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ILLICIT NETWORKS RECONFIGURING STATES

Social Network Analysis
of Colombian and Mexican Cases

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What to Observe and What to Measure
in StC and CStR processes

Introduction

People have often thought that as a rule, criminal gangs confront the State. We have this preconceived notion of the State as a homogeneous entity acting as a block to guarantee law enforcement, and of organized crime, such as drug trafficking, seeking ways to get away with breaking the law. In achieving these two objectives, violence ensues: the State resorts to coercion, and organized crime resorts to bribery, kidnapping, murder, or terrorism. However, research carried out during recent years shows that the history of the relationship between the State and organized crime is not always one of confrontation. Indeed, in some cases the latter has been able to infiltrate and to co-opt some State institutions in order to achieve its unlawful objectives. On the other hand, government officials and politicians, in many cases, get along well with organized crime, taking advantage of its criminal power in order to obtain egoistic, exclusive and morally unlawful benefits to the detriment of public interests. It has been reported around the world that policemen infiltrate gangs, criminal gangs bribe government officials to obtain privileged information, and government officials reach secret agreements with gangs of outlaws. However, the social situations analyzed in this book go beyond the classic stories of bribed policemen, infiltrated gangs, or egoistic government officials. This book analyzes cases in which the State has been infiltrated and manipulated, sometimes resulting from alliances between

the organized crime and lawful officials and organizations. These alliances can be observed even at high decision-making levels, affecting the structure and operation of institutions.

In previous books, the concept of Co-opted State Reconfiguration (CStR) has been introduced to describe situations in which unlawful groups reach agreements with authorities in order to infiltrate State institutions. This concept was also useful to describe situations in which lawful organizations, such as political movements, groups of individuals as landowners, government officials and politicians, establish alliances with unlawful groups to take advantage of their criminal and violent potential. In both cases, the objective is to manipulate and use legitimate institutions in order to obtain unlawful benefits, or obtain lawful benefits that are socially questionable. In both cases the result goes beyond the economic framework, encompassing objectives of political, criminal, judicial and cultural manipulation, and to gain social legitimacy. The CStR has been defined as a more developed and complex process of State Capture (StC), since in the traditional StC lawful economic groups manipulate law making in order to attain exclusive economic benefits.

Against this backdrop, the objective of this book is to go deeper into the conceptual, methodological, and empirical issues of the State Capture (StC) and Co-opted State Reconfiguration (CStR). To fulfill this objective, a conceptual and empirical analysis of specific cases of organized crime in Colombia and Mexico will be made. A methodology identifying when a social situation may be defined as either traditional or systemic corruption, StC or CStR, will be presented, developed, and applied. This methodology will also be used to infer the institutional scope, or the degree of

damage that a criminal organization may impinge on informal and formal State institutions. Therefore, the StC and CStR will be the guiding concepts throughout the book. The empirical issues will be developed through the social network analysis (SNA), in which alliances such as the above mentioned are found.

The first network analyzed is a Mexican cartel, well known for its extreme violent actions throughout the past decade. The second network analyzed is related to an unlawful paramilitary group operating in a Colombian province called Casanare. This province has been favored for more than two decades with huge amounts of public resources coming from oil royalties. However, most of the province's budget has been misspent, stolen, or appropriated by lawful agents and outlawed organizations, and diverted for purposes other than providing for the social needs of a poor and backward population. The third network is related to five Colombian provinces in the Atlantic Coast of Colombia: *Sucre*, *Córdoba*, *Cesar*, *Atlántico*, and *Magdalena*. In these provinces, the United Self–Defense Forces of Colombia [*Autodefensas Unidas de Colombia*, AUC], the most powerful unlawful paramilitary group that has ever existed in the recent Colombian history, consolidated its unified command at the end of the nineties. This group, with its increase of *de facto* power, combined violent actions, drug trafficking, and corruption in order to grab large portions of public budget, manipulate elections, and ultimately, get elected to the Colombian Congress. These actions were carried out with the purpose of promoting law making that favors its interests and achieving social legitimacy at the same time.

The first network will be referred hereinafter as "*Mexican Cartel* Network," the second as "*Casanare* Network," and the third

as "*Atlantic Coast* Network." The cases modeled hereunder are mainly the result of access to judiciary information. Therefore, the analysis herein is supported by the so-called "judicial truth", which by its nature is more restrictive than "social truth". Although the only source of information used in this book are judicial files, this information could always be complemented with other sources to get a better approximation to reality.

The methodological analysis of this book is based on social networks, which will be referenced as Social Network Analysis (SNA). This methodology allows identifying the characteristics and structure of the social relationships configuring those social phenomena. Following the methodology laid out in Chapter 2, models were developed when processing the information contained in the judicial and administrative files that were collected from the competent authorities of the countries in question. These models allow to ascertain the identity, role, functional/organizational and functional/institutional association of participants in the process, as well as to determine the nature of the relationships established in each network analyzed. The results shown in this research were obtained by processing a specific set of information, and therefore should be interpreted with care, always as *partial* results and *open* to further refining through additional sustainable and accurate information. This means that if the models are processed again with new data, some characteristic features of the networks will change.

This caution is not intended to undermine the advantages of the methodology employed or the results obtained, but rather to point out a fact that is very often overlooked. Indeed, any research methodology has these kinds of limitations: the models change according to the quantity and quality of the data.

However, since the models herein are based on judicial and disciplinary information, we are able to overcome some difficulties regarding empirical verification and information checking. It is evident that judicial sources are fairly "objective"; such information has been validated through judicial and technical protocols crafted to achieve high levels of confidence and coherence *vis-à-vis* the facts.

This book has seven chapters. The first chapter lays out the background of State Capture (StC) and Co-opted State Reconfiguration (CStR) concepts. The second chapter explains in detail some theoretical elements of social networks relating to the concept, methodology, and basic components of analysis: centrality indicators and sources of social capital. These methodological elements are key to understanding the role that some social groups play in formulating and facilitating the setting up of social networks, including those of organized crime. The third chapter lays out the theoretical foundations of the methodology used to identify and analize the StC and CStR institutional scope.

The fourth, fifth and sixth chapters present the results of the social networks analysis for the Mexican Cartel Network, the Casanare Network, and the Atlantic Coast Network, respectively. After modeling the social networks, it is possible to use the information resulting from those models to understand the institutional impact caused by each process of StC or CStR. In chapter seven it is used that information in order to make a comparison between the StC & CStR levels of institutional scope for those three social situations. The last part of the book also is devoted to reflections on the principles of public administration, giving justification for the revisiting of current principles in light

of the existence of these groups analyzed. Usually, current policies are not ready to deal with the actions of these powerful lawful and unlawful groups, whose objective is to infiltrate and to co-opt the State in order to attain egoistic and exclusive advantages of different kind. Acknowledging these social dynamics, it would be possible to move forward towards a trans-disciplinary interpretation of State conformation, reconfiguration, and consolidation; it is, towards an integrative notion of the State, in which theories and social reality are coherent. At its turn, this implies acknowledging the interaction of criminal, political and psychological dimensions of social relationships within a particular context.

At the same time, this acknowledgement may lead to abandoning naïve interpretations of State consolidation processes. According to these naïve interpretations, it is not essential to acknowledge the existence of structural failures of orderly operating markets and democracy in fragile or embryonic States, such as in the case of States facing severe situations of organized crime, like drug trafficking. Omission of actions and institutional effects of unlawful organizations over the formation of formal and informal institutions, leads to an incomplete historical and prospective narrative of the consolidation of States (Elias, 1994) facing severe situations of organized crime and drug trafficking. Therefore, it is imperative to recognize structural fractures and institutional effects of unlawful and powerful organizations over the conformation of formal and informal institutions in order to grasp an adequate historical and prospective understanding of the process of formation of some contemporary States.

Chapter 1

Conceptual Framework

It has been acknowledged that during the last decade the social process of corruption in Colombia has shown novel features, different from those that are typically recognized and defined by the traditional analysis of corruption. Usually, corruption –in terms of public policy– has been defined as the abuse of the public function in order to obtain private and exclusive benefits (World Bank, 1997). According to the World Bank, when a government official accepts or requests bribes for his private benefit, he is abusing of his public function. Specifically, the World Bank points out that this should be the most widely analyzed type of corruption (World Bank, 1997). Indeed, the World Bank has drawn the attention to the importance of studying the bribery practice when oriented towards: (i) Achieving preferential treatment in respect of conferral of contracts, licenses and concessions; (ii) the usufruct of government benefices, either monetary or through subsidies, insurances and pensions, or in kind through grants or aids to sectors such as health, education, or housing programs; (iii) tax evasion; (iv) influencing the timeframe for the issuing of governmental decisions and (v) altering the results of legal decisions; for instance, those of High Tribunals (World Bank, 1997).

Analysis regarding corruption has focused on bribery practices and the interaction between public and private individuals pursuing mainly economic interests. However, in Colombia, the intervention of illegal armed groups and the use of coercive means replacing or complementing bribery, are features justifying the qualifiers of "violent corruption" (Mockus, 2008), "armed corruption" (Flores, 2008) or "narco-corruption" (Cepeda, 1997). This means that the participation of unlawful organizations is a distinctive feature of Colombian corruption, since in general, traditional corruption analysis omits the use of coercive methods (Garay L. J., Salcedo-Albarán, Guerrero, & De León-Beltrán, 2009; Presidency of the Republic of Colombia, 2005).

The same comment applies to States other than Colombia, where studies on corruption analysis and administrative processes only contemplate the participation of lawful groups pursuing economic benefits through bribery. For instance, a number of studies on StC carried out in the late 1990s in East European countries during their transition to market economy, focused on bribery by economic groups to influence law making, resulting in obtaining tax or administrative benefits (Pesic, 2007). At the same time, those countries exhibited a strong mafia activity encompassing trafficking of nuclear weapons, trafficking of illicit drugs, and prostitution markets, amongst others.

One of the distinctive features of the traditional analysis regarding the concept of State Capture is the omission of the intervention of unlawful groups and of methods of coercion as corrupt procedures. Usually the StC is defined as the intervention of individuals, groups, or lawful companies in the drafting of

laws, decrees, regulations, and public policies in order to obtain long-lasting individual benefits, and mainly of economic nature in detriment of public interests (Hellman, Jones, & Kaufmann, 2000; Hellman & Kaufmann, 2001; Hellman & Kaufmann, 2000). In that sense, a traditional StC situation is configured when companies and economic groups, using bribery, influence legal and regulatory State structures in order to obtain economic or regulatory benefits.

The following are the main features of the traditional concept of StC: It is (i) the action of lawful groups such as economic groups, domestic and transnational companies; (ii) taking the form of corruption with economic motivation and consequences; (iii) implemented mainly through bribery at domestic and transnational level and (iv) exercised over the legislative and executive branches at central level (Garay L. J., Salcedo-Albarán, & De León-Beltrán, 2009).

The traditional StC may be interpreted as an advanced stage of systemic corruption unlike those low-scale and sporadic corruption situations. Low-scale corruption happens, for instance, when a person offers a bribe in order to have access to a public service. However, when millions of dollars in bribes are being paid by a company in order to obtain a long-lasting tax benefit, it turns out to be a large-scale corruption. The causes and consequences of the former tend to be sporadic and short-lived; on the other hand, the scope of the latter tends to be long lasting. Furthermore, few government officials participate in low-scale corruption, mainly because of the low administrative level, whereas to configure a large-scale corruption scenario it requires the intervention of

decision-making officials occupying strategic jobs within the hierarchy of public administration. In this manner, long-lasting agreements are reached.

One of the worst scenarios is observed when large-scale corruption is oriented towards the intrusion in institutions controlling and preventing corruption. When entities responsible for controlling and preventing corruption become victims of corruption, then *systemic corruption* takes place (Klitgaard, MacLean-Abaroa, & Lindsay, 2000). The characteristic of systemic corruption is the participation of many people establishing long lasting agreements and badly affecting the operation of institutions responsible for corruption control.

The execution of socially perverse agreements of a differing kind among illegal armed groups, politicians, government officials, and members of the civil society in order to manipulate the drafting of laws, decrees, and decisions of public policy, configure a more perverse scenario than typical corruption. However, traditional analyses of StC usually omit scenarios in which unlawful groups participate and violence complementing or substituting bribery is used. After examining some traditional StC situations in States where the Rule of Law is embryonic or in process of consolidation, like Colombia or Mexico, the following has been found:

(i) *The interest to capture the State is not exclusive of lawful groups* since there are many unlawful groups willing to manipulate institutions to favor their interests (Garay L. J., Salcedo-Albarán, & De León-Beltrán, 2009).

(ii) *The motivation to capture the State is not of a solely economic nature*. For any unlawful group, the interest is not only to become wealthier, but also to use wealth as a mean to diminish criminal exposure (Garay L. J., Salcedo-Albarán, & De León-Beltrán, 2009).

(iii) *Bribery is not the only method of StC*. Unlawful groups usually know how to use technologies of violence endowing them to increase their effectiveness in reaching their objectives. The technologies of violence include kidnapping, murder, and threats, among other forms of violence. These violent actions are part, as cause or consequence, of the dynamics of corruption and illegality in a country, and are overlooked in the traditional theoretical and empirical analyses of corruption.

(iv) *Processes of StC are not limited to influencing decisions of the legislative branch at the central level, but may be extended to other branches of public administration*. It is more likely that such processes take place, at least at the outset, at the decentralized level of public administration, since in general, therein the institutions are weaker. Additionally, the cultural and moral implications of capture processes are usually omitted, and it has been neglected that unlawful groups also have reason to legitimize and institutionalize their actions, objectives, and behavior (Garay L. J., Salcedo-Albarán, & De León-Beltrán, 2009).

For all of the foregoing, the objective is to improve the traditional StC concept, enriching the character of actors and the scope of social relationships involved. It is necessary to consider any kind of institutional interference –not only bribery, but also different technologies of violence that allow illegal agents

to diminish penal risk and to realize their egoist or criminal interests. Through bribery and violence, illegal agents are able to manipulate institutions in the security branch, the judicial branch, the legislative branch or the executive branch at the local, regional and national levels.

In the StC processes, social relationships are usually established in one direction. Usually, lawful agents outside of the State try to manipulate legislative institutions. In other cases, when unlawful agents are intervening in the process, and an advanced stage of StC is configured, the social relationships are usually established from the unlawful toward the lawful agents. Both cases are coherent with the literal sense of "State Capture" as a process originated outside of the State, carried out by an external agent or organization that is capturing officials or formal institutions.

On the other hand, a subsequent process called Co-opted State Reconfiguration (CStR) takes place in advanced and complex stages with the following characteristics: (i) participation of lawful and unlawful groups; (ii) the benefits sought are not only economic but mainly criminal, judicial, political, and social legitimacy; (iii) the use of coercion methods and/or political alliances that are a complement of or a substitution for bribery and (iv) the sphere of influence happens in different branches of public power and different levels of the public administration.

Garay L. J. *et al.* (2008) define the CStR as: "*The action of lawful and unlawful organizations, which through unlawful practices seek to systematically modify from inside the political regime and to influence the drafting, modification, interpretation, and application*

of the rules of the game and public policies. These practices are undertaken with the purpose of obtaining sustained benefits and ensuring that their interests are validated politically and legally, as well as gaining social legitimacy in the long run, although these interests do not follow the founding principle of social welfare."

In basic stages of StC, lawful agents promote the process, but in advanced and more complex processes of StC, like some of the cases analyzed in this book, unlawful agents also carry out this function. Contrary to what is observed in advanced stages of StC, social relationships in the CStR process are not only established from unlawful agents toward lawful agents. Indeed, mutual or even reversed alliances and political agreements –from unlawful to lawful agents– are established. This is coherent with the sense of the "co-opted reconfiguration" concept, in which co-optation can be carried out in any direction. In CStR it is therefore possible to find scenarios in which legal agents –i.e. candidates or officials– are co-opting illegal agents –i.e. paramilitary or subversive groups–, in spite those relationships may also be in reverse. In the CStR process it is necessary for the legal and illegal interests to be coordinated, independently if it is based on a lawful or unlawful initiative. The coordination of interests is sometimes observed in inter-organizational co-optation (Burt, Christman, & Kilburn, 1980). Nevertheless, the co-opted reconfiguration of a State is a process by which institutions are manipulated and even reconfigured from the inside, and not just captured from outside as in a typical StC process.

The CStR is nearly always characterized by procedures of Instrumental Institutional Capture (IIC), consisting of the use

of formal and informal institutions to infiltrate the core of the State, i.e., some key democratic institutions for the operation and support of the Rule of Law. These key institutions are those responsible for the reproduction of formal and informal institutions. The following types of IIC can be identified: Instrumental Capture of Academia (ICA), Instrumental Capture of Media (ICM), Instrumental Capture of Civil Society (ICCS), or Instrumental Capture of Political Parties (ICPP). Although in the last chapters of the book a deep analysis of the ICPP is developed, all of those forms of IIC are possible, and therefore objects of empirical analysis. It means that any institution can be instrumented in order to infiltrate and finally reconfigure a key institution of the State.

Although the above mentioned forms of IIC and the process of CStR are originated in unlawful groups, sometimes the structural scope and the IIC procedures may be pursued and fostered by lawful groups seeking structural but non-legitimate modifications of the institutional framework. In other words, both lawful and unlawful groups may kick off the process. The social network methodology allows us to understand the dynamics of social relationships, and is useful for determining whether the predominant social relationships involved in a particular CStR situation was originated in lawful or unlawful groups.

The CStR concept is based on theoretical elements from the economy of crime, the microeconomics of corruption, and rent seeking. Within the conceptual framework of the economy of crime, conducts configuring CStR scenarios are interpreted as rational and oriented towards maximizing some types of benefits (Becker, 1968). The assumption that economic agents are rational,

seeking to maximize benefits and to minimize transaction costs, has been used for the analysis of different crimes (De León-Beltrán & Salcedo-Albarán, 2007). Therefore, this assumption may be used to understand conducts configuring StC and CStR scenarios.

