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# Narcomessages as a way to analyse the evolution of organised crime in Mexico

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## ABSTRACT

Drug-related homicides in Mexico have increased to levels never before seen and organised crime has evolved accordingly, becoming more fragmented and diverse. This work analyses the evolution of organised crime and drug-related violence in Mexico by examining how drug trafficking organisations (DTOs) communicate through the messages left next to executed bodies from 2007 to 2011. Results suggest that the use of narcomessages has changed and developed in parallel with the evolution of organised crime. In the beginning, DTOs used their victims merely to position themselves. Over time, as the organisations became stronger, they began to direct and sign their narcomessages. By 2009, rivalries were firmly entrenched between several criminal groups, even while the increasing violence led to the creation of new groups with the stated purpose of defending citizens. The evolution of organised crime is observed by the fragmentation of existing groups, the consolidation of new alliances, and the creation of new groups.

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## Introduction

Drug prohibition in Mexico and its war against organised crime led to an increase in violence to heretofore unseen levels. From 2007 to 2010, drug-related homicides increased from 3.02 per 100,000 inhabitants to 16.03 per 100,000, respectively, with violence stronger in regions where drugs were sold, trafficked, or produced.<sup>1</sup> Organised crime evolved accordingly, becoming more fragmented and diverse. Drug trafficking organisations (DTOs) no longer focused solely on narcotics but expanded their illegal activities to include human trafficking, oil theft, extortion, and kidnapping, among others.<sup>2</sup> The purpose of this work is to analyse the evolution of organised crime and drug-related violence in Mexico by examining one particular channel by which DTOs communicate.

A change in strategy for fighting DTOs in Mexico was accompanied by a concurrent evolution of organised crime. The governmental efforts to ‘behead’ criminal organisations by killing or arresting their kingpins or *capos* created power struggles within and

between organisations for turf control over the domestic market and as a potential route for trafficking drugs into the U.S. As a consequence of this 'decapitation' strategy, the number of criminal groups in Mexico grew exponentially. According to a confidential data set obtained by CIDE,<sup>3</sup> more than 200 criminal groups have been identified because they got involved in confrontations with governmental authorities, because they signed the executions of their enemies, or because some of the victims were members of specific groups. Turf wars and fights to control drug routes became more intense than ever before, as the number of players in the arena increased. The increasing drug-related violence in Mexico was characterised by not only a higher number of groups but also by the use of new practices, such as labelling their violent actions (through *narcomessages* or *narcomantas*), obtaining territorial control, diversifying their activities, and by creating new alliances and fragmentations among different groups.

Uncommon outside of Mexico, *narcomessages* can be seen as a signalling strategy that reveals the psychological motivation of criminals, giving context to the urban milieu where crimes are committed. Ioannou et al.<sup>4</sup> examined the psychological motivation of criminals by analysing the criminal narrative experience to understand why offenders decide to commit a crime. Using data from a prison in the north of England, the authors identify four types of individuals representing four different motivations: the professional type, the hero type, the revenger type, and the victim role. In this sense, the different *narcomessages* observed in Mexico can be used to understand the motivations killers have for committing a crime.

Anderson<sup>5</sup> and McNeeley and Wilcox<sup>6</sup> study the urban context where crimes are committed, using data from the U.S. and London, respectively. These studies identify the 'codes of the street' individuals follow. These codes are informal agreements based on signals such as styles of dress, specific words used, and specific behaviours. Depending on these signals, individuals can earn respect in their communities, sometimes because of the displayed threats of violence, or because of the projected belief that they can take care of themselves.<sup>7</sup> *Narcomessages* can then be understood as part of the 'street code' used by criminals in Mexico to impose their position in a specific territory, or to communicate a threat of violence to other groups, the government, or society at large.

Finally, Gambetta<sup>8</sup> examines the signalling strategies used by criminals as a way of communicating in an environment where trust is nonexistent. Since personal or organisational interests are not directly observable,<sup>9</sup> the emission of true or false signals, such as violent messages left next to executed bodies, or the way bodies are left exposed to the public, can increase the reputation or fear of a specific organisation.

Using this literature as a framework, *narcomessages* can be understood as the mechanism by which criminals signal their power to enemies and indicate their willingness to engage in violence. Thus, the results of this analysis could provide some insights into other methods of criminal communications or signalling in other countries or contexts.

While Mexico does not have the highest homicide rate among Latin American countries (e.g. higher levels exist in Central American countries or were observed in some Colombian cities during the 1990s), particularly savage killings performed by the drug cartels in Mexico have gained the attention of national and international media alike. In a world where trust is almost nonexistent, the threat of violence (and violence itself) allows for an uneasy cooperation among criminals.<sup>10</sup> As a result, the media has

tried to censor this information with Ex-President Calderon mentioning that organised crime enjoys free publicity when the media decides to publish all the details of a drug-related execution.<sup>11</sup>

Several articles have explored the relationship between organised crime labelled violence and the importance given to criminal groups by the press. According to Rivera Fuentes,<sup>12</sup> in violent states a rise in media coverage increases the narcomessages by 160% the following week. Martin<sup>13</sup> finds that narcomessages appear in the media almost every day (out of 365 days analysed, only in 41 were no messages published). Other analyses have focused on the communication strategies of the narcomessages and their relationship with the human body and the way the executions were performed.<sup>14</sup> Others have used the information gleaned from the messages to draw conclusions about the *modus operandi* of some groups in specific states. In fact, the group most analysed is 'La Familia Michoacana', whose operations are based in Michoacán, Guanajuato, and the state of Mexico.<sup>15</sup>

However, this paper represents the first time that a complete data set of messages has been used to understand the evolution from unlabelled to labelled violence in Mexico during the period of the war against organised crime. Existing academic articles that aim to analyse the evolution of narcomessages and their relationship with the drug war are limited in several ways: either they are focused only on 1 year,<sup>16</sup> on a specific state, or on a specific group.<sup>17</sup> The data set used in this article includes messages left next to executed bodies by criminal organisations from 2007 to 2011. Not only does the data set include information about narcomessages but also data on other executions not 'labelled' as such by their perpetrators. Moreover, the presence of different groups in a territory can be verified by observing where they left or received a message. Only from this vantage, then, is it possible to draw wider conclusions about the evolution of violence related to organised crime in Mexico.

In what follows, I analyse approximately 2600 narcomessages left next to executed bodies. Results suggest that violence is becoming more 'visible' than ever before: in 2007 only one DTO was identified via narcomessages, and only 1% of total executions by DTOs were labelled at all (or had a message left next to the body). In contrast, in 2011, more than 110 groups were identified via narcomessages, while 11% of the total number of executions were labelled. I classify these messages into six different categories depending on their content: these include whether they were directed at the government, to other DTOs, or to snitches; whether they were left to justify the execution (*vigilante* messages); or whether they were related to drug trafficking or territorial control.

Results suggest that the use of narcomessages has changed and evolved in parallel with the evolution of violence and organised crime. According to Martin,<sup>18</sup> messages have increased in the same direction as inter-cartel violence, a result that I also find here. In the beginning, DTOs used their victims only to position themselves without directing any particular message to the government or to other DTOs. However, over time, as they became stronger and more consolidated, they began to direct and sign their narcomessages. In 2009, rivalries were already firmly in place between the main criminal groups in the country; with the increasing violence, new groups were created with the stated purpose of defending citizens from existing DTOs. These groups are what I call *vigilantes*, or self-defence groups, and are these days spread throughout states in the country

corresponding with the greatest levels of violence. The fragmentation of existing groups, the consolidation of new alliances, and the creation of new groups have further escalated drug-related violence in Mexico to levels impossible for the federal government to control.

