



Criminal groups and transnational illegal markets

A more detailed examination on the basis of Social Network Theory

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Abstract. In the study of organised crime, the traditional view of criminal groups as centrally controlled organisations has been replaced by the notion of criminal networks. However, little use has been made of concepts and theories of social networks that have developed in other social sciences. This paper uses concepts from social network theory to describe and tentatively explain differences in social organisation between criminal groups that perform three types of transnational illegal activities: smuggling and large-scale heroine trading, trafficking in women, and trading stolen cars. Groups that operate in the large-scale heroin market tend to be close-knit, cohesive and ethnically homogenous. Groups active in the trafficking of women have a chain structure, while those that operate in the market for stolen cars are characterised by three clusters of offenders in a chain. Both groups are less cohesive than criminal groups in the large-scale heroin market. The differences in social organisation between the three types of illegal activities appear to be related to the legal and financial risks associated with the crimes in question, and thereby to the required level of trust between collaborating criminals.

Introduction

In the field of criminology there is nowadays more emphasis than formerly on the idea that crimes are not always committed by criminals acting on their own, but that many crimes are planned and committed by several offenders working together (Weerman, 2001). Criminology has seen the introduction of terms like group crime, gangs, corporate crime and organised crime. In the last ten years there have been more and more empirical studies into criminal activities that require a certain form of collaboration and organisation. This research has shown that the traditional image of organised crime as an activity that is dominated by centrally controlled organisations, with a clear hierarchy and strict division of tasks is apparently out-dated. Organised crime appears to be better portrayed as a collection of offenders and criminal groups that enter into collaboration with each other in varying combinations (Reuter, 1986; Fijnaut et al., 1998; Kleemans et al., 1998; Klerks, 2000). Partly on the basis of this observation the concept “criminal network” has become popular as a designation for the structure of the groups of people who are involved in organised crime. The ease with which this term is used in criminology, does not however do justice to the abundance of concepts and theories that have

developed in the other social sciences in relation to the formation, structure and effects of social networks. That knowledge would be put to better use in theoretically explaining and empirically investigating criminal collaborative links. We do that by describing for three illegal transnational markets (smuggling and large-scale trading in heroine, trafficking in women and the market for stolen cars) how active criminal networks differ from each other and which characteristics can be attributed to these networks.

We decided to choose these illegal markets because, in order for them to function, a geographical distance must be bridged to match supply and demand: They are transnational forms of crime. For the sake of simplicity we shall, with this criterion, exclude rather locally active criminals from the analyses. We would like to emphasize that this concerns a description, with its goal being to demonstrate that theoretical insights from the social network approach can be highly significant to criminology. In the following section we discuss how social networks arise and what characteristics can be distinguished. Thereafter we will provide a brief description of the three illegal markets named above and analyse the characteristics of criminal networks that are active in these illegal markets. The data we use are derived from the Fijnaut Research Group (Fijnaut et al., 1996), Bovenkerk and Yeşilgöz (1998), Bruinsma (1996, 1999), Kleemans et al., (1998), and Bruinsma and Meershoek (1999), supplemented as necessary with other data. In the last section we will summarise our arguments and discuss a number of hypotheses that might be interesting for criminology.

Characteristics of social networks

The ease with which the term criminal networks is used in the field of criminology, does not do justice to the existing theoretical and methodological literature in the field of social networks (Burt, 1983, 1992; Burt and Minor, 1983; Granovetter, 1972, 1982; Wellman, 1983; Wellman and Berkovitz, 1988; Jansen and Van den Witteboer, 1992; Wasserman and Faust, 1994). In the last twenty years progress has certainly been made on that point. Criminology can thus take advantage of this, even if it is only to be able to formulate its research questions more precisely and to carry out the empirical analyses in a more refined manner.

Social networks consist of two sorts of elements: actors and relations between actors. In most studies of social networks the actors are *persons*, with characteristics and features such as age, sex, education, criminal record, physical strength or temperament. A *relationship* may or may not exist between two persons. The existence of a relationship indicates that both persons are linked to each other directly in some way or other. Just like

people these relationships between persons also have characteristics. In the literature some nineteen different characteristics of social relationships are distinguished. Examples of these are the frequency of contacts, the age (duration) of the relationship, the degree to which the relationship is affective or instrumental, or whether the relationship is hierarchical and the degree to which the relationship is homogenous (i.e. between similar persons as far as personal or background characteristics are concerned).