Under this conceptual framework, successful corrupted groups, and likewise rational criminals, make the appropriate judgment seeking to minimize the probability of being detected, investigated, brought to trial and penalized (Garay L. J., Salcedo-Albarán, Guerrero, & De León-Beltrán, 2009). However, some actions or interventions of free riders and non-organized agents may complement the configuration of complex and stable corruption scenarios. This is why the microeconomics of market corruption should be taken into account. The analysis under this framework allows for the identification of those scenarios where free riders take advantage of determined market conditions in order to attain their particular interests to the detriment of the general interest (Oliviera, 1999; Oliviera, 2002).

Finally, the social practice of rent seeking is also related to the StC and CStR processes. Rent seeking refers to taking advantage of market failures and State fragility, facilitating pressure, filtration, and co-optation by some individuals and groups in defense of their own economic and political interests (Garay L. J., 1999; Garay L. J., Salcedo-Albarán, Guerrero, & De León-Beltrán, 2009, p. 28). In this sense, rent seeking refers not only to the "*expression of the distributive struggle between different social sectors for rents already existing,*" but also to the "*expression of efforts to artificially generate, through State intervention, (…) possible sources of rents*" (Pritzl, 2000, p. 72).

Social capital is also an essential concept supporting the analysis developed in this book. Social capital is developed through the establishment of new relationships with the consent of parties involved. The notion of social capital is useful to explain situations of improvement in grades of students or income of employees (Loury, 1977; Brass, 1984). However, social capital can also be created through coercion –in which case, it turns out to be a "*perverse social capital*" (De León-Beltrán & Salcedo-Albarán, 2008). The concept of social capital, either perverse or socially beneficial, enables us to understand the relevance of social contacts. This concept also allows understanding the nature of the social relationships –either coercive or by mutual cooperation– that are established for the configuration of social networks oriented towards the fulfillment of objectives socially beneficial or socially perverse.

SNA Methodology

Methodological concepts

Social Networks and Centrality

As mentioned previously, systematic corruption requires a durable participation of different agents. Any form of systematic corruption therefore implies establishing durable social relationships. In turn, these social relationships are arranged as a social network, allowing investigation of their structural characteristics. For instance, it is possible to analyze types of agents, nature of relationships, flow and levels of information, and therefore, quality of social capital (Degenne & Forsé, 1999; Wasserman & Faust, 1994). This book analyzes social networks focusing on the organizational aspects of systematic corruption. In order to proceed with this analysis, some key methodological issues are explained below.

Each point in a network of social relationships, defined as a *node*, represents an agent. Each line connecting two nodes, defined as an *edge*, represents a social relationship. The edge may

have a particular direction, in which case, an arrow connects the nodes. The edge indicates the presence of a specific relationship between nodes, and the arrow shows the specific direction of that relationship. For instance, if *Agent X speaks to Agent Y*, then there is an arrow from a node representing *Agent X* towards a node representing *Agent Y*.

The arrangement of the nodes and edges, or arrows, may be represented through graphs. A graph is a finite set of *n* nodes connected through *edges* or arrows (Degenne & Forsé, 1999, p. 63). This means that if there is no arrow connecting two nodes, these nodes have not established a social relationship or a social contact. Graphs have been used in social sciences as a method to represent individuals arranged in a group, and their social relationships (Degenne & Forsé, 1999, p. 63; Bornholdt & Georg, 2003); in criminology, graphs have been used to identify structural features of illicit networks (Morselli, 2008) and situations of corruption (Baker & Robert, 1993). Once the graph corresponding to a set of relations is elaborated, then it is possible to analyze the characteristics and dynamics of the agents involved. With this representation, it is possible to identify the *central* nodes, that is, the most important agents of the group of individuals involved in the network.

Some agents or nodes are more relevant than others. An important agent or node enjoys a relevant position in the conformation of all social relationships within the network. This means that this node decisively contributes to configure the structure of that network. Being a relevant node has two specific meanings, each one defined by a criterion: (i) That the node is very connected or (ii) that the node concentrates a high proportion of

the information that is flowing across the network. In both cases of relevance it is possible to speak of *central* nodes, even though such centrality has two different meanings (Everett & Boratti, 2005). To identify those central nodes within a social group, it is necessary to calculate centrality indicators. In the present book two indicators of centrality are calculated and used, and each indicator is therefore coherent a particular criterion of centrality.

First criterion of centrality:
Being the most connected node

According to the first sense of centrality, it is possible to identify the most connected node by calculating the *degree of direct individual centrality* or *degree centrality* (Degenne & Forsé, 1999, p. 132). Therefore, the node with the highest degree of *direct individual centrality* is the node with the highest quantity of direct connections with other nodes. With the purpose of finding the relative centrality through the degree of individual centrality, it is possible to calculate an "*index of relative or weighted centrality for each node, (…) by dividing her score or absolute centrality by the maximum possible centrality for the graph [when this indicator is calculated] (…) 0 denotes an isolated node, while 1 designates*" (…) (Degenne & Forsé, 1999, p. 133) a node that is connected with every other node in the network.

The node with the highest degree of individual centrality within a network is referenced as a *hub*, which is the most connected node, concentrating social relationships. In this sense, the *hub* represents a privileged position of influence in social relationships within the network. The hub is the most "popular" agent in the sense that it is the most connected and most known agent within

the network. Central nodes, or *hubs*, have many more links than peripheral nodes, which in this case implies more relationships and social contacts (Degenne & Forsé, 1999, p. 133).

Second criterion of centrality: Arbitrating information

A second criterion of centrality is conceptually based on the concepts of *structural holes* and *structural bridges* (Burt, 2005; Burt, 1992; Burt, 1997; Burt, 1998; Burt, 2000). According to these concepts, being highly connected, as in the case of the hub, does not guarantee the largest concentration of social capital. Strong social relationships are a source of social trust (Coleman, 1988). Nevertheless, after several social interactions, each node can get connected with every other node and information within the network becomes redundant. In this case, defined as a clique, being a hub does not necessarily imply knowing more or concentrating more information. In fact, when each node is connected with every other node, there is no hub because each node has the same amount of connections (Graph 2.1).

Graph 2.1
A clique
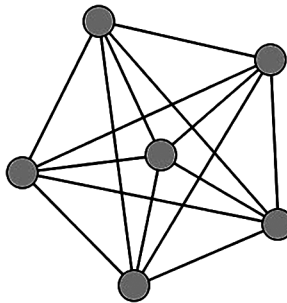
In this case, the *degree of direct individual centrality* does not provide information about how relevant a node is. Therefore, there is no information about the levels of social capital because every node has the same amount of social capital. Nevertheless, "*some weakly connected individuals (…), may still be indispensable to certain transactions*" (Degenne & Forsé, 1999, p. 135). In this situation, a question about social capital arises: How is it possible to increase social capital when the social network is closed and the information is redundant, or when each node is connected to every other node?

When the social network with redundant information gets connected to another network, through a single node or a single edge, the flow of non-redundant information is increased across both networks. This type of connection establishes a new network, and therefore different levels of social capital emerge across these sub-networks that are now configuring a new network. The single node linking the previously unlinked networks may be interpreted as a *structural bridge*, because it allows a flow of information where there was a structural hole. The structural bridge therefore concentrates information and social capital, and even more important, is able to arbitrate information. The node acting as structural bridge not only increases the levels of social capital in the new network, but also increases its own level of social capital; it becomes a powerful node, even if it is not highly connected, because the information between the two sub-networks is flowing through it: "*The greater an individual's actual or potential intermediary value to all members of a network, the greater his control over communication flow and independence of others to communicate*" (Degenne & Forsé, 1999, p. 136). The Graph 2.2 illustrates a node acting as structural bridge.

Graph 2.2
Two cliques connected through a single node
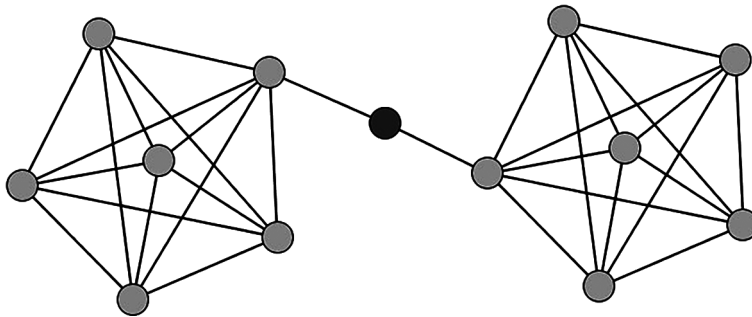
In order to determine how relevant a node is for the potential conformation of a network, it is not enough to pay attention to the amount of connections; it is also necessary to evaluate the centrality indicator of *betweenness*. This indicator determines if a specific node is intermediating among other nodes of the network; the node with the higher indicator of *betweenness* is the node with the higher power or potential to arbitrate information: "*Such an individual can easily influence the group by withholding and/or distorting information that passes through her hands. She is also in a better position to coordinate information for the entire group. From all of the above, she clearly occupies a central position*" (Degenne & Forsé, 1999, p. 136). The betweenness centrality hence identifies if a specific node appears in a larger or shorter extent in the geodesic routes of the network.

Levels of Social Capital and centrality indicators

It is possible to identify and analyze the structure of social relationships by calculating centrality indicators, since these

indicators determine the relevance of a particular node or a group of nodes within the structure of a social network. Social capital, in an individual sense, is metaphorically explained as "something" that the individual possesses (De León-Beltrán & Salcedo-Albarán, 2008). This notion of social capital is coherent with the calculation of *direct individual centrality*.

Nonetheless, it is also possible to calculate the level of social capital for a group of nodes by the group centrality indicator (Everett & Borgatti, 2005). After defining a group of nodes within a social network, group centrality consists of calculating the amount of contacts that other nodes share with this specific group. In this sense, as shown in the Graph 2.3, the degree of group centrality determines the level of social capital that is flowing between a group that is located inside a network, and other nodes outside that group but inside the network.

Graph 2.3
A group, or sub-network, inside a network
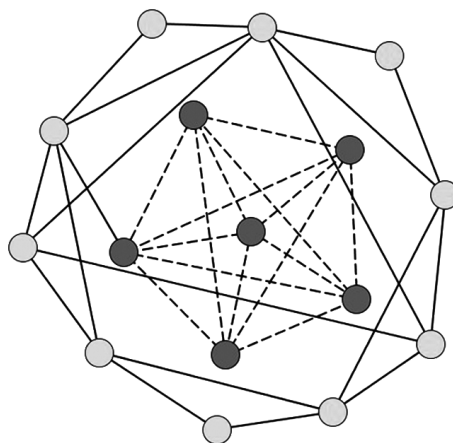
In general, the concepts of group centrality and individual centrality are related with alternative methodological approaches chosen to understand the structure of a social network (Degenne & Forsé, 1999). Given that our purpose is to identify the most relevant agents in the network structure, the indicators of individual centrality will be calculated to identify and understand the role played by certain important agentes within an organization.

Since the analysis developed in this book focuses on individual social capital, the *direct individual centrality* indicator will be calculated for each node of a social network. This indicator will establish which agent has the largest number of individual links; this tends to be the most relevant agent in the conformation of the social network (Everett & Borgatti, 2005; Degenne & Forsé, 1999). In the absence of this agent, important changes in the structure of the social network can be expected.

Methodological Procedure

The agreements among public officers, politicians and candidates for public office, private agents, and members of unlawful armed groups, can be modeled through a graph corresponding to an *nxn* matrix in which n = *agent*. This means that elaborating a relational matrix is the first step to generate the graphs of the social network.

The relational matrix must have the same amount of rows and columns, in which the names of the agents are arranged in the same order. Then, when the agents and relationships have been identified in the qualitative source, a 1 is marked if there is a relationship between the agent-tag in the column and the

agent-tag in the row. For example, if there is a social network comprised of Agent 1, Agent 2 and Agent 3, we have 3 nodes (agents) arranged in a 3x3 matrix. Additionally, if we find that Agent 1 called to Agent 2, Agent 2 spoke to Agent 3, and Agent 3 sent money to Agent 2, then the resulting relational matrix will be as follows (Table 2.1):

Table 2.1
Example of a 3x3 relational matrix

	Agent 1	Agent 2	Agent 3
Agent 1	0	1	0
Agent 2	0	0	1
Agent 3	0	1	0

Modeling each social network analyzed in this book required elaborating a relational matrix. Each relational matrix is based in judicial files from the Office of the General Prosecutor, the General Attorney, the Supreme Court and other administrative authorities in Colombia and Mexico. Processing the information consists of reading and coding the description of evidence records, the reconstruction of facts, and the codification of sentences and other administrative acts, in order to identify agents and social relationships.

Finally, each matrix containing information on how many nodes are connected was used to generate the graph of each social network. Those graphs were generated using the software VISONE version 2.X, developed for graphing and analyzing social networks. The resulting graphs are as follows (Graphs 2.4 - 2.6):

Graph 2.4.
Mexican Network

Graph 2.5.
Casanare Network

Graph 2.6.
Atlantic Coast Network

After calculating the centrality indicators, it is possible to generate information regarding the characteristics and the structure of the network. It is possible, for example, to draw the inner area of the node or to locate each node in function of its particular indicator by applying graphic-algorithms.

In general, the whole process of reading and coding the information, elaborating the relational matrix, graphing, calculating indicators, and applying graphic-algorithms, allows the evaluation of the social capital flow and the structure of social relationships established within the network (Baker & Robert, 1993, p. 856).

In addition to the analytic procedure described below, it is also possible to analyze each relationship established in the network. In the graph, an edge is nothing but a line, but "inside" that line there is important qualitative information regarding the description of the social relationship established between the nodes. In order to analyze that information, *Método* developed algorithms that allowed tagging and classifying social relationships, to calculate concentrations of those relationships established in the social networks. For example, when processing the information regarding the "Casanare" Network, no explicit references to the association of private agents for conforming self-defense groups were found. Unlike the Casanare Network, in the "Atlantic Coast" Network, explicit references of those associations and agreements were corroborated. This means that in the Atlantic Coast Network there is a category of social relation that is not present in the Casanare Network. That single category of social relation was then empirically analyzed to determine its importance *vis-à-vis* other relationships. In the following chapters, those results will be presented and discussed.

Conceptual Principles to Graduate the Scope of StC & CStR

Garay L. J. *et al.* (2009) noted that the notion of a fully reconfigured State is a theoretical benchmark. History supports the assertion that there is no State in which StC & CStR processes have been completed. The State is a complex organization composed by many individuals and sub-organizations, in which many functional roles converge. This is why it is almost impossible, in empirical terms, for a unique group with vested interests to capture and reconfigure all functions of a State. Nevertheless, the theoretical entity of a fully reconfigured State by a group with unified interests serves as benchmark to determine when some States have been more deeply affected by StC & CStR processes.

Therefore, in the present chapter it is proposed a methodology for the diagnosis of existence of a CStR process and the institutional scope of such a process. After explaining in the previous chapter the methodological procedure that was applied in this book, it is important to use the Social Network Analysis (SNA) as a tool for Institutional Diagnosis (SNAID). In doing so, answers to the following questions will be provided:

(A)   When may a criminal situation with corruption elements be defined as (i) a traditional corruption scenario, (ii) a StC scenario, or (iii) a CStR scenario?

(B)   What is the institutional scope of an identified CStR scenario? This question can be paraphrased as follows: To what extent a CStR process affected the institutional context of a State?

In order to set the epistemological structure of the SNAID, a conceptual protocol is proposed in the lines below. Some of these concepts, such as the concept of *agent*, were already used in the previous chapters. Nevertheless, other concepts must be stated in order to apply the SNAID to the social networks that are analyzed in the present book. The underlying conceptual principles of the SNAID are the following:

1.   A social situation is a set of agents with functional/ organizational and functional/institutional roles.

2.   Agents, bearing in mind their moral agency/description, are interpreted as moral agents. This means that it is possible to identify a collective purpose in a group, and that purpose can be morally evaluated.

3.   The functional/organizational role of an agent is defined as any action performed in function of his/her belongingness to an organization -for instance, a civil, criminal, judicial, or any other organization, either governmental or private.

4.   The functional/institutional role of an agent is defined with reference to any action aiming at the promotion or

obstruction of some formal or informal institutions, either lawful or unlawful. Those formal and informal institutions can be socially beneficial or socially perverse; therefore, the functional/institutional role can be morally and socially evaluated.

5. An agent may intervene in a social network playing a lawful functional/organizational role, and at the same time, playing an unlawful functional/institutional role. Therefore, the analysis cannot be restrained to the functional/organizational role of an agent. For instance, the following situations may be found:

    a. An agent with the functional/organizational role of "traffic officer" that in his functional/institutional role promotes traffic law enforcement.

    b. An agent with the functional/organizational role of "traffic officer" that in his functional/institutional role obstructs traffic law enforcement -for instance, accepting bribes.

6. The analysis of the functional/organizational and functional/institutional roles may result in a lawful agent (bright), unlawful agent (dark) or undefined agent (grey), as follows:

    a. *The lawful agent (bright)* is that agent who belongs to a lawful organization and plays a lawful functional/institutional role.

    b. *The unlawful agent (dark)* is that agent who belongs to an unlawful organization and plays an unlawful functional/institutional role. This agent not only

obstructs compliance with the lawful functional/ institutional role or openly promotes its non-compliance, but also contributes to compliance with the unlawful functional/institutional role.

c.   *The undefined agent (grey)* is the agent whose exercised functions do not fall under either situation 6.a) or 6.b). An example of undefined agent (grey) is the "traffic officer" who, while belonging to a lawful organization, obstructs compliance with traffic laws.

7.   Lawful (bright), unlawful (dark), or undefined (grey) agents establish social relationships.

8.   Social relationships result in actions that may be interpreted as aiming to transmit psychosocial information in the wide sense of the term. This transmission of information occurs by virtue of the execution of neurological and psychological mechanisms within a social context.

9.   Some actions aimed at transmission of information are approved within the institutional context and others are not. The former are considered lawful actions and the latter unlawful actions. For instance:

a.   If agent X murdered agent Y as a result of socio-psychological disapproval of Y's behavior, in most institutional contexts, X performed an unlawful action.

b.   If X communicated verbally to Y in order to express the same disapproval, in most institutional contexts, X performed a lawful action.