The rest of the paper is organised as follows. In section two, a limited description of the data set is provided, including some summary of the statistics of the main variables used for this analysis. Section three describes the methodology used to classify the messages and defines each of the categories used. Section four shows the results of the analysis based on three dimensions: time analysis, involvement of criminal groups, and geographical location. Finally, conclusions and policy implications are provided in section five.

## Description of the data

The data used for this analysis comes from a confidential data set obtained by the Drug Policy Program (PPD) of the Centre for Economic Research and Teaching (CIDE). The data set (hereafter PPD data set) was validated using open sources and will soon be published and open to the public for academic and research purposes. The PPD data set includes all executions related to organised crime in Mexico, the date of the event, municipality, state, the method by which the execution was committed, the number of people executed, and the content of the narcomessage in the cases where a message was left next to the body. According to the PPD data, during the 5-year period, Mexico witnessed 43,801 executions related to organised crime, corresponding to 30,982 violent incidents. The public data set published by the Office of the President during the government of Felipe Calderon reports the total number of executions related to organised crime in Mexico from December 2006 to December 2010 as being 30,013, a figure that reflects the number of homicides found in the PPD data set. A complete description of the data set, the validation exercise conducted by the PPD at CIDE, and the main biases and limitations of the data are described in Atuesta et al.<sup>19</sup>

According to the Methodological Guide of the public data set published by the Office of the Presidency (available online until the end of the former administration), an execution related to organised crime is defined as an intentional homicide in which the victim or the perpetrator was an alleged member of any criminal group. It is not the result of an individual aggression or a confrontation, and it does not assume the participation of any governmental activity. A violent event can have multiple homicides categorised as executions. A homicide categorised as an execution can have two further characteristics: (i) it was perpetrated with extreme violence (decapitation, mutilation, calcination, etc) and/or (ii) there are more than two victims.

**Table 1** describes the number of events, executions, and narcomessages left next to the executed body per year included in the PPD data set.

Of the 30,982 events in which at least one execution was observed, narcomessages were left 8.65% of the time. According to Rios,<sup>20</sup> narcomessages are defined as ‘billboards that traffickers leave on the streets to clarify why they assassinated someone, to intimidate other potential victims, identify themselves or their victims, communicate with citizens around the area, or give instructions to the investigators who will eventually record the messages, among other reasons’. All narcomessages included in this data set are messages left with an executed body. This analysis thus excludes other means of criminal communication such as

**Table 1.** Number of violent events, homicides categorised by executions, and narcomessages found next to the executed bodies.

	Number of events	Number of homicides categorised by executions	Narcomessages
2006 (December)	41	55	0
2007	2030	2595	56
2008	4543	6183	281
2009	6580	8906	506
2010	9070	13,167	889
2011	8716	12,895	948
<b>Total</b>	<b>30,982</b>	<b>43,801</b>	<b>2680</b>

Source: Data set BE-PPD.

narcomantas, narcovideos, or narcoemails (defined in Eiss<sup>21</sup>), previously analysed as information modes used by criminal groups in Mexico.<sup>22</sup> The number of narcomessages found next to executed bodies increased exponentially over time, from 56 in 2007 to 958 in 2011, an increase of 1611% over the 5-year period.

In the stats above, the number of executions is greater than the number of events because there are some episodes in which there was more than one executed body. In total, there were 43,801 executed bodies found from December 2006 to November 2011. The year with the greatest number of executions was 2010, with 13,167 executed bodies found. While the number in 2011 is still greater than in other years, it was lower than 2010 numbers by 2.07%. At the same time, the number of narcomessages found next to bodies increased significantly since the first message found in 2007. From 2007 to 2008, the number of messages increased by more than 400%. In 2010 and 2011, they increased by an additional 80% and 75%, respectively, over the previous year. From 2010 to 2011, this figure increased again, but grew by only 7%: from 889 narcomessages to 958, respectively.

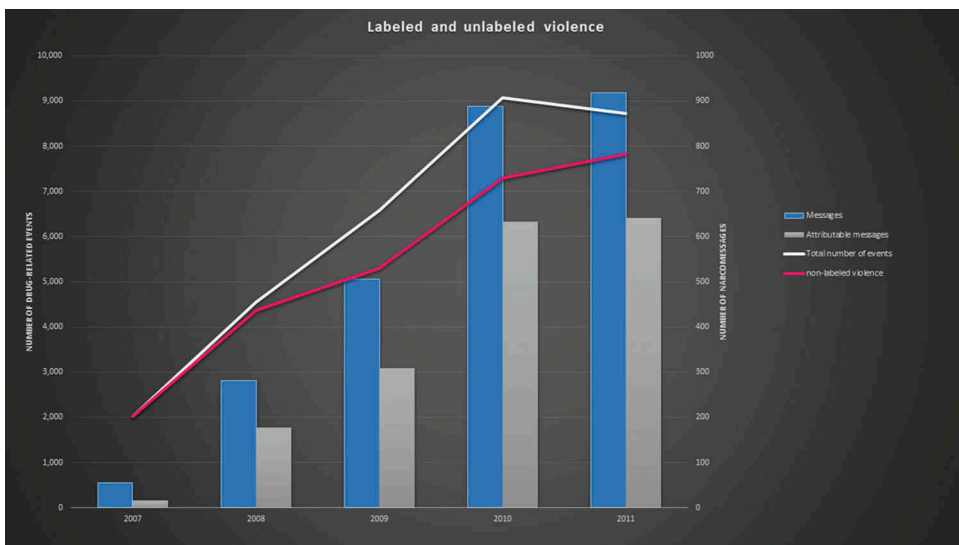
The first narcomessages were observed in March 2007 in the states of Nuevo Leon (two messages) and Quintana Roo. These messages were directed at public officers to the justice attorney and a public officer that was allegedly protected by the Sinaloa Cartel. One month later, messages were also found in Tabasco, Nuevo Leon, and Guerrero. Since then, they have spread to 25 of the 32 states in Mexico. The five states with the greatest number of narcomessages were Guerrero (429), Sinaloa (285), Chihuahua (272), the state of Mexico (259), and Michoacán (186). In all of these states, drug-related violence steadily increased with the number of criminal groups proliferating since the beginning of the war against organized crime in Mexico implemented during the government of Felipe Calderon.<sup>23</sup> According to Eiss,<sup>24</sup> the first narcomessage documented by the press was observed in the state of Guerrero on 20 April 2006, when two policemen were killed and beheaded. However, the term narcomessage was not used until the tactic was repeated.

It is interesting to observe how violence became more labelled or 'visible' than before. While in 2007 (the first year with data) only 3% of the executions were labelled (with a narcomessage left next to the executed body), by 2011 this figure had increased to 11%. On the other hand, out of the total number of narcomessages, only 29% were attributable in 2007 – that is, signed by or directed towards a specific group. In 2011, the proportion of attributable messages increased to 70%. These figures suggest that not only was violence becoming more frequently labelled than before, but that criminal groups were also interested in becoming more visible and known.

However, no clear explanation for this phenomenon exists. It may be because competition among cartels increased, and narcomessages were a way to ensure that society, the government, and other groups acknowledged a specific cartel's presence in a certain territory. It may also be because cartels wanted to intimidate and scare society, or because it simply became 'fashionable' and 'trendy' to leave such messages. Since not all messages were published by the press, it is also not clear who the final recipients of the messages were intended to be. The most valid hypothesis is that messages were used as means of communication between groups, and also as mechanisms to impose fear and to earn respect from society. Figure 1 shows the relationship between the total number of events (white line) with the non-labelled violence (pink line) and the relationship between the total number of messages found (blue bar) and the total number of attributable messages (white bar).

The PPD data set also includes the killing method of the executed body. The most common killing type in executions was by shooting. However, increasingly gruesome methods have been employed over time, including decapitations and dismembering, among others. Table 2 shows the number of events where a narcomessage was left, by year and by killing type.