Although it is possible to distinguish the various characteristics of the relationship between two people analytically, these are the characteristics that are often difficult to distinguish in practice. Most social relationships show various characteristics simultaneously (they are multiplex). Thus at work we find mostly instrumental and hierarchical relationships, but a different kind of content is also attached to them: the other person is regarded as more or less pleasant, there is more or less frequent social intercourse, or there are continuous arguments or one manages to resolve conflicts or learns to live with them. From this great variety of social relationships it can be assumed that our social world is vibrant. People and their mutual relationships form the building blocks of which social networks are constructed.

In addition to persons and relationships, both elements of social network, there are three other aspects that are important when it comes to analysing social relationships: the characteristics of the *network structure* as a whole, the characteristics of the *position* that a person occupies in the network structure, and *relationships between* networks.

Structural characteristics can be attributed to networks as a whole. These include the *size* (the number of persons who participate in it), the *density* (proportion of existing social relationships compared to all possible relationships in a network) and the *cohesion* of a network. When we think of the last characteristic we have in mind the number of intensive and affective social relationships within networks. It is assumed that social networks with many mutual affective relationships are more permanent and durable than if they were only to consist of instrumental relationships. Thus we see within many ethnically based criminal groups that there are affective and other forms of emotional relationships with family members. These networks have a stronger group cohesion as a result. Another feature of a network is that within the network a number of factions or clusters can be identified, that can also be called *cliques*. This term was for example used by the Fijnaut Research Group to typify the Dutch hash networks (Fijnaut et al., 1998). Within *cliques* we see a further compression of the number of multiplex social relationships. The characteristic *segregation* is linked within a network to the presence of *cliques* or clusters. This form of segregation must be distinguished from the segregation of a social network within a society

(see below). By this we mean the degree to which the clusters occupy a more or less isolated position in a social network. The number of links maintained by the clusters with the rest of the network is of importance in this.

Social networks also have a form. They can have the form of a *chain*, or be *hierarchical* or *central*. When social networks have a chain-like form, there are few social relationships between the persons and the links between people in the network are often not direct, but often occur via someone else in the network. Hierarchical networks occur, for example, in the business world or in government. If within a larger social network a particular *clique* holds a central position then this is a *central* network. People have individual characteristics and features, which are separate from their relationships with other people, but they also derive characteristics from their positions in one or more networks. A person can for instance occupy a central position or a more marginal position.

Social networks are also linked to other networks, through persons who are involved in both networks. If social networks were not to be connected to each other in some way or other then nothing would exist that was like a society. All networks would then exist segregated from each other. In the Netherlands that is certainly not the case. There are however in our country many homogenous networks that are formed principally through social position and age. Young people, for instance, have little contact with the elderly and as a result there are only weak links between social networks of the elderly and the youth. The links between separate networks appears to be relevant from the criminological perspective. From the studies conducted by Fijnaut et al. (1998) it appeared that certain suspects often appear in various criminal group analyses, distributed over the country. On the whole they were, from the criminal law perspective, not considered interesting enough to spend a lot of time and energy on detection by the police. These persons however form unusually significant links between criminal groups, for example because they bring people into contact with each other, and they can speak to different groups and people in order to get matters arranged, etc Kleemans et al. (1998) called these the intersections in criminal networks and they especially drew attention to the underexposed phenomenon of the facilitators, who occupy a central position due to a specific skill, such as money launderer or as a forger of documents. Outside the field of criminology it was, in particular, Burt (1992) who pointed out the importance of certain positions that form a bridge between separate networks.

