Street Capitalism:
Informal Property Rights and their Enforcement in Bogota’s On-Street Parking System

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ABSTRACT

This thesis explores how informal property rights are defined and enforced in the business of on-street parking in Bogota. It establishes that informal businesses could not operate without such property rights and that the value of force has been underestimated in the scant literature devoted to the subject.

To contribute to the construction a currently non-existent informal property rights theory this thesis contrasts the research findings with traditional property rights theory and attempts to redefine classic property rights concepts to fit the context of the urban informal economy.

Finally, the thesis explains how mafias can enforce informal property rights, the logic of their actions, and the dangers of their proliferation.

Thesis Supervisor: Bishwapriya Sanyal
Title: Professor of Urban Studies and Planning
Acknowledgements

While doing the research for this thesis I met a cuidador with his ten year old son. He was born in Los Laches, a barrio in Bogotá associated for generations with insecurity and crime. He had worked for over 20 years for 12 hours a day taking care of cars. I asked him if his son would take over his business when he was older and he replied “no I want him to be a professional like you”. It is in people like this cuidador who despite all odds continue to believe in honest and hard work for personal and national advancement that I find my motivation for public service and my passion for urban planning. This work is a modest tribute to their dedication and a call to policy makers and academics to step out of the dogmas and tackle the pragmatic regulation of the informal economy head on once and for all.

None of this work would have been possible without the selfless help provided to me by my advisor Bish Sanyal and Cauam Cardoso. It would also not have been possible if I had not encountered the work of Charles Tilly on state making during my college years or without having read the excellent work done by previous DUSP students such as Bruno Baroni, Arturo Ardila, Michael Donovan and German Lleras.

On a personal level I am eternally thankful to my parents Paulo and Clara who have followed me with infinite patience and love through all my crazy endeavors. To my friends from Combo2600 in Bogota who remind me that I am only one of many committed to make Bogota a city that makes us proud. Finally to Carlos, Mariana, Quyen, Thomas, Alejandro and Valentina who shared with me my happiest moments in Cambridge.
Biographical Note

Diego Laserna grew up in Bogota, Colombia. He attended Columbia University in New York where he attained a Bachelor of Arts in Economics and Political Science in 2007 and now a Masters in City Planning at MIT. He has worked with several youth organizations, politicians and government offices in Colombia and ran for a city council seat in Bogota in 2015. He expects to continue a career of public service in city government to make Bogota a city of which its citizens are proud and an international model for urban planners.
# Table Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>4</td>
</tr>
<tr>
<td>BIOGRAPHICAL NOTE</td>
<td>5</td>
</tr>
<tr>
<td>TABLE CONTENTS</td>
<td>6</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>9</td>
</tr>
<tr>
<td>2. LITERATURE REVIEW</td>
<td>12</td>
</tr>
<tr>
<td>2.1 LITERATURE ON THE INFORMAL ECONOMY</td>
<td>12</td>
</tr>
<tr>
<td>2.2 THE LITERATURE ON PROPERTY RIGHTS</td>
<td>15</td>
</tr>
<tr>
<td>2.2.1 JOHN LOCKE</td>
<td>15</td>
</tr>
<tr>
<td>2.2.2 THOMAS HOBBES</td>
<td>16</td>
</tr>
<tr>
<td>2.1.3 KARL MARX</td>
<td>18</td>
</tr>
<tr>
<td>2.1.4 ELINOR OSTROM</td>
<td>19</td>
</tr>
<tr>
<td>2.3 LITERATURE ON THE INFORMAL ECONOMY AND PROPERTY RIGHTS</td>
<td>20</td>
</tr>
<tr>
<td>3. BACKGROUND ON ON-STREET PARKING IN BOGOTA</td>
<td>26</td>
</tr>
<tr>
<td>3.1 A BRIEF HISTORY OF ON-STREET PARKING</td>
<td>26</td>
</tr>
<tr>
<td>4. METHODOLOGY</td>
<td>31</td>
</tr>
<tr>
<td>4.1 THE CENSUS</td>
<td>32</td>
</tr>
<tr>
<td>4.2 SEMI-STRUCTURED INTERVIEWS WITH CUIDADORES</td>
<td>33</td>
</tr>
<tr>
<td>5. RESULTS</td>
<td>37</td>
</tr>
<tr>
<td>5.1 THE CENSUS</td>
<td>37</td>
</tr>
<tr>
<td>5.1.1 THE CUIDADORES</td>
<td>37</td>
</tr>
<tr>
<td>5.1.2 PROFITABILITY</td>
<td>39</td>
</tr>
<tr>
<td>5.1.3 ORGANIZATIONS</td>
<td>42</td>
</tr>
<tr>
<td>5.2 SEMI STRUCTURED INTERVIEWS</td>
<td>52</td>
</tr>
<tr>
<td>5.2.1 HOW DO PEOPLE BECOME “CUIDADORES”?</td>
<td>52</td>
</tr>
<tr>
<td>5.2.2 HOW ARE PROPERTY RIGHTS CREATED?</td>
<td>54</td>
</tr>
<tr>
<td>5.2.3 HOW ARE THE CUIDADORES ORGANIZED?</td>
<td>61</td>
</tr>
<tr>
<td>6. ANALYSIS</td>
<td>73</td>
</tr>
<tr>
<td>6.1 INFORMAL PROPERTY RIGHTS ARE THE BACK BONE OF ON-STREET PARKING</td>
<td>74</td>
</tr>
<tr>
<td>6.2 ORGANIZATIONS AS A TOOL FOR THE CONSOLIDATION AND ENFORCEMENT OF PROPERTY RIGHTS</td>
<td>76</td>
</tr>
<tr>
<td>6.2.1 FAMILIES AS THE FIRST RESOURCE</td>
<td>76</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>6.2.2 Locke and the &quot;Bottom Up&quot; Model</td>
<td>77</td>
</tr>
<tr>
<td>6.2.3 Ostrom and the &quot;Bottom Up&quot; Model</td>
<td>79</td>
</tr>
<tr>
<td>6.2.4 Hobbes, Marx and the &quot;External Agent&quot; Model</td>
<td>82</td>
</tr>
<tr>
<td>7. The Greater Challenge: Mafias as the Enforcer of Informal Property Rights</td>
<td>87</td>
</tr>
<tr>
<td>7.1 Reasons for Concern</td>
<td>87</td>
</tr>
<tr>
<td>7.2 On Street Parking Mafias</td>
<td>90</td>
</tr>
<tr>
<td>7.3 Mafias as Enforcers of Other Informal Businesses in Bogota</td>
<td>94</td>
</tr>
<tr>
<td>7.4 Two Important Points</td>
<td>98</td>
</tr>
<tr>
<td>7.5 A Brief Clarification on the Word “Mafia”</td>
<td>99</td>
</tr>
<tr>
<td>8. Conclusions</td>
<td>101</td>
</tr>
<tr>
<td>References</td>
<td>103</td>
</tr>
</tbody>
</table>
“There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right of property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe. And yet there are very few, that will give themselves the trouble to consider the original and foundation of this right. Pleased as we are with the possession, we seem afraid to look back to the means by it was acquired, as if fearful of some defect in out title; or at best we rest satisfied with the decision of the laws in our favor, without examining the reason or authority upon which those laws have been built”

1. Introduction

Cities in developing countries around the world are overrun by informal activities in public space. From Mumbai to Cape Town and Ho Chi Minh to Bogotá, plazas, sidewalks and streets are used by street vendors, pedicabs and beggars who without official permission use these spaces to perform their trades.

In the case of Bogota, for example for the last twenty years there has been a debate on whether these activities (in particular street vending) should be allowed or not. Supporters claim that these people do not have alternative sources of income and that if they are removed from public spaces they will starve. The opponents of this view argue that “the disorder” brought about by informal activities in public creates difficulties for pedestrians, makes streets dangerous and therefore the city becomes a less attractive place to live in and visit. Bogota’s policies have gone back and forth with changes in governments leaving a residue of bitterness and anger among informal workers who feel mistreated, and citizens who feel abandoned by the authorities. As a result over the last two decades there has been very little analysis of how informal activities in public space actually work and how a middle ground between prohibition and total permissiveness can be designed.

The goal of this research is to understand better how one type of informal activity—on street parking—actually works to ultimately develop a theory of informal property rights. The people who operate on-street parking in Bogota are called cuidadores. How they establish informal property rights through their work can help us better understand other
informal activities which occupy public space and help policy makers break through the stalemate that they seem to be in regarding the informal economy.

In theory, of course, public space is public and nobody but the State should own it but there is profuse evidence to question that idea. As many inhabitants of developing countries can attest and the following pages will show, public space is not just temporarily occupied by informal workers; they claim exclusivity for its use, rent, sell and inherit it. In fact, despite being outside the legal framework, cuidadores have developed over public spaces something very close to what traditional property rights provide. On the other hand bouts of violence between informal workers in public space, claims of mafia presence and police extortions are not a rare occurrences and yet academics and policy makers continue to see property rights and force as independent phenomena.

The claim put forward in this paper is that in the case of on-street parking these apparently disconnected facts are not disconnected at all. Informal property rights to land are a crucial aspect of the operation of this business because they are the only way these informal workers can be somewhat sure that tomorrow they will have a place to work and that they will not have to fight for it. In the absence of a legal structure, cuidadores attempt to develop property rights over the terrain they control by working in it for long periods of time and gaining the favor of the community and the local authorities in the process. But these property rights are unstable, always vulnerable to a challenge by another cuidador who has more force than the incumbent. In order to preempt these challenges to their property rights, cuidadores attempt to increase their access to force through various means. Some have weapons at hand, others bring in family members to work with them, others form associations and others pay for security. If they decide
to organize, the nature of their informal property rights will vary greatly depending on the way they decide to do so.

Private transactions of public space between individuals, violence between cuidadores, bribes to the police and the role of mafias are seen differently under this framework.

After this brief introduction, in section 2 I review the literature on the informal economy, formal property rights theory and informal property rights. In doing so I highlight the relative absence of materials that discuss informal property rights and the role of force in their definition and enforcement. In section 3 I explain in more detail the logic of the business of on-street parking in Bogota, its recent history and why it is still informal. Section 4 describes how a census of cuidadores and semi-structured interviews were used as the main sources of information for the research. Section 5 describes the results of the research focused heavily on the information that shows how property rights emerge and the ways cuidadores organize themselves to protect them. Section 6 compares the results of the research with the literature and suggests adjustments to traditional property rights theory in order to begin to construct a theory of informal property rights. Section 7 discusses the likelihood of mafias becoming more common in the business of on-street parking and the consequences of such a development. Finally, section 8 outlines the conclusions of the research and suggests further ways to explore the issue of informal property rights.
2. Literature Review

The informal economy of which Bogota’s cuidadores make a part has been studied for decades around the world and there is a vast amount of literature analyzing its numerous facets. The bulk of this literature, however, has so far focused on the impact of the informal economy on economic growth and whether informal workers are better or worse off than if they were formal employees. Only a subgroup of the literature has analyzed informal activities in public space and fewer authors still have discussed how property rights are defined and enforced in the context of the informal economy.

The majority of authors who have studied the emergence of property rights and their enforcers have done so in the context of the origin of government and the social contract and thus refer to to “formal” property rights. The first purpose of this literature review is to show the gap between these two bodies of literature and survey the work of the authors that have attempted to bridge it. The second purpose of this literature review is to show how even those authors who have studied the emergence and enforcement of informal property rights have largely neglected the use of force as an important factor in the system.