Considering the 5 years analysed, in 55% of the cases in which a message was left next to the body or bodies the execution type was a shooting; in 25% of the cases, it was beheadings and/or dismembering; in 4% it was asphyxia and in 5% other methods were used, such as beatings, blows to the head, the use of knives, or bodies delivered in bags or blankets. While shootings still represented the greatest percentage of the total, the more gruesome methods such as beheadings and dismembering grew in frequency (increasing from 25% of the total in 2007 to 31% in 2011). According to Gambetta,<sup>25</sup> communication and violence are connected: the more violence is used as an agent, the less an individual has to do to prove his or her reputation. Thus, cartel's signing messages in the most gruesome executions could be a strategy for generating respect and reputation among rivals and to society in general.



**Figure 1.** Total violence vs. non-labeled violence and total messages vs. attributable messages.

**Table 2.** Number of messages found next to executed bodies, categorised by the way the individual was killed.

	Shootings	Beheadings and Dismembering	Incinerations	Asphyxiation	Others	No Information
2007	0	0	0	0	0	56
2008	128	71	2	10	16	54
2009	319	87	2	32	34	32
2010	533	212	13	41	32	58
2011	498	291	6	24	50	79
<b>Total</b>	<b>1478</b>	<b>661</b>	<b>23</b>	<b>107</b>	<b>132</b>	<b>279</b>

The narcomessages found varied in every sense: in the way they were written, the message they were trying to convey, the way the execution was conducted, and in their specificity, grammar, and clarity. In the next section, I categorise these messages according to their content in order to identify the reasons why they were delivered. When comparing the number of messages included in this analysis with previous studies, I observe that this data set is more robust than the others; this suggests that messages have existed that never were released to the press.

The robustness of the PPD data set comes from the validation and codification processes conducted by the PPD and described in Atuesta et al.<sup>26</sup> As stated above, the PPD data set contains official records of the events related to organised crime that were never published by the press, including the content of messages that were left next to the executed bodies. The data set was validated with open source data to verify the accuracy of its information, and with publically available data sets.<sup>27</sup> Once validated, it was coded and anonymised in order to mask sensitive information such as names of the victims, specific characteristics of the events, or personal threats to governmental officers. Since the PPD data set includes messages that were not released to the media (but were gathered by the government), the publication of the message and the role of the media are influencing the analyses conducted in the following sections.

## Methodology

Messages were classified based on the information included in the text. However, further research should include a multi-dimensional classification similar to the one included in Martin.<sup>28</sup> Using a simpler categorisation like the one employed here provides the benefit of making it easier to conduct the temporal, spatial, and group analyses of the evolution of organised crime, which is the aim of this article.

Five different categories were included in this classification:

- Messages directed to the government (meaning any governmental authority including military, marines, and police officers). This category includes the following messages:
  - Messages directed specifically to the government or governmental agencies;
  - When the victims were public officers or authorities;
  - When the victims were government sympathisers or informants;



- When the victims were members of other cartels dressed up like soldiers or police officers;
- And messages that threaten to kill public officers if the authorities decide not to release the message with the objective of informing the public about the DTOs power.
- Messages against informants:
  - Messages referring to the informants as ‘fingers’ or ‘rats’: usually those identified as ‘fingers’ are killed and their index finger, used to point to something or someone, is cut off.<sup>29</sup>
- Vigilante messages: any type of message trying to convey some shared values to society. Cartel vigilantes try to justify their killing by blaming the victim for being a thief, a kidnapper, for selling drugs in schools, or for raping or killing women, among others. According to Martin,<sup>30</sup> *vigilantism* is the most influential way messages from criminal groups can influence public opinion. By releasing them, cartels position themselves as ‘caring’ groups looking after society and eliminating criminals that harm the population.
- Rivalries between cartels or messages of hatred: these are done just for being a member of a rival cartel or for supporting a cartel’s enemies. Most of these messages are directed towards a specific group and signed. These are another type of messages in which the DTOs want to inform the public about their power but in this case, specific threats to the government are not included.
- Drugs or territorial control: including *chapulines*, who are the local drug traffickers usually working for a rivalry organisation.<sup>31</sup>

Table 3 shows the classification of messages for each of the 5 years of analysis. The classification is not exclusive, since a message could be, for example, directed to the government (blaming an individual as collaborating with the government) but also a message against informants (since the collaborator is blamed for being a ‘dedo’, or a snitch). Specific words are also used for classifying the messages. For example, the ‘chapulines’ are small drug traffickers usually working for a rival organisation. ‘Dedos’, or ‘fingers’, are snitches or informants; ‘Madrinas’, or ‘godmother’, are government informants; ‘marranos’, or ‘pigs’, are individuals who can be easily convinced to change sides, and are perceived as having no principles.<sup>32</sup>

Most of the messages found next to the executed bodies concern rivalries between cartels (44%), followed next by *vigilante* messages (22%). As will be discussed in the next section, the evolution of organised crime and the fragmentation and creation of new criminal groups led to the proliferation of the use of *vigilante* messages to justify illicit actions as serving the greater good of society. Messages directed to the government

**Table 3.** Classification of messages by year in the five categories described.

	To the government	Against informants	<i>Vigilante</i> messages	Rivalries between cartels	Drugs or territorial controls ( <i>chapulines</i> )
2007	5	5	9	31	3
2008	42	32	40	143	11
2009	59	111	148	192	62
2010	84	107	222	342	123
2011	79	135	193	508	87

only represented 10% of the narcomessages during the 5 years of analysis – the same percentage as messages related to drugs or territorial control. Most of the messages included in this latter category are related to the killing of a ‘chapulin’ belonging to a rival organisation.

The message classification and analysis was conducted only with the information included in the text of the message and with information regarding the groups involved in the event reported in the PPD data set. Since the data came from official records, it is possible that the classification of messages could be biased (for more information regarding these biases, see Atuesta et al.<sup>33</sup>). Another problem the data could have is that narcomessages are sometimes used to misguide the police with respect to who committed the murder. Moreover, as some anecdotal evidence has suggested, security forces in Mexico have used narcomessages to hide their extrajudicial executions<sup>34</sup> by attributing them to a specific criminal group. However, since the data comes from official sources, there is no way to account for this bias in the analysis.

In the following section, I use the information obtained from this methodology to analyse the evolution of organised crime using narcomessages. The dynamics of the analysis include temporal and spatial dimensions, as well as a specific analysis of the use of messages for the most important groups over different periods of time and in different locations.

## Results

### *Temporal and group analysis*

The temporal analysis shows an evolution in the types of messages observed. At the beginning, messages were rarely signed or directed at some specific group. Although they were used to make a statement with the executed body, violence was not very visible and groups were not interested in being acknowledged for the execution. The only rivalry in place was between criminals and the government. For example, the first two messages found in Nuevo Leon were directed at the government: the first to a justice attorney, and the second to public officers defending the Sinaloa Cartel.

In April of 2007, Los Zetas signed the first message in Guerrero. The message was *not* directed at anyone specific, but was rather a statement of the presence of the group in the state: ‘we are already here’, it said. This message could be seen as communicating a warning to the current groups already in the state, to the government, or to society in general. Los Zetas continued leaving messages next to the executed bodies, some with simply the letter Z on them or others with some specific messages leaving general threats. For example, in May of 2007 in Tabasco, Los Zetas left the following message next to an executed member of the state police: ‘he has someone to take care of him, you have who? You snitches are going to lose your head’. The message was written replacing all the ‘s’s’ with ‘z’s’ and was replete with spelling mistakes.