From this brief overview of social networks and the elements from which social networks are constructed, it is immediately apparent that a restricted characterisation such as criminal networks does not do sufficient justice to the complex reality. In that last case there are only relationships between

people with the common characteristic that they commit crimes. It usually remains unknown or vague, as to what and which social relationships they have in common, and which characteristics, form, and content their criminal network has. Other complicating factors are also that social networks can rarely be sharply delimited from their environment and that people participate in different networks that often overlap each other. In addition social networks change their form and content in the course of time, and social networks do not arise randomly. They are the consequence of the inclination of people to associate by preference with those of a similar disposition and of societal preconditions. Thus the local neighbourhood and the school are important conditions for the formation of social networks among young people. For adults, such conditions are their work and the city/town in which they live.

Three illegal markets

In this section we describe briefly three illegal markets, which because of their complex logistics at least require some collaboration and organisation by the suppliers: smuggling and wholesale of heroine, trafficking in women and trading in stolen cars. With the last mentioned this concerns the systematic theft and “recycling” of cars, and the sale of cars or car parts elsewhere. This is therefore not *joyriding*, and/or *car theft for own use* (Bruinsma, 1996). These three activities mentioned above have two common characteristics, in addition to their illegality and the consequent necessity to hide them from criminal investigation agencies. All three activities are forms of crime that serve a *market*. In all cases there are products or services that are obtained illegally, which are moved and that have to be sold to resellers or end users. In addition, all three activities require the physical bridging of a fairly large geographical distance in order to get the “product” to the buyers.

We provide a brief description for each of the three sorts of crimes named above, about what is known about the usual working methods and the criminals involved. There is a certain danger in categorising them in terms of the nature of the market being served, because criminal collaborative links are not necessarily market-specific. After all, it appears from many sources that not all offenders are always specialists (see among other Kleemans et al., 1998). A large number of offenders are engaged in various types of crimes, in some cases with both trafficking in heroine and women and in stolen cars. That can be explained if one considers that certain characteristics and skills can be utilized in different criminal activities, such as a willingness to take risks, an ability to conceal illegal activities, an ability to threaten violence, a willingness to use violence, and having an extended network of criminal contacts.

*Heroin trafficking*¹

Heroin is extracted, with opium and morphine as intermediate products, from poppy heads. Heroin comes from South-East Asia (the Golden Triangle between Thailand, Burma [Myanmar] and Laos) and from areas in Afghanistan, Iraq and Iran (the *Golden Sickle*). For the Netherlands the Golden Sickle is the most important supply source of heroin. Raw opium is processed into heroin in Turkey, and then primarily smuggled by freight trucks over land to Western Europe. According to estimates, 85 percent of the heroin available in the Netherlands has reached our country this way. This used to be via the Balkan route: Greece – former Yugoslavia – Austria. As a consequence of the wars in the former Yugoslavia there are nowadays three alternative routes, including the sea route from Greece to Italy. Smuggling to and import into the Netherlands takes, in many instances, place in large quantities simultaneously. It often involves, going on the volume of the shipments intercepted by the criminal investigation agencies, market values per shipment in the order of 100,000 to several million euro. After arriving in the Netherlands the heroin is stored and sold in smaller lots to middlemen who then further distribute the heroin (after cutting it with other substances) in ever-smaller portions. Bovenkerk and Yeşilgöz (1998, 156 onwards) described four phases in their book about the Turkish mafia. First of all the opium is transported with the aid of Kurdish groups from the source countries to the east of Turkey. Then the opium is transported to Istanbul or to a place near the Mediterranean Sea in order to be processed into heroin. A third group transports the heroin to the destination countries. The fourth link is formed by various close groups of Turks with strong mutual family relationships, who after chain migration often come from one region, town or village in Turkey. They take care of the further distribution in the destination countries.

*Trafficking in women*²

In this case we understand trafficking in women to be the recruitment and transportation of women from elsewhere in order to force them to work under duress as prostitutes in the Netherlands. In the Netherlands, approximately 25,000 men and women work as prostitutes. This meets the (legal) demand for sexual services. In the case of trafficking in women we find a legal market, as such, which is partly serviced via illegal activities, where the women are subject to duress, blackmail and deprived of their liberty. Some of the prostitutes come to work in our country as a consequence of illegal trafficking in women or through trafficking in minors. These victims of trafficking come from all over the world, Nigeria (13 percent), North Africa (5 percent), Latin America (22 percent), Middle and Eastern Europe (19 percent) and even from

the Netherlands itself (32 percent) (Kernteam Noord- en Oost Nederland, 2001: 85).