2.1 Literature on the Informal Economy

Chen (2012) provides a valuable summary of the main theoretical schools analyzing the informal economy in which she divides the debate in four main lines.

The first school of thought which she terms “Dualist” was primarily concerned with the mismatch between urban population growth and formal employment. In this school the earliest scholars on informality claimed that the informal economy arises as the formal sector is unable to provide well paying jobs to an increasingly large urban population (Hart 1973; ILO 1972). In his early work in Ghana Hart described how many workers unemployed or unable to gain
enough income from formal employment found that “petty capitalism, often as a supplement of wage-employment, offer(ed) itself as a means of salvation.” He underlined that informal occupations were not necessarily worse than formal occupations for workers and that many people combined the two. Although Hart and the ILO talked about many informal occupations ranging from manufacturing to street hawking and fortune telling they did not analyze informal workers in public space in particular and therefore did not address the concept of informal property rights.

The second school listed by Chen, called the “Structuralist” was mainly concerned with the relationship between formal and informal firms and the extent to which the informal economy might be explained by the desire of traditional firms to cut costs (Moser 1978; Castells 1989). Instead of portraying these two systems as parallel, the Structuralists depict the informal sector as feeding the formal sector in fact, exploiting it. Thus, Moser claimed that “petty commodity production is very important for the capitalist sector. Not only is surplus from this sector transferred to the capitalist sector but in addition the capitalist sector itself benefits from the existence of petty production for the maintenance of low levels of subsistence and the low cost of labor reproduction”. Again, perhaps because the Structuralists did not concentrate much attention on the analysis of informal economic activities in public space specifically they do not address the issue of informal property rights.

The third school, defined as Legalist school (De Soto 1990, 2000) did discuss property rights extensively. In two controversial books De Soto claimed that the large costs to comply with state regulations pushed people to operate in the informal economy. In his words “informality... is
the area … where individuals take refuge when the costs of abiding by the law are higher than its benefits.” But De Soto was keen to underline that operating in the informal economy did not mean operating in chaos: “informal workers have not given in to anarchy but rather have developed their own law and institutions… to compensate for the official justice system where it does not work.” (De Soto, 1990) In his work he explains concrete examples of informal laws and institutions such as the “invasion contract” developed by organizations of settlers before a land take over and the “self defense” contract carried out by street vendors’ organizations in order to defend themselves from the authorities and competition. De Soto, however, fails to evaluate the role of force in these contracts and what happens if the workers or settlers refuse to abide by them.

Finally, the fourth school listed by Chen is the Voluntarist school (Maloney 2004) which asserts that “the urban informal microenterprise should be viewed as a part of a voluntary small firm sector similar to those in advanced countries that, due to the laxity in the enforcement of labor and other codes, is able to choose the optimal degree of participation in formal institutions”. Similarly, the Voluntarists claim that workers often voluntarily choose to work in the informal sector because it offers them more benefits than the formal positions that they would have access to with their education and skill level. Maloney again, analyses the informal sector in a very general fashion treating the same way small informal manufacturers who do not operate in public space and street vendor who do. Therefore the topic of the nature of informal property rights and their enforcement is again absent.
As it can be seen from Chen's typology, despite the recognition by many authors in these four schools of thought that the informal sector is not all chaotic, the analysis of how property rights emerge and how they are enforced has been sparse. In fact in a 2012 article by Bruton, Ireland and Ketchen attempting to chart a research agenda for the informal economy the term property rights was not used once. Thus, in order to understand how informal property rights emerge and are enforced it is useful to look back at "formal" property rights theory and see if the way these property rights are understood can shed any light on our topic of interest.

2.2 The Literature on Property Rights

Property rights theory is a rich field that has been explored by celebrated authors for centuries. It is not possible to provide here a survey of that literature or to do justice to the intellectual depth of its most recognized thinkers. However, imperfect as it may be, a selection of some of those works can provide important insights to understand informal property rights without taking away from the readability of this paper.

2.2.1 John Locke

In The Second Treatise of Government, John Locke (2005) puts forth what has come to be known as the "labor theory of property". This theory claims that in the beginning, when everything was held in common it was enough for a man to put labor into any piece of land to remove it from the state of nature and claim the property of it "but as families increased...and built cities... by consent they came in time to set out the bounds of their distinct territories and agree on limits between them and their neighbors".

But Locke made it clear that in such a state man’s enjoyment of his property was not ideal because it is

“uncertain and constantly exposed to the invasion of others; for all being kings as much as he, every man his equal, and the greater part no strict observers of equity and justice, the enjoyment of the property he has in this state is very unsafe, very insecure. This makes him willing to quit this condition which, however free, is full of fears and continual dangers; and it is not without reason that he seeks out and is willing to join in society with others who are already united, or have a mind to unite for the mutual preservation of their lives, liberties and estates, which I call by the general name- property.

The great and chief end, therefore, of men uniting into commonwealths, and putting themselves under government, is the preservation of their property; to which in the state of Nature there are many things wanting”.

Three elements of Locke’s theory are important to consider in the development of a theory of informal property rights. First, if it is “labor” that first creates property. Second, if in the informal economy the limits of that property are also defined by a “social consent”. And third, if it is true that because the “social consent” is not stable and men are bound to take advantage of each other, they enter into associations whose main aim is the preservation of their property.

2.2.2 Thomas Hobbes

Thomas Hobbes (1968) has a significantly different interpretation of how property rights emerged in society. According to him

“during the time men live without a common power to keep them all in awe, they are in that condition which is called Warre, as is of every man against every man...(but) the nature of War; consisteth not in actual fighting; but in the known disposition thereto, during all the time there is no assurance of the contrary”
Therefore for Hobbes, even if there was no constant fighting if men lived without a common power to rule them they lived in war and under such a state,

“nothing can be unjust...Where there is no common Power, there is no law: where no law, no injustice...It is consequent also to the same condition, that there be no Propriety, no Dominion, no Mine and Thine distinct; but onely that to be mans that he can get; and for so long as he can keep it”

Hobbes thus claims that where there is no “common power” there can “use” but there can be no “property” and no peace and that in order to escape the state of nature men need to be a part of a social contract and join a commonwealth in which a sovereign guarantees their safety. Importantly, once in the commonwealth this sovereign is only obliged to guarantee their safety and their property from each other’s abuses but not from those of the sovereign:

“ Every man has indeed a propriety that excludes the right of every other subject... But (if) the right of the sovereign also be excluded, he cannot perform the office they have put him into, which is to defend them both from foreign enemies and from the injuries of one another; and consequently there is no longer a Commonwealth.”

As can be seen, unlike Locke, Hobbes does not emphasize the action that gives a property right to an individual but the fact that unless these individuals are under a common power there can be no definitive property right for he might *justly* be deprived from his possessions by anyone who is more powerful than him. Once people join the Commonwealth and there is such a common power they may have property rights vis a vis other individuals but not vis a vis the sovereign.

Two of Hobbes’ points are important for the discussion on informal property rights. The first is to consider what the “common power” described must be in a context where government is by definition absent. The second is to consider how wide is the “security” obligation of the sovereign vis a vis its subjects. If an individual is risking less than his life in the state of nature, can he expect more from the sovereign than a guarantee for security?
2.1.3 Karl Marx

A third theory of property rights is the one espoused by Marxist thought. For Marx “the two essential notes of property (were) its historical characteristic, and the notion that property is a social relation” (Keys 1981).

The “historical characteristic” means that according to Marx property rights are not static but are “a legal expression...for relations of production” thus as the economy changes, so does the nature of property rights. A Marxist economist Wu (2008) claims

“Marx studied three states of property before capitalism. The first form consisted of primitive land property. In this form, the community relates as owner to the natural conditions of production... At this stage there was no state and no law, there were no proprietary rights only ownership...The second historical form of property is marked by the ownership of the working subject of working tools, materials and necessities of life...At this stage appears the ownership of property, private ownership based on one’s own labor. The third historical form is one in which... a worker’s sole property is his labor, and his sole ownership is the ownership of his labor. All other property becomes the capitalist’s property and the worker’s non-property”.

Evidently this theory overlaps with Locke’s in the sense that it describes the beginning as a state with common property without law and without government then followed by one with private property emerging from labor. Marx, however, explains a later stage of “relations of production”, the capitalist stage, in which someone (the capitalist) can own the fruits of the labor of somebody else (the worker).

The second characteristic of property for Marx is of a more Hobbesian nature. By saying that property is a social relation Marx means that “an isolated individual could no more have property in land or soil (or any other thing) than he could speak” (quoted in Keyes 1991). Therefore it would seem that Marx unlike Locke believes that there could be no property before some type of government was created.
There are at least two key points that this perspective can contribute to the debate on informal property rights. The first is the question if a specific informal business such as on-street parking can have more than one state of informal property rights at the same time. That is, if the “relations of production” within a single business can vary. If the answer to that first question is affirmative, inevitably the second question would be what makes the “relations of production” vary while the business and the time period are the same.

2.1.4 Elinor Ostrom

A fourth type of property rights theory is the one espoused by Ostrom (1990). According to her, neither the absolutist Leviathan scheme nor the full privatization scheme are the only solutions to preventing the tragedy of the commons and free ridership in managing common pool resources. In her theory, common property of resources such as land is a viable alternative as long as there are institutions capable of creating a set of rules (known as common property agreements) for exploiting the resource, that these are commonly monitored and that the people involved have a credible commitment to abide by them.

This credible commitment to the rules will exist if they:

1. Define a set of appropriators who can use the resource
2. Relate to the specific attributes of the resource and the community
3. Are designed at least in part by local appropriators
4. Are monitored by individuals accountable to local appropriators
5. Sanction violators using graduated punishments.

Importantly, Ostrom also points out that the decision of an individual to opt into a common property agreement depends heavily on

“how an individual evaluates expected benefits ...(and) the information available to the individual concerning the benefits (or harm) likely to flow from an alternative set of rules as opposed to the benefits (or harm) likely to follow from continued use of the status quo rules”.

19
Although Ostrom mostly focuses on the sustainable management of common pool renewable resources such as pastures, water and fisheries she claims that Common Property Arrangements can (under some circumstances) guarantee the provision of small collective goods.

There are two points in her theory that are interesting to our analysis of informal property rights. The first point is that it would seem from the preceding quote that higher threats of reduced earnings would make it more likely for people to join common property agreements and abide by them.

The second point is that although there are instances in her description of real life Common Property Agreements where she mentions physical force as the ultimate means of enforcing these agreements, it is not a central part of her analysis. In other words, do common property agreements ultimate rely on the ability to use force so that the collective can sanction individuals who violate the rules and keep non authorized appropriators out? Who provides that force in the absence of formal law enforcement?

Locke, Hobbes, Marx and Ostrom then shed some light on how the consolidation of informal property rights might happen yet questions remain open regarding what some of their key concepts mean in the practice of the informal economy. Some of these concepts are “social consent”, “the commonwealth”, “sovereign”, “security”, “common power”, “graduated punishments”, “expected benefits” and “relations of production”.

2.3 Literature on the Informal Economy and Property Rights

In his seminal work Institutions, Institutional Change and Economic Performance, Douglass North (North 1990) claims that institutions (both formal and informal) and the incentive structures attached to them explain to a large degree the differences in economic development seen in societies around the world. According to him “the major role of institutions in a society
is to reduce uncertainty by establishing a stable (but not necessarily efficient) structure of human interaction" and the level to which they do so efficiently explains their degree of development. In the context of the informal economy where property rights are not well defined and formal institutions have taken a back seat, only informal institutions can help the business and its operators run somewhat harmoniously.