10. Actions defining social relationships can be analyzed in quantitative and qualitative terms:

    a. Actions developed within the context of social relationships may be morally evaluated by virtue of its lawfulness or unlawfulness.

    b. Also, actions developed within the context of social relationships may be categorized, classified, and quantified in neutral quantitative and qualitative terms.

11. With principles 1 to 10 it is possible to define a social situation as: A set of lawful, unlawful, or undefined agents that establish social relationships, which may be characterized, classified, and empirically analyzed.

    a. A social situation is defined in terms of social relationships.

    b. A social relationship is defined in terms of actions.

    c. Actions defining social relationships:

        i. Are oriented towards the communication of psychosocial information.

        ii. Can be classified as lawful or unlawful in a specific institutional context.

    d. In this sense, the institutional and psychological dynamics of social reality are interconnected.

12. The set of agents and social relationships set forth in 11 is a state of things of social reality, it is, an ontological arrangement of things, with epistemological interpretation at the symbolical and institutional level. This ontological arrangement with epistemological interpretation defines social reality(Searle, 1995) that is analyzed as a discrete event, although it is a continuous one consisting on a socio-cultural evolution process.

13. The selection of observable variables -actions- that defines the social situation, is the result of an arbitrary decision of the analyst-observer (De León-Beltrán & Salcedo-Albarán, 2003).

14. Each social relationship, or at least the emission or reception of psychological information that flows in the transmission process of the relationship, occurs in a spatial ambit and a temporal ambit that is theoretically discrete.

15. Therefore, the social situation, configured by a set of social relationships, also has a spatial and temporal dimension that can be theoretically delimited.

16. Since it is possible to delimit a temporal and spatial context for a social situation (with temporal and spatial dimensions), it is also possible to identify the specific institutional context in which that situation occurs.

17. Bearing in mind all principles 1 to 16, but mainly principle 9, the empirical analysis of a social relationship or social situation allows inferring information about the institutional

context in which the set of social relations −or the social situation− is developed.

Based on these principles, the SNAID methodology allows diagnosing a social situation within (i) an institutional context, (ii) a temporal context and (iii) a spatial ambit that usually has as benchmark a geo-administrative unit. The diagnosis is the result of the qualitative and quantitative analysis of a social situation. The diagnosis serves to give an answer to questions A and B proposed at the beginning of the present chapter.

Lastly, the social situations that capture the attention of this analysis include unlawful agents and/or social relationships. In this sense, a social network may be: (i) Lawful if it is configured only by bright agents, (ii) unlawful if it is configured only by dark agents and (iii) undefined if it is configured by a combination of dark and bright agents, or by grey agents. It can be therefore expected that StC and CStR situations are examples of grey networks.

CHAPTER 4

Mexican Cartel Network

The Context: Drug Trafficking and Violence

During the last five years, the media has allowed the world to witness the high levels of violence attained by Mexico. Indeed, Mexico has become a clear-cut example of the kind of violence and institutional chaos derived from the strong presence of organized crime, such as drug trafficking, and the confrontation among criminal gangs to take control of distribution routes of drugs and illegal inputs.

It may be thought that the Colombian State underwent the same problem in the late 1980s and 1990s; however, in Colombia the confrontation among drug cartels did not have the intensity observed in Mexico. More precisely, the confrontation between the Colombian State and the main drug cartels reached the highest intensity in the late 1980s with the war waged against Pablo Escobar, whose final aim was to defeat the State.

Violence in Mexico has astonished for its proliferation and brutality: 22.700 violent deaths related to drug trafficking since

December 2006 (El Universal, 2010). On the other hand, things like beheading and throwing the severed heads into night clubs, incinerated bodies abandoned in cars, dead bodies hanging from bridges on highly trafficked roads, videos showing mutilations, and massacres of high school students, are some of the scenes observed in the last three years that have horrified Mexican States.

In the more confrontational territories, the Mexican population has been severely exposed to violence that has badly affected the credibility and legitimacy of their institutions, mainly at the local level. Consequently, it has been expressed that the Mexican State is losing the war against drug trafficking (Rocha, 2010). Additionally, there are insinuations, even from recognized political leaders at international level like the Mexican ex-chancellor Jorge Castañeda (CNN, 2010), expressing that the State should not fight a war that was lost from the beginning. In this sense, Castañeda expressed that Mexico should not try to stop the drug traffic toward United States. Moreover, wide sectors of Mexican society are convinced that the Mexican State has made a mistake in declaring war on drug trafficking without a proper strategy to confront the huge and almost unlimited power of gangs.

These opinions were quite popular at the time of the death of Beltrán-Leyva, the boss of the Beltrán-Leyva cartel, who appears to have offered a truce to the local administration of Morelos, where he died, in order to avoid Federal and international attention in exchange for crime containment. Marco Antonio Adame, Governor of the State of Morelos in Mexico, expressed that the local administration did not establish a pact with Beltrán-Leyva, but he did accept that the Beltrán-Leyva Cartel

"bought the police" (Reséndiz & Miranda, 2009). This seems to be coherent with the fact that 35 members of the local police disappeared when Beltrán-Leyva died, apparently, because they appeared in the nomine of the Cartel (Tonantzin, 2009).

The appearance of extreme violence over the past years does not mean that the history of drug trafficking in Mexico is recent. Indeed, it has been noted that during the second half of the last century, in some territories of the Mexican State, drug traffickers and local States were in connivance, resulting in violence containment (Astorga, 2005). Apparently, changes in the Mexican political structure of power fostered at the end of last century, as the culmination of the so-called PRI regime which lasted for around seven decades, the increased power of dominant cartels and the incursion of others as potential rivals, and the recent "war to narco" declared by president Calderón, propitiated the current violence scenario.

Currently there are at least six cartels operating in Mexico: (i) Tijuana, (ii) Juárez, (iii) Sinaloa, (iv) Golfo, (v) Familia Michoacana, and (vi) Beltrán-Leyva Brothers. Although there is no evidence that these cartels had meaningfully taken part in processes of StC & CStR as complex and developed as those described below in the case of Colombia, they have been involved in infiltration, intimidation, and coercion, and usually obtained information and protection from local authorities. Bribery is one of the main methods to manipulate decisions made by the executive and legislative branches at the local level.

The cartel analyzed in this chapter operates mainly in selected regions of the States of Mexico and Michoacán, and

at the borders of States of Guerrero and Jalisco. This cartel announced in 2009 through local newspapers that it would increase its activities in order to "impose order" in the State of Michoacán. However, this cartel turned out to be the one with the largest capacity to impose terror on the population because of its extreme violence. Currently, with rhetoric of religion, this cartel recruits young people and affects local institutions (Tuckman, 2009; Logan & Sullivan, 2009). In fact, in 2009 the media evidenced that several mayors of the State of Michoacán were working with this cartel (Rocha, 2009). The media also called the attention on the risks that this cartel imposes to the electoral process (Wilkinson, 2009).

The social network model of this chapter is still partial and open to new judicial information and additional data. However, it is useful and opportune to lay out such a model because it is characteristic of a social situation that may be interpreted as the initial steps of a StC and a CStR process, given the widely spread use of bribery in order to co-opt lawful and unlawful institutions. This social network has 110 nodes and 193 social relationships established between nodes. As it will be presented in the last chapter, this network is mainly made up of drug traffickers, police government officials, and other local security agencies, which is a difference between this and the other social networks that are modeled.

For methodological reasons, it has been necessary to deactivate one of the nodes of the model to make a correction derived from a distortion of the information processed. The Mexican network is made up of only one testimony, and it creates a distortion because the witness concentrates centrality

when narrating the facts; it does not necessarily imply that he concentrated informational activity when the facts happened. To that extent, information about the individuals and social relationships of the network has been obtained from this witness, playing a pre-eminent role on the informational structure of the judicial source, but not necessarily on the actual structure of agreements reached in the social situation hereunder. This kind of distortion does not always occur since judicial files are made up of a number of testimonies and complemented with technical evidence collected by investigating bodies. Indeed, in the other two social networks analyzed in this book for the specific case of Colombia, this distortion does not occur because the files have different testimonies and technical evidence.

When the judicial file is made up of only one testimony, the network structure is reconstructed from the information provided by the only witness X, who claims that he "knows" individual Y, or "knows that" an individual Z played a determined role. When this situation occurs, the model registers a social relation of the kind "knows" that links X to Y, or of the kind "knows that" that links X to Z. Given that in the above network it is necessary to control for the concentration of information obtained through the unique witness, that specific node had to be deactivated.

The Hub

The model of the analyzed network was developed mainly from judicial files with testimonies from members of the organization. For this reason, the agent with the largest centrality indicator is the main witness under protection, who unveils information

about the individuals of the network and confesses that he "knows" such members. To that extent, it is expected that the predominant social relationship is defined by the action "to know," as will be shown below on the concentration of social relationships. However, even though the more connected individual in the file is the witness under protection, this does not imply that this individual was the most important one in the development of the social situation analyzed.

Bearing in mind the foregoing, prior to the methodological adjustment to the model, the individual with largest direct centrality indicator is TESPOLRIC, a witness under protection, and member of the drug trafficking organization, who later provided testimony to collaborate with the authorities. This individual will be called hereinafter the hub-witness. The Graph 4.1 illustrates the levels of direct centrality, with the hub-witness becoming the nucleus of the network.

Although the graph registers the flow of information in the file, it does not necessarily register the flow of information that structured the network in question, since there is a distortion derived from the concentration of information on the individual testimony. Indeed, when the judicial file is based on only one testimony, in which the witness confesses that he *knows* most of the members of the unlawful organization, it becomes a limitation for the reconstruction of models of the social network. In this case, the node hub-witness has been deactivated to obtain a network model without the distortion resulting from the concentration of social relationships of the kind "he knows." Again, it is worth mentioning that this kind of problem did not occur in the two Colombian cases analyzed in this book.

Graph 4.1.
Mexican Cartel Network (Graph 2.4) after applying a visualizing algorithm of complete coordinated radial prominence and assignment of complete symmetric orbits in function of the direct centrality indicator.

The Graph 4.2 shows the *hub-no witness* as the nucleus, and the rest of nodes with their respective indicators of quantity of direct relationships, but without the presence of the *hub-witness*.

After deactivating the node acting as witness, the node NARMILATT –the boss of the cartel in question– becomes the hub. This individual has made clear in a number of opportunities that the *raison d'être* of his organization is the provision of protection to the population of his hometown against criminal organizations like the ZETAS. According to NARMILATT, the justification of the actions of his group is closely related to ideals of self-defense and self-protection of the society against criminal organizations, acknowledging that to meet this objective he has to act outside the law (Periódico La Jornada, 2009). Indeed, drug trafficking and money laundering through real state, buying and selling cars, nightclubs, restaurants, discotheques, and extortion to self-service stores finance their activities.

NARMILATT has a direct centrality indicator of 8.5%, i.e., the percentage of participation out of the total network social relations. The node with the second highest centrality indicator is represented with the code TESPE, with 5.5%, and has been called *core node 2*. TESPE is another witness under protection of the network structure, but even if he were not a witness, his location is not required to uphold the operative autonomy of NARMILATT. This can be seen in the graph above, where there is no node accumulation around the nucleus, or the hub; the core node 2 and the core node 3 are far off the nucleus. The fact that there are no nodes close around the nucleus implies that there are no nodes, modules, or sub-networks articulating the network, but rather the hub social bearing brings about the articulation.

Graph 4.2.
Mexican Cartel Network (Graph 2.4) without the hub-witness, after applying a visualizing algorithm of complete coordinated radial prominence and assignment of complete symmetric orbits in function of the direct centrality indicator.
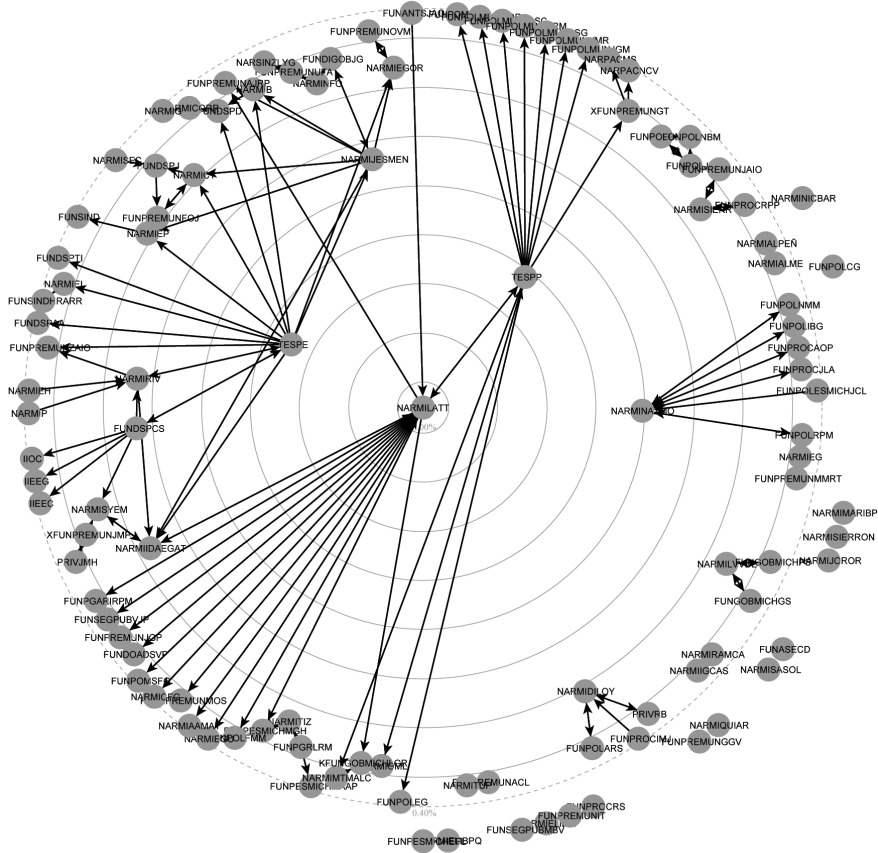
The Graph 4.2 also shows that the hub is separated from the core node 2 by a difference of 3 percentage points, whereas the core node 3 is separated from the core node 2 by a difference of 0.4 percentage points. This means that there is an important distance in terms of percentage points between the hub and the other core nodes. This can also be seen in graph below showing the levels of hierarchy according to the centrality indicator.

The Structural Bridge

Calculating the indicator of betweenness and deactivating the articulating role of the hub-witness, results that the NARMILATT node is the node that appears more in the flow of information. However, the high concentration of flows of information where this node shows up is remarkable. Unlike the 3 percentage points separating the hub and the core node 2 –difference measured according to the direct centrality indicator– the difference with respect the indicator of betweenness is 12.8 percentage points, which is too high, bearing in mind that only 28 individuals show an indicator of betweenness different from zero. The structural bridge, NARMILATT, with a high potential of information arbitration, shows a betweenness indicator of 28.7%, followed by core node 2, TESPP, with 15.9%. Core node 2 has substantially lower potential of information arbitration than NARMILATT.

The Graph 4.3 shows the network structure analyzed, as seen from the perspective of the nucleus relevance of the structural bridge.

Graph 4.3.
Mexican Cartel Network (Graph 2.4) without the hub-witness, after applying a visualizing algorithm of complete coordinated radial prominence and assignment of complete symmetric orbits in function of the indicator of *betweenness*.
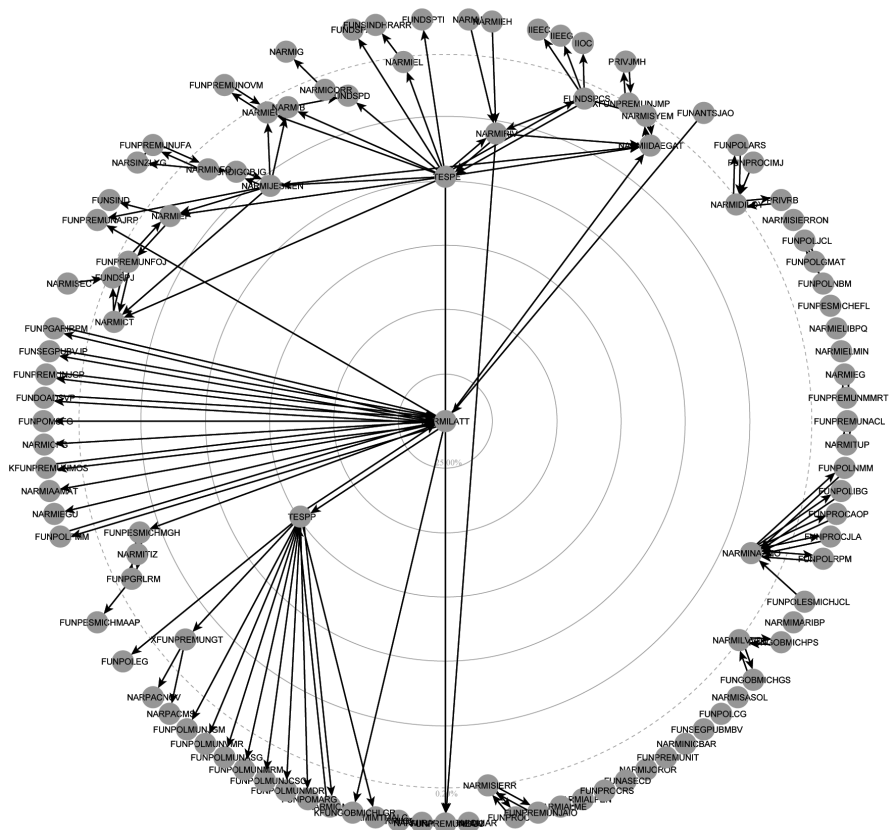
Social Relations

According to the SNA applied in the present book, each relational matrix is accompanied by a qualitative analysis that allows identifying the main categories of social relationships configuring the network. In the Mexican Cartel network, the categories of the social relationships are the following.