The working method in transnational trafficking in women can be roughly divided into three phases (Bruinsma en Meershoek, 1999): recruitment of women in the country of origin, transportation of women to the destination country and (sale and) sexual exploitation of women in the destination country. Local criminals usually carry out recruitment in the country of origin. Via personal contacts or advertisements women are given false hope of obtaining a well-paid job in the West. Approximately half the women have already been working as prostitutes in the country of origin (Bruinsma and Meershoek, 1999; Nijboer and Vocks, 2000). In many cases the women know or suspect that prostitution is involved, but they have a rose-tinted idea of what prostitution is in the West. They are generally not well aware that they will in fact be brutally exploited. Because entry to the Netherlands for the residents of most Central and Eastern European countries can be obtained on a tourist visa for three months, the recruiters only need to obtain a visa for the women and then bring them to the Netherlands by car. Often the women's passports are forged to make access to the Netherlands easier. During the journey the women are intimidated to scare them and make them insecure and easier to exploit. After arriving in the Netherlands they are "delivered" in exchange for a payment to the employers and forced to work as prostitutes, mostly in window prostitution. Often the women are sold on to brothel keepers in other cities in the Netherlands, Germany or Belgium. For brothel keepers the victims of trafficking in women are profitable because they allow themselves to be exploited because of the dependent situation in which they find themselves.

In comparison to the drugs trade the logistics of trafficking in women are simple. It seems not to be particularly difficult to recruit women whose economic circumstances are desperate and to get these women to go voluntarily. Trafficking in women by means of kidnapping also occurs, especially from Albania, but is in fact much less common. The women do not need to be hidden and no or almost no illegal actions are required (sometimes forgery of documents or bribery takes place) up to the moment that the women are forced to work as prostitutes by intimidation or violence. The criminal law risks are fairly small, in part because of the difficulty of obtaining legal proof and because the victims are reluctant to report the crime to the police. The buyer runs no financial risks because he only has to pay when the women are delivered and the money is then earned and paid back by the women. On the other hand, trafficking in women, including the revenue illegally obtained through exploitation, is in comparison to smuggling and dealing in heroine less lucrative per transaction, especially as exploitation requires care-

ful supervision and continuous intimidation and the investments only become profitable in the long term.

Trade in stolen cars

Less is known about the trade in stolen cars and the market that there is for this in the world, than about drugs trade and trafficking in women.³ Annually between 5,000 and 7,000 cars “disappear” for good in the Netherlands. That is to say that they are reported as stolen and never will be found. It is assumed that the majority of them are exported either by road or by ship to be sold elsewhere (for example in Africa or in Eastern Europe). In most cases there is a specific division of tasks. One group of criminals steals a car “on demand”; another group is responsible for “recycling,” i.e. fitting it with a new identity by changing its physical characteristics and forging its papers (see among others Bruinsma, 1996 and Tremblay et al., 2001); then couriers drive the car over the border and deliver it to the destination country. For the international market, stolen cars are valuable as a whole car, whilst in the Netherlands their components are more valued.

The trade in stolen cars is piecework, almost by definition because cars are difficult to steal *en masse*. The financial value of the separate transactions is once again, in comparison to the large-scale trade in drugs, relatively small. That is why the total value of this market seems so paltry in comparison to that of the heroine market. Even a generous estimate (Bruinsma, 1996) of the financial volume of this illegal market comes out at “only” 175 million euro (7000 cars with an average market value of €25.000). The level of sentences for crimes that constitute part of the trade in stolen cars (such as theft, fencing and forgery) is not particularly high. In addition the detection of these crimes does not enjoy a high priority at national level. Just like trafficking in women, the trade in stolen cars can be sketched as an illegal activity with a relatively low risk.

Criminal networks and illegal markets

In the previous section we provide a brief sketch of the illegal markets for heroine, women and stolen cars. We have tried to give a general indication of the working methods used and of the size and social structure of the groups active in these markets. In this section we will take a closer look at the relationship between characteristics of the illegal markets and the size and structure of the collaborative relationships between actors in these markets.