In 2007, the only identified groups through messages were The Gulf Cartel, ‘El Barredor’, ‘Gente Nueva’, and Los Zetas. Out of the 56 messages found, 41 were not attributable to any group, nor were most of the signed messages directed towards a specific group. However, the content of the messages suggests that, in most cases, the objective was to hurt a member of a rival organisation. A notable exception was a

message found in Oaxaca, in June of 2007 signed by 'Sangre Nueva' and directed to Los Zetas: 'this is going to happen to everyone working for Los Zetas. Att. Sangre Nueva'.

The number of messages increased sharply from 2007 to 2008, expanding from 56 messages in 2007 to 281 in 2008 (a growth rate of over 400%). Of the messages left in 2008, 124 (44%) were not attributable to any group. Most were about rivalries between groups (53%), messages directed at the government (16%), and *vigilante* messages (15%). Again, it is important to keep in mind that these categories are not exclusive, and a message, for example, that justifies the killing for being a 'madrina' is classified both as a message directed to the government and against informants. Of the total number of messages found in 2008, 36 were both signed and directed, and a clear rivalry between groups could be observed. A new rivalry was clearly identified in the state of Chihuahua between the Sinaloa Cartel and La Linea (the armed group of the Juarez Cartel) with 10 messages signed by La Linea against the Sinaloa cartel from May until November 2008.

The Sinaloa Cartel was not only a target of La Linea, but they attracted the attention of most of the groups identified in 2008, including Los Zetas and the Beltran Leyva and Tijuana Cartels. Some messages accused the Sinaloa Cartel of partnering with the government, but the majority were just messages of hate against 'El Chapo' Guzman and the Sinaloa Cartel in general. While the Sinaloa Cartel was receiving these messages, La Gente Nueva (an armed group of the Sinaloa Cartel) left a message against the Juarez Cartel in Chihuahua, blaming them for killing innocent people, terrorising the population, and blaming the government for their actions. Part of the message read: 'for those who commit robberies, executions, extortions and kidnappings, threatening and beheading both police officers and innocent people to seed terror in the society and blame the government of Felipe Calderon of protecting the Chapo cartel, and still they complain of what they are doing'. The different positions of the cartels were observed through the messages: while the Sinaloa Cartel was accused of having connections to the government, the Sinaloa Cartel itself (through its armed group) accused other groups of killing innocent people and blaming the government for it.

Forty-two messages were directed at the government, and 22 of them were signed by a group or blaming a group for collaborating with the government. Some of these messages were directed specifically towards the military operations implemented during the government of Felipe Calderon. For example, in August of 2008, four federal agents were executed in Michoacán and an unsigned message was left: 'This is for you to keep sending airplanes'. In November 2008 in Guanajuato, La Familia Michoacana signed a message declaring the 'war against federal and ministerial agents'. Other messages were directed specifically to an army major, or to the army in general, blaming them for being criminals.

New self-defence groups started appearing in 2008 and through 2009. When violence erupted in most of the states in Mexico in 2008, new groups were created with the intention of eliminating older groups such as Los Zetas and the Sinaloa Cartel. Messages from these new groups like 'The Priest that Kills Narcos' and 'The Avenger of the People' (in Chihuahua and Guerrero, respectively) began appearing in 2008. Their messages also included content such as 'the people are tired of the rats and the muggers', or 'this is going to happen to everyone who kills a policeman or a military officer', or 'for all the rapists, kidnappers, muggers, and rats'. Other groups such as the Tarasco Group left

messages in Michoacán purporting to 'clean' the state of kidnappers, rats, and bandits. Traditional cartels also began to justify their executions, even if the executed was a member of rivalry organisation. Of the 41 *vigilante* messages left in 2008, it is possible to attribute at least one group – killers or killed – in 23 of them.

More than 50 groups were identified in messages found in 2009. The number of messages jumped from 281 to 506 (an increase of 80% from the previous year), and the messages that increased the most were those against informants and *vigilante* messages. Although rivalry messages still represented a significant proportion of the total number of messages observed that year (34%), *vigilante* and anti-informant messages gained significant traction (26% and 12%, respectively). In 125 messages, at least two groups could be identified, suggesting that one of them was signing the message and the second one was receiving it. Some of the identified rivalries included Los Zetas against La Familia Michoacana, the Juárez Cartel against the Sinaloa Cartel, and La Familia Michoacana against the Beltrán Leyva Cartel. Since La Familia Michoacana was the identified group that left (or received) the greatest number of attributable messages in 2009, it was not surprising that most of the messages were found in the states of Mexico, Guanajuato, and Michoacán, where the group enjoyed territorial control (all together, the three states had a total of 147 messages).

On the other hand, the single state with the greatest number of messages was Guerrero (84) and in most of them, the Beltrán Leyva Cartel was identified, as it clashed primarily with La Familia Michoacana. The Beltrán Leyva used *vigilante* messages to justify their actions, even if a rivalry against another cartel was declared. Although most of the messages did not mention territorial control, some suggested that the rivalry with La Familia Michoacana was caused by the state. For example, a portion of a message left by the Beltrán Leyva stated: '(...) michoacanos, stop killing innocent people, here we are, Guerrero is ours. Att. Boss of bosses'.

La Familia Michoacana was considered one of the most territorial of cartels, and the messages left next to the people they executed corroborate this. La Familia was identified in 118 of the messages found in 2009, a year in which they controlled Michoacán, Mexico, and Guanajuato, and were engaged in a dispute with the Beltrán Leyva for Guerrero. In 2010, they tried to expand to Veracruz. Their rivalries against Los Zetas and the Beltrán Leyva were for territorial control, both in Michoacán and Guerrero, respectively. This trend continued during 2010 and their rivalries with other groups increased (with La Resistencia, Cartel del Centro, La Contra, etc). Compared to other cartels, La Familia had a significant number of drug-related messages or messages about territorial control. Phrases such as 'This turf has an owner' or 'Michoacán does not sell "ice" and "crystal"' were common. The conquering of territory was so important that they began referring to themselves with specific names, depending on the territory they were operating. For example, messages found in Guanajuato were signed by 'La Familia Guanajuatense', and when their operations were in Guerrero, they signed their messages 'La Familia Guerrerense'. In 2010, a message referring to 'La Familia Mexicana' was found, but soon the new nickname disappeared. The first message with this identification said: 'this happens to all the rats who have "ice" and those who do not want to be part of the Familia Guanajuatense, soon to be, La Familia Mexicana'. A second message appeared 2 days later also signed 'soon to be La Familia Mexicana', and 3 days later, also in Guanajuato, a message signed by La Familia Mexicana was left against Los Zetas: 'This is what is going to happen to everyone that supports Los Zetas, Att. La Familia Mexicana'.

In 2010, 890 messages were found, representing an increase of 76% from the previous year. Fragmentations and new alliances among groups led to more than 70 groups being identified by the content of the messages. The main groups that left messages in 2010 were Los Zetas, the Sinaloa Cartel, La Familia Michoacana, and La Resistencia. The group with the greatest number of appearances in the messages were Los Zetas with 173 messages, followed by La Familia Michoacana (111 messages), the Sinaloa Cartel (101 messages), and the Beltran Leyva (69 messages). Most of the already established groups were not afraid of signing and directing their messages, and in 205 of the cases, at least two groups could be identified from the content. Messages related to drugs or territorial control kept increasing (an increase of 98% when compared to the previous years), and in most of the cases, the executioners referred to the executed as a 'chapulin' or a minor trafficker from a rival group. In 2010, 39% and 25% of the messages found were about rivalries to other criminal groups or *vigilante* messages, respectively.