Intra-organization

Intra-organization refers to hierarchic relationships of command and information management within the drug trafficking organization. To the extent that the social situation herein modeled is mainly made up of drug traffickers, this category is one of the most important for the network articulation in terms of concentration of relationships measured in percentages, as will be shown below.

Bribery

This category refers to the payment made by drug traffickers to government officials. The social relationship explained below, is the basis to understanding the idea that bribery was mainly oriented towards the systematic purchase of protection and information from government officials of security agencies at local level. Strictly speaking, this type of bribe is different than low scale bribery, such as the one used to get away with the payment of a traffic contravention, or a bribe to obtain an operating license. The bribery observed in this network has institutional effects because it distorts law enforcement at a medium level of the local administration. Therefore, the social

situation analyzed is closer to a StC situation than to a complex and sophisticated CStR situation. Notwithstanding, this question will be addressed in Chapter 5 with the comparative analysis of the three networks.

Collaboration

This category refers to services provided to drug traffickers by government officials, mainly from local security agencies or other local individuals, in exchange for bribes. This category consists of collaboration for: (i) Providing information, (ii) providing protection, and (iii) money laundering operations.

The first type of collaboration, the provision of information, refers to social relations whereby local security officers leak information to drug traffickers pertaining to when, who, and in what circumstances there will be an operative against them. Local officers will usually alert drug traffickers, even without knowing prior information on operatives, to the arrival of federal authorities into the territory that is under the influence of the unlawful organization.

The collaboration to provide protection refers to those social relationships whereby, for instance, security officers let drug traffickers cross security-checkpoints without being disturbed. It also has been reported that drug traffickers use facilities and material exclusive of security agencies. Other situations involve patrols of security agencies that are made available to important drug traffickers for protection and transport purposes.

Lastly, the collaboration for money laundering refers to those situations whereby drug traffickers reach agreements with entrepreneurs, traders, and other local private individuals to use money coming from drug trafficking in lawful businesses.

To Know

Since the judicial file used in this model consists mainly of information provided by a witness previously a member of the unlawful organization in question, social relationships are found in which the witness claims that he knows some individuals from the unlawful organization. In most of the social relationships classified in this category, the witness also provided information about the functional roles played by the referred individuals from the network.

Political Agreements

This category of social relationship refers to those situations in which a drug trafficker hands money over to a candidate in a popular election as an electoral campaign aid. These contributions are made mainly in cash and not in logistic aid. When the candidate receives the money he is constrained by an obligation *vis-à-vis* the drug trafficker. The judicial source does not specify the nature of the obligation, but it is understood that compliance with the obligation will take place as soon the candidate can, when he gets to the public office.

The political agreements of the network in question are different from the political agreements reached in those networks analyzed later. In the Mexican Network, the political agreements

consist mainly of cash payments, which entail less sophistication and complexity than the so-called Instrumental Capture of Political Parties –ICPP– that was mentioned in the Chapter 1 and that will be analyzed later. On a large scale, the hand-over of huge amounts of money in cash looks more like a bribe rather than a structural modification of the electoral rules, particularly at local/municipal level. Therefore, the commitments derived from the hand-over of money have a narrower scope than those of structural character that are derived from the commitments from networks analyzed later on.

Familiar

Some social relationships of the network analyzed are of family and consanguinity links. There are two types of family social relationships: among brothers and between father and son. The link among brothers accounts for a larger percentage of relevance in the network articulation, providing authorities with clear indications as to the articulation and operation of the network in question.

Violence and Murder

Lastly, some social relationships of the social situation analyzed are classified as coercion, consisting mainly of threats and murders. The unlawful organization analyzed has been known for exercising extreme violence resulting in murder, and therefore, a percentage of the social relations structuring the network have been classified under this category.

Conclusions: Characteristics of the Mexican Cartel Network

According to the calculation of the direct centrality and betweenness indicators, the following are the main characteristics of the Mexican Cartel network.

The Hub and the Structural Bridge are the same

The percentage calculation of direct centrality indicators and the betweenness indicator revealed that the drug trafficker NARMILATT, boss of the unlawful organization that was analyzed, is not only the hub, but also the structural bridge. This result can be interpreted in two manners. On the one hand, NARMILATT had enough capacity of perverse social capital management in order to coordinate the network without much ancillary core node intermediation, concentrating an important proportion of the social relationships of the network. This comprehensive social capital management capacity may be explained because this drug trafficker was well known and respected by the local population. To the extent that the participants of the network are mainly locals, NARMILATT's local popularity would be relevant for explaining why he could establish direct social relationships with locals on his own. As it will be analyzed, the Casanare Network is different, because sometimes the hub of the Casanare Network needed close collaboration and intermediation from a core node in order to have social and political access to "unreachable" agents, at least directly for the hub.

On the other hand, being a hub and a structural bridge at the same time implies a large criminal exposure of the agent. In the criminal networks, this means an excessive level of criminal exposure of the structural bridge, *ceteris paribus*, affecting his ability to achieve the network criminal objectives, at least in the long run. To a great extent, the "ideal" criminal network would have a relatively unknown agent in the middle of the information flow, relieved from most of the network direct social relationships.

There is no a module of stabilizer nodes in the nucleus of the network

Unlike the Casanare Network, the large concentration of social relationships and flows of information around NARMILATT in the Mexican Cartel Network is explained by the absence of a set of nodes stabilizing the network (Csermely, 2006). As illustrated in the graphs of this chapter, the core nodes consecutive to NARMILATT are far off the nucleus.

Concentration of social relationships

Each network has particular categories of social relationships, but some of the categories are comparable among networks. The comparable categories of each network will be analyzed in the final chapter of the book. Nevertheless, at the end of every chapter, the concentration of all identified relationships will be shown.

The percentage of concentration of social relationships identified, in order of importance, is the following: (i) Intra-

organization accounting for 28.3%; (ii) bribery accounting for 45.6%; (iii) collaboration accounting for 18.9%; (iv) to know accounting for 10.6%; (v) political agreements accounting for 7.2%; (vi) familiar accounting for 5% and (vii) violence and murder accounting for 3.3%.

The Casanare Network

The Context: Paramilitary Groups in Casanare, Colombia

The origin of paramilitary groups in Colombia is linked to the fight against kidnapping. Paramilitary groups were born in a region known as Puerto Boyacá, at the beginning of the 1980s. At least one circumstance triggered this phenomenon: the increase in economic demands of FARC [*Fuerzas Armadas Revolucionarias de Colombia*, FARC] guerrillas as ransom for people kidnapped in that region. Mainly farmers and cattle raisers were the ones who had to confront permanent extortion and kidnapping, in some cases resulting in forced abandon of lands (Duncan, 2005, p. 12; Duncan, 2006). For these reasons, Puerto Boyacá was the scenario of armed confrontation against subversion driven by the Army and the civil society. This confrontation constituted the background for "*the creation of a private army or paramilitary group to fight subversion together with the Army*" (Medina, 1990, p. 167). The objective of this initiative was to eliminate the guerrilla presence, and to curb kidnaps in the region.

The "Colombian Association of Magdalena Medio Cattle Raisers"[1] (ACDEGAM) was one of the main defenders of private security, and years later funded the training provided by the mercenary Yair Klein to those groups (Medina, 1990). A paramilitary group was created whose theatre of military operations later expanded to Antioquia, Caldas, Cundinamarca, and Santander provinces. Magdalena Medio Valley self-defense groups waged a defensive war against kidnapping and extortion in the zone, and were mirrored by other self-defense groups in the Atlantic coast where kidnapping was also rising.

The group with the theatre of operations in the Magdalena Medio Valley became a model to be reproduced during the late 1980s with the alleged support of army members, and with more solid funding. Such support is still a matter of discussion. For instance, there are still court proceedings for crimes against humanity involving high rank army officers, that took place in Magdalena Medio Valley during the late 1980s (Redacción Judicial, 2008).

Some groups created under the scheme of self-defense were "legally recognized" by Colombian legislation at the beginning of the 1980s, in the middle of the process of paramilitary expansion and consolidation in the Magdalena Medio Valley. It is important to note that self-defense groups that were legally accepted until the mid-80s, were later banned during the government of President Virgilio Barco, and then became legal during the government of President César Gaviria. Their legal status was the one of vigilant groups, collectively known as "Convivir" (De León-Beltrán & Salcedo-Albarán, 2008; Gutiérrez & Barón, 2007; Romero, 2002; Romero, 2006; González, Bolivar, & Vásquez, 2003).

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1   *Asociación Campesina de Ganaderos y Agricultores del Magdalena Medio.*

The creation and evolution of Self-defense groups in the Magdalena Medio Valley has been thought of as paradigmatic (Medina, 1990). As the popularity of these groups increased during the 1990s[2], an apparently political speech and a declaration of war against guerrillas were institutionalized in the country. However, the intent to wage war against guerrillas voiced by the "Peasants Self-defenses from Córdoba and Urabá" [*Autodefensas Campesinas de Córdoba y Urabá*, ACCU] was concurrent with the creation of local armies safeguarding cattle raisers, farmers and drug traffickers' interests. Lastly, between 1997 and 1998, a large number of self-defense groups were consolidated in the unified command known as "United Self Defense Forces of Colombia" [*Autodefensas Unidas de Colombia,* AUC].

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2   According to the Inter-American Commission on Human Rights of the Organization of American States (OEA, 1993), in 1993 the following paramilitary groups were operating in Colombia:
(i) At National Level: Colombian Anticommunist Youth (JACOC), Death to Kidnappers (MAS), American Anticommunist Alliance (Triple A), Colombian Anticommunist Movement, Black Hand, The Birds, Colombian Revolutionary Commands, Democracy Colombian Anticommunist Alliance, Subject to Extradition.
(ii) Province of Antioquia: Self-defenses of North East of Antioquia (ANA), death Squadron, Red Star, Students Committee Revolutionary Union, Death to Pot and Crack Dealers, Death to North East Revolutionaries, Love for Medellín, Total Clean-up, Death to Judges (MAJ), National Socialist Young Worker Students (JOES), National Socialist Worker Students Movement (MOENS). The Magnificent (Antioquia, Urabá and Córdoba), Death to Common Criminals (Urabá), Killing Vicious People, Death for Faith, Reserve and Moral (Medellín), Eye for Eye (Urabá and Córdoba), Revolutionary Worker Group.
(iii) Atlantic: Death to Cattle Rustlers (MAOS), Punishment to Signatories and Intermediaries Swindlers (CAFIAS), Death to Invaders, Colaborators and Sponsors (MAICOPA), Death to Antisocial, Syndicalists, and

The activities of the paramilitary groups strengthened with alliances around a process of national scope. The paramilitary commander in-chief, Carlos Castaño, stated: "*The institutional defense of National Unity and democracy becomes a social obligation of general character, imperative and patriotic, against the unstoppable threats of internal or external factors aimed at destroying those values*" (Castaño, 1990, p. 50). In this national consolidation process can be identified three important moments: (i) In 1994 with the official creation of the Peasants Self-Defense of Córdoba and Urabá (ACCU), (ii) later mirrored in other regions of the country, and (iii) lastly invigorated with the establishment of the AUC's central command under the command of Carlos Castaño. Progressively, the actions of the paramilitary structures became stronger, but the process can be always traced back in the regions of Magdalena, Urabá, Córdoba, Sucre, and Antioquia.

Communists (MASCO), The Rebels, The Black Hand

(iv) Bolívar: Death to Communist Kidnapers.

(v) Boyacá: Death to Criminals, Lopez Gang, Barreras Gang

(vi) Caldas: Citizen Self-defense Movement (Manizales), Death to Homosexuals (Manizales, Medellín and Cali).

(vii) Caquetá: Machete Squad, Free World (Florencia).

(viii) Casanare: Casanare Self-defense Army (FAC) or Casanare Self-defense Movement.

(ix) Cauca: Phalanx Bolivarian Revolutionary Alliance, Bolivarian Phalanx (Cauca), Friendship Youth Front, The Peace Fellows (Popayán), Bolivarian Death Squad, Death to Thieves from the North (Popayán), Democratic Friendship Front, People's Democratic Front, Antiterrorist Bolivarian Group, Youth Group 12 October, Democracy Movement.

(x) Cesar: Terminator, Revolutionary Action Unified Command.

(xi) Chocó: Roya 87

(xii) Córdoba: The Cascona, contra-revolutionary organization (Orcón), Camilo Daza Group; The Mazudos, The Beheaders.

(xiii) Cundinamarca: Death to car Thieves, Death to Thieves from the North (MAL), Death to Petit Thieves from the North (MARNO

By 1998, most of the illegal paramilitary groups in Colombia were consolidated into the unified AUC command, which improved the effectiveness of the paramilitary groups in Colombia, and therefore increased the violent actions across the Colombian territory. Between 1998 and 2004, one of the fractions that were also unified under the AUC command intensified violent actions in Casanare. This group, known as "Peasant Self-defenses of Casanare" [*Autodefensas Campesinas de Casanare*, ACC], constitutes the Casanare Network. Despite the AUC unified command, when the ACC dominated the Casanare province, another paramilitary group known as the "Centaurs Block" [*Bloque Centauros*, BC], came onto the scene. The BC, commanded by Miguel Arroyave, initially operated in another province near Casanare but some conditions found in Casanare called the attention of this group.

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o MURN), Christian Anticommunist Movement, The Trigger, Revolutionary Organization against Thugs (ORCA), Workers and Peasants Self-defenses, Phantom Plan, Death to Indigents, Civil Security and Self-defense Committee from Cundinamarca, National Coordinator of Paramilitary Organizations, Popular Brigades from Southeast.

(xiv) **Huila:** Latin-American Democratic Urban Commands (CUDL), Colombian Vigilant and Development Committee, Huila Community, the Vampires.

(xv) **Guajira:** The Embryonic, Alpha 83, Magdalena Valley Cleaning-up, The Blackened, The Crickets, Death to Revolutionaries (MAR), The Slights, Command Cnel. Rogelio Correa Campos, Self-defenses from Magdalena Medio.

(xvi) **Meta:** The Stings, Love for the Lowlands, Counter Guerrilla Front, Lowland Self-defense Front Democracy Nation, Red Berets, Peasants Revolutionary Front, Corn Men, Narco Armisty, The Tousled, Drug Traffickers' Property Self-defense, the Black Hand.

(xvii) **Norte de Santander:** The Rampuches, Popular Self-defense, Rambo, Ocaña Friends Society (SAO), The Avenger.

Why Casanare? Because important petroleum reserves were found in that province and the royalties paid to the local administration increased substantially in the 1990s. This got the attention of paramilitary groups wanting to control the public budget in order to reinforce their financing and power (Periódico El Tiempo, 2004). Provinces and municipalities in Colombia receive petroleum royalties both directly and indirectly when domestic or foreign companies exploit petroleum reserves. Direct royalties are an important economic source for several provinces and municipalities in Colombia, especially in Casanare, which is precisely the department receiving the highest amount of royalties since the 1990s (Hernández, 2004). Between 2000 and 2002, royalties paid by the Colombian government were concentrated in four provinces: (i) Casanare accounting for 42.7%; (ii) Arauca accounting for 15%; (iii) Meta accounting for 11.1%; and (iv)

(xviii) Quindío: The Quindian Avenger (JUQUIN), Workers Clandestine Army, The Anonymous Avenger.

(xix) Risaralda: Death to Thieves and Whores, Kayac, The Death Squad, The White Eagles.

(xx) Santander: Phalcon 2, The Vampires, The White Eagles Legion, Scorpion, The Caracuchos, Phalco, Red Flag, The Black Drop, The Command Ariel Otero, Movile Star, Command Henry Pérez, Command Pedro Gordillo, Death to Revolutionaries and Comunists Movement (Marco), Red Command Simón Bolívar, The Poors' Army, Toxicol 90, Scorpion, Green Berets.

(xxi) Sierra Nevada: The Avengers,

(xxii) Tolima: Red-Ata

(xxiii) Valle del Cauca: Colombian Non-conformist Youth (JIC), Green Commands, Kan-Kil, Red Berets, Black Flag, We Efficient Palmira, Silent United Front, Democratic Alliance, Western Military Force, Implacable Avenger, Clean-up Cali Squad, Death to Rats, The Avengers, Revolutionary Popular Army, Revolutionary Civic Movement, Armed People Organization (OPA), People's Army Organization, Death to Drug Dealers (MAJI).

Huila accounting for 10.2%. Additionally, according to the Office of the President of the Republic of Colombia, between 1996 and 2002, Casanare accounted for 67% of total direct royalties paid to decentralized governments by the Royalties National Fund of Colombia.

In 2003, oil production in Casanare was concentrated in six municipalities covering 23% of the area of the province, a small area concentrating a high proportion of public budget. According to the National Royalties Commission of Colombia, the province of Casanare accounts for the highest oil production in Colombia with 101.127.244 oil barrels per year, a production higher than the sum of the second and third producers: Arauca with 35.702.511 and Meta with 21.566.569. In fact, in the year 2003 the economic activity of Casanare was concentrated in oil production (Table 5.1).

Table 5.1.
Share of Casanare's GDP by Economic Activity – 2003

Economic Activity	Share (%)
Petroleum	45.2
Services	33.0
Livestock	11.3
Farms	8.5
Government	2.0

Source: Departamento Nacional de Planeación, 2003.

The production levels and the resulting royalties are key factors explaining, at least partially, why BC was operating in the province of Meta and then tried to operate in Casanare. Economic

factors are useful to explain the motivation of paramilitary groups to take control of public institutions and administrative decisions at local and regional levels. Nevertheless, another circumstance must be considered in this case. Casanare is located at the eastern part of Colombia and is used for drug trafficking towards the European market. Therefore, dominating the Casanare's lawful and unlawful structures is strategic for criminal interests. This strategic domination may be interpreted as one of the most important purposes of the *Casanare* Network that is modeled and analyzed in this chapter. The characteristics of this network are presented below.