Collaborative relationships in the heroine trade

There are in general many family relationships between the members of the Turkish groups, such as between fathers, sons, nephews, cousins and brothers-in-law (Bovenkerk en Yeşilgöz, 1998). Because the number of Turkish people in the Netherlands has become quite large as result of chain migration and because the families involved in the Netherlands maintain frequent contacts with family members in Turkey, it is possible that the entire trade chain from production in Turkey to sale in the Netherlands is based on family relationships. Nowadays Dutch drivers are often used to arouse less suspicion among the investigating organisations. The dominance of Turkish groups in the Dutch heroine market seems therefore not only to arise from the fact that Turkey is an important supply country, but it is also facilitated by the relatively large size of the Turkish community in the Netherlands, through the extended family relationships between the members of this community and through the relatively important role of these relationships in Turkish culture.

In the heroine trade large geographic distances have to be crossed. In doing this there are criminal networks active that, from a social network perspective, can be typified as follows. The constituents of networks are, on the whole, social relationships in which there are very frequent contacts. This serves to scrutinize the trade for irregularities given that there are large sums of money involved, but also to keep an eye on where the other person is. The social relationships are mostly homogenous in nature: those involved have comparable characteristics when it comes to age, social class, country and region from which they come. These homogenous relationships are strengthened by the affective bonds that they have with each other, often based on mutual family relationships and a common region or village of origin in Turkey. Most of the mutual social relationships of the members of a criminal network are thus multiplex, layered. They relate to several life areas. These social relationships are reflected in the characteristics of the criminal network in the drugs trade. The size of such a network is generally large (there are many places in the world where contacts are needed and people have to know each other closely to minimize the risks), the network has a high density (most conceivable social relationships are filled: there are many direct relationships because everybody knows everybody else through the existing family relationships), and the network has strong cohesion.

Collaborative relationships in trafficking in women

In police files, Bruinsma and Meershoek (1999) identified 23 criminal groups and distinguished among them two sorts of collaborative relationships. The

first type, called a *clique*, consists of two or three Dutch professional criminals who regularly collaborate without a specific division of tasks or a hierarchical relationship. Most members are traditional pimps who now again engage in trafficking in women, generally as “buyer” of “ordered” women.

The second kind of collaborative relationship is an organised criminal group of, on average, eleven persons with a specific division of tasks, and that uses more violence and that traffics in considerably more women than the *cliques*. Four of the twelve groups identified are based abroad where they operate brothels, discotheques and bars. These groups do not have regular clients for women in the Netherlands. They thus each time seek interested buyers. The other groups are, as far as working method is concerned, comparable but operate from within the Netherlands, where they exploit brothels, sex clubs and prostitute windows. They work closely together with partners in the country of origin when it comes to ensuring a supply of women.

It is difficult on the basis of the study by Bruinsma and Meershoek (1999) and the cases studied by Kleemans et al. (1998) to indicate to what extent the criminal groups identified actually form cohesive social networks. Yet the description of the working method suggests that those who collaborate in this market do not form cohesive social networks. This applies particularly to the collaborative relationships between suppliers and buyers of women, which often relate to one-off transactions between strangers. The descriptions of the criminal groups also do not give rise to the impression that they maintain anything other than purely instrumental relationships. The traffickers in women thus seem to operate rather more often as “free agents” than as a component of a network of cohesive (family) relationships). This is also expressed in the criminal networks to which they belong.

The form of criminal networks in the trafficking in women can generally be typified as a “chain” with at both ends some smaller clusters: one rounds up the women and the other draws them in and exploits them or sells them on to other persons in our country. The clusters are isolated from each other: the persons at both ends of the chain networks do not know each other or only superficially and the links between the cluster are made by a few persons who maintain what are principally instrumental relationships with each other. The cohesion of the criminal network is extremely low, as is the density of the network. In addition the criminal networks are not usually large. The persons who take care of the links between the clusters occupy a strategic bridging position. They link the clusters to each other by pairing up the market parties. The mutual social relationships are, on the whole, restricted and are characterized by low frequency of contact, absence of affective relationships, the domination of instrumental relationships and absence of multiplex relationships between the members. These relationships are also not necessary, as

was noted above, because the financial risks for every member are limited, even in the event that the women demanded cannot be delivered.