The informal institutions that allow for the definition and enforcement of informal property rights have not been widely discussed in the literature but Leaf (1994) provides a good typology of what he calls “models of informal legal authority”. According to him there are three models, the “bottom up”, the “detached top down” and the “external agent”.

The “bottom up” model was first analyzed by Karst (1973) who “placed a great emphasis upon the judicial role of the juntas de barrios (locally chosen government boards) in Caracas as arbitrators in cases of legal or social conflict” (Leaf 1994). This model of the democratically elected association of informal workers or settlers acting as the mediator of disputes related to informal property rights has become quite popular in the literature. De Soto (1990) claims that similar institutions define and enforce informal property rights for street vendors, informal bus drivers and informal settlements. Bonilla (2005), describes how property rights for a neighborhood in the south of Bogota were managed by the junta de accion communal through a book registering all the transactions of informal property in the neighborhood. Also Kanazawa (1996) explains how in the nineteenth century land squatters in the American frontier formed “claim clubs” that “developed rules and by-laws which governed squatter claims...and procedures for resolving conflicts among squatters”. Importantly, these claim clubs also “facilitated collusion among squatters, enabling them to intimidate auction bidders” who otherwise might legally buy the land they occupied.
The second model described by Leaf is the “detached top-down” which emerged after Perez Perdomo (1982) did a study in the same community as Karst and perceived that it was not the local associations who were enforcing property rights any more but that a government office known as the Legal Aid Department was acting beyond its legal responsibilities as “a court of law for the barrios”. Perez Perdomo claimed this situation was “official because those who prevent and resolve conflicts are public servants, [yet] informal because it lies outside the framework of the conventional legal system”. Leaf (1994) describes the same situation in Jakarta where there are

“two seemingly independent systems for registering rights to land. One... is an expression of the legal authority of the state. The other... persists merely because the state is unable to address its existence in any meaningful manner. This second system... is clearly official in that it is administered by public servants, yet informal since its operations are no longer... determined by the legal framework of the state”

Finally, the third model in Leaf’s typology is the “external agent” which can be discerned in Smart (1986) when describing the way squatters in Hong Kong found land. According to him a local political organization, the Kaifong Association kept a registry of informal real estate transactions and in exchange for a fee gave squatters a “title” that was recognized by other residents. Interestingly, Leaf raises the following question:

“It is, however, unclear how the political association – as external agent both to the residents and the state- would work to secure land rights vis a vis the state, as presumably this was part of the service which was implied by the registration of land transactions. One could imagine that some security might be obtained through political intervention by the association on behalf of the residents, or perhaps more nefariously through acts of criminal coercion”

Lanjow (2002), describes the same model in Guayaquil, Ecuador where the invasions of publicly owned land “are frequently coordinated by ‘dirigentes’ or ‘organizers’ and it is to such a person that participants make payments to acquire ‘ownership’ of a plot. As these
organizers are typically involved in politics, the requisite ‘payment’ could be political in nature’. Bromley (1978) somewhat inadvertently also describes yet another variation of the “external agent” model in his case study on street vendors in Cali Colombia when he says:

Complaints [from street vendors] about police brutality and corruption are frequent, and some officials even run neighbourhood ‘protection rackets’ charging each trader a daily or weekly sum in return for a promise of free business operation... (but also) in the more unsavoury areas close to the town center... groups of traders may employ thugs or bribe police to expel competitors.

In this case the “agent” in the “external agent” model that is capable of defining and enforcing informal property rights is not a political organization but the police force itself acting in a clearly illegal fashion. It could be argued that this is a form of the “detatched top-down model” since the Police is a government institution but when the police’s practices are so clearly illegal it is difficult to put it at the same level of the institutions previously described. The last, but very important version of the “external agent” model is the enforcement of property rights by mafias. According to Gambetta (1993) “the mafia is a specific economic enterprise, an industry which produces, promotes and sells private protection...(and) every time the state decrees a particular transaction illegal, a potential market for private protection is created”.

Although not referring directly to the informal economy, Buonanno (2011) claims that in Sicily during the nineteenth century “the lack of publicly provided property rights protection from widespread banditry favored the development of a florid market of private protection and the emergence of a cartel of protection providers: the mafia”. According to Buonano the Sicilian mafia emerged predominantly in the western part of the island where the most profitable products (citrus fruits and sulphur) where concentrated and in particularly dire need of protection from bandits. Bandiera (2002) also describes how the Sicilian mafia emerged to provide protection to land owners in the absence of the state but claims the determining factor was not the profitability
of the products but the degree of division of the towns’ land. Similarly, Aunurrohman, Misse (1997) and Schindler (2014) show how criminal organizations defined and enforced property rights for on-street parking, gambling and street vending in Yogyakarta, Rio and Delhi.

While Bandiera, Buonanno and Gambetta are inclined to that mafias work like firms, others (Tilly 1985, Skaperdas 2001) stress that “Mafias and gangs… can be thought of as providing primitive state functions.”

A fourth model of informal legal authority not discussed by Leaf but very popular in the literature on informality could be termed the “harmonious coexistence” model according to which there is no need for a higher authority to resolve conflicts surrounding informal property rights since established norms allow independent informal workers to resolve these claims by themselves. This seems to be the default model of the analysts of informality that do not tackle the question of informal property rights directly (ILO 1972, Hart 1973, Roever 2006, Anjaria 2006, Bandyopadhyay 2011, Yasmeen 2014) and therefore the most popular one but it is also the one model for some who do. For example although Kim (2012) in a study of Ho Chi Minh’s sidewalk vendors recognizes the occasional intervention of the police in the way sidewalk space is distributed she says that “cooperation not only occurred between property owners and vendors, but also extended to how vendors are able to coordinate with each other, taking turns in the sidewalk.” While harmonious coexistence might be common, in fact in many places it might be the rule, there is no reason to assume it is the only model of informal legal authority. In fact, the history of formal property rights suggests that the eventual recourse to force to enforce decisions on competing claims is a central tenet of a property rights scheme.

In conclusion, the literature on informal property rights and their enforcement can be divided
into for different categories: bottom up, detached top-down, harmonious coexistence and external agent. Notably, the question of force and how informal property rights are ultimately enforced is seldom discussed. Namely, what happens under each of the models if an informal worker or settler irrevocably refuses to abide by the rules?

In the case of the external agent model it is clear that he will face violent repercussions but how can the bottom-up, the detached top-down or the harmonious coexistence models guarantee that people abide by the rules without recourse to force is a question that remains open in the literature and that should be addressed. After all, if law enforcement is a crucial element for the formal property rights system to guarantee that citizens comply with the law, there is no reason to believe that mere good will or social pressures are enough to guarantee compliance under a scheme of informal property rights.
3. Background on On-Street Parking in Bogota

The case of Bogota’s cuidadores de carros was chosen to illustrate the importance of informal property rights, how they are defined and how they are enforced for five main reasons. The first is that as opposed to informal gambling or manufacturing on-street parking happens in a public space. The second is that it happens always in the same public space and thus requires not only a transitory occupancy but a more stable relationship to the area that can closely resemble what is understood as property. The third reason is that cuidadores being mostly stationary in the same location made interviewing the subjects easier. The fourth reason is that on-street parking seems much easier to regulate than other informal businesses because it involves less workers and there are already many experiences of formalized parking schemes both in Colombia and abroad (Banco Interamericano de Desarrollo 2013). The fact that on-street parking would not seem to be as difficult to formalize as other informal business makes the negative consequences of its informal status particularly troubling. The fifth and final reason is that with the expected increase in the number of cars and motorcycles in Bogota and a relatively fixed supply of parking, Bogota’s on-street parking business is bound to become increasingly profitable and contentious magnifying the negative consequences of its informal status.

In the next few pages I will give a brief overview of the recent history of on-street parking in Bogota that will show how it works, why it is still informal and what has gone wrong with the previous formalization attempts.

3.1 A Brief History of On-Street Parking

While in most cities in the developed world on-street parking is symbolized by park-meters and traffic policemen in Bogota as in many cities in the third world on-street parking charges have...
not been regulated and on-street parking is one of many businesses open to informal entrepreneurship. In Bogotá the men and women in charge of this business are called *cuidadores de carros* or car care-takers.

Their business is relatively simple. Although off-street parking (parking lots) is heavily regulated (with various permits, zoning requirements and price ceilings) many drivers still consider it costly and prefer to park on the street, sidewalks or culs de sac. Since leaving a car uncared for in the street is dangerous because the mirrors, wheels or radio could be stolen, there is a latent demand to provide security. Aware of this, people who desire to become *cuidadores* find a space where people park on the street and offer to guarantee the security of their vehicles while they are gone.

Young Cuidador helping a car drive out in Bogotá
In practice however cuidadores come to “own” different on-street parking areas, exclude competitors and expect a payment from the drivers who park there whether they are concerned about their vehicle’s security or not. Usually the driver pays the cuidador whatever he wants with a certain regard to how much time he parked in the spot but oftentimes in places with a high demand for parking the cuidadores set the rates and demand the drivers to agree before they leave the car.

Unlike other informal economic activities in public space such as street vending or pedicab transport, the activity of taking care of cars while they are parked on the street (as long as the payment is voluntary) is not prohibited legally. This is important because it means that the cuidadores face an absence of regulation rather than a prohibition which greatly reduces the clashes they have with the police compared to other informal activities such as pedicabs and street vendors.

During the last 25 years there have been several attempts to formalize on-street parking in Bogota of which two were mildly successful and are remembered as the “Zonas Azules” or “Blue Zones”. The first initiative of Zonas Azules was undertaken in 1989 during the administration of Mayor Andres Pastrana and lasted until 1993 when the Secretary of Transportation claimed the charges for on-street parking could not continue until they were regulated by the city council\(^1\). During this time the operation of the Zonas Azules was contracted with private companies and NGOs who hired personnel who charged drivers a fixed fee for parking in the designated zones. If the drivers did not pay, the employees of the Zonas Azules

\(^1\) Las Zonas Azules, aún Desiertas http://www.eltiempo.com/archivo/documento/MAM-246141
would place a lock on the vehicle’s wheels until the client paid. If the driver did not pay in the following hour, the vehicle would be towed away.\textsuperscript{2}

Two years later, in 1995 the Zonas Azules returned and like in the previous attempt their operation was contracted with private operators. In both instances the program only functioned in relatively small areas of the city and was always immersed in controversy with drivers who felt they should not be forced to pay for the use of public space.

The second phase of the Zonas Azules ironically died in 2000 under the first administration of Mayor Enrique Peñalosa as he allowed the contracts with operators to end in order to launch a paid on-street parking scheme for the entire city. Amidst delays in the City Council to approve the expansion of the initiative, Bogota ended up without its small Zonas Azules program or Peñalosa’s ambitious expansion plan.\textsuperscript{3}

The Zonas Azules programs were considerably unpopular with drivers who are accustomed to free (or extremely cheap) parking on the street. Drivers and many politicians claiming to represent them contested that charging people for parking in the street was as unfair as charging people to walk on sidewalks. This unpopularity explains to a large extent the 12 year gap between the demise of the Zonas Azules and the last attempt to formalize on-street parking in Bogota.

The most recent attempt to formalize on-street parking in Bogota was initiated in 2011 under the administration of Mayor Samuel Moreno and continued in the beginning of Mayor Gustavo Petro’s. Several studies were carried out in preparation but ultimately the public tender to select a

\textsuperscript{3} La Calle se llenó de dueños. http://www.eltiempo.com/archivo/documento/MAM-511771
firm that would operate the five areas with the highest demand for parking in the city fell through in 2012 amidst criticisms from proponents and Colombia’s Inspector General.