The Hub

In Casanare, several agreements between lawful and unlawful agents and groups were established during the period 1998-2007. These agreements were also observed in other provinces and municipalities in Colombia for the same period (Corporación Nuevo Arcoiris, 2007). Almost all of the unlawful agents participating in the network belong to the ACC, and the lawful agents are basically mayors and legislators at the local administrative level. After calculating the *degree of direct individual centrality* indicator, it is possible to identify the hub of this social network, which means identifying the most connected node.

Given that the intentions of the Casanare Network were mainly of illegal character, at least in principle it could be expected that an unlawful agent acted as the hub. It is remarkable, nonetheless, that the hub of the Casanare Network is an individual acting from a lawful and legitimate position, such as mayor of the municipality of Monterrey, a small town located in Casanare.

The case of this hub is useful to illustrate how acting from a lawful position or organization does not imply that the individual must be considered exclusively as a lawful agent. In fact, this case illustrates how the lawful/unlawful category is vague when defining and explaining the structure of networks like the Casanare Network. The lawful/unlawful category was preliminarily applied in the first stages of the present analysis by paying attention to the organizational role, but then it was difficult to define an individual as lawful, when acting from a lawful institution but establishing agreements with illegal paramilitary forces. In general, the lawful/unlawful category defined by the organizational role had to be abandoned, since it was inadequate to classify some individuals participating in StC and CStR networks as purely lawful or purely unlawful. Additionally, some agreements cannot be defined as illegal acts, but as socially or moral incorrect acts. If an individual were classified as lawful/unlawful in function of its organizational role, important qualitative information regarding its functional role within the network would be misleading. Nevertheless, the conceptual protocols proposed in Chapter 3 allow defining an individual as lawful, unlawful or indefinable.

Even though the hub operated from of a lawful institution (the municipal mayor's office), its direct proximity to the Commander of the paramilitary group[3] and other ACC members was widely known by locals. Therefore, it is inadequate to hold that this individual was entirely lawful or unlawful. Most of the hub's actions may fall in a grey zone between legality and illegality because of his direct and close relationship with members of the

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3   Martín Llanos.

paramilitary group[4]. But at the same time, due to agreements regarding public resources and the local administration in which the hub was acting as mayor –the legal representative of the local public office– therefore his administrative decisions were lawful. In this case, the hub acted as a public officer democratically elected despite his close relationship with the paramilitary group.

In general terms, this case can be therefore defined as a typical example of Instrumental Institutional Capture (IIC) and particularly, as an example of Instrumental Capture of Political Parties (ICPP) (Garay L. J., Salcedo-Albarán, Guerrero, & De León-Beltrán, 2009). According to the ICPP concept, individuals with unlawful interests capture electoral and democratic institutions in order to infiltrate and co-opt the structure of the State. When institutions within the State have been infiltrated or co-opted by manipulating electoral institutions (ICPP), it is then possible for unlawful agents or groups to influence and modify administrative decisions in their own favor and to the detriment of collective interests. In this sense, the mayor of Monterrey, the hub of the Casanare Network, is a citizen elected through legitimate democratic elections, benefiting from the paramilitary support provided by the ACC, to become the mayor of a municipality in order to have direct access to administrative decisions in the legal sphere.

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4   Carlos Guzmán Daza, ACC member, *"knows the close relation of the lady [Mayor] (…) and the meetings that she held before and after she was elected mayor of Monterrey, where the appointment and continuity of personnel from the mayor's office was discussed. A lady also attended the meeting (…) the mother in law of Martín Llanos"*. (Office of the General Attorney Working Group Against Public Administration Crimes, Criminal File 1833. Bogotá, Colombia: Office of the General Attorney).

Had the ACC tried to influence legal administrative decisions through bribes –as is usually the case in typical scenarios of traditional corruption– the result would not have been as effective as the situation described above, especially in the medium and long term. It is reasonable to assume that, at least in the medium term, had the ACC decided to bribe an elected mayor, they would have not reached the same level of administrative control and social legitimacy actually achieved through the ICPP process. Additionally, bribery does not attain the levels of loyalty accomplished by the ICPP, given the absence of medium and long-term relationships of mutual correspondence between lawful and unlawful structures.

Therefore, the structural closeness between the mayor acting as hub and the ACC commander provided the unlawful structure with a space for privileged administrative decisions. Additionally, the support given to a candidate legitimated by electoral rules, gave the ACC a degree of social impunity and legitimacy that was difficult, if not impossible, to achieve only through bribery.

Stabilizer nodes

The hub represents the node with the highest flow of information because it is the most connected node. According to the notion of social capital as the amount of established social relationships, it is found that in the Casanare Network, the mayor of Monterrey concentrates the largest amount of information flows. This means that the absence of this particular node would disarticulate the network, or at least, its absence would entail a very different structure.

Additionally, by calculating the degree of direct centrality, it is possible to identify the intricate nucleus of relationships established among legal and illegal agents. After calculating this indicator, it was found that the next three nodes in the list, behind the hub, are active ACC members. The group of four core nodes is the stabilizing nucleus, since they account for almost half of the network connections. This stabilizing nucleus is better understood with the Graph 5.1, in which the hub is located as the radial nucleus. The nodes located in the immediate radial orbits next to the nucleus are the *core nodes* mentioned above, which constitutes the network-stabilizing nucleus.

The set of these four core nodes accounts for 47.8% of total connections established within the network, making this nucleus the network-stabilizing group (Csermely, 2006). According to the *nestedness* concept, it is possible to deduce that this stabilizing nucleus was one of the first relational modules to be formed in the social network (Csermely, 2006), providing information regarding the first stages in the formation of the whole network. Therefore, it may be concluded that this stabilizing group concentrates perverse social capital in the form of a substantial flow of information resulting from the largest amount of social relationships established by this group with the rest of the network, or in the sense of information arbitration.

The Structural Bridge

According to the notion of social capital generated by structural bridges operating on structural holes, it can be held that a higher number of links within the network does not necessarily imply higher levels of arbitration of information or larger flows of social

Graph 5.1.♦
**Casanare Network (Graph 2.5) after applying a visualizing algorithm
of complete coordinated radial prominence and assignment of complete
symmetric orbits in function of the direct centrality indicator.**
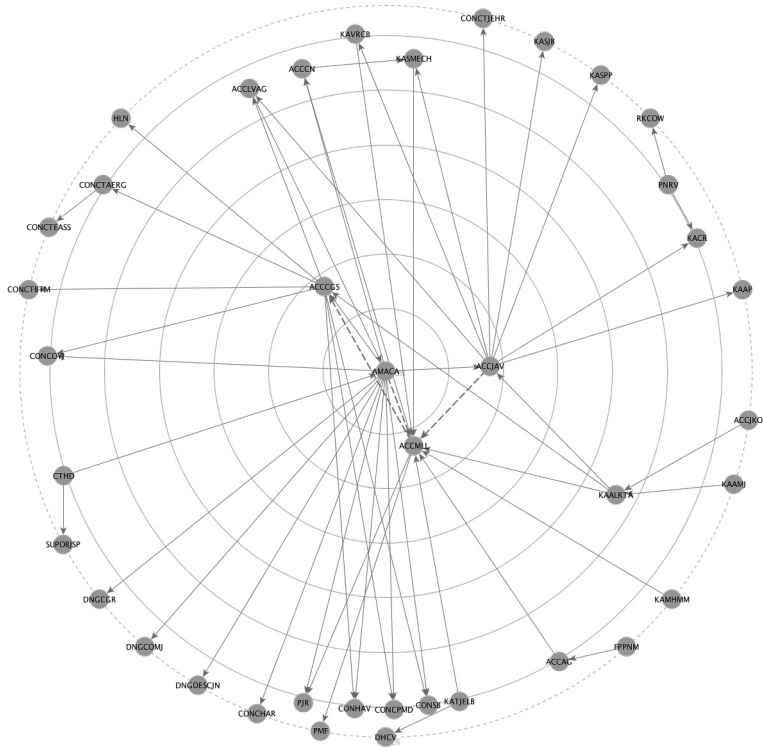
capital, because the flows of information may tend to closure. Therefore, being more connected does not necessarily mean more information arbitrated and more social capital generated, and not necessarily entail a better position of power within the social network. It is therefore important to determine the node appearing in the middle of the geodesic routes of the network. This test is undertaken through the betweenness indicator (Degenne & Forsé, 1999).

After calculating the betweenness indicator for the Casanare Network, it was found that the ACC top leader, identified with the code ACCMILL, is the node most frequently appearing in the geodesic routes. Graph 5.2, through a visualizing algorithm, allows identifying the relevance of the node with the largest betweenness indicator.

Although the hub identified with the code AMACA is the most linked-up agent, the chief of the ACC is the agent with the highest betweenness indicator. Therefore, ACCMILL is quite possibly the most important arbitrator of information, which locates him in the nucleus of Graph 5.2. The relevant character of ACCMILL as arbitrator of information is also illustrated in Graph 5.3, in which ACCMILL is connecting two sub-networks within the Casanare Network.

The node ACCMILL is the most important agent in terms of arbitration of information and generation of social capital among sub-networks within the Casanare Network. In other words, although ACCMILL is not the hub, it is the structural bridge because of its contribution to the flow of information among sub-networks. This is easy to explain given the fact that

Graph 5.2.
Casanare Network (Graph 2.5) after applying a visualizing algorithm of complete coordinated radial prominence and assignment of complete symmetric orbits in function of the indicator of *betweenness*.

Graph 5.3.
Casanare Network (Graph 2.5) after applying a visualizing algorithm to separate the most important sub-networks of the *Casanare* network.

ACCMILL arbitrates the flow of information between the lawful and the unlawful structures of the network. In fact, ACCMILL intermediates the flow of information between: (i) The hub, which is the mayor making decisions within the legal structure, and (ii) an important group of paramilitaries making decisions within the unlawful structure.

The hub is an agent acting from a lawful position in his condition of mayor; on the other hand, ACCMILL cannot make lawful decisions because he is acting as an unlawful individual and from an unlawful structure. Therefore, ACCMILL needs a contact point with the administrative and lawful structure of decision-making, and this contact point is the mayor of Monterrey. Since the ACC are not operating through bribery and classic corruption procedures, but rather taking advantage of more sophisticated StC and CStR procedures, ACCMILL needs an apparently legitimate channel to manipulate administrative decision-making in Casanare. ACCMILL makes indirect legal decisions through the hub under its command, and at the same time he can make direct unlawful decisions upon the subordinated ACC personnel. Although ACCMILL is not the hub, he is the node arbitrating information between the lawful and unlawful structures and therefore is the main network structural bridge.

Social Relationships

According to the SNA applied in the present book, each relational matrix is accompanied by a qualitative analysis that allows identifying the main categories of social relationships configuring the network. In the Casanare network, the categories of the social relationships are the following.

Commitments of Administrative Support and Management

This category typically consists of commitments and agreements with government procurement and the management of public resources. The following are the situations and social relationships falling under this category:

- The candidate or the public official undertakes to include and approve "over-costs" to inflate the amount of the government procurement, for example including "*10% of the quota of each contracting process.*"[5]

- The candidate or public officials grant a minimum percentage of the municipal contract to the ACC, for example, a commitment allowing "*ACC to manage 50% of the municipality's budget.*"[6]

- The ACC intervenes to compel a contractor or the comptroller to act in an inappropriate manner.

- The candidate or public officials undertake with the ACC to grant "good management" of health system resources.

- Candidates to public office undertake to grant bureaucratic "*quotas such as the ombudsman, government secretaries or other public officers.*"[7]

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5   File 1833, National Directorate of Prosecutors, National Working Group Against Public Administration Crimes, 16th Prosecutor, pg. 2-3.

6   File 1833, National Directorate of Prosecutors, National Working Group Against Public Administration Crimes, 16th Prosecutor, pg. 2-3.

7   File 1833, National Directorate of Prosecutors, National Working Group

⋆   The candidate or public officials manipulate the contracting process to favor the paramilitary group, for example, through an irregular termination of projects.[8]

Among the commitments mentioned above, it is very interesting to find a social relationship in which the candidate or public official undertake with the ACC to grant a "good management" of the health system public resources. It seems to be counter-intuitive to find that the ACC is interested in the improvement of Casanare's Public Health System, given the fact that it is a criminal organization. This situation can be nevertheless understood by the definition of CStR. According to this concept, a lawful or unlawful group capturing or co-opting the State usually develops a long-term strategy that is also oriented to gain social legitimacy. This is the case of the Casanare Network. Therefore, it was found that this commitment was used by the ACC to gain popular support and legitimacy, showing locals that the Health System has been improved because the ACC were intervening along with the public administration. In other words, it was found that the ACC claimed responsibility for the improvement of the Casanare's health system.

Commitments of Political Support

This category consists of social relationships arising out the context of electoral support given by the ACC to a candidate. If the social relationship goes from a member of the ACC towards a candidate

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Against Public Administration Crimes, 16th Prosecutor, pg. 2-3.

8   File 1833, National Direction of Prosecutors, National Working Group of Crimes Against Public Administration, 16th Prosecutor, pg. 2-3.

or a public official, the ACC usually undertakes to mobilize voters or to go "*door to door ordering to cast the vote for (…)*"[9] a specific candidate. On the other hand, when the relationship goes from the candidate or the public official towards an ACC member, the commitment usually consists of increasing the ACC political capital by committing "*political management upon the authorities such as the Police, Army, and all other military organizations linked to the government, in the ACC's benefit.*"[10] Candidates and public officers also undertook giving public support to the ACC.[11]

Violent pressure and Coercion

Social relationships, in which some kind of violent pressure or coercion was observed, were classified under this category. In this sense, a commitment of political support becomes *violent pressure and coercion* if violence is carried out by the ACC for supporting a specific candidate. Threats are also classified in this category. This relationship was usually found when the ACC threatened or pressured a specific candidate to withdraw from the electoral competition. For example, according to the testimony of ACC members, in certain cases "*a candidate received pressures*"[12], in others some ACC members intimidated

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9   Fiscalía General de la Nación. Working Group of Crimes Against Public Administration, 16th Delegate Prosecutor, Bogotá, January 16, 2008, from file 1833, p. 24.

10   File 1833, National Direction of Prosecutors, National Working Group of Crimes Against Public Administration, 16th Prosecutor, pg. 2-3.

11   File 1833, National Direction of Prosecutors, National Working Group of Crimes Against Public Administration, 16th Prosecutor, pg. 2-3.

12   File 1833, National Direction of Prosecutors, National Working Group of Crimes Against Public Administration, 16th Prosecutor, pg. 10.

voters "*on behalf of the organization so that they would not support that candidate*".[13]

Emotional, Sentimental or Family relations

This category of relationships refers to the intervention of family or emotional bonds in the configuration of the network. For example, when processing the information, it was discovered that a public official with penalizing authority at a local administrative level "*was emotionally linked to a member known as Agujeto.*"[14] According to the judicial files, the public official intervened in public decisions to favor this paramilitary member of the ACC known as *Agujeto*. Even though this category of social relationship was not very common in the network, there were other examples of family bonds and sentimental relationships that sometimes connected agents acting from lawful and unlawful positions.

Cooperation and Internal Management of the Group

This category was used to classify and analyze those social relationships established within the same paramilitary group.

Conclusions: Characteristics of the Casanare Network

According to direct centrality degree and betweenness indicators, the following are the main characteristics of the Casanare network.

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13   File 1833, National Direction of Prosecutors, National Working Group of Crimes Against Public Administration, 16th Prosecutor, pg. 11.

14   File 1833, National Direction of Prosecutors, National Working Group of Crimes Against Public Administration, 16th Prosecutor, pg. 19.

The hub is a mayor

Calculating the direct centrality degree indicator allows identify the hub of the network. In the Casanare network it was found that the hub is an individual who did not strictly operate from the criminal structure, but rather from a lawful position. Despite the fact that this agent was elected through a democratic process, configuring an ICPP scenario, it cannot be said that the election was entirely lawful. In fact, elements of coercion were found in the Casanare Network, which, by definition, is contradictory to a completely lawful democratic election. Indeed, the procedure through which AMACA, who is the hub, became mayor of the municipality of Monterrey is the result of a gray area between the respect and disrespect of some rules of the democratic electoral process. This situation constitutes an example of ICPP because it illustrates how an unlawful group, in this case the ACC, manipulated public institutions and electoral legitimacy, as political parties, to accede to legitimate positions within the local government and to make important administrative decisions.

The stabilizer nodes are three paramilitary agents and a legal mayor

A group or sub-network comprising the hub and three other core nodes account for almost half of the total social relationships established within the Casanare network. This module, or sub-network, of four core nodes can be interpreted as the stabilizing nucleus of the network. This nucleus can be observed in the center of Graph 5.1, occupying the first and second radius. These agents accounted for 47.8% of the social relationships. In this module of four core nodes, only the first agent acted exercising

lawful functions, and the other three agents were important and active ACC members.

The structural bridge of the Casanare network is the chief of the ACC

It was found that the structural bridge was "Martín Llanos," the ACC commander, despite not being the hub. This can be explained because "Martín Llanos," represented as ACCMILL, arbitrated the information flow between lawful and unlawful sub-networks. Specifically, ACCMILL had direct influence upon the mayor of Monterrey, and because of that influence, he was able to influence agents acting on lawful institutions. Additionally, ACCMILL exercised his command upon agents acting in strictly unlawful sub-networks. Only ACCMILL, as structural bridge, despite not being the most connected node, arbitrated the information flows among lawful and unlawful agents.

Concentration of social relations

The concentration of the categories identified in the *Casanare* network is, in order, as follows: (i) Violent Pressure and Coercion accounting for 40% of the total relations established in the network, (ii) Commitments on Political Support accounting for 31%, (iii) Commitments of Administrative Support and Management accounting for 16%, (iv) Cooperation and Internal Management of the Group accounting for 7% and (v) Emotional, Sentimental or Family relations accounting for 6%.

The Atlantic Coast Network

The Context: Paramilitary groups in five Colombian provinces

Following the dominance of the AUC explained in the last chapter, at the end of the 1990s and beginning of this century, the paramilitary activity expanded all over the Colombian north coast, thought the Atlantic Coast provinces. The motives of consolidation in each province go beyond the objectives of this analysis. However, it can be pointed out that Bolivar, Atlántico, Magdalena, Córdoba and Sucre provinces were the favorable scenarios for the political and operative expansion of the AUC, by deploying there violent confrontation in search not only of lucrative interests, but also seeking to accomplish StC and CStR of the State at local and regional levels, with clear intentions of reaching the national level.