Collaborative relationships in the trade in stolen cars

In this market only a few small native Dutch groups of four or five persons have been identified, who principally operate locally and regionally, and on a fairly small scale. In addition there are a few somewhat larger foreign groups with five to eight members, originating in Eastern Europe. In this article our concern is with the latter. In this transnational trade in stolen cars we see the involvement of three groups of offenders: one group is specialised in stealing cars; one group takes care of “recycling” and the necessary papers; and one group, that is resident abroad, is responsible for the demand for the type of car and for the couriers who take the stolen cars over the borders. These three criminal groups do not generally know each other, but only via-via. Contact is made by telephone and the order (for a specific car) is placed. The lynch pin in the organisation is the person who is responsible for the “recycling” of the cars: he coordinates supply and demand and is responsible for financial settlement. Sometimes these persons are native Dutch, sometimes foreigners who through a legitimate company are often temporarily resident here.

The social networks can be described as three clusters that are linked to each other via “thin” lines. The social relationships are mostly instrumental, are only affective within one of the three clusters and then only to a limited extent. The frequency of contacts between the clusters is low and mostly restricted to instrumental contacts. Within the clusters those involved often have much in common: age, education and background (homogenous relationships), but they almost never maintain affective relationships. The size of the criminal networks in transnational car theft is generally small, the cohesion is low and a degree of density only exists within the clusters and not between them. There is no central cluster and the entire network must be regarded as a chain.

Summarising we can typify the criminal networks in the three illegal markets schematically as is shown in Figure 1.

Discussion

In the field of criminology the term criminal networks has recently become fashionable as a designation for the structure of groups of persons who are engaged in organised crime. In this article we have shown that criminal networks can be specified in more detail when the theories, concepts and methodologies of social network theory are applied. Our discussion shows that crim-

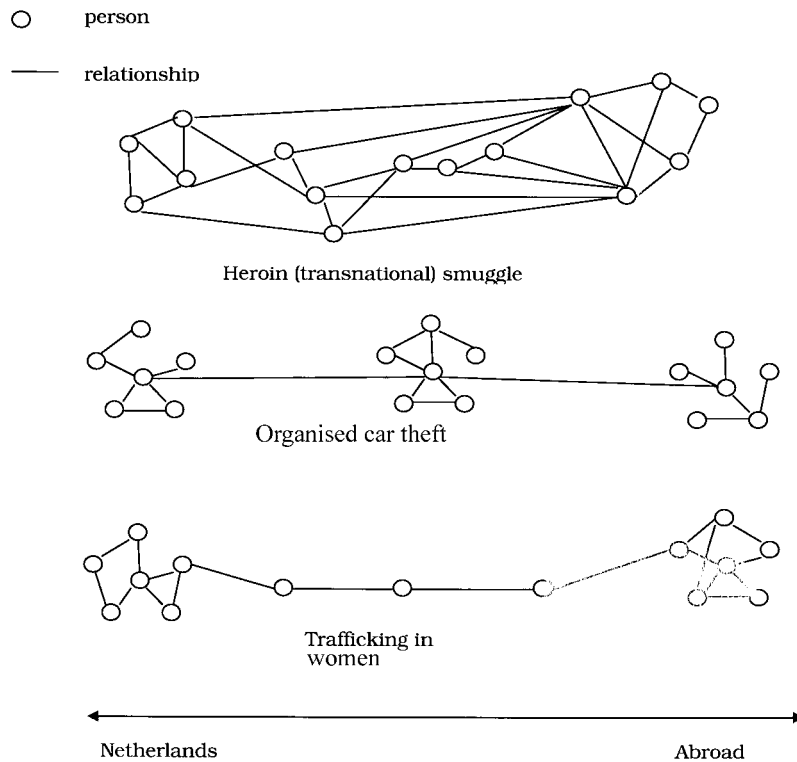


Figure 1. Structure of criminal networks in three transnational illegal markets.

inal groups that are engaged in large-scale transnational smuggling and trading of heroine, are mostly based on collaboration between members of cohesive (and often ethnically homogenous) social networks. This seems to be much less the case in the trafficking of women and the trade in stolen cars. We will conclude by formulating hypotheses about the composition and characteristics of perpetrator groups in transnational illegal markets on the basis of our portrayal of social networks.