The 2012 legal tender proposed to formalize 3,270 on-street parking slots in the 5 centralities with the highest demand for parking in the city. Although, this represented a small proportion of the availability for parking in the city, this effort was a first step to organize on-street parking and illustrates the approach the Mobility Secretariat believes adequate to formalize this activity.

Although the project incorporated taxation, formal employment, time-variable charges and other interesting technical elements that promised to modernize on-street parking, it fell short of a valid level of inclusion of the current cuidadores. In fact, in the request for proposals that describe what the proponents would be committed to in case they won the tender, the cuidadores were only mentioned once to specify that the contractor would have to hire at least 50% of the operative personnel from the cuidadores identified in the census. Even though this might seem an ambitious goal, from an interview with a proponent in the legal tender, it is clear that even attempting to hire the highest number of people possible only around 50 of the 847 cuidadores in the census would be hired under the formalized scheme proposed.

This is interesting because it highlights the potential loss of employment from a formalization scheme.

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4 According to Bogota’s Planning Department, the city does not have a precise figure for the overall availability of parking but the fact that the city had 1.4 million vehicles in 2013 illustrates what a small proportion of the demand generated by them is supplied by these formalized areas.

5 Some examples of interesting technical elements included in the proposal were: electronic payments, economic incentives to report illegally parked vehicles, participation in revenues for the city government and the gathering of valuable information regarding the demand for parking in the city.

6 Interview with Eduardo Bayon, President of CityParking. July 15 2014
4. Methodology

In order to better understand how informal property rights emerge and are regulated in the business of on-street parking in Bogota, an exploratory case study was chosen as the most suitable approach. As underlined by Yin (1985), this approach is particularly well suited to understand research questions focused on "how", that require no control over behavioral events and focus on contemporary issues. Furthermore, an exploratory case study was chosen as opposed to an explanatory case study because of the difficulty to obtain complete and reliable results that would allow for hypothesis testing from questioning the cuidadores directly. Thus the goal of this study is not to prove causal relationships or to test a hypothesis but to describe how cuidadores' property rights are defined, survey the ways in which cuidadores organize to enforce them and suggest why these vary. Without a doubt the main research challenge was to draw conclusions from information that, due to the informal nature of their activity, cuidadores' are hesitant to share. For example it makes perfect sense that they would be reluctant to tell a stranger what their earnings are, if they pay bribes or if they are regulated by an external agent. Sharing such information could put them at risk of being displaced from their work area or face reprisals from regulators who do not desire their identities to be revealed.

In order to work around these constraints several research methods were adopted as inputs to the case study. Also, in order to frame the research geographically it was decided to focus on 4 of the 5 centralities where the cuidadores' census was carried out in 2012. The "Eventos" centrality was not included in the interviews because according to the census the cuidadores there did not work regularly and mostly went when there were concerts and soccer matches. In such a context it did not seem likely for property rights to be comparable to the other 4 areas.
4.1 The Census

In 2012 in an initiative to formalize on-street parking, the city of Bogota organized a public tender to find a private operator to organize and run a paid on-street parking scheme in five areas of the city. These five “centralities” were chosen because they were the areas with the highest demand for parking in the city and would be a sort of pilot program before a formalization of on-street parking throughout the city was begun. As part of the preparation for the formalization of on-street parking the city contracted the realization of a census of the cuidadores working in these five areas with Colombia’s National University.

Map #1: Map of the Five Centralities

Source: Informe Final Censo (2012)
Although the legal tender never took place, the census was carried out and its results delivered (Universidad Nacional de Colombia 2012) to the city’s Mobility Secretariat which is the office in charge of designing and implementing transport policies in Bogota.

The process to survey the cuidadores for the census lasted 30 days in which all the streets in the 5 selected areas were visited at least twice. When it was identified through references that a cuidador worked during a time period different to the one the interviewers were likely to come by, he would be looked for specifically.

The census results have both socioeconomic and transit information. Examples of the first are whether the cuidador is the only income earner in the household, a member of an association of cuidadores, disabled or how much he earns per day. The transit information is related to whether the cuidador operates in an area where it is permitted to park or not.

In order to build on the results of the census, complement them and be able to provide useful inputs to the Mobility Secretariat if it decided to reinitiate a legal tender the research used for this paper was carried out in four of the five centralities where the census took place.

With information regarding the demographics of the cuidadores, their earnings and their organizational patterns the census provides valuable information to understand who they are and how they are organized.

4.2 Semi-Structured Interviews with Cuidadores

During the months of July and August of 2014, twenty two semi-structured interviews were carried out with cuidadores in four of the five centralities. The purpose of these was to complement and contrast the information gathered in the census. In particular the semi-structured interviews addressed questions regarding who else worked in the spot, what the relationship with
people who worked in the same spot or around the cuidador was like, whether there was any sort of “rent” to be able to work there and what the relationship with the formal authorities was (See complete list of questions in Annex #1). These questions were emphasized because the census had not delved into them carefully and were critical to reach conclusions about how the business was regulated in Bogota yet, as mentioned before, the cuidadores have many incentives to not answer them truthfully.

In fact some cuidadores were so mistrustful of answering questions to strangers that they refused to speak at all. Thus, after some failed attempts to record dialogues with them and in order to establish rapport (Leech 2002) it was decided to memorize the questions of the interview and present them as a dialogue. Furthermore, a series of “warm up” questions were selected to begin the interview about how long they had been working on the spot, what their schedule was and who else worked with them. After the interview was over the main points of interest were noted in the interview format which are quoted in the text as “Survey”. It is important to clarify that when the semi-structured interviews with the cuidadores are quoted in the results section, as in “Survey #1”, they might correspond an interview with more than one cuidador. The details of what cuidadores correspond to which survey are detailed in Annex #2 however for privacy and security reasons their exact locations and names are not revealed.

In order to go into more depth one dialogue was arranged with two cuidadores who allowed the recording of the one hour long conversation.

After all the interviews were finished and the formats gathered, codes were assigned to the most important pieces of information (Miles 1984) in the notes. This coding was later united with the
information coded from the semi-structured interviews with stakeholders and the coding categories were revised once again for proper fit.

4.3 Semi-Structured Interviews with other Stake Holders

In order to work around the reluctance of the cuidadores to talk about the ways in which they are regulated fifteen semi-structured interviews were carried out with businessmen, policy makers, politicians, neighbors and academics who had experience with on-street parking, informal activities in public space or parking policy (details provided in Annex #3).

Table # 1: Interviews with Stakeholders

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Mayor</td>
<td>1</td>
</tr>
<tr>
<td>Local Mayor</td>
<td>1</td>
</tr>
<tr>
<td>Academics</td>
<td>4</td>
</tr>
<tr>
<td>Off-Street Parking Businessmen</td>
<td>1</td>
</tr>
<tr>
<td>On-Street Parking Businessmen</td>
<td>2</td>
</tr>
<tr>
<td>Former City Councilor</td>
<td>1</td>
</tr>
<tr>
<td>Former Civil Servant</td>
<td>2</td>
</tr>
<tr>
<td>Neighbors</td>
<td>3</td>
</tr>
<tr>
<td>Cuidadores</td>
<td>1</td>
</tr>
</tbody>
</table>

Not all of these stakeholders had direct experience with on-street parking yet by discussing either their experience with the way other informal activities are organized or how the parking business works, they provided insights into what the cuidadores might not be revealing in their interviews. The information from these conversations is quoted as “Interview” as opposed to the ones with the cuidadores which – with the exception of the hour long recorded conversation - are quoted as “Survey”.

35
In order not to ask interviewees for information that could be gathered elsewhere, an internet search about them and their previous work was done before every interview (Leech, 2002).

Once these interviews were finished, they were assigned descriptive codes (Miles 1984) that matched the codes used for the cuidadores’ semi-structured interviews and thus prepared the data for analysis. The codes were first determined before the transcription of the interviews and an analysis of the notes and then revised when done, reducing them further to what Miles calls “pattern coding”.
5. Results

In the following section the results of the research will be described according to the methodology used to gather them. First a description of the results of the census will be carried out, then the results of the semi-structured interviews with the cuidadores and with other stakeholders will be described.

5.1 The Census

The fieldwork for the census was carried out between October and November of 2012 and lasted 30 days. It had three main objectives: the identification of the main socio-economic conditions of the cuidadores, their expectations regarding their work and a spatial disaggregation of those results. For our purposes the census results have valuable information in four main regards. First, they allow us to understand better who the cuidadores are. Second, they enable us to see the levels of profitability of the business expressed geographically. Third, they let us see the (legal) ways in which the cuidadores organize and fourth they permit us to explore a relationship between what the cuidadores earn and the way they organize.

5.1.1 The Cuidadores

The census found that in the four centralities of our interest there are 821 cuidadores (distributed geographically according to Map #1) of which 82% are men and only 18% women. Of the cuidadores surveyed 68% are the only source of income for their households, support an average 3.1 people and 47% were not born in Bogota. Surprisingly, as shown in Graph #1 395 (45%) of the 821 cuidadores have been working for more than 10 years in the business and 599 (65%) have been in the business for over 5 years. This should be a clear sign of the attractiveness of this
line of work for the people performing it and the reluctance or the impossibility that they have to switch jobs. It is also an indication of why informal property rights emerge in this line of work.

**Graph #1 – How long have you been working as a cuidador?**

![Graph #1](chart1.png)

**Graph #2 - Percentage of cuidadores by level of education**

![Graph #2](chart2.png)
Furthermore, as shown in graph #2, although 4.5% of the cuidadores did not have access to any education, 69% of the cuidadores finished at least primary school which leads us to believe that at least that proportion is literate.

Therefore, reading the census results very broadly, the average cuidador is a male who has been in the business for a long time, that attained at least some level of secondary education and who is the only source of income to support 3 people other than himself.

5.1.2 Profitability

According to the census results the average monthly earnings for a cuidador are 624,110 pesos ($341) or 25,314 ($14.79) daily without social security benefits.

**Graph #3 – Cuidadores' Monthly Range of Earnings**

*Cuidadores were asked separately for their monthly and daily earning. Clearly they do not all work 30 days a month. This amount is in 2012 pesos and is slightly higher than the minimum wage at the time (566,700 without social security contributions) although it must be pointed out again that the fact that the cuidadores are carrying out an informal activity is a powerful incentive to underreport their earnings. The November 2, 2012 exchange rate was used (1826 pesos per US dollar).*
Although on the surface the results portray the average cuidador as the typically vulnerable informal worker a closer look reveals some interesting outliers. As shown in graph #3 fiftynine cuidadores or 7% of those surveyed claim to earn over 1,000,000 pesos per month, an amount almost twice the minimum wage (their locations can be seen in Map #2).

At the same time, 371 cuidadores or 45% of those surveyed said they were making less than 500,000 pesos per month which is hardly enough to support one person, much less support the average 3.1 people that the average cuidador is responsible for. For this reason it is not a surprise that only 58% of the people interviewed said they earned enough money from taking care of cars to cover their basic necessities.

**Graph #4 – How many days a week do you work?**

The fact that there are cuidadores are willing to work for less than 500,000 pesos per month probably means that they are working part time to supplement another source of income or as a support for another income earner in the household. In fact, of the cuidadores interviewed, 21%
said that they worked less than six days a week (as shown in graph #4), an equal proportion said they had jobs other than being cuidadores and 32% said they were not the only income earners in the household.