The Hub

Based on the degree of direct centrality, in the Atlantic Coast Network, unlike the Casanare Network, the hub is an agent

clearly identifiable as an active member of the AUC. This individual is Rodrigo Tovar Pupo, aka "Jorge 40", identified in the relational matrix and in the Graph of Atlantic Coast Network with the code AUCRTP. This agent concentrates 11.6% of the total social relationships of the network. Bearing in mind the large number of agents acting in the network, AUCRTP's degree of centrality can be interpreted as high. Indeed, the degree of direct centrality for the hub is roughly twice the indicator of the second highest direct centrality indicator. Salvatore Mancuso Gómez, another member of the AUC that was identified with the code AUCSMG, is the second most connected agent accounting for 6.6% of the connections.

The difference in the centrality indicators levels is more evident in the graph of symmetric radial distribution, above where the hub is the network nucleus. The nucleus in Graph 6.1 is AUCRTP, and the node with the second higher centrality is far off the nucleus in terms of radial distribution.

Stabilizer Nodes

Unlike the Casanare Network, the Atlantic Coast Network does not have a definable set of nodes that can be considered as a stabilizer group. This is easily observed in Graph 6.2 where there are no nodes close to the nucleus. Whereas in the Casanare Network 4 nodes close to the nucleus concentrated almost 50% of all established social relationships, in the Atlantic Coast Network 18 nodes accounted for the same percentage of concentration of social relationships, and these 18 nodes are relatively disperse when compared with the four nodes concentrating a half of the social relationships in the Atlantic Coast Network.

Graph 6.1.
Atlantic Coast Network (Graph 2.6) with visualization parameter
of coordinated radial prominence and full allocation of complete
symmetric orbits according to the direct centrality indicator.
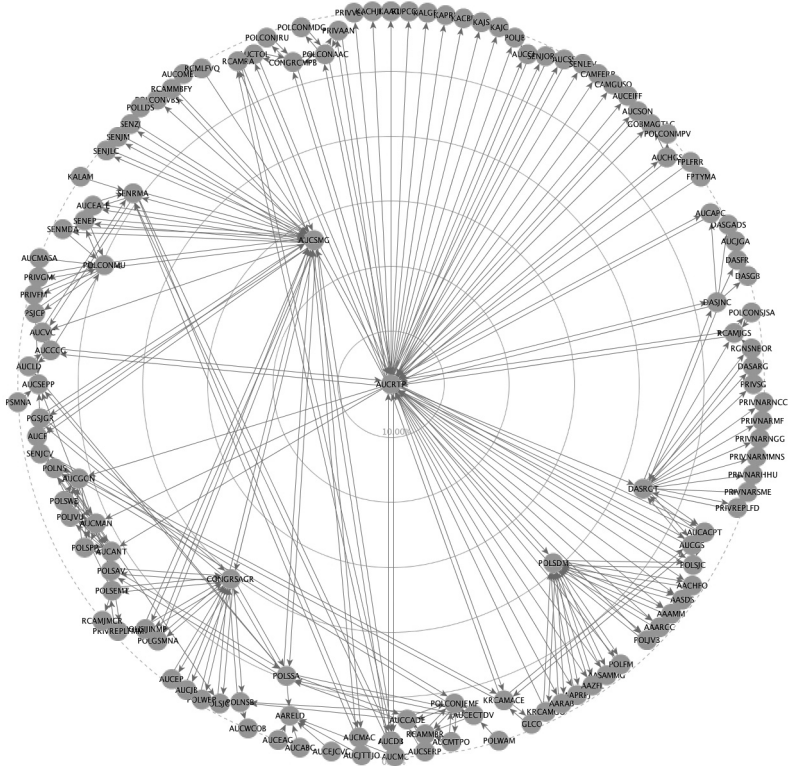
Although there is no a set of nodes stabilizing the whole network around a unique nucleus, it is possible to identify the partial core nodes, i.e., the nodes subsequent to the hub, having the largest centrality levels. The node with the second largest direct centrality is AUCSMG with 6.6%, who is one of AUC's high-rank commanders. In Graph 6.2 it can be observed that the relationships are mainly established with politicians, which are the nodes with identifiers that begin with SEN, POL, RCAM and CONGR.[15]

It is worth mentioning that the tertiary core node CONGRSAGR, with a direct centrality indicator accounting for 3.9% of total social relationships, is articulated into the network only through the agent AUCSMG, who is an AUC paramilitary commander. This means that congressman, CONGRSAGR managed information between a political module or sub-network and AUC paramilitary bosses. CONGRSAGR had relationships with 9 politicians and 3 AUC members, including Salvatore Mancuso. Lastly, the fourth individual that may be interpreted as the fourth core node is a politician, POLSDM, more specifically a Senator. This individual execute s multiple agreements, mainly with mayors, identified with codes that begin with the letters AA.

It is important to note the interrelations between the hub and the three core nodes with the largest direct centrality levels, shown in Graph 6.1. The hub has a direct bidirectional relationship with the node that may be interpreted as core node 2, having the second largest direct centrality indicator. In contrast,

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15   (i) SEN: Senator; (ii) POL: Politician with identified specific functions, (iii) RCAM: Chamber of Representatives member and (iv) CONGR: Congress member.

the hub has no direct relationship with the core node 3, but only through the core node 2.

Lastly, the core node with the fourth largest direct centrality indicator, established direct relationships with seven mayors, a candidate to the Chamber of Representatives, and three politicians. At the same time, these individuals also had direct relationships with the hub. This means that the hub, "Jorge 40," also managed the relationships established by the core node 4. It can be asserted, then, that the fourth core node did not have autonomy to manage the social relationships established, because such relationships always were finally dependent on "Jorge 40", the hub. However, the direct centrality indicator of the fourth core node is too low as compared to the direct centrality indicator of the hub. For this reason, the role of POLSDM as core node is greatly diminished within the general structure of the network. This demonstrates the interconnection power concentrated in the hub. In general, in the structure of the Atlantic Coast Network, the hub and the eleventh core nodes do not perform the role of network stabilizer group as a whole, but rather perform the role of partial networks sub-hubs interconnected through the central hub. Therefore, the mentioned core nodes are modules or sub-networks partial nucleus of the Atlantic Coast Network.

The Structural Bridge

The calculation of the betweenness indicator, in order to identify the node with the highest potential of information and social capital management (Degenne & Forsé, 1999), revealed that aka "Jorge 40," the hub identified with the code AUCRTP, is also the node with more occurrences in all geodesic routes. The Graph 6.2 below, with a visualization algorithm, allows identifying the relevance of the node with the largest betweenness indicator.

Graph 6.2.
**Atlantic Coast Network (Graph 2.6) with visualization parameter
of coordinated radial prominence and full allocation of complete
symmetric orbits according with the percentage betweenness indicator.**

Unlike the Casanare Network, in which the hub is different from the structural bridge, in the Atlantic Coast Network, AUCRTP is both the hub and structural bridge at the same time. This means that the agent that established the larger quantity of relationships in the network configuration is also the individual that arbitrated the largest part of the information, at the same time.

Social Relations

The categories of social relations identified in the Atlantic Coast Network are the following:

Commitments of Administrative Support and Management

Like in the Casanare Network, this category consists mainly of commitments and agreements reached on government procurement and the management of municipal and provincial resources. In general, this category brings together all administrative acts that usually imply a mismanagement of municipal or provincial resources within the ambit of the Atlantic Coast Network. This category comprises situations such as:

+ A government official or a candidate *"when executing a purchase agreement (…) omitted a public call, through a notice posted on a visible place of the institution, to make proposals"*[16] in order to favor AUC in processes of government procurement.

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16   Office of General Vice-Procurator, file 154-52256-07, p. 4.

⁘ A government official facilitated the "illegal *appropriation of resources by AUC's North Block*" commanded by Rodrigo Tovar Pupo.[17]

Political Support Commitments

Like in the Casanare Network, this category consists of the electoral support of a candidate provided by the AUC. In the Atlantic Coast Network there is evidence regarding the electoral support received by some candidates. The support consists mainly of political campaign manipulations in order to obtain that: (i) Electors cast their vote for a specific candidate; (ii) some candidates withdraw from their electoral campaigns and (iii) electoral institutions favor the election of a previously selected candidate. There are evidences that in the configuration of this network, the AUC partitioned the electoral districts in order to select the candidates to be supported, and define the kind of support to be given. For instance, there is evidence that "in the north zone"[18] of the Atlantic Coast of Colombia, a candidate with great political power, "*in connivance with Salvatore Mancuso (…),*"[19] supported a particular candidate.

The AUC manipulated electoral institutions in order to organize and systematize the information needed to guarantee an effective support to specific candidates. According to a government official report from the Colombian intelligence agency, the AUC together with officials working at the National Registry Office in

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17   Special District Criminal Court from Barranquilla, 6 February 2009.

18   Office of the Deputy General Attorney, Bogotá, 16 October 2008, p. 3.

19   Office of the Deputy General Attorney, Bogotá, 16 October 2008, p. 3.

Santa Marta,[20] which is an important city of the Atlantic Coast, *"coordinated all the electoral matters in 2002."*[21] Furthermore, the AUC requested,*"a computing program in order to list the names of people at all polling stations in the provinces of Cesar, Guajira and Magdalena, in order to seek collaboration for Jorge 40."*[22] The commitments of support and political management gave rise to "a giant electoral fraud"[23] consisting of the verification of*"poll station by poll station, municipality by municipality, etc."*[24] Finally, *"at the end of the election day, the poll stations juries made sure that the largest percentage of the votes counted in the municipality were registered on the name of Jorge 40's candidate."*[25]

There were also cases in which candidates requested AUC's authorization to run their political campaigns. There is evidence of a candidate that *"in his political undertaking, (…) requested authorization to run his political campaign in the municipalities where"*[26] some paramilitary bosses *"exercised illegitimate jurisdiction."*[27]

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20   The Colombia institutional body responsible for electoral matters.

21   Special Criminal Court from the Sixth District of Bogotá, file 006-2007-009, 23 November 2007.

22   Special Criminal Court from the Sixth District of Bogotá, file 006-2007-009, 23 November 2007.

23   Special Criminal Court from the Sixth District of Bogotá, file 006-2007-009, 23 November 2007.

24   Special Criminal Court from the Sixth District of Bogotá, file 006-2007-009, 23 November 2007.

25   Special Criminal Court from the Sixth District of Bogotá, file 006-2007-009, 23 November 2007.

26   Office of the General Procurator, 001-161560, p. 6.

27   Office of the General Procurator, 001-161560, p. 6.

Violent Pressure and Coercion

This category corresponds to those social relationships in which a type of violent pressure or coercion is exercised. In the Atlantic Coast Network, active members of the AUC practiced mostly explicit violence and less unrealized threats. However, threats also fall within this category. An illustrative case, well documented in judicial files, is the murder of the mayor of the municipality El Roble, in the province of Sucre. The mayor disclosed unlawful government procurement processes that badly affected his province to the authorities. The mayor was tortured and murdered in a joint action between AUC members and politicians who, acting within lawful institutions, felt threatened by the mayor's disclosures. Graphs 2.6, 6.1 and 6.2 show a number of lawful and unlawful individuals participating in the "*forced disappearance and later murder of Eduardo Díaz Salgado.*"[28] It was registered that a Governor of the province of Sucre, identified with the code POLSSA, participated in the torture and murder of the mayor.

Threats or pressures from AUC members to candidates, either to get a commitment or to eliminate electoral competition, also fall within this category. There is evidence that in the province of Cesar a brother of a candidate to the office of mayor of the municipality of Chimichagua was kidnapped "*to coerce him to abandon his candidature.*"[29]

Threats against directors of a public university were also registered, compelling them to resign "*for non-collaboration with*

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28   Office of the General Procurator, Final Instance Ruling, date of facts, 2002 – 2006, against Salvador Arana Sus.

29   Office of the Attorney General, File S.I. 032, p. 2.

unlawful procurement processes."[30] It was possible to identify a long list of victims of violent pressures, as threats and the kidnapping of relatives, inflicted by AUC members.[31]

Collaboration and non-Identified Commitments

Among the social networks analyzed in this book, the Atlantic Coast Network shows the largest number of agreements reached among lawful and unlawful agents. In the Atlantic Coast Network AUC members, government officials, candidates for public office, and candidates for the legislative branch at the local and regional levels established several commitments and agreements. Although there is information regarding meetings to execute agreements among them, the content of the agreements reached in such meetings is not always known. For this reason, it was necessary to use a special category to classify meetings where the agreements reached are unknown.

This category includes situations in which, for example, important politicians from the province of Sucre are "reported attending a meeting in 1997"[32] in the farm of another important politician "*which also was attended by Salvatore Mancuso Gómez*[33] *resulting in the expansion of paramilitary groups to the province of Sucre.*"[34] The meetings between Salvatore Mancuso and a group

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30   Office of the Attorney General, File S.I. 032, p. 2.

31   Office of the Attorney General, File S.I. 032, p. 2.

32   Criminal Cassation Chamber from the Supreme Court of Justice, Minute No. 264, 19 December 2007.

33   Important commander of the AUC.

34   Criminal Cassation Chamber from the Supreme Court of Justice, Minute No. 264, 19 December 2007.

of politicians from the Atlantic Coast, known as the "syndicate,"[35] are examples of this kind of relationship in which it is impossible to know the content of the agreements reached.

Collaboration in the Setting-up and Strengthening of Self-defense Groups

There is also information regarding meetings between politicians and private individuals in which they were committed to set-up or strengthen self-defense groups, that later became part the AUC unified structure. This category is specific to the Atlantic Coast Network, because in the Casanare Network there are no judicial evidences indicating the explicit commitment to set-up or to strengthen self-defense groups. In the Atlantic Coast Network, these agreements or commitments usually consisted of the provision of financial or logistic resources, or the intermediation before specific authorities. For instance, there is evidence of a meeting that took place in a restaurant of the municipality of Sincelejo between politicians and self-defense members *"in which it was agreed to set-up an unlawful armed group to operate in the municipalities of Sucre and Majagual, province of Sucre. In that meeting it was said [that two important politicians of the region] might help to obtain the Col$ 60 million needed for that purpose."*[36] There is also information of other meetings in which attendants were committed to strengthen a self-defense group or an AUC fraction, rather than setting-up a new one.

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35   Criminal Cassation Chamber from the Supreme Court of Justice, Minute No. 340, 25 November 2008, Proceeding 26.942, p. 19.

36   Criminal Cassation Chamber from the Supreme Court of Justice, Minute No. 264, 19 December 2007.

Favorable and Improper Judicial Treatment

The AUC's Atlantic Coast structure established direct links with the "Administrative Security Department" [*Departamento Administrativo de Seguridad*, DAS], which is the Colombian intelligence agency. Graphs 2.6, 6.2, 6.3, 6.4, and 6.5 show the relationships established between AUC and high-ranking officials of DAS responsible for confidential information. They are identified with codes beginning with letters DAS. It is important to note the connections established between the Atlantic Coast Network hub and two DAS government officials. "Jorge 40", a commander of the AUC, had a direct link with the DAS director of that time, identified with code DASJNC, and a subordinate officer of the director, who had access to the agency's confidential information[37]. The latter has the code DASGRT, and despite being a subordinate of the director DASJNC, has a higher degree of direct centrality. This means that DASGRT, even though he was a subordinate of DASJNC, had more social relationships and, therefore, is shown in a higher level than the intelligence agency director (see Graph 6.3).

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37   This section of the analysis of the Atlantic Coast Network is based on empirical information found in the following documents: (i) National Directorate of the General Attorney, National Unit for the Extinction of Property Rights and Against Money Laundering, District Attorney Eleventh, Testimony of Rafael Enrique García (annexed to the Special Criminal Court from the Sixth District of Bogotá, Proceeding 798-6(006-206-0079), 20 October 2006; (ii) Criminal Chamber to Alleviate Workload of the High Tribunal, File 1100107040062006000079-0 (annexed to the Special Criminal Court from the Sixth District of Bogotá, Proceeding 798-6(006-206-0079), 20 October 2006, and (iii) Office of the General Procurator, File 001-154112-07, Charge: Former Senator of the Republic.

Graph 6.3.