A first hypothesis is that networks that are characterised by high density and a large proportion of affective relationships (in short: cohesive networks) are pre-eminently suited to criminal collaborations where a great deal of mutual trust is needed. Trust is principally important in activities that are linked to major criminal and financial risks. The first hypothesis would seem to be supported by our finding that collaboration in the smuggling of and wholesaling of heroine, by far the most risky enterprise of the three we have dealt with, takes place primarily by criminals who are mutually embedded in

cohesive networks. Social networks in both the other markets, and also in the less risky street trade in drugs, are less cohesive.

The second hypothesis is that collaborative relationships between persons, who jointly participate in cohesive networks, are more durable and stable than collaborative relationships between persons who participate in less cohesive networks. We expect therefore that the collaboration between offenders in cohesive networks will be of a longer duration, because their mutual relationships are not merely instrumental, whilst persons who participate in networks that are looser often restrict their collaboration to just one or a few criminal projects. We are unable to conclude whether this hypothesis can be substantiated or not, from our sketch of criminal networks in the three markets dealt with here. This sketch is after all mostly based on the contents of police files of criminal investigations, in which rather more long term collaborative relationships are recorded.

A third hypothesis is that criminal groups with a few mutually segregated clusters in less risky criminal activities collaborate more than criminal groups in which the clusters are more directly connected to each other.

In all these hypotheses the assumption is that the structure of social networks is a fact and this structure is, to a greater or lesser degree, suitable for indicating collaborative relationships between network members. From this perspective the social network thus forms an infrastructure, which is not a priori criminal, for criminal collaboration. The question is however, to what extent does criminal collaboration in itself also create (affective) links between the collaborating partners and therefore as such generate social (criminal) networks. In this perspective social networks do not exist in advance, but rather that they arise as consequence of regular criminal collaboration. After all, outside the field of criminology it is also not unusual for social networks to occur within groups of people who, in one way or other, regularly have contact with each other or meet each other, such as colleagues, classmates or neighbours. The question is thus whether criminal collaboration should be regarded as a cause or as a consequence of social networks. For the moment that question remains unanswered.

Another question that we have not discussed here, relates to the causal relationships between criminal networks and illegal markets. Do certain illegal markets generate a particular composition and specific characteristics of criminal networks or do offenders adjust their criminal networks to the illegal markets in which they operate? It is also not possible to exclude with any certainty the idea that the criminal networks that we have described here may be the least successful in the illegal markets mentioned, because they have been detected by the police. In order to obtain more insight into this question, new, specifically targeted empirical studies are urgently needed.

Finally we wish to state that the use of the concept “criminal networks” in criminology is in general not precise enough. Networks as such are not criminal. Networks consist of persons and relationships between persons. These persons have characteristics. In addition to age, sex, social status, “criminal” (committing crimes) is one of these characteristics. Social relationships also have many characteristics. Both offenders and non-offenders maintain non-criminal relationships with other criminals and non-criminals (Sutherland’s theoretical views are strongly based on this notion). If we only filter out the criminals and their mutual criminal collaborative relationships, then a “criminal network” arises that does not do justice to the other relationships within larger social networks. Criminology can therefore profit from the social network concepts that have been developed in other disciplines.

Notes

1. Knowledge about the working method and social structure of groups that inside or outside the Netherlands are engaged in drugs trafficking has been drawn from Van Duyne (1995), Fijnaut et al. (1996), Kleemans et al. (1998) and Bovenkerk and Yeşilgöz (1998).
2. This section is based on Fijnaut et al. (1996), Fijnaut (1994), Bruinsma (1999), Bruinsma and Meershoek (1999), Nijboer and Vocks (2000), and Smit (2001).
3. Here we have relied mostly on Bruinsma (1996) and the sources discussed therein.

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