Most of the Los Zetas messages referenced rivalries with other cartels, *vigilante* messages, or messages directed at the government. If they did have an alliance in 2009 with the Beltran Leyva (documented by Pérez Dávila and Atuesta<sup>35</sup>), this alliance disintegrated in 2010. Los Zetas were also fighting the Sinaloa Cartel, the Gulf Cartel (2010 is the first year with evidence of the termination of the alliance Gulf-Zeta), and La Familia Michoacana, among others. Los Zetas' *vigilante* messages did not focus anymore on distancing their reputation from the 'fake zetas' (a trend observed in previous years), but rather on blaming other groups for killing innocent people. Their presence was observed in most of the national territory, though they were called different names, depending on the state. For example, they called themselves FEZ (Special Forces of the Zetas) in Tabasco, and went by Zetas Operational Group in Tamaulipas.

On the other hand, the Sinaloa Cartel used messages to address rivalries with other groups, including Los Zetas, the Juarez Cartel, La Linea, La Familia Michoacana, and La Barbie, among others. The Sinaloa Cartel remained concentrated in the northern states and their expansion was not as drastic as that of Los Zetas (who had a presence in Chihuahua, Coahuila, Durango, Sinaloa, and Sonora). Nonetheless, other groups accused the Sinaloa Cartel of maintaining a collaboration with the government, even as they themselves also blamed the government for collaborating with other groups. They used territorial messages (defending their turf) and mentioned the drug retail trade of marijuana. In Morelos, they began calling themselves the South Pacific Cartel.

Parallel to the turf wars observed between the main criminal groups, smaller groups kept appearing with a logic a little different than that of the traditional groups. Although it is not possible from this data set to draw conclusions about the origins of the organised crime in Mexico, anecdotal evidence and academic research have linked the development of the drug markets to the creation of criminal groups.<sup>36</sup> Specifically in Mexico, the linkage between drug markets and groups such as the Sinaloa Confederation and later on the Juarez and the Beltran Leyva Cartels have been documented by Grillo,<sup>37</sup> Astorga,<sup>38</sup> Snyder and Duran-Martinez,<sup>39</sup> and Pérez Dávila and Atuesta.<sup>40</sup> These new groups, appearing since 2009, seem to have a different motivation. As the between-groups violence increased in Mexico, with society caught in the middle of the crossfire, new groups appeared with the main intention of fighting the narcos. According to Reveles,<sup>41</sup> *paramilitarism* in Mexico is already a reality: these vigilantes represent groups with no name that demand justice and are born out of the protests of the people against a violent situation that the government seems unable to control.

For example, in Guanajuato and Veracruz, the Mata Zetas ('Killing Zetas') had, as their name suggests, killing Zetas as their main objective. Their messages also railed against extortions, kidnappings, and burglaries, and essentially blamed the Zetas for extorting Mexican entrepreneurs and for killing innocent people. Other groups such as El Pueblo, La Gente, Mr. Justice, The Avenger of the People, and the Resistance Against Los Zetas, among others, also appeared in the states of Durango, Guerrero, the state of Mexico, Michoacán and Sinaloa with messages directed at times to specific groups such as La Familia and Los Zetas, but in most of the cases with generic messages justifying their killings and protecting the population from bandits. This trend continued during 2011 and greatly influenced the proliferation of both groups and violence.

In 2011, the number of messages increased to 919, only a 3.2% increase from the previous year. Overall, most of the messages found in 2011 were about rivalries with other cartels (51%), following by *vigilante* messages (19%), and messages against informants (13%). Of the total messages found, 30% (278 messages) were attributable to at least one identified group. Again, the state with the greatest number of messages was Guerrero, which was also the state with the greatest presence of identified groups: the number of groups increased from 3 in 2008 to 13 in 2011. By comparison, in Chihuahua and Jalisco, eight groups were identified in 2011, and five in Durango and Sinaloa, respectively. The difference in the number of messages found in Guerrero with other states was significant: while in Guerrero 221 messages were found, in the state with the next greatest number of messages, the state of Mexico, only 82 messages were found. The number of groups also proliferated during this year. More than 100 organisations could be identified between cartels, bands, armed groups, and gangs.

Los Zetas and La Familia Michoacana were still playing an important role in receiving and delivering messages. Fights for controlling territories could be observed both in Guerrero and the state of Mexico. A new rivalry was observed in Guerrero between La Familia and Los Rojos, an armed group of the Cartel of the South Pacific (born from a faction of the Beltran Leyva after the killing of Arturo Beltran Leyva). Although most of the messages were messages of hate against each other, some of them suggested the existence of a turf war. For example, in July 2011, one executed body was left with the following message: 'Come and pick up your trash. This is going to happen to those who are already located in our turf. This turf already has an owner. Citizens do not pay your fee and do not be extorted. We are not doing this, Los Rojos are doing it. Att. Guerrero Unido, armed group of La Familia Michoacana'. The same month, Los Rojos left a message suggesting an alliance between La Familia and Los Zetas ('We are where we belong and I brought my friends ZZZ. Att. The new generation of Los Rojos ZZZ').

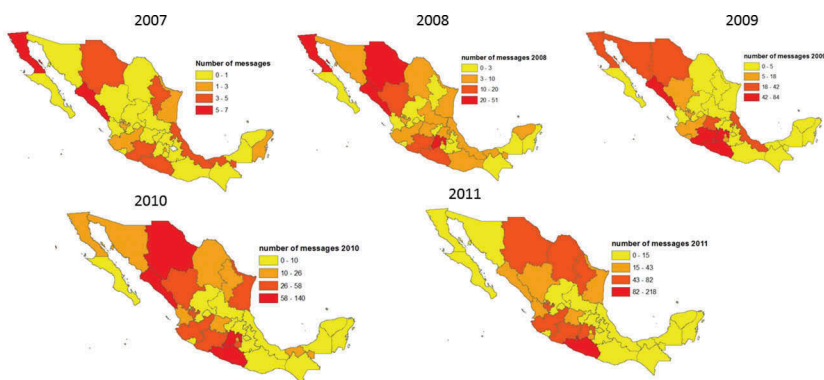
Los Zetas were identified in 215 of the messages found in 2011. New alliances were observed with the Beltran Leyva, La Familia Michoacana, the Juarez Cartel, and the Cartel del Milenio in different states of the country. The main rivalry of Los Zetas during 2011 was the Gulf Cartel (Los Zetas used to be the armed group of the Gulf Cartel) and a large proportion of the messages in which Los Zetas were identified (49) were directed to or received by the Gulf Cartel, mostly in the states of Coahuila, Nuevo Leon, Tabasco, Tamaulipas, and Veracruz. Most of these are just messages of hate, with the exception of a couple of messages in Nuevo Leon from the Gulf Cartel suggesting an alliance between police officers and Los Zetas (calling them, 'the polizetas'). Another rival of Los Zetas was the Sinaloa Cartel or the Pacific Cartel (known as the new generation of the former Sinaloa Cartel).

## Geographical analysis

The geographical analysis shows a strong correlation between the number of groups identified and the level of violence. This relationship is not surprising since the literature has already suggested that violence in Mexico increased with the fragmentation of criminal groups as a consequence of the policies implemented by the government of Calderon in its war against organised crime.<sup>42</sup> Since most of the groups were identified by the content of the messages, there was also a relationship between the number of messages (or the percentage of labelled violence) in each territory and the number of groups. The following maps show these relationships and are used to draw conclusions about the proliferation of the organised crime in Mexico and the evolution of drug-related violence.