The cuidadores that said that they had other work usually had informal jobs ranging from being plumbers to street vending and painting houses.

Map #1–Location of Cuidadores Interviewed in the Census (including Eventos)
To go back for a moment to the 7% of the cuidadores that earn over a million pesos per month it is important to underline that only a small proportion of people with less than a secondary education can make that amount of money. To all those people who see the cuidadores making more money than them through a business they have no legal right to do, these on-street parking spots in particular must seem very attractive. That does not mean however that all the other on-street parking spots are not highly attractive to the throngs of unemployed or displaced people roaming the streets of Bogota in search for enough money to survive and few employment options to consider. In reality, at least the 472 cuidadores that have areas where they earn enough to make a living have an asset that many Colombians do not.

5.1.3 Organizations

The third set of information emerging from the census that is highly relevant to this study is the way in which the cuidadores are organized. While the results allow us to identify the cuidadores organized under formal associations (bottom-up model) and those who are independent (harmonious coexistence model), unfortunately they do not allow us to identify cuidadores that are organized in either a detached top-down model or an external agent model. Interestingly, however, the census provides information on “families” another form of organization that although not considered by Leaf (1994) a model of informal legal authority will merit analysis in the next section.

Independents

In order to be able to better analyze the ways in which cuidadores organize, “independents” here are understood as cuidadores that do not belong to a formal association or have members of their
household who work as cuidadores. This definition is slightly different from the definition in the census where independents were understood only as those not in associations.

Map #2 – Cuidadores Earning over 1.000.000 per month by Ranges
In any case, the census results reveal (as shown in graph #5) that the vast majority of cuidadores are independent and that on average they do not have significantly different earnings from families or associations (graph #6).

**Graph #5 – Cuidadores’ methods of Organization**

![Pie chart showing organization methods]

- 21% Associations
- 9% Families
- 70% Independents

**Graph #6 – Cuidadores Average earning by Organization type (in pesos)**

![Bar chart showing average earnings]

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Average Earnings (in pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associations</td>
<td>586,240</td>
</tr>
<tr>
<td>Families</td>
<td>618,764</td>
</tr>
<tr>
<td>Independents</td>
<td>582,571</td>
</tr>
</tbody>
</table>
Families

The census asked the cuidadores whether any other members of their household worked in their same trade. This question is not ideal as the definition of household or the Spanish “hogar” is not immediately clear. Strictly speaking it means people sharing the same living space but it could be interpreted as including close family such as brothers or parents even if they do not share a living space. In any case it does not include valuable relationships such as cousins or uncles that are considered part of the family.

Graph #7 – How many people in your household other than you are also cuidadores?

![Bar graph showing number of people in household and number of cuidadores.]

In spite of this (as shown in graph #5), 187 cuidadores or 21% of those surveyed said that other people in their household worked as cuidadores. Although the fact that 21% of the cuidadores have household members in the business reveals that it is a common practice, the small number
of household members that have been brought in (shown in graph #7) suggests that it is not particularly easy to bring large amounts of family members into the business.

Finally it is important to point out that as shown in Map #3 there is no apparent relationship between the places where cuidadores earn the most income and whether they are organized as families.

**Map #3 – Families and Cuidadores with the most Earnings**
Associations

Only 84 cuidadores or 9.6% of those surveyed in the census said they belonged to a formal association of cuidadores yet when they say to which association 9 of the responses did not make any sense as they refer to firms or government bodies. In the end only two associations of cuidadores seemed to exist at the time of the census: Asovicar in the Restrepo centrality and Cooptrainfocien in the Chapinero centrality comprising a total of 75 cuidadores.\(^9\)

In the census, fifty three cuidadores said they belonged Asovicar and twenty two to Cooptrainfocien. While there is no significant difference of earnings between the cuidadores whether they are independents, families or associations, there is a significant difference between the income of the members of these two associations (as shown in graph #8).

**Graph #8 – Average Monthly Earnings for Members of the two associations of cuidadores (in pesos)**

\[\begin{array}{c}
\text{Cooptrainfocien} & \text{Asovicar} \\
939.091 & 439.774
\end{array}\]

\(^9\) 84 cuidadores or 10% of those surveyed in the census said they belonged to a formal association of cuidadores yet when they say to which association 9 of the responses do not make any sense as they refer to firms or government bodies so those 9 responses were not included in the “associations” category.
Interestingly, there is a high spatial correlation between the location of the most lucrative locations for on-street parking and the place where Cooptrainfocien was located. There, six of its members claimed to earn over a million pesos per month. In Asovicar only one of its fifty three members said that he earned over a million pesos per month.

Map #4– Cuidadores Earning over 1,000,000 and Cuidadores in Associations
Map #5 – Spatial Clustering of Cuidadores by Earnings
In fact, using a hotspot spatial analysis tool\textsuperscript{10} which shows where cuidadores with either high or low values cluster spatially, we can see in map #5 that while Coostrainfocien is no doubt a hotspot where many of high income cuidadores concentrate, Asovicar is a coldspot where many low income cuidadores congregate.

Finally there is one other interesting result shown in Map #6 regarding the associations of cuidadores. In the case of Asovicar 13 of the 53 members say they have household members who are cuidadores in El Restrepo. This suggests that Asovicar might either have evolved around different families or that only such a wide amount of blood relations allows it to survive as a large organization. In the case of Coostrainfocien although the cuidadores in the area did not say that they had other household members in the business when the census carried, Henry Martin (Interview # 6) who led the realization of the census and Angelica Lozano (Interview #5) who as a local mayor worked with them both said they were family members.

\textsuperscript{10}To see more information about the hot spot identifying methodology visit http://desktop.arcgis.com/en/arcmap/10.3/tools/spatial-statistics-toolbox/h-how-hot-spot-analysis-getis-ord-gi-spatial-stati.htm
Map #6 – Cuidadores in Associations and Cuidadores with household members who are also cuidadores

- Families
- Associations
5.2 Semi Structured Interviews

The results of the semi-structured interviews both with cuidadores and stakeholders will be presented in the following way. First the way in which cuidadores begin to perform their jobs is discussed. Then, the elements which help establish the cuidadores’ property rights and the ways in which cuidadores are organized are explained. In the final subsection the business factors that determine the cuidador’s earnings are analyzed. The purpose of organizing the information in this way is to show how the cuidadores’ property rights are defined and how their consolidation is aided by the emergence of different types of organizations. The business model serves to explain why it is in the cuidador’s interest to control more territory and why attractive territories are bounds to attract more competition. This section’s objective is to present the results of the research in a relatively curt fashion, the relevance of these relations is mostly postponed until section 6.

5.2.1 How do people become “cuidadores”?

There are essentially two paths to become a cuidador. The first is to “create” a territory or business where one did not exist before and the second is to come into a terrain where a property right already existed and continue operating it. There are several examples of each path in the data.

An example of the first path is a cuidador (Survey #2) arriving to watch over a small informal parking lot in the Usaquen centrality after his former officer in the army told him that in front of his building car parts are being stolen and that there was an opportunity to make some money by taking care of them. Another example is a cuidador (interview #4) who claims that he began in doing it:
“Because of unemployment but I was very young. I was 16 and came with a friend. We saw all these cars and said “we are going to take care of cars” and we staid there”

A parking businessman (Interview #3) who began as a Cuidador in the Centro centrality explains how he got into the business:

“because we worked very close to our house it was very easy. When we were 6 years old we went out. And usually the people who do this are poor. So the tourists arrived and we would tell them “park it there” like that. So because they closed the museum on Mondays and the doormen would not let us go in there we looked for alternatives. Then it was people from Los Andes University who came and we had to come closer to the university”

The two latter cuidadores claim that challenges to their ownership were particularly common in those early days which contrasts with those cuidadores which arrived to a space where property rights were already consolidated.

For example the cuidador in calle 80 and Carrera 9 in the Chapinero centrality claimed (Survey#10) that he had bought a piece of the street for 300,000 pesos to a man and then expanded after the other cuidador was displaced by the neighbors for repeated drunkenness. Despite having an attractive location with over 30 parking spaces he said he had never been faced a challenge for the area.

Another cuidador in the Usaquen centrality (Survey #1) said that he had arrived recently to that spot but had to pay 50% of his earnings to the owner of the house in front. He also claimed that because everybody knew the owner of the house and that this area was his he did not have any trouble with people trying to come take his spot.
In the Chapinero centrality a different cuidador said that he had been working in that spot for 4 years but that his family had been operating there for 22. In fact all around the Centro 93 mall area it was divided among members of his family which made challenges by other people for the space infrequent and relatively easy to handle by talking.

In essence, cuidadores who come into space whose property rights are already somewhat established seem to have an easier time keeping challengers at bay than those who are just starting a new spot. It is also interesting to see that people avoid attempting to open new territory entirely by themselves. They either look for a partner to do it, have family in the area or some connection to the neighborhood that helps them feel less insecure about trying the new job out.

5.2.2 How are property rights created?

Once a cuidador arrives to a new spot where nobody was previously taking care of cars he is faced with a very concrete challenge: how to make other people recognize that this territory is exclusively his so that he can use it to make a living without fighting over it every day. In other words, how does he create a property right? As will be shown ahead there are three main audiences that the new cuidador wants to reach in this process: the community, local authorities and other cuidadores. With the first two he needs to be able to develop a mutually beneficial relationship, to the third he must be able to show that he has a solid hold of the territory and that if need be he has enough force to defend it.

1. Mutually beneficial relationship with the community

By “the community” are understood local residents and businesses who have a relative frequent interaction with the cuidador. There are several ways in which a relationship with them can either flourish or turn sour.
In order for it to be mutually beneficial one factor is crucial: consistency. As neighbors see that a
cuidador’s presence can be relied on, a series of positive interactions become possible that in the
end allow the community to prefer this particular cuidador’s presence in the area over some
other’s. A cuidador in Usaquen (Interview #4) put the importance of good relations with the
community very clearly:

Interviewer: what is it that allows you to keep working in the place where you
have always been?

Cuidador: the relationship that you have with people because they come and
say “good morning don Jose” and you respond “good morning”

Interviewer: this is more important than having the support of three guys or the
police?

Cuidador: yes. That they know you. There is a black guy who begs at the light
and one day the police came to take him away and the ladies from the building
came out and told them “look he only begs, he does not steal, he is not rude”
and wouldn’t let them take him away. So it is very important.

Thus, learning the names of members of the community and simply allowing them to see the
cuidador’s good behavior at a distance is important. Similarly, doing small favors for nearby
residents of businesses is a solid way to improve relationships with them. The same cuidador in
Usaquen said that:

“here at the yoga place there are two ladies and they are always asking me to
take care of (their client’s) cars because one Sunday [when the cuidador does
not work] a tire was stolen in front. So she asks me to keep an eye out and I tell
her “as long as I am here I will make sure nothing is stolen””

Another way in which cuidadores often gain the favor of nearby businesses is to save parking
spots for their clients (Interview #12), washing their cars (Survey #7) or of course catching
people attempting to steal mirrors, wheels or radios from the cars left under their care (Survey
#10).
In any case there do not seem to be fast ways to gain the trust of the community, however, there are plenty of ways to lose it very quickly.

An evident one is the lack of parking for clients or visitors for which businesses and neighbors complaint constantly (Interview #13,14,15). Although this is a logical consequence of the absence of market prices for parking, since the cuidadores are seen as the administrators of the areas they are often blamed for it. This can lead to the decision by buildings (Interview #4) to encircle some parking spots with cones for their visitors clearly signifying that these spots are outside the control of the cuidador and thus no longer his property.

