have shown, to analyze markets as networks. In addition, I have introduced a distinction between the stage where individuals are actually engaged in a criminal business process together and a preceding stage when the necessary criminal relations are established. The resulting concept of the criminal macro network is, in fact, broader than that of a criminal market, as the latter is limited to ongoing illegal activity. Instead, being a member of the criminal macro network does not require that one actively commits criminal acts at any given point in time. The only prerequisite for being a member of the macro network is having at least one criminal relation with another member.

Second, there has been a fierce debate among criminologists about the functionalist model, which depicted organized crime and the American mafia in particular, as a large-scale and hierarchically structured, nationwide cartel.<sup>86</sup> Later studies, for instance conducted in New York, failed to corroborate the existence of such a cartel.<sup>87</sup> Indeed, criminological research from the 1970s onwards made it clear that it will be very difficult for criminal collectives to develop into large-scale permanent organizations in nations with a functioning legal system and effective law enforcement. It is widely accepted that, under these circumstances, organized crime will be predominantly “disorganized”. However, in situations where law enforcement is lax or even completely absent, criminal syndicates may very well expand, and even be able to dominate parts of the legal economy.<sup>88</sup>

Instead of viewing the Italian-American mafia of the 1960s as a single organization, it is perhaps more fruitful to see it as a subset of the American criminal macro network. Mafia families across the United States were connected by personal relations, as Cressey observed, but this does not necessarily mean that they were also constantly involved in criminal business processes together.<sup>89</sup> Adjustment, however, may have been useful with regard to importation and distribution of large shipments of drugs or perhaps for the mutual coverage of financial risks that may occur in an illegal gambling operation when a punter wins a large sum of money. Further research on what actually happened at gatherings of the “Commission”, such as the famous Appalachian meeting of 1957, could shed more light on this.<sup>90</sup>

---

<sup>86</sup> D. Cressey, 1969, *op. cit.*, p. 1.

<sup>87</sup> P. Reuter, 1983, *op. cit.*

<sup>88</sup> L. Paoli et al., 2009, *op. cit.*

<sup>89</sup> D. Cressey, 1969, *op. cit.*, p. 113.

<sup>90</sup> *Ibid.*, p. 57.

Criticism of the functional approach also focused on the description of organized crime groups as hierarchically structured and as being comprised of individuals with specific functions, ranging from *capos* to “soldiers”. Instead, the view that organized crime groups were predominantly loosely knit collectives gradually gained acceptance. This was illustrated by Europol in its organized crime report of 2003, which stated that the “greater percentage of powerful organized crime groups are far more cellular in structure, with loose affiliations made and broken on a regular basis and less obvious chains of command.”<sup>91</sup>

In this article, I have explained that the structure of a criminal collective or organization depends on the mix of organizing principles used to coordinate the criminal business process. Most criminal business processes require both executive tasks and “business deals”. For the latter activities, being able to rely on trusted accomplices is to be preferred above employing different people for every new job unless they are deemed to be expendable, such as smugglers or retail dealers of illicit drugs.

Hence, the concept of the criminal macro network allows one to integrate the economic and social-network approaches to organized crime from an economic sociological perspective. Furthermore, by assuming that criminal collectives use a mix of different organizing principles to coordinate criminal business processes, one can explain how both loosely knit and more functionally structured groups occur. Thus, the debate about how organized criminal collectives are structured is qualified, and the “Cressey model” to some extent rehabilitated. The question remains, however, about whether criminal collectives can, indeed, develop into organizations able not only to engage continually in specific criminal business processes for years or even decades but also to control parts of the criminal macro network at the local level or even beyond or with regard to specific illegal activities.

The further development of the concept of the criminal macro network promises to be able to contribute significantly to our understanding of organized crime. Moreover, a better understanding of the criminal macro network would allow us to develop more effective and efficient control strategies from the perspective of both law enforcement and prevention. If we want to tackle forms of organized crime effectively, it is not enough to stop criminal business processes at random and to bring the members of the criminal collectives responsible to justice. Instead, we need to disrupt the criminal macro network. Furthermore, measures should be developed to restrict the inflow of new members of the network as much as possible and to maximize the outflow.

---

<sup>91</sup> Europol, *European Union Organized Crime Report* (Luxembourg, 2003) Office for Official Publications of the European Communities, p. 8.

Once again, that the macro network is relatively stable over time provides an important starting point. Indeed, experienced detectives will usually know most of the key members in their district. Remarkably, Cressey also mentions that United States law enforcement agencies in the 1960s had the names, criminal records, and information about the principal criminal activities of about 5,000 members of the mafia.<sup>92</sup> When the Dutch police started to give priority to reining in ecstasy production and trafficking in the second half of the 1990s, the “ecstasy network” was also charted within a few years.

The central problem for law enforcement agencies is not that organized criminals are unknown to them or are too smart to be effectively investigated and prosecuted, although individual cases may take much time and require a substantial effort. Instead, it is impossible to take on all members of the criminal macro network simultaneously. Even if this would be the case, new apprentices are free to join the network, and they will as long as there are huge profits to be made. Moreover, workers or facilitators who received short prison sentences will soon be able to return and take over the business of those criminal entrepreneurs who are still being detained. Because it is impossible to crush the criminal macro network completely, at least for as long as the principles of a free and democratic society are respected, the basic goal of a criminal policy against organized crime should be to keep the criminal macro network under control and to prevent individual members from acquiring positions of power either within the criminal network or in the “upperworld”.

One ecstasy case in the Netherlands provides an interesting example. After the members of the criminal macro network who were involved in this illegal activity were identified, it was decided to take on the major criminal entrepreneurs as well as the key facilitators. Analysis of the criminal business process revealed the crucial importance of PMK that was obtained from China. After a while, it became clear that only a few facilitators were responsible for importing large quantities of PMK so the effort concentrated on them. As a result, the producers had great difficulty in obtaining PMK in 2005–2006, so ecstasy production very substantially dropped. However, as long as members of the criminal macro network remain, organized criminal activity will continue. By 2007, new importers had obviously filled the gap and the amount of ecstasy pills seized, and the number of laboratories discovered by the police, rose once again. Controlling the criminal macro network, therefore, requires continuous effort on the part of law enforcement agencies and also of other actors.

---

<sup>92</sup> D. Cressey, 1969, *op. cit.*, p. x.