Atlantic Coast Network (Graph 2.6) with algorithm of status visualization with levels of direct centrality

Graph 6.4.
Graph of the Atlantic Coast Network (2.6) with algorithm of status visualization with levels of betweenness
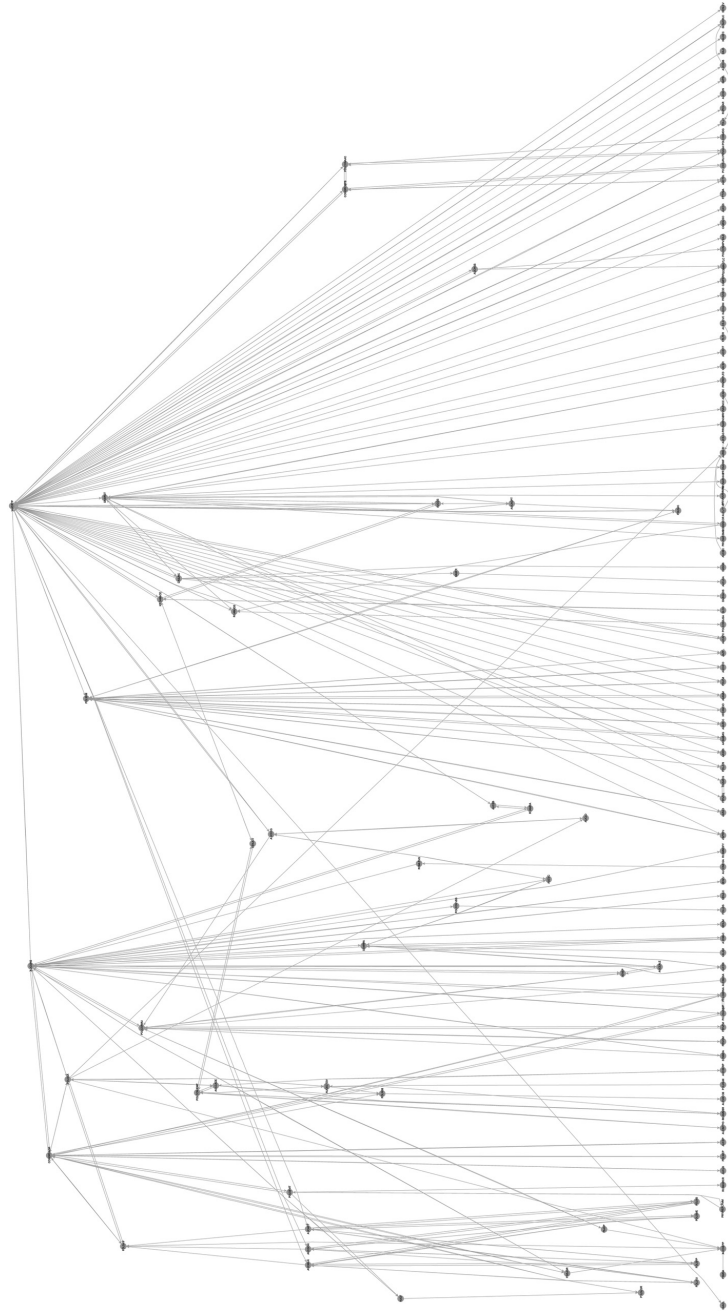
Graph 6.5.

Atlantic Coast Network (Graph 2.6) with visualization grouping algorithm by direct centrality indicator and nodes size in function of direct centrality indicator
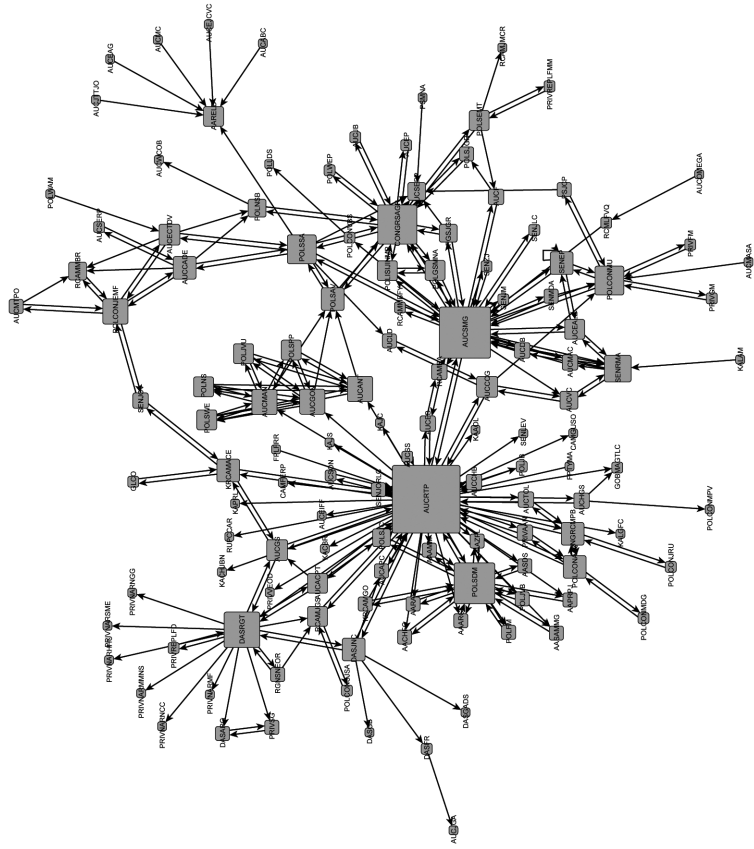
Not only does DASRGT have a direct relationship with the hub, but also many relationships with a number of DAS government officials and external agents. Therefore, DASRGT is more connected than the director DASJNC, because has more relationships and a larger betweenness indicator.

The direct relationships established by "Jorge 40" with DAS government officials, enabled the AUC to have access to intelligence and logistic judicial information and resources restricted to the Colombian State. In some cases, those social links facilitated favorable and improper judicial treatment to people having warrants for arrest or mobility restrictions to travel abroad. Since DAS controls international migration, drug traffickers and members of unlawful organizations were able to mobilize inside and outside Colombian borders without judicial restrictions. For this reason, the category of favorable and improper judicial treatment was created to classify favors to outlawed individuals having access to judicial resources restricted to the Colombian State.[38]

Conclusions: Characteristics of Atlantic Coast Network

According to the calculation of the direct centrality and betweenness indicators, the following are the main characteristics of the analyzed network.

38　The list of people apparently benefiting from alteration or disappearance of their judicial files is long and may be consulted in the ruling by the Special Criminal Court from the Sixth District of Bogotá, Proceeding 798-6 (006-206-0079), and dated 20 October 2006.

The Hub and the Structural Bridge:
Rodrigo Tovar Pupo, aka "Jorge 40"

"Jorge 40" is the network hub, i.e., the individual with the largest quantity of direct social relationships established within the Atlantic Coast Network. This agent is one of the AUC's top leaders and it is remarkable his capacity to establish direct relations with lawful and unlawful agents and organizations. This means that "Jorge 40" did not need any intermediation or any entry point into the legal structure of the network made up of individuals in five Colombian provinces. In this sense, it is remarkable and source of analysis: (i) The persuasive power of "Jorge 40"; (ii) the AUC's coercive power and/or (iii) the interest of politicians to take advantage of the violent and geo-strategic resources offered by AUC. This constitutes a radical departure from the Casanare Network structure, in which the hub is an individual elected democratically but illegally, in strict sense of the term, through the configuration of an ICPP scenario.

The agent "Jorge 40," who is the nucleus of the Graph 6.1, has the largest quantity of social relationships, and is the essential pivot point for the observed structure of the Atlantic Coast Network encompassing five Colombian provinces. The ICPP, although important, is less relevant in the Atlantic Coast Network because it does not necessarily lead to the configuration of a hub represented by a lawful agent. But in any case, the ICPP facilitates the establishment of network social relationships also in the Atlantic Coast Network.

Graph 6.2 shows the nodes distribution according to the betweenness indicator where the node with the largest indicator

becomes the nucleus. At the same time, "Jorge 40" is both the hub and the structural bridge, i.e., the individual with the largest quantity of connections in the network and with the largest potential to arbitrate information, enabling the information flow between modules or sub-networks configuring the network as a whole. It is remarkable that an AUC member was able to play both roles; indeed, that agent was capable of establishing the largest quantity of direct connections with few intermediaries and arbitrated the largest flow of information. In the Casanare Network case, although the ACC commander is the main arbitrator of information, he needed a mayor to establish contacts with most lawful agents. Instead, "Jorge 40," personally established most of the contacts without the intermediation or collaboration of somebody else close to him, either as nucleus-hub or nucleus-betweenness.

However, it is worth mentioning that the node with the second largest betweenness indicator is closer to the nucleus than the node with the second largest direct centrality indicator. This means that for the establishment of direct social relationships, "Jorge 40" acted without the strong support of the second core node. However, regarding information arbitration, the second node was closer. According to the betweenness indicator, the second node, AUCSMG, had privileged access when arbitrating information, with an indicator of 22.3%, which is a little bit lower than the one from the structural bridge, AUCRTP, 29.2%.

Apart from these two nodes, no other agent had privileged access to the Atlantic Coast Network information flows, since the third largest betweenness indicator has a value of 6.9%. The rest of the nodes are peripheral individuals in terms of access to network information.

The Network Nucleus Has no Complex Module of Stabilizer Nodes

The Casanare Network has a module of four core nodes close to the network nucleus, accounting for almost half of all social relationships established within that network, facilitating the interpretation of that group of nodes as network stabilizer nodes. However, the Atlantic Coast Network case is different because there is not a set of nodes close to the nucleus. Indeed, Graph 6.1 shows that the nodes with largest direct centrality indicators after the hub are far off the nucleus.

Concentration of Social Relations

The concentration of categories identified, is the following: (i) Support and political management commitments accounting for 40%; (ii) Collaboration in the setting-up and strengthening of self-defense groups accounting for 30%; and (iii) Unidentified commitments accounting for 18%. The last three categories of relationships account, together, for 12% in the following order: (iv) Coercion; (v) Favorable and improper judicial treatment and (vi) Administrative collaboration.

The foregoing illustrates the nature of most of the agreements reached for the Atlantic Coast Network configuration: Politicians received unlawful electoral support, and the AUC had the support of politicians, lawful agents and organizations, which was essential for their logistic, economic, and political strengthening and also for their relative social legitimacy.

Chapter 7

CHAPTER 7

What to Observe and What to Measure in StC and CStR processes

In order to illustrate the conceptual and analytical power of the SNAID methodology, two observable and measurable elements in the traditional corruption scenarios, the StC or the SCtR, are assessed: Social relationships and the agents. As stated in Chapter 3, the SNAID was based in two main questions that must be answered to develop an institutional diagnosis: (A) When should a criminal situation with corruption elements be defined as a traditional corruption scenario, an StC scenario, or a CStR scenario? And (B) to what extent a CStR process affected the institutional context of a State?

First Issue: Determination of the Existence of StC and CStR analyzing Social Relationships

To know whether or not a social situation may be defined as StC or CStR, it is useful to identify, classify, weigh, and analyze the relationships configuring a social network. By following this process it is possible to identify what the predominant and determinant interactions of a given social situation are, as well as determining whether or not a given social situation is analytically

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closer to either traditional corruption, StC or CStR. For instance, a process boosted only through bribery or intimidation and not through political or electoral agreements classified within the conceptual category of ICPP, may be interpreted as a situation closer to the StC than to a CStR. In contrast, a social situation boosted mainly through IIC and ICPP is theoretically closer to CStR than StC, and thus than a situation of traditional corruption.

The following criteria are useful to theoretically and empirically differentiate situations of traditional corruption from StC and CStR:

*   In a social situation of traditional corruption, there are neither systematic institutional effects nor IIC.

*   In a social situation of StC there are systematic institutional effects but not IIC.

*   In a social situation of CStR there are institutional effects and also IIC.

Graph 7.1.
Institutional Scope in classic corruption, StC and CStR

Corruption	StC	CStR
$IE = 0$	$IE > 0$	$IE > 0$
$IIC = 0$	$IIC \geq 0$	$IIC > 0$
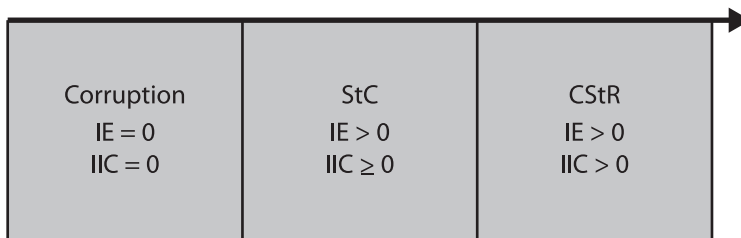
Where:

IE   = Institutional Effects

       = f (modified laws, decrees, regulations)

IIC   = Instrumental Institutional Capture

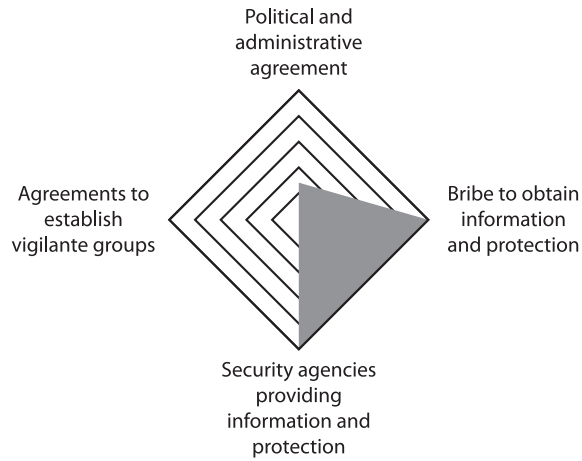   = f (ICPP, ICCS, ICM)

       ICPP = Instrumental Capture Political Parties

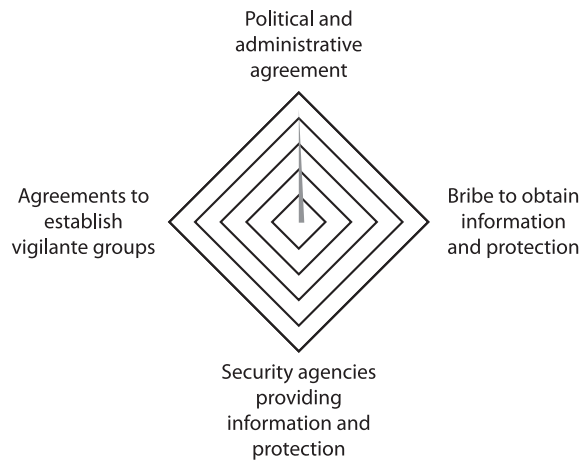   ICCS = Instrumental Capture Civil Society

       ICM   = Instrumental Capture Media

The left-hand rectangle represents corruption. In the CStR rectangle, the larger the ICC, *ceteris paribus*, the farther to the right the social situation is. Bearing in mind the methodological aspects described in Chapter 2, it is possible to categorize, classify, quantify and weigh each category of social relationship *vis-à-vis* the set of social relationships identified in the network. The results for each social situation herein analyzed were shown in the last section of Chapters 4, 5 and 6. Following Garay L. J. *et al.* (2009) and from the results of each social situation, four social relationship categories, that are comparable among the social situation analyzed, are used to identify the existence of either traditional corruption, StC or CStR (see Graphs 7.2-7.4).

Graph 7.2.
Concentration of Social Relationships – Mexican Cartel Network

Political and administrative agreement

Agreements to establish vigilante groups

Bribe to obtain information and protection

Security agencies providing information and protection

Graph 7.3.
Concentration of Social Relationships – Casanare Network

Political and administrative agreement

Agreements to establish vigilante groups

Bribe to obtain information and protection

Security agencies providing information and protection

Graph 7.4.
Concentration of Social Relationships – Atlantic Coast Network

Political and
administrative
agreement

Agreements to
establish
vigilante groups

Bribe to obtain
information
and protection

Security agencies
providing
information and
protection
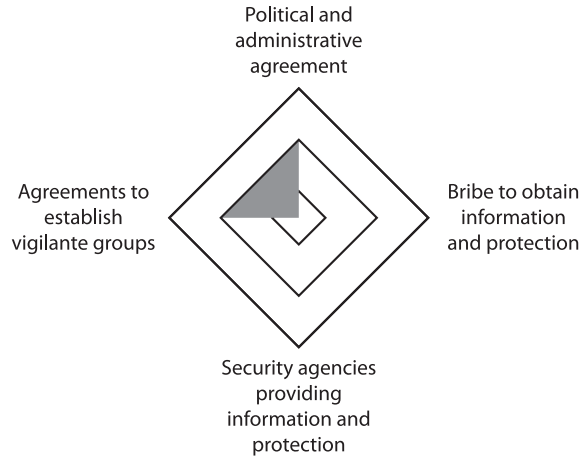
Given the infrequent intervention of electoral and political institutions in the Mexican Cartel Network, it may be asserted that in that case there were evidences of systematic corruption and progress towards StC, at least at the local level, albeit with lesser intensity than the other analyzed cases. The Atlantic Coast Network is the opposite, with frequent intervention of electoral and political institutions, which can be observed by the concentration of relationships at the upper tip of the diamond. Thus, the social situation of CStR observed in the Atlantic Coast Network is very different that in the case of the Mexican Cartel Network. The near absence of bribery is an additional indicator leading to the definition of the Atlantic Coast Network as an evident case of CStR, not only at the local level but also at the national level.

Second Issue: Determination of the Existence of StC and CStR through the Analysis of Agents

It is difficult to make a diagnosis of the scope of each of these situations based only on the social relationships, thus it is necessary to analyze the concentration of agents participating in each situation. Additionally, this concentration can be used to identify the branch of the public administration that is being affected either by the corruption process, the StC or the CStR. The results are obtained by categorizing, classifying, and quantifying the agents involved in each social network (see Graphs 7.5-7.7).