According to [Figure 2](#), the maximum number of messages found in a state in 2007 was seven (in Baja California), followed by Sinaloa, where six messages were found. This number increased to 51 in 2008 (Chihuahua), to 84 in 2009 (Guerrero), 140 in 2010 (Sinaloa), and 218 in 2011 (Guerrero). These results are interesting because they differ from the conclusions drawn by Martin (2012) who, analysing the media, finds that Chihuahua and Morelos were the states with the greatest number of messages, while the contents of those were usually not published in Chihuahua, Sinaloa, and Durango. Although the analysis was conducted in 2010, Guerrero was not identified as one of states with the greatest number of messages. [Table 4](#) shows the five states with the greatest number of messages in each of the years of analysis:

The states of Mexico, Guerrero, Sinaloa, and Chihuahua have been the states where most of the messages have been historically found. Guerrero, both in 2009 and in 2011, was the state with the greatest number of messages, and this could be a reflection of the turf wars in which La Familia Michoacana, Los Beltran Leyva (later in 2011 'Los Rojos'), and Los Zetas participated. In most of the messages found in Sinaloa, in which a group could be identified, the Sinaloa Cartel was either a victim or a perpetrator: other groups accused them of collaborating with the government and included messages of hate against the Cartel itself or El Chapo. The content of these messages suggests that even if the Sinaloa Cartel was in control of the state, other groups (the Juarez Cartel, Los Zetas, and the Beltran Leyva Cartel, among others) were also disputing the territory.



**Figure 2.** Number of messages found in each state by year.



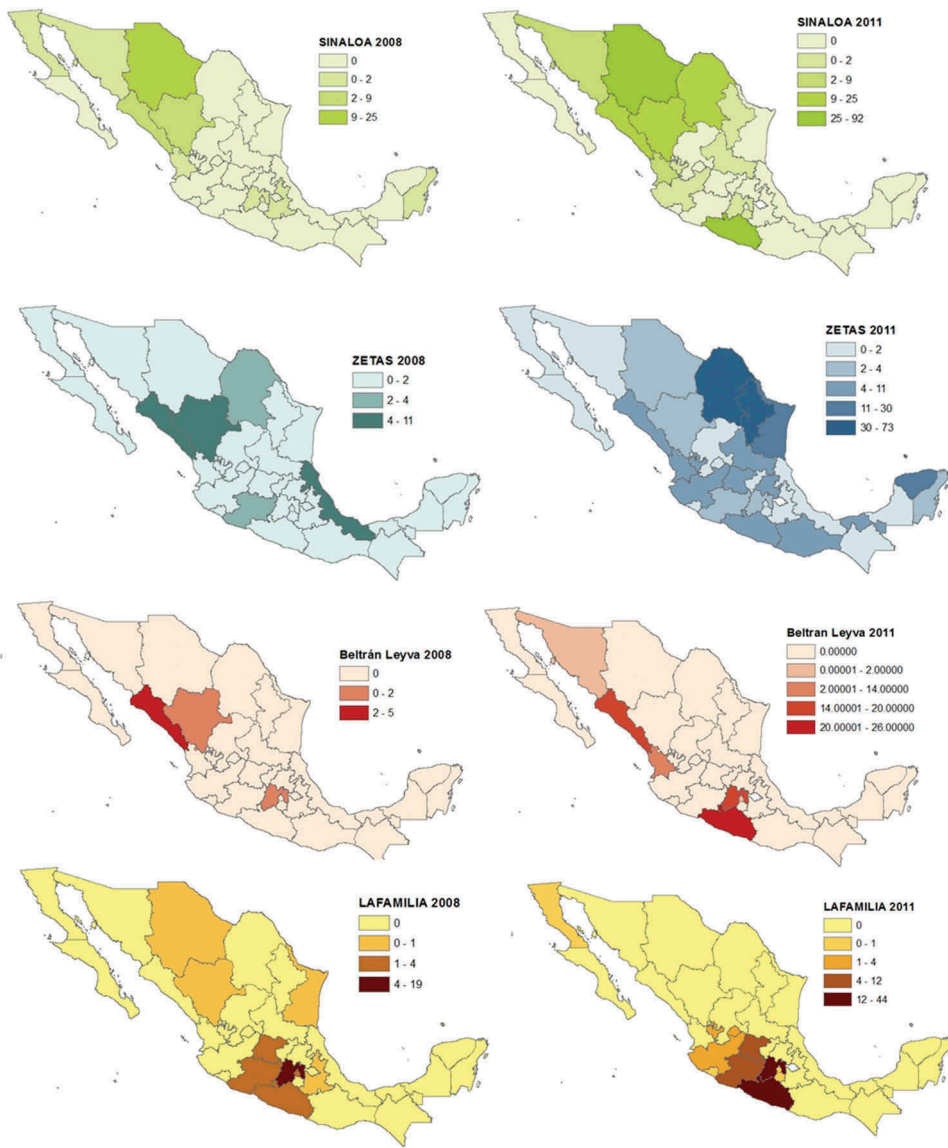
**Table 4.** Top five states with the greatest number of messages found by year.

Rank	2007	2008	2009	2010	2011
5	Tabasco 4	Guerrero 20	Guanajuato 42	Morelos 58	Coahuila 59
4	Veracruz 4	Mexico 31	Mexico 50	Mexico 95	Chihuahua 78
3	Guerrero 5	Baja California 32	Michoacán 55	Guerrero 102	Nuevo Leon 78
2	Sinaloa 6	Sinaloa 35	Sinaloa 66	Chihuahua 103	Mexico 82
1	Baja California 7	Chihuahua 51	Guerrero 84	Sinaloa 140	Guerrero 218

Given the important role played by the Sinaloa Cartel, Los Zetas, the Beltran Leyva Cartel, and La Familia Michoacana on leaving or receiving messages next to their executions, maps in [Figure 3](#) show the evolution of their activities across the national territory. Two maps are shown for each group: the first one in 2008 (where a significant number of messages was already observed) and the second one in 2011 (the last year for which information was available). The maps show the territorial strategies of different cartels. While the Sinaloa Cartel and Los Zetas were looking to expand their operations to the majority of the states of the country, the Beltran Leyva Cartel and La Familia Michoacana were focused only in the states of Guerrero, Michoacán, Mexico, and Guanajuato. It is interesting to observe how focused La Familia Michoacana was on preserving the control of the four states in which it operated. Although in 2008 their activities were more spread out across the country, there is no doubt that in 2011 they decided to defend their territory and concentrated most of their activities in the southwest side of the country. Similarly, the Beltran Leyva Organisation started leaving messages in the state of Sinaloa in 2008, but in 2011 they migrated to the south, concentrating themselves in Guerrero, where they clashed both with La Familia Michoacana and Los Zetas for turf control.

As previous studies have argued,<sup>43</sup> the communication techniques used by criminals are at times insufficient to provoke fear or respect, as they can be seen as fraudulent signals. In response, criminal groups usually accompany these communication techniques with other signs that cannot be easily mimicked, such as gruesome killings, or an increase in the level of violence. This appears to be the case in Mexico, where the appearances of narcomessages have been accompanied by an increase in violence. [Table 5](#) shows how the evolution of messages is correlated to the number of homicides (aggregated data). It is clear how the intensity of activities of the groups (measured by the number of messages) was highly correlated with the level of violence in most of the states. Although causality cannot be definitively proven, since I am not estimating a statistical model to control for reverse causality, the simple results show that, on average, for the whole country (excluding Baja California Sur and Tlaxcala, states with a very small number of observations), the correlation between the number of messages and the number of executions was 0.7946; these correlations were greater for states with greater levels of violence. For example, in the state of Guerrero, where the homicide rate per 100 thousand increased from 9.98 to 51.43 from 2006 to 2010, the correlation between executions and messages was 0.9844. This figure for the state of Guanajuato was 0.9867, the highest correlation found in the country.





**Figure 3.** Intensity of activities of each group in different states in 2008 and 2011.

States with a low correlation, in which the number of messages were not related with the level of violence (or at least, not at the level observed in most of the country), include Puebla (with a negative correlation between the two variables), Aguascalientes (0.4549), Hidalgo (0.2266), and Veracruz (0.2842). From these three states, the only surprising result is Veracruz because, according to the data set, some groups focused their activities (and therefore their executions) there. From 928 executions (from 2007 to 2011), 65 were accompanied by messages, and from these messages, Los Zetas were identified in 55.