Perhaps the logical response to the lack of parking that results from the absence of a market price is for the cuidadores to attempt to come up with a market price themselves and then demand drivers to pay it if they park there (Survey #9). This in fact is a common practice particularly when drivers leave their cars parked all day. However it is also a powerful source of tension with the community since often drivers claim that the cuidador has no right to charge for the use of public space and refuse to pay. In such cases arguments often ensue between the driver and the cuidador. If this happens repeatedly it is not uncommon for some cuidadores to scratch the cars that do not pay (Interview #2).

Another frequent source of conflict between the cuidadores and the community is their personal demeanor. Often, cuidadores do not have anywhere to eat or go to the toilet other than the piece of street where they work. If they are seen urinating in public, intoxicated or leave trash behind (Interview #4, Survey # 10) the relationship with the community will inevitably deteriorate probably also involving the authorities and impacting that relationship as well.

Also fighting other cuidadores in public over who controls what is something which the community looks down on (Interview #4).
Finally, the most sensitive part of the relationship with the community is of course whether parts get stolen or cars are in any way deteriorated while under the care of the cuidador. This is a constant risk any cuidador faces and they are often not only held responsible for allowing the theft but suspected of being somehow involved. In order to prevent the trouble that could emerge from this type of conflict and no doubt the deterioration to their property rights, some of them claimed that they had to pay the owner for what was stolen (Survey#3, Survey#5, Survey#10).

2. Mutually beneficial relationships with local authorities

"Local authorities" in this definition means mostly the Bogota Metropolitan Police but also the Transit Police, the Local Mayor’s office, civil servants, ediles and city councilors. Although legally there is no reason why the authorities could remove a cuidador from his place of work in the nebulous space of informal property rights an apparent acquiescence or collaboration from the authorities goes a long way to symbolize the social acceptance essential to define informal property rights.

In the data it is seen that a mutually beneficial relationships with the authorities can be achieved in several ways. The most basic one is just being constantly present without having problems with neighbors or clients (Interview#4). Just the fact of being known and not troublesome will make the Police give preference to that cuidador over an unknown one. Another essential one is for the cuidadores to in fact do their job and help prevent theft, capture thieves and report suspicious behavior to the Police (Interview #4, Survey #10). A third one is having a personal relationship with people in power. For example a cuidador in the Usaquén centrality (Survey #1)

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11 Bogota is divided into 20 localities. Each one has one local mayor and between 7 and 11 "ediles" or council members for the locality.
claimed that he never had any trouble with the authorities because many of his clients worked
with the local mayor. Similarly a family of cuidadores in another sector of Usaquén (Survey #3)
claimed that they had prevented the Zonas Azules from displacing them by contacting council
members which they knew. In exchange of this support come election time all the family’s
relatives would vote for them.

Finally, the last way of improving relationships with the authorities is through bribes (Interview
#3). Often members of the police realize that the cuidadores’ business is quite profitable and that
they can take advantage of their uncertain legal situation to take part of their earnings. Although
the usual way to understand this transaction is as extortion in which the Police makes use of its
power in order to extract money from the vulnerable cuidadores, a different way to understand it
is to see it for a payment for the Police’s favor which is very valuable in helping the cuidadores
consolidate his property rights. Not surprisingly the Police is more likely to favor a cuidador that
pays them from one that does not. As commented by a cuidador in the Chapinero centrality being
on the right side of the Police is extremely valuable (Survey #11):

    Interviewer: how do you prevent competitors from coming in here?
    Cuidador: I’m not stupid. And the police would not let them either.

But just as there are several ways to gain the favor of the authorities there are perhaps many
more to lose it. They are very similar to the ones previously listed as being likely to deteriorate
relationships with the community. Namely: allowing theft to happen in their area of control,
keeping the workplace dirty, public urination, entering into arguments with drivers who refuse to
pay, charging fixed prices, fighting other cuidadores, etc. Basically, the logic is that if the
cuidadores have a behavior that disturbs the community the authorities will hear about it sooner or later and challenge the cuidadores over the issue.

Interestingly, some local authorities have realized that informal workers themselves are better at controlling the oversupply of informal activities than the intermittent actions of the police. The words of a public employee working with the Usaquen mayor are clear in this regard. After she and the police arrived and saw an increase in street vendors in a particular corner she told them (Interview #2):

"It's up to you. If you allow more people to come here I will get rid of all of you. I cannot stand here or come every day to check so if you let more people in you lose because you will all have to go."

Although she is talking about street vendors and not cuidadores her statement is interesting because it suggests that keeping newcomers away might not just be a way for cuidadores to protect their territory but also a way to improve relations with the authorities.

3. Force

Although mutually beneficial relationships with the community and the authorities can help consolidate a cuidador's property rights they are not complete without force. After all, it is risky for a cuidador to play all his cards for economic survival on the hope that in the time of danger a neighbor or a policeman who do not truly have a direct responsibility to him will come in his defense from a possibly violent challenger. In the end, immersed in a world with unclear rules cuidadores must be able to fend for themselves and the more access to force they have, the more consolidated their property rights will be.

The data shows this in several ways. When asked how they reacted when a potential competitors came into their area some cuidadores said that they had been forced to "frentearlos" or
“bravearlos” (Survey #4, Survey #10) which does not quite imply physical violence but is close to the English equivalent of “stand up to them”. While “standing up” to somebody does not mean it was a violent clash it does imply a threat of violence of which the part who walked away did so because it believed it was weaker.

Other cuidadores (Survey #5, Interview #5) claimed that they always kept a weapon, even if it was just a large pole, around in case they had to intimidate competitors or thieves. Others (Survey #7, Survey #1) said that other working people in the area or family members would act as backup to drive trespassers away. The cuidadores who were part of Asovicar also said in a very confident way that “the association would not allow any unknown people to enter” the area (Survey#8).

A former cuidador in the Centro Centrality who accepted to be paying off the police put his way of accessing force the following way:

   Interviewer: so when you take hold of an area what allows you to hold on to it?
   Cuidador: the neighbors and the police.
   Interviewer: and the backup?
   Cuidador: yes, that too. Like a normal business. You tell the others “don’t come here” and also look for alternatives about how to defend yourself. If you see the people are really rough, then you tell the police.

This cuidador was not paying just for a better relation with the Police, he was paying for protection and that protection is only necessary if there is a risk, usually a high risk of it being used.

A former employee of Usaquen’s local mayor’s office (Interview #2) said that cuidadores on 124 street with Carrera 19 “fought it out with knifes every time someone from outside came in"
Also on a very simple level, cuidadores need some force to carry out their work properly and prevent cars parts from being stolen. If they cannot muster this force they will fail at their basic promise and sooner or later run into trouble with the community and the authorities.

In short, it should be clear from these findings that the use of force is a crucial, although not always apparent, aspect of the cuidadores’ business and the development of their property rights. As shown previously, acting aggressively, using weapons, organizing support and gaining the favor of the police are all ways to build up force. This force is useful to a cuidador initially to protect himself from competitors but it can also be useful if he desires to expand his territory at the expense of others which as will be seen in the section “what is the business model for the cuidadores” is quite plausible.

In fact, in this context force begins to appear as a tradable commodity in a market where it is perhaps the strongest single factor for success.

5.2.3. How are the Cuidadores Organized?

The two previous subsections have shown that the development of property rights for cuidadores is a slow, contentious affair where a balance of good relations with the community, the authorities and force is critical. This section will complement the results of the census in describing how the cuidadores are organized with an eye to how these types of organizations are useful in the definition and enforcement of property rights.

According to the results of the semi-structured interviews the cuidadores are essentially organized in four main ways: independent, families, associations and mafias. To be clear from the outset, the difference between an association and a mafia is that the association’s ultimate goal is to represent its members in order to achieve better working conditions for all, while the
goal of the mafia is mainly to extract rents in exchange for protection. In the process they may both charge fees and provide security but given their ultimate ends both the fees and the sanctions for not paying are likely to be much higher when mafias are present than when it is a legitimate association.

1. Independents

As shown in the census, the vast majority of cuidadores claim they are independent. That is, they are neither part of a family or an association (the census did not ask about mafias and the cuidadores have clear reasons not to say they belong to one of these). Although their incomes range from high to low their operations rely on the same three factors previously discussed: mutually beneficial relations with the community, mutually beneficial with the authorities and force. The only conceptual difference is that by definition they do not count on other people as back up and must therefore either operate in a less contended spaces or compensate for that lack of force by other means i.e. having a weapon or paying for security. Although the ultimate reasons for the lack of organization are difficult to pin point, some cuidadores (Survey #8) including those already in associations pointed out the high costs of belonging to an association in terms of time and loss of independence. Furthermore it seems reasonable to assume that although many of them would like to bring their families into the business this could imply either an oversupply of labor or a conflict with neighboring cuidadores that see them as encroaching on their territory.

2. Families

As was evident from the census, the presence of families is quite common in the cuidador business (Survey #1, #2, #3, #6, #11, Interview #3,#4,#5 and #6). Husband and wife, brothers, cousins, grand father and grand child, a wide range of combinations are present. One reason for
this is that having a relative in the business makes it easier to come in whether it is at the same spot or nearby. The main reason why it is easier is that both the “know how” and the social relationships can be shared to a large degree. Thus one possible reason why there are so many relatives in the cuidador business is that there is a much higher incentive for people who already have contacts in the businesses to try it out. The second powerful reason why there might be so many families in the business is that family is a very reliable back up when it comes to defending territory. Thus, having a husband, cousin or brother working in the area is not only a way for him to be gainfully employed but also a way to be able to quickly gather force in case there is somebody who is trying to challenge the ownership of the space (Survey #1, Interview #4).

The man who carried out the census put it the following way (Interview #6):

Henry Martin: Generally its families who take care of the areas. For example in the Cristo Rey chapel, its all a family there [Cooptrainfocien].
Interviewer: its also an association though, Asocopcien or something like that right?
Henry Martin: yes. Its families. Just like the ones on Carrera 11 and 96 street in front of the Olimpica and behind the Bodytech. I worked in the middle of those and they were always saying “auntie this and that”. They are families. Especially on 100 street because it’s a lot of people. They take hold of the area and nobody can come in.

This comment reveals not only how families are important for territorial control but how associations might evolve from family structures. The story of Cooptrainfocien told by former local mayor Angelica Lozano highlights the motivation for that transition (Interview #5):

Angelica Lozano: with cuidadores there is a special story that does tell me that they are organized, that they do use weapons -even if it is only knives- and that they are willing to fight to the bitter end. This story is in the area near the funeral homes by 100 street. These are areas that the buildings gave to the city and where on-street parking lots emerged. It is also an area with a lot of demand. Historically these lots had some cuidadores take care of them, families, people who had always been there. The nearby buildings got organized and asked the
city to let them run the lots. So the model changed because now there was a pay booth and a way to control access. But this was a result of a public competition. So the neighbors’ association competed and won against the cuidadores’ association that got organized at the last minute and did not have the strength to win... The neighbors won but they were unable to move the cuidadores out. They said “we will only leave this place dead”. It was an act of confrontation and resistance.

There is an extremely interesting story hidden in this description. Essentially the families that had been taken care of cars in the area for decades saw their property rights challenged by the neighbors who were frustrated by the cuidadores’ conflicts amongst themselves and with drivers. They challenged that property right not through force but through a legal channel. In order to compete on that front the families of cuidadores had to get organized in a legally valid fashion and formed an association: Cooptrainfocien. But despite having lost the battle against the neighbors legally since the families still had access to force they were able to continue working there, at least for a while.