Graph 7.5.
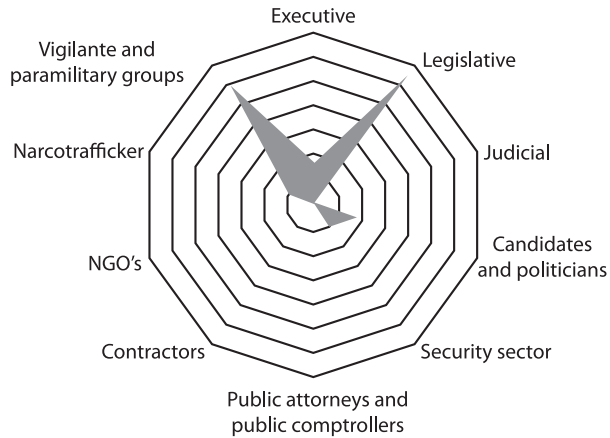**Concentration of Agents – Mexican Cartel Network**
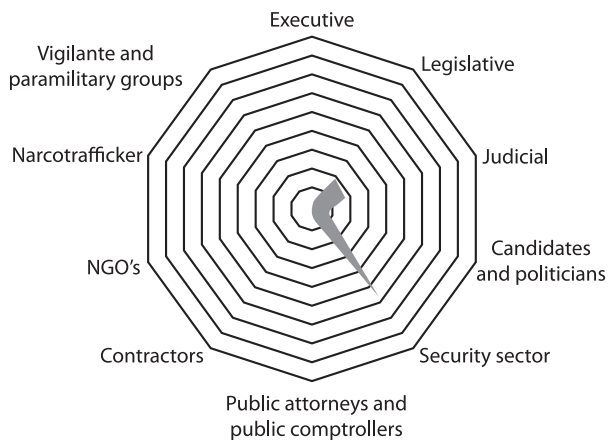
Graph 7.6.
Concentration of Agents – Casanare Network
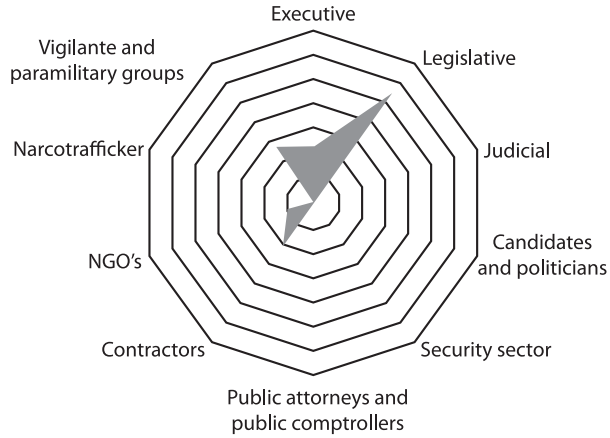
Graph 7.7.
Concentration of Agents – Atlantic Coast Network

The Mexican Cartel Network shows a concentration of agents belonging to State agencies of the judicial and security branches, mainly at the local level. This phenomenon coincides with the fact that this network has a high concentration of social relationships linked to bribery and the purchase of security information to State agencies at the local level. Thus, given the low existence of political, administrative, and electoral agreements, the progress towards StC in the case of the Mexican Cartel Network has affected institutions in charge of security and judicial functions of the Mexican State, mainly at the local level. It is possible that some government officials may have been involved in an StC scenario by their own initiative, through consent, or by coercion. Although this matter may be clarified by the qualitative analysis of social relationships, at this point it is only identified the level of affectation but not differentiating between the types of involvement, whether it be consent or coercion exercised over the government official. The level of affectation only identifies the lawful organizations whose officials were involved in the social situation analyzed.

Unlike State institutions affected in the Mexican Cartel Network, the Casanare Network not only shows a higher concentration of agents in charge of legislative functions, mainly at the local and regional level, but also agents from paramilitary structures. This is characteristic of an ICPP scenario, which at the same time coincides with a concentration of social relationships consisting of political and administrative agreements, as may be observed in Graph 7.3.

As a difference, the Atlantic Coast Network is an extreme case of CStR where there is a clear concentration of paramilitaries,

agents in charge of legislative functions, and candidates for public office by popular vote, at the local, regional, and even the national level. The conspicuous concentration of agents observed in the Atlantic Coast Network is accompanied by a concentration of social relationships formed through the execution of political agreements. This means that paramilitaries, politicians, and legislators interact mainly through political and administrative agreements. It may be noted then, that in this social situation, electoral and legislative institutions have been affected. The more risky aspect of this scenario for both institutions and the quality of democracy is the high concentration of agents from the legislative branch at the regional and national level. As pointed out in the Chapter 1, the more perverse structural effects arise when the CStR takes the form of direct and wide manipulation of lawmaking institutions. In this case, it is more likely that a State is facing what is called the *paradox of co-opted State*, which will be explained later.

Information in Graphs 7.5, 7.6, and 7.7 identifies the concentration of agents according to their functional/ organizational characteristics. This information, complemented with information regarding the concentration of social relationships, suggests a dense social interaction among paramilitaries, candidates for elected office, and lawmakers in the Atlantic Coast Network. These pieces of information make it possible to infer the presence of an intense process of ICCP, and therefore a scenario of CStR. However, there is a need for additional information in order to come up with a diagnosis of the context and institutional scope of the development of a social network.

As mentioned before, in terms of diagnosis, the purpose of this empirical analysis is to identify those institutions most negatively affected as a result of the participation of lawful and unlawful organizations and the establishment of specific social relationships. Therefore, it is necessary to differentiate the administrative levels mainly affected by the corruption, StC, or CStR process. Such differentiation is important because it makes a difference from an institutional perspective if agents involved in the social network belong to the public administration at either the local, regional, or national level. For instance, regarding a concentration of people from the executive branch, having the favor of a mayor in a small municipality is not the same as having the favor of the President of a country. The same may be said at the level of legislators or security agencies, because the involvement of a congressman is different than the involvement of a municipal lawmaker in a network. Additionally, having the favor of a local government official from a security agency is not equal to having the favor of a director of a federal or national intelligence agency. Therefore, to fully complete the institutional analysis, the following graphs distinguish which specific administrative level the agents participating in the network belong to (see Graphs 7.8 - 7.10).

The Institutional Scope of the Co-opted State Reconfiguration

Given the fact that some kind of IIC is present in the three situations referred to before, one can reasonably argue that these fall within StC or CStR brackets and not within the limited scope of traditional corruption. It is now necessary to specify

Graph 7.8.
Concentration of Agents differentiating the Administrative Level
– Mexican Cartel Network
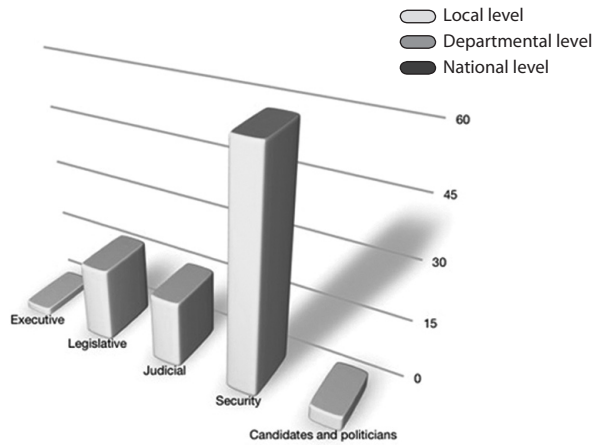
Graph 7.9.
Concentration of Agents differentiating the Administrative Level
– Casanare Network
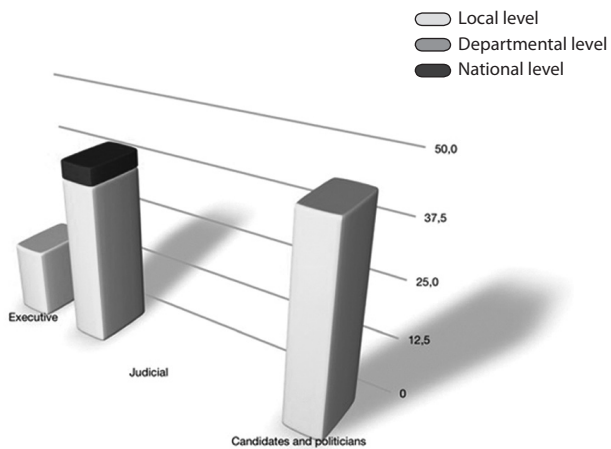
Graph 7.10.
Concentration of Agents differentiating the Administrative Level –
Atlantic Coast Network.

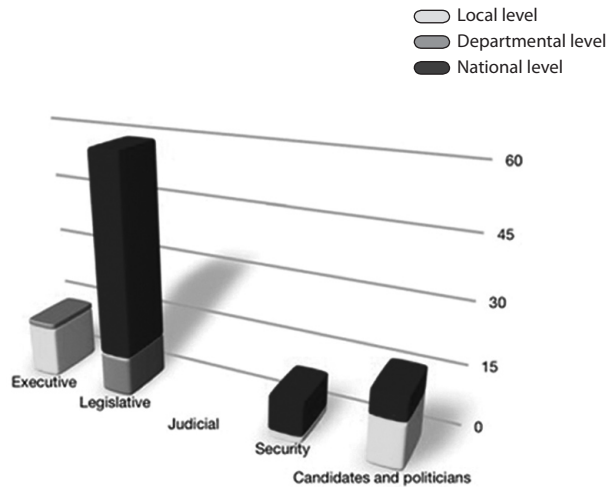the institutional scope of the StC or CStR, given the fact that, at least *a priory*, the greater the advance of the StC or CStR, *ceteris paribus*, the larger the weakness and failures of the institutional context.

It should be noted that reference is made to the institutional scope of the CStR and not to how developed or deep the StC and the CStR may be. At the outset it may be thought that the depth of the StC and CStR situations may only be determined by the percentage of people concentrated in a particular branch of the public administration. For this it is necessary to establish strict equivalences between the number of people captured/co-opted or capturers/co-opters among the different levels of the public administration: Local, regional, and national. For instance, it would be necessary to establish how many mayors captured/

co-opted, or capturers/co-opters are equivalent to a province governor captured/co-opted or capturer/co-opter and, in turn, how many province governors captured/co-opted or capturers/co-opters are equivalent to a President captured/co-opted or capturer/co-opter. However, this equivalence, which may be established in an arbitrary manner, would not solve the problem of composition of different branches of the public power both intra-institutional and inter-institutional.

Therefore, the concept of institutional scope of StC & CStR is presented to indicate which branch and which level of the public administration has been affected at a particular geographic and institutional level. This means that the scope of the StC & CStR encompasses the branch of government and the level of the public administration that may be affected by the StC & CStR process. This can be determined from the information in Graphs 7.8, 7.9, and 7.10. Given the impossible task of establishing a strict generalization for the above-mentioned equivalences, the scope of the StC & CStR is determined by the importance of the administrative levels affected.

For instance, it is worth mentioning that in some cases, capturing or co-opting at least one agent is a necessary condition to strengthen an StC or a CStR process. This is the case in the executive branch, which at the top or on the national level consists of only one individual agent: The President of the Country. This means that it is much more serious and dangerous for the quality of democracy to capture or to co-opt only one agent of the Executive Branch at national level, than to capture or co-opt a number of agents, also from the executive branch, but at local level. However, *a priori* it is impossible to determine in

quantitative terms the equivalence between the impact of a co-opted President and the impact of a number of mayors or province governors co-opted. The depth of the StC & CStR is a matter that may only be addressed through qualitative analysis; for example, examining the content of laws enacted by the initiative of the Executive under the influence of external agents.

Something similar may be said of congressmen; the perverse institutional effects derived from a co-opted congressman are larger than those derived from a number of lawmakers at local level. The problem aggravates when a number of congressmen are co-opted to enact laws aimed at favoring egoist or even criminal interests. In any case, the equivalences become more complex with inter-branch and inter-level analysis of the public administration.

Despite these *caveats*, it is evident that the Atlantic Coast Network represents a social situation with the most advanced stage of StC & CStR institutional scope- encompassing congressmen and security agencies at national level, and candidates for elected office such as mayors and politicians in the Colombian State. In contrast, the Mexican Cartel Network has a much more restricted scope, with no agents at the Federal level involved. The Casanare Network is at an intermediate level.

Naïve administrative models and the Paradox of the Co-opted State

The complexity of the interaction among agents of the networks analyzed leads to a reasonable inference that there is a certain rationale adopted in the search of a Capture and Co-opted

Reconfiguration of the State. This search is observed at the national, regional, and local level. To a certain extent, the complexity of the social interaction analyzed is explained by the multiple individual agendas sought. All of these interests pretend to be conciliated around a collective purpose attributable to the network, but this collective purpose does not exclude the existence of differential individual and group interests. It means that the collective purpose is not the sum of the individual purposes. The individual objectives may be diverse: Spanning from the contractor obtaining economic benefits, to the congressman obtaining electoral support during elections. However, in the end, each individual links up his own objectives with those of the others, in order to establish a collective purpose for the network. This can be clearly exemplified in the Atlantic Coast Network in which, for example, despite the individual interests and purposes, most of the political agents signed a document adopting a single collective purpose: Re-found the Colombian State and establish a new social and political regime. Therefore, the network allows taking individual advantage but, at the same time, allows achieving collective purposes related to gaining a relative control of the State at local, regional, and national levels.

Paramilitary drug traffickers are the main promoters of the networks analyzed in the Colombian case, whereas in the Mexican case, they are solely drug traffickers. After analyzing the stages of the path from the StC to the CStR, it may be concluded that drug traffickers have been perhaps the main promoters of this process in the most recent Colombian and Mexican history. Nevertheless, drug traffickers are not the only active agents, given the strategic role played by some politicians and public officers in the case of the Atlantic Coast network, for

example. However, it is important to analyze, with the relevant judicial information, other StC and CStR processes promoted by other criminal organizations interested in obtaining economic, social and political benefits through improper manipulation of democratic institutions.

The multiple connections between local and national agents, including transnational, lawful and unlawful, are useful to illustrate how certain social networks operate to systematically capture the State or even to move towards a CStR.

The analyzed networks have local particularities explained by factors such as availability of local resources, economic structure, predominant political practices in each region, market and State failures, and the location and social legitimacy of unlawful agents and groups. Therefore the scope of the network, as measured by the data of this chapter, leads to information about the lawful and unlawful institutions affected within each StC or CStR process. The characteristics set forth in Chapters 4, 5, and 6 are those of criminal networks that have surpassed the traditional corruption stage. These networks have moved towards local and regional StC, and in the Atlantic Coast Network case, the CStR has affected the national level.

The Mexican Network Cartel enabled drug traffickers to obtain privileged information at the local level. The Casanare Network enabled the paramilitary drug traffickers, Peasants Self-defense from Casanare (ACC), to control local and some regional decision-making authorities. Thus, a great deal of the executive, legislative, and judicial activity of Casanare since mid 1980s was oriented towards favoring egoist and exclusive interests, both

lawful and criminal.[39] Finally, with the Atlantic Coast Network, paramilitary drug traffickers, and to some extent a group of politicians and public officers were able to influence directly in the national legislative activity and obtain information and preferential treatment from Colombia's central intelligence and security agency.

The scope and development of the StC and CStR processes are of great concern in terms of the implications for the consolidation of the Rule of Law. This is even more worrisome when the CStR affects the legislative, executive, and judicial branches, sometimes at the highest levels of national government. This scenario occurs when technical and administrative weaknesses at local and regional levels coincide with the presence of unlawful groups of high criminal power. Both factors foster the reproduction of perverse interests through procedures of Instrumental Capture of Political Parties and Politicians, leading to the infiltration and co-optation of the central body of the legislative activity in favor of both criminal and lawful but perverse interests.

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39 Situations like Casanare's just described were observed in other Colombian provinces. For instance, there are reports of the association between lawful and unlawful groups in others Colombian provinces also beneficiaries of huge amounts of royalties derived from oil, such as Meta and Arauca, with the purpose to manipulate decisions from the legislative, executive and judicial branches, particularly at local and regional levels. For instance, there are judicial files with evidence of the interference of the National Liberation Army [*Ejército de Liberación Nacional*, ELN] with the public administration of the province of Arauca. There are also judicial files with evidence of relations between paramilitary drug traffickers and government officials of the province of Meta. Both provinces are characterized for the management of huge amounts of money from oil royalties.

An advanced level of CStR is a matter of grave concern because its effects over formal and informal institutions tend to be structural and permanent. As a result, the CStR could acquire a long-term endemic character that affects the operation of democratic institutions due to the manipulation of the rules of the game, distorting the fundamental pillar of any modern State: the Rule of Law. If the CStR affects lawmaking, laws may consequently lose their social legitimacy, the basis for the Rule of Law, and in general, the basic notion of any modern Democratic State.

Additionally, these perverse situations may be aggravated in administratively weak States that are carrying out idealistic or naïve decentralization processes. It can be easily found several weak States adopting decentralization models that do not fit in their particular reality. Some States with technical weaknesses undertake naïve decentralization processes without duly considering: (i) flaws in the institutional and administrative capacity of territorial entities, (ii) weakness of the State in the exercise of inalienable functions such as security provision and enforcement of the Rule of Law, (iii) the fragility of democracy and lack of representativeness of political parties and social movements and (iv) the presence and activity of powerful unlawful groups. All of these factors may influence the configuration, reorientation and/or weakening of formal and informal institutions. When this occurs, lawful and unlawful groups may perversely affect the consolidation of States (Elias, 1994) and the Rule of Law.

When the legitimacy of certain key laws emerging from advanced stages of CStR is being challenged, a severe paradoxical situation arises: The Rule of Law calls for compliance with

legislation, but at the same time, such compliance may favor excluding and even criminal interests to the detriment of social welfare and the Rule of Law itself. At this institutional stage even the "social goodness" of compliance with such laws may be challenged (Garay L. J. & Salcedo-Albarán, 2010). This is the case in a number of Latin American and African countries, though with varying degrees of depth. Herein, this situation is named "Co-optation Paradox of Rule of Law." This paradox can be strengthened if the States do not consider their actual context when adopting administrative or decentralization models.

Implications for the Institutional Model of State

In a typical situation of "Co-optation Paradox of Rule of Law", decentralization not only fails to strengthen democracy, but also weakens democracy in structural terms. In order to avoid this scenario, it is needed to acknowledge that powerful lawful and unlawful groups are able to not only affect formal institutions and distort law and regulation enforcement, but also co-opt lawmaking and institutions management. Therefore, it is necessary to redefine some of the basic paradigms that represent traditional notions of political and administrative decentralization, adapting them to the realities of States with a presence of organized crime.

The foregoing does not necessarily imply that "tooth and nail" centralization is the "optimal" alternative to avoid that type of social situation. Although unlawful organizations would face greater obstacles for the StC and CStR in a centralized State, by no means are those obstacles insurmountable. This

means that in a centralized State, there are also risks for CStR. Therefore, the key is neither to go back to centralization nor to the deregulated decentralization, but instead move towards a regulated decentralization within an integral framework of mutual territorial responsibility under the principles of competition, complementarity, and more fundamentally, the construction of democracy, citizenship, and the Rule of Law. As stated, if the Rule of Law is weak, there is a great risk that the law itself can be manipulated and used as a "tool" for criminal interests. In this sense, it is needed to face the issue about how to advance on administrative decentralization process that is carried out in a context of strong organized crime.

Deepening democracy and citizenship participation, vindicating politics as the space for handling public interests, enhancing the primacy of public interests, and institutional State strengthening, are the means to impede progress of illegality, StC and CStR. Nevertheless, the empirical and factual conditions for these ideas must be analyzed in order to formulate a model in which it is possible to deep democracy and, at the same time, to face the risks imposed by drug trafficking and other forms of organized crime.

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