**Table 5.** Correlation between number of homicides and number of messages found in each state.

States with the greatest number of messages	Correlation between number of messages and violence
Aguascalientes	0.4549
Baja California	0.9520
Baja California Sur	
Campeche	0.8675
Chiapas	0.8764
Chihuahua	0.8796
Coahuila	0.9745
Colima	0.6964
Distrito Federal	0.5708
Durango	0.8685
Guanajuato	0.9867
Guerrero	0.9844
Hidalgo	0.2266
Jalisco	0.9717
Mexico	0.9698
Michoacan	0.8863
Morelos	0.9979
Nayarit	0.9835
Nuevo Leon	0.9743
Oaxaca	0.8824
Puebla	-0.0556
Queretaro	0.7776
Quintana Roo	0.8430
San Luis Potosi	0.8621
Sinaloa	0.8940
Sonora	0.7921
Tabasco	0.7737
Tamaulipas	0.9540
Tlaxcala	
Veracruz	0.2842
Yucatan	0.9862
Zacatecas	0.7252

## Conclusions

Organised crime in Mexico has evolved in different ways. Not only has it spread to different states in the national territory, but the number of groups also increased, and more gruesome techniques to kill victims were employed. This proliferation, both geographically and by the number of groups, led to exponentially increased violence. By using a confidential data set gathered by the PPD at CIDE, this article analyses the evolution of organised crime by observing the messages left next to the executed bodies. Although some previous studies have conducted partial analyses of these messages, this is the first time that a complete data set is studied, in which not only the messages published by the media are included but also those that were never available to the public.

The analysis described in this article suggests that the organised crime in Mexico is no longer completely focused on the production and trafficking of illegal drugs. The big drug cartels that originated in the late twentieth century (such as the Sinaloa Cartel, the Beltran Leyva Organisation, and the Gulf Cartel) were replaced by new groups that are more territorial, more visible, and more interested in obtaining the 'approval' of the population to justify their violent actions. The proliferation of criminal organisations in Mexico was accompanied by the creation of new groups with different ideologies, including 'vigilante' groups created to defend the population from the 'real criminals',

and groups that were interested in labelling their actions and being more visible. Although it is not clear what explanation is for these trends, a new *modus operandi* of organised crime was observed in Mexico: more groups than before were labelling their actions and looking for society's approval.

One of the main limitations of this analysis is that the PPD data set was only available until November 2011. According to government press releases, the Database of Homicides related to Alleged Criminal Rivalry published during the former administration of Felipe Calderon by the Office of the Presidency, stopped gathering information in September 2011.<sup>44</sup>

However, if the PPD data set corresponds to the source files of the public Database published by the Presidency – a finding suggested by Atuesta et al.<sup>45</sup> – the data were still being gathered after the date the government announced its cancellation, and probably it is still being collected today. However, since the beginning of the administration of Enrique Peña Nieto (the current Mexican President), this information has not been made available to the public. With more updated data available, this analysis could be extended in order to understand how criminals communicate when facing different levels of violence and when dealing with a government of a different political party (even though its security strategies are very similar).

The findings of this paper have significant academic and policy implications. Theoretically, the analysis of this article provides some insights about communication strategies among criminals and the use of violence to signal reputation or fear of a criminal group to other groups, the society or the government. Narcomessages have been the most common way that criminal groups communicate in Mexico, both through the text included in the messages and by the violent context in which they were left. As Gambetta<sup>46</sup> stated, the use of violence and the linguistic messages accompanying this violence provide signals that establish a hierarchy of toughness and respect. In an environment in which every criminal group is communicating using these techniques, to decide not to leave a message, or to abstain from using gruesome killing techniques, could be signalled as weakness or as a 'license for abuse'. What would be interesting to investigate and to monitor over time is how this communication changes as the signalling intent of imposing fear loses efficacy. In other words, since all groups are leaving narcomessages and applying gruesome killing techniques to engender respect and fear, there must be a time when the impact of these techniques decreases, and new ways of communication become implemented.

Further research should also examine the policy implications of these findings. For instance, why do new groups feel the need to protect the population from the old-fashioned drug cartels? Was not this task the responsibility of the state? The results of this article question the consequences of the lack of governmental control in most of the Mexican territories. The lack of institutional control has created a *power vacuum* that is being filled by new criminal organisations. Although these new groups could be at some point involved in the production or trafficking of illegal drugs, their origins are motivated by the need to defend the population.

The problem of organised crime and drug-related violence in Mexico is not going to be solved with a change in the current drug policy. However, by letting these groups control the markets and obtain lucrative earnings from the production and trafficking of illegal substances, the current drug regime is allowing (and promoting) their territorial expansion and their involvement in territorial wars to control specific turfs. The analysis

of the messages left next to the executed bodies suggests that the current security and drug policies are generating counterproductive effects in which violence is increasing due to more rivalries between organisations and more *vigilante* groups being created to 'protect' the population. If we want a different situation in the future, we should begin by evaluating the costs and benefits of the current policy being implemented, and its effects regarding the evolution and strengthening of organised crime.

## Notes

1. Database of Homicides. The data named 'Database of Homicides related to Alleged Criminal Rivalry' was available since January 2011, but it was withdrawn from the website of the Presidency ([www.presidencia.gob.mx/voceria\\_seguridad/](http://www.presidencia.gob.mx/voceria_seguridad/)) at the beginning of the current administration.
2. Secretaría de Seguridad Pública, 'Radiografía de las organizaciones del narcotráfico'; and Busgalia, 'The paradox of Expected Punishment'.
3. Atuesta et al., 'La guerra contra las drogas' en México'.
4. Ioannou et al., 'Criminal Narrative Experience'.
5. Anderson, 'The Code of the Streets'.
6. McNeeley and Wilcox, 'Street Codes, Routine Activities'.
7. See note 5 above.
8. Gambetta, *Codes of the Underworld*; and Gambetta, 'Signaling'.
9. Gambetta, 'Signaling'.
10. Gambetta, *Codes of the Underworld*.
11. 'Calderón imputa a la prensa'. (*La Jornada*, 26 February 2010).
12. Rivera Fuentes, 'Crime Hype in Mexico'.
13. Martin, 'Categorization of Narcomessages in Mexico'.
14. Triay Montiel, 'México'; and Pavón Cuellar and Albarrán Díaz, 'Narcomensajes y cadáveres'.
15. Rios, 'Why Did Mexico Become so violent?'.
16. See note 12 above.
17. See note 14 above.
18. See note 15 above.
19. See note 3 above.
20. See note 16 above.
21. Eiss, 'The Narcomedia a Reader's Guide'.
22. See notes 11, 12 and 20.
23. Felipe Calderón was the president in Mexico from 2006 to 2012. Since the beginning of its administration, military operations were implemented all over the country to fight organised crime. Levels of violence increased significantly since then.
24. See note 20 above.
25. See note 10 above.
26. See note 18 above.
27. See note 15 above.
28. The Drug Policy Program at CIDE conducted two different validation processes. The first one compared the total number of homicides with the homicides reported by the Office of the President during the government of Felipe Calderon. The results of this validation suggest that the PPD data set is composed by the source files used to report the total number of homicides related to Alleged Criminal Rivalry at the aggregate level, published by the Office of the Presidency during the administration of Ex-President Felipe Calderon. The second validation involved searching online for each of the events included in the data set. Of the 30,982 events, 15,012 were validated by the press, corresponding to 48% of the total. More information can be found in Atuesta et al.
29. Diccionario de Americanismos, 'Asociación de Academias'; and Pavón Cuéllar and Albarrán Díaz, 'Narcomensajes y cadáveres'.