The lesson from this story is that to have a more powerful voice vis a vis the government it helps cuidadores to change from just being families to being organized in a legal fashion such as an association. Furthermore, if cuidadores are bringing in family members into the business at least in part to gather strength it makes sense for them to consider joining an association where they can gather an exponential amount.

3. Associations

At the time of the research in July-August 2014 Cooptrainfocien no longer existed. The fight between the neighbors’ association and the cuidadores had made the neighbors’ association go broke and the city intervened and found another operator which successfully displaced the
cuidadores and formalized on-street parking in that area (Interview #5). One of the original cuidadores remained working for the new operator but she refused to speak extensively about what appeared to have been a very troubling experience.

Asovicar in the Restrepo centrality on the other hand was still working strong. They had around 50 members, an elected board and constant cooperation with the police and the local mayor in regards to security and traffic. The individual cuidadores said that they had to pay attention to report people illegally parked to the transit police (Survey #8). They had a system according to which the most senior members had the parking areas with more demand and a set of "back-up" cuidadores to take over slots when the principal cuidador could not go. Therefore there were only common property rights, individual property rights did not exist.

The association only collected fees for particular tasks and held regular meetings amongst themselves. The fear of outside people taking over their parking areas was not prevalent perhaps because their uniforms signaled to possible challenger that confronting one of them would involve all of the association.

What they did fear was the reformalization of on-street parking or what they identified as the return of the "zonas azules" because they assumed they would be displaced (Survey #8). They also had a serious problems making sure their members lived up to their commitments, for example being on time to work or paying dues however occasional they were. Finally, another challenge they faced was desertion. Some of the cuidadores in the Restrepo Centrality who did not belong to Asovicar (Survey #8) claimed that they did not see any benefit in belonging to the association and the bickering involved, also they did not appreciate having people tell them what to do.
During the research a third association was found to be developing in the Usaquen centrality along the 106 street corridor. This association is called APE Estacionamiento en Via (or APE on-street parking) and was headed by a man called Octavio Castrillón who apparently had devoted the better part of the last two decades to work related to on-street parking in Bogotá (Interview #15).

This association was six months old and had only six members but according to Castrillón the reason for this was that he was carrying out a “pilot” which would continue to grow and organize on street parking in Bogotá whether the city took actions or not. So far they had established the
association legally and constructed a webpage that described Mr. Castrillon’s history in on-street parking and what the goals of the association are.  

The six members of the association had to pay a daily amount of 1000 pesos (around $0.5 at the time) for association expenses and an extra fee for the jacket identifying them as members of the association. In exchange they received training by Mr. Castrillon on customer service, intermediation with the Mobility Secretariat and the possibility to call him as a replacement in case they could not go to work. From the cuidador’s perspective what was most valuable about belonging to the association was the information Mr Castrillon was able to collect from the Mobility Secretariat. For example a cuidador belonging to the association (Interview #3) commented that before belonging to the association “the transit police gave us a harder time. Now we have a letter that says that “the lot is authorized as a parking area” so they do not come to bother him any more. Somehow, the fact that Castrillon gave them uniforms and had legal documents with information related to on-street parking made these cuidadores feel they were more formal and thus less likely to face problems with the police and with the city government.

Importantly, the cuidadores that joined APE Estacionamiento en Via did not give up their individual property rights to the association and continued to work daily in the same area they worked before they joined.

Although the regular extraction of fees and the non-democratic nature of this organization might seem to make it closer to the definition of a mafia than an association, the fact that the members were receiving benefits from their payments other than security, that the payments were so small and that membership was voluntary makes it seem more like an association than a mafia.

4. Mafias

12 http://orientadoresdeestacionamiento.blogspot.com/
Again, the definition of a mafia is that of an enterprise which is focused more on extracting rents from people which provide the service in exchange for security than on providing the service itself. It is also non-democratic and violent organization. For obvious reasons it is not easy to get cuidadores to say that they work or pay tribute to a mafia but at least in one occasion it is clear that this type of organization existed in on-street parking in Bogota.

The Usaquen park is a touristic area in the north of Bogota that attracts foreign and local visitors due to its architecture, restaurants and cultural life. It also faces a severe lack of parking and a significant part of the existing supply is managed by cuidadores. Juanita Caycedo, former employee of the Usaquen mayor’s office describes the situation in which the mafia in this area emerged (Interview #2):

“(Roberto) Sogamoso organized everything there, and he had people with radios up, in the middle, everywhere. So you arrived and you would be forced to pay 5,000 pesos for however long you were going to park... and he scratched your car if you did not pay... we had complaints from the neighbors but no body ever filed suit... he had like three or four people with radios and he could calculate from how many cars came in how much each had to pay him... (and) it was far from you keep what you make”

A neighbor accused him of carrying a gun and at the time of the research, many years later the facts that were just described by Caycedo and despite the fact that she claimed that he was no longer in the business a cuidador working in front of Sogamoso’s house said that he was forced to pay 50% of his daily earnings to the owner.

A press article further described Sogamoso’s operations:

“The document [which the newspaper had access to] gathers testimonies from people that worked in the parking lot where they claim a man named Roberto Sogamoso is the owner of that area and that he administers the

operation of the informal workers to which he pays 25,000 in exchange for receiving the daily minimum of 220,000 pesos”

Although this was the only well documented case of mafias in on-street parking other cuidadores (Interview #15, Interview #3) mentioned that they knew of cases where areas of on-street parking were controlled by bosses that only came by occasionally to collect the rent.

Now, to be clear this is not the Sicilian mafia but the point is that Sogamoso’s business was no longer to take care of cars but to rent out an area to cuidadores who he guaranteed through force would not be disturbed by others. The second point is to show that this type of organization can benefit the cuidadores in the sense that it gives them a job and protection from competition. At the same time, however, this model leaves the workers regulated by the mafia prisoners of an arrangement in which they have absolutely no bargaining power.

So far, it should be clear that force either in an implicit or explicit fashion is a central element to the existence of informal property rights in on street parking, however, this force has mostly been shown to be useful as a means of creating or protecting an area. What is perhaps even more problematic is that the business model for the on-street parking business is such that it is very difficult to increase earnings without increasing or improving the territory which the cuidador controls and force is a central element to being able to achieve that goal.

5.2.4 What is the business model for the cuidadores?

As the section devoted to the census shows, cuidadores typically arrive to this activity due to lack of income and usually earn only enough to survive but for some of them it can become a very profitable enterprise. From the interviews carried out with them it can be seen that the differences in profitability emerge from their capacity to control good real estate and protect it
from the competition. “Good real” estate is an on-street parking area that is profitable and profitability depends on four factors:

- **Size:** in order for the activity of taking care of cars to be profitable the cuidador must make sure to own an area with enough parking spots so that he can take care of many cars but not too large so that he cannot guarantee their safety. From the interviews carried out the largest area a single cuidador could take care of were 50 parking spots (Survey #3) but the average area controlled tends to be much smaller.

- **Demand:** it is not enough for a cuidador to control a large area of on-street parking if it remains empty for most of the day. In order for the business to be profitable, the area that the cuidador controls must be attractive for cars to park in. This is typically associated with the proximity of uses such as restaurants, offices, parks, universities, etc.

- **Pricing:** a large enough demand for parking in the area he controls will allow the cuidador to charge a fixed price for its services as opposed to receiving whatever tip the owner wants to offer and thus generate a much higher revenue (Survey #9). Charging a fixed price however also has important drawbacks since it usually provokes conflicts with business owners and neighbors that complaint that the cuidadores charge a fixed price for the use of public space. It is also likely to lead to clashes with drivers that refuse to pay the price demanded. Such a scenario might even lead to conflicts with the police and impinge seriously on the capacity of the cuidador to stay in charge of the area (Interview #4). The amount charged for a full day of parking is usually between 5.000 and 7.000
pesos depending on the demand and supply of parking in the area. This price is around the amount a car pays for one hour of parking in an off-street lot\textsuperscript{14}.

- **Rotation**: a fourth but less important factor related to profitability is the fact that the “lot” that the cuidador controls has a mix of users that means that some cars stay all day, others for only a few minutes and yet another group for a couple of hours. This allows the cuidador to charge a fixed price more than once per day for those who stay more than only a few minutes. So for example table #3 shows the price scheme for a cuidador in the Centro centrality (Survey #12):

<table>
<thead>
<tr>
<th>Duration</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours or more</td>
<td>5.000</td>
</tr>
<tr>
<td>3 hours</td>
<td>4.000</td>
</tr>
<tr>
<td>2 hours</td>
<td>3.000</td>
</tr>
<tr>
<td>Less than two hours</td>
<td>Tip</td>
</tr>
</tbody>
</table>

So if this particular cuidador could fit three cars that parked for three hours he would more than double what he would make if one car stayed for the whole day. Now, this pricing strategy might not be the best but it illustrates the fact that cuidadores can create a strategy to profit more from the rotation of cars than on a site where cars tend to park for the whole day.

\textsuperscript{14} The price per minute of off-street parking has been fixed at a maximum of 95 pesos per minute in Bogota since 2011.
From the analysis of these four factors the ideal situation for a cuidador should be clear: he wants to own a large parking area with high demand where he can set the prices for parking and where hopefully cars have a high rotation. Unfortunately for the cuidadores there are two pieces of bad news. The first is that there are not many such areas in Bogota and the second is that they can do very little to improve the profitability of the areas they already control.

A cuidador cannot determine the demand for parking in the area that he controls, this depends entirely on the uses associated with the parking (shopping, office, commercial, etc) and he is powerless to alter those. For the same reason he is unable to increase the rotation of cars parking in the area. He can charge a fixed price at the risk of infuriating the drivers, the community and the authorities but ultimately this strategy also has a limit as drivers can park elsewhere or simply refuse to pay. The only ways in which he can increase his earnings is by either moving to a more profitable spot (Interview #15) or by increasing the amount of territory he or those who work for him control. This, of course, is not easy for he would be forced to clash with the current owner and perhaps the community and the authorities as well but if he decides to do so, the one thing he will absolutely need is access to force.

As it can be seen from the census results the differences in earnings between different cuidadores is significant. Unlike other businesses, this is not because they are intrinsically better at doing their jobs but because of their location and it is unreasonable not to expect cuidadores to never clash over who controls what spot or to try to expand, particularly in the areas where demand for parking is the highest.
6. Analysis

"A distinction is made that this is formal and this is informal but its all capitalism"

Mercedes Castillo – Professor Universidad Nacional de Colombia

Not even the most libertarian philosopher dares to claim today that capitalism could work without property rights and someone that guarantees that those rights are enforced. They would also be hard-pressed to claim that in spite of the existence of extremely elaborate institutions such as the legislative and judicial branches of government devoted to defining property rights such property rights could exist in the real world without the eventual recourse to force. In a formal legal system this means police intervention or the more elucidating term law enforcement.

While few would challenge the idea that the informal economy is part of the capitalist system, for some reason the literature on informality has considerably overlooked the fact that informal property rights are central to the operation of informal businesses in public spaces (ILO 1972, Hart 1973, Roever 2006, Anjaria 2006, Bandyopadhyay 2011, Yasmeen 2014) and that even if they exist their terms are agreed on without the use of force (Kim 2012, De Soto 1990, Bonilla 2005, Lanjouw 2002). The evidence provided in the previous pages should begin to question those beliefs and provide stepping stones to articulate a theory of informal property rights and the role of force in the way they are enforced.