30. See note 15 above.
31. Diccionario de Americanismos, 'Asociación de Academias'.
32. See note 28 above.
33. See note 18 above.
34. Guevara Bermudez and Jose Antonio, 'Las ejecuciones extrajudiciales en México'.
35. Pérez Dávila and Atuesta, "Fragmentation and Cooperation."
36. Cornell, 'The Interaction of Narcotics and conflict'.
37. Grillo, *El Narco*.
38. Astorga, *El siglo de Las drogas*.
39. Snyder and Duran-Martinez, 'Does Illegality Breed Violence?'
40. See note 31 above.
41. Reveles, *El cártel incómodo*.
42. Osorio, 'The Contagion of Drug Violence'; Calderon et al., "The Beheading Of Criminal organizations"; and Atuesta and Ponce, '¿Cómo la intervención gubernamental altera la violencia?'
43. 'Pone gobierno "bajo llave" cifras de ejecutados'. (*Proceso*, 5 January 2012).
44. See notes 5 and 10 above.
45. See note 18 above.
46. See note 24 above.

## Disclosure statement

No potential conflict of interest was reported by the author.

## Notes on contributor

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## Bibliography

- Anderson, E. "The Code of the Streets." *Atlantic Monthly* 273, no. 5 (1994): 81–94.
- Astorga, L. *El siglo de las drogas: El narcotráfico, del Porfiriato al nuevo milenio*. Mexico City: Plaza y Janés, 2005.
- Atuesta, L. H., and A. Ponce. "¿Cómo la intervención gubernamental altera la violencia? Evidencia del caso mexicano." Working Paper. Drug Policy Program, Center for Economic Research and Teaching, 2016.
- Atuesta, L. H., O. S. Sordia, and A. Madrazo. "La guerra contra las drogas' en México': Registros (oficiales) de eventos durante el periodo de diciembre 2006 a noviembre 2011." Working Paper. Drug Policy Program, Center for Economic Research and Teaching, 2016.
- Buscaglia, E. "The Paradox of Expected Punishment: Legal and Economic Factors Determining Success and Failure in the Fight against Organized Crime." *Review of Law & Economics* 4, no. 1 (2008): 290–317. doi:[10.2202/1555-5879.1206](https://doi.org/10.2202/1555-5879.1206).

- Calderón, G., G. Robles, A. Díaz-Cayeros, and B. Magaloni. "The Beheading of Criminal Organizations and the Dynamics of Violence in Mexico." *Journal of Conflict Resolution* 59 (2015): 1455–1485. doi:10.1177/0022002715587053.
- "Calderón imputa a la prensa a difundir gratis *narcomensajes*." 2010. *La Jornada*, February 26. <http://www.jornada.unam.mx:8810/2010/02/26/politica/003n1pol>.
- Cornell, S. E. "The Interaction of Narcotics and Conflict." *Journal of Peace Research* 42, no. 6 (2005): 751–760. doi:10.1177/0022343305057895.
- Database of Homicides Related to Alleged Criminal Rivalry. "Published by the Office of the Presidency by the National Security Council." 2011. Accessed January 30, 2011. [www.presidencia.gob.mx/voceria\\_seguridad/](http://www.presidencia.gob.mx/voceria_seguridad/).
- Diccionario de Americanismos. "Asociación de Academias de la Lengua Española." Diccionario de Americanismos. Accessed April 15, 2015. <http://lema.rae.es/damer/>.
- Eiss, P. K. "The Narcomedia: A Reader's Guide." *Latin American Perspectives* 41, no. 2 (2014): 78–98. doi:10.1177/0094582X14521388.
- Gambetta, D. *Codes of the Underworld: How Criminals Communicate*. Princeton: Princeton University Press, 2009.
- Gambetta, D. "Signaling." In *The Oxford Handbook of Analytical Sociology*, edited by Peter Hedström, Peter Bearman. 168–194. Oxford: Oxford University Press. 2009.
- Grillo, I. *El Narco: Inside Mexico's Criminal Insurgency*. London: Bloomsbury Publishing, 2012.
- Bermudez, G., and J. Antonio. 2014. "Las ejecuciones extrajudiciales en México." *Animal Político*, September 29. <http://www.animalpolitico.com/blogueros-verdad-justicia-reparacion/2014/09/29/las-ejecuciones-extrajudiciales-en-mexico/>.
- Ioannou, M., D. Canter, and D. Youngs. "Criminal Narrative Experience: Relating Emotions to Offence Narrative Roles during Crime Commission." *International Journal of Offender Therapy and Comparative Criminology* (2016). doi:10.1177/0306624X15625991.
- Martin, C. "Categorization of Narcomessages in Mexico: An Appraisal of the Attempts to Influence Public Perception and Policy Actions." *Studies in Conflict & Terrorism* 35, no. 1 (2012): 76–93. doi:10.1080/1057610X.2012.631459.
- McNeeley, S., and P. Wilcox. "Street Codes, Routine Activities, Neighbourhood Context and Victimization." *British Journal of Criminology* 55 (2015): 921–943. doi:10.1093/bjc/azu116.
- Montiel, T., and E. Natalia. "México: El poder y las políticas de muerte en los narcomensajes." *Versión Nueva Época*, no. 29 (2012): 1–18.
- Osorio, J. "The Contagion of Drug Violence: Spatiotemporal Dynamics of the Mexican War on Drugs." *Journal of Conflict Resolution* 59, no. 8 (2015): 1403–1432. doi:10.1177/0022002715587048.
- Pavón, D., and L. Albarrán. "Narcomensajes y cadáveres: el discurso del narcotráfico y su violentada literalidad corporal." In Gárate Martínez, I., J.M. Marinas Herreras and M. Orozco Guzmán (coord.) *Estremecimientos de lo real: Ensayos psicoanalíticos sobre cuerpo y violencia*, 191–204. México: Kanankil, 2012.
- Pérez Dávila, S., and L. H. Atuesta. "Fragmentation and Cooperation: The Evolution of the Organised Crime in Mexico." Working Paper. Drug Policy Program, Center for Economic Research and Teaching, 2016.
- Reveles, J. *El cártel incómodo: El fin de los Beltrán Leyva y la hegemonía del Chapo Guzmán*. México: Grijalbo, 2011.
- "Pone gobierno "bajo llave" cifras de ejecutados." 2012. *Proceso*, January 5. <http://www.proceso.com.mx/?p=293857>.
- Ríos, V. "Why Did Mexico Become So Violent? A Self-Reinforcing Violent Equilibrium Caused by Competition and Enforcement." *Trends in Organised Crime* 16, no. 2 (2013): 138–155. doi:10.1007/s12117-012-9175-z.
- Rivera Fuentes, J. *Crime Hype in Mexico: A Fierce Battle for Attention*. Second Year Policy Analysis. Working paper, Harvard Kennedy School of Government, 2013. [http://ksghauser.harvard.edu/index.php/content/download/66767/1239878/version/1/file/SYPA\\_JohananRivera\\_2013.pdf](http://ksghauser.harvard.edu/index.php/content/download/66767/1239878/version/1/file/SYPA_JohananRivera_2013.pdf).

- Secretaría de Seguridad Pública. 2012. "Radiografía de las organizaciones del narcotráfico." Information access request through INFOMEX No. 0002200120709. <https://www.infomex.org.mx/gobiernofederal/homeOpenData.action>.
- Snyder, R., and A. Duran-Martinez. "Does Illegality Breed Violence? Drug Trafficking and State-Sponsored Protection Rackets." *Crime, Law and Social Change* 52, no. 3 (2009): 253–273. doi:[10.1007/s10611-009-9195-z](https://doi.org/10.1007/s10611-009-9195-z).