Thus, two major assumptions of the literature on informality are challenged by the evidence provided in this research:

1. Informal property rights are not a crucial factor in the operation of the informal economy
2. Informal property rights when they do exist are defined and enforced peacefully by individual informal workers or their associations.

6.1 Informal Property Rights are the Backbone of On-Street Parking

Despite the relative absence of the discussion of informal property rights from the literature on informality the entire business of on-street parking is difficult to imagine without informal property rights. As shown by the semi-structured interviews in the results section the cuidadores live by it, the neighbors recognize it and even the authorities are willing to coexist with it. In fact, the concept of a cuidador merely to exist implies the control of physical space where cars can park and, equally important, where he can exclude others.

But “controlling” is not enough. If cuidadores only “controlled” the area where they work it would mean that they could only use it as long as they were present and that if one day somebody showed up before them to work they would have to find somewhere else to operate because they had no property of that terrain. The instability and repeated clashes such a system would provoke would be a great cost to the cuidadores and could make the business impossible to perform. This uncertainty, with the threat of conflict looming over the cuidadores every day, if somewhat less tragic, is not very different from the state of nature described by Hobbes and Locke.

But the daily threat of violence is far from the situation described by the cuidadores in their daily routines. They know clashes can happen and prepare for them in several ways but they do not have to fight daily to gain control of the territory they controlled the previous day. The reason is that for years they have worked in that terrain and deployed a wide array of tactics to create the “social consent” in which the community, the authorities and the other cuidadores accept that the small piece of land they occupy daily belongs to them. These tactics range from fighting
competitors and bringing in their families as back-up to bribing the police and cozying-up with the neighbors and should be proof of the lengths they are willing to go through in order to consolidate a property right over that terrain.

In theoretical terms the “social consent” the cuidadores look for in the community and the authorities resembles closely the one described by Locke when “families increased and built cities” but there was still no State. At this point property rights exist not just thanks to the cuidador’s labor but because there is a more or less solid social consensus that it is his. But this property right is still unstable because as Locke said “all being kings as much as he, every man his equal, and the greater part no strict observers of equity and justice, the enjoyment of the property he has in this state is very unsafe”.

This is the state of most of the independent cuidadores in Bogota. They have developed an informal property right over a piece of land that emerges from the labor they have put into it and the social consensus that it belongs to them. Both elements are necessary for that right to exist but not enough for it to be secured, these property rights could be challenged any day by a greedy competitor and the force the cuidador has at his reach in order to defend himself does not amount to much. In fact, Hobbes would say that such an insecure property right is no property at all because somebody with more force can always displace them and take it away. Some cuidadores decide to take the risk to operate independently but the desire of others to organize emerges precisely from that insecurity and the need to muster more force to defend their wobbly but extremely valuable informal property rights.

Perhaps because the existence of individual informal workers is so common, the “harmonious coexistence” model is the most popular one in the literature on informality yet it should be
emphasized that even if no “higher” enforcer exists, this model should not imply that force is irrelevant to property rights definition and enforcement. It should also not imply that other forms of definition and enforcement of property rights do not exist or that they are anecdotal. Informal workers organize to increase their access to force and the way they decide to organize has a profound effect on the nature of those property rights.

6.2 Organizations as a tool for the consolidation and enforcement of property rights

The argument thus far is that informal property rights are essential to the informal operation of on-street parking in Bogota, that force is key to the definition and enforcement of those property rights and that organizing collectively is a way for individual cuidadores to increase their access to force. This does not mean that the only motivation to organize is to gather force but that is an extremely important one.

6.2.1 Families as the first resource

Families are the cheapest form of organization vis a vis collective action and self defense. They do not require written rules, fees or frequent meetings yet when the need for collective defense of their property rights emerges they can be easily mobilized. Of course there are many other benefits to having the family in the same business. For example cuidadores want to help family members get a job (Rover 2006), they want them to keep him company, they can divide some of the work, etc all seem plausible reasons for bringing them into the business but collective defense is certainly an added incentive. But families as an organizational form devoted to the defense of property rights also have limitations. On the one hand it is not easy to bring family members into the business because they must either occupy new territory -which entails conflict- or remain underutilized most of the time becoming a hefty cost to the cuidador’s operations.
Thus, the formation of a family of cuidadores is likely to be a long term process seldom available as a recourse in a time of emergency for the majority and as the census showed they are likely to remain relatively small (although it is important to remember that the census asked about “household” and not “family”). On the other hand, families are still a type of informal organization that lacks the perceived legitimacy to interact collectively with either the community or with local authorities and thus is of little use in achieving the social acceptance so vital to the creation of solid property rights.

In short, bringing in family members is an effective way for a cuidador to increase the security of his property rights. In fact many believe that under the circumstances of their operation it is enough to feel relatively at ease but if the challenges to a cuidador’s property rights are high enough this type of organization can be insufficient to guarantee their security. Although organizing in families preserves the individual nature of property rights that cuidadores had as independents the dispute resolution mechanisms between them are unwritten and often unclear which might be a further source of instability.

6.2.2 Locke and the “Bottom Up” Model

Typically, according to Lockean theory, the desire by man to leave the state of nature and join “society” in order to secure his property has been understood as accepting submission to a civil government and its rules. Since in the informal economy the government is by definition not making and enforcing the rules the theory would seem to fail. Yet it is important to remember Locke’s words when he said:
“The great and chief end, therefore, of men ... putting themselves under government, is the preservation of their property; to which in the state of Nature there are many things wanting”

This passage underlines the fact that the motivation for men to leave the state of nature is not to join government for government’s sake but in order to protect their property. If “government” as traditionally understood is not an option, the theory would seem to accept as a substitute a different organization that helps men achieve the same goals. Such an organization that respects individuals property rights but creates dispute resolution mechanisms and serves to protect the members from outside encroachers would seem to be very close to the associations of informal settlers and workers portrayed in the “bottom up” model described by Leaf (1994) and illustrated in the work of De Soto (1990), Bonilla (2005) and Karst (1973).

This type of association is also present in Bogota’s on-street parking business with APE-Estacionamiento en Vía where, the association accepts individual’s property rights as superseding it and therefore having a very limited role in their management. It also seems to have been the case with Cooptrainfocien but since the association disappeared before our research specific questions such as the nature of property within it are hard to unearth.

Although a still nascent organization with a low membership, APE by giving its members uniforms is sending a message to potential challengers that its cuidadores are not alone and will act together if challenged. By having substitute cuidadores, it makes sure that the members’ areas are never unguarded and by having Castrillon as a mediator with the city authorities the association continues to work on achieving a social consent about its members’ ownership of certain areas. Furthermore by having meetings and Castrillon as a leader, there are some spaces
where disputes over property rights can be brought up and worked through in a somewhat institutional fashion.

Because they have access to these complimentary services *cuidadores* working with APE are in a different situation from the state of nature yet there are also costs to belonging to association that threaten its sustainability. An evident one are the fees of 1000 pesos that the cuidadores have to pay to the association which although a small amount must be paid. The fact that some members might not pay brings up the second problem which is the capability for the organization to enforce its own decisions without a concrete way of exercising force. Of course the members could all get together and physically attack the member that refuses to comply with the association’s decision but this is unlikely and members who refuse to abide by the rules know it. Having members blatantly ignore the association’s decision invalidates to a great extent the justification for joining it and threatens its survival. APE in particular seemed vulnerable to this type of situation.

As a symbol of the Lockean enforcer of informal property rights APE therefore offers respect and more security for individual property rights, dispute resolution mechanisms and mediation with formal authorities. However, it has one main drawback which is the abstract nature of its access to force and the possible incapacity to muster it when necessary particularly in regards to enforcing its own decisions. This is not true of a Lockean government in traditional property rights theory but it seems to be so with “bottom up” associations in the informal economy.

6.2.3 Ostrom and the “Bottom Up” Model

Ostrom’s theory of property rights is important in our enquiry about informal property rights because it posits the idea that under certain circumstances the management of common property
can be achieved. Of course, she claims this in the context of the formal economy where there is some possibility of access to a police force, courts and all sorts of government institutions that can act as back up to the agreements that aim to manage common property. Three questions emerge from translating Ostrom’s theory to the informal economy, in particular the case of on-street parking:

1. Is common property viable in on-street parking

2. Is it an attractive alternative to independent cuidadores

3. Is the higher access to force a factor in the attractiveness of common property

The story of Asovicar in Bogota suggests the answer is yes, partially and yes for these three questions.

Asovicar, like APE is an association such as the ones categorized by Leaf (1994) in the “bottom up model”. As described in the Results section, Asovicar operates in the Restrepo centrality of Bogota, has around 53 members and has been operating in the area for over a decade. As opposed to APE Estacionamiento en Via, the cuidadores in Asovicar are not owners of any particular area but are assigned their places according to seniority by the association. If a member decides to leave the association, he can no longer operate in the association’s area. The leaders are democratically elected and rotate on a periodical basis. Although the cuidadores’ work is informal, the association has regular meetings with the local mayor’s office and the police which is a clear sign that it has achieved a high degree of social consent. Considering these facts, the answer to the first question should be an unequivocal yes.

Although Ostrom did not write about anything like parking spaces (she mostly wrote about common pool renewable resources such as water, fisheries and pastures) her theory seems
applicable to on-street parking because in this context there is also a fixed resource (land) that if not managed well will lead to conflict between its appropriators and reduced outcomes for all of them (although not the depletion of the resource).

The answer to the second question mentioned above is “partially” because although Asovicar has been successful in managing common property in its area of operation and consolidating its common property rights this is far from being the preferred model of operation for the majority of Bogota’s cuidadores. Of the 876 cuidadores in the census only Asovicar’s 53 members operate under a common property agreement: a tepid 6%. So while for the people operating in Asovicar’s area a commitment to common property is appealing (otherwise it would not have enjoyed a solid membership for so long) it has not attracted enough interest from cuidadores in other areas to be replicated.

The answer to the third question is also yes. Although the legitimacy and the feeling of being more “formal” are considered incentives for people to join Asovicar in the semi-structured interviews members were explicit that one of the benefits of being in the association is the capacity to keep competitors out more easily. Like in APE’s case Asovicar’s uniforms are useful in this respect because they signal to potential challengers that they will face collective resistance if they challenge any of the association’s members.

But like in APE’s case the abstract nature of Asovicar’s force is also its main vulnerability. Namely, is not clear how they can enforce the associations’ decision if members ultimately refuse to comply, if they do not pay their fees or refuse to go to the meetings. If the association does not have a clear enforcing mechanism - which sooner or later implies the use of force - it is
bound to run into trouble. In fact, the desertions from Asovicar mentioned previously are signs of this.

Although Ostrom does not underline the role of force in the capacity to manage common property agreements two of her rule-design principles # 1 “Define a set of appropriators who can use the resource” and #5 “sanction using graduated punishments” necessarily imply the use of force. If associations cannot guarantee the capacity to exclude outsiders and to punish those who violate the whole arrangement is bound to crumble. Without the support of outside authorities and the concrete use of force it is unclear how associations of informal workers can function in the long term.

In conclusion, common property arrangements managed by associations are a viable alternative to leave the state of nature in on-street parking in Bogota. They provide more access to force and more legitimacy than working alone or in families but also imply costs. Time are money are the most obvious ones, but the most important one is the necessity to enforce the association’s decisions vis a vis insiders and outsiders. The incapacity or unwillingness to do so puts the association’s capacity to survive in peril.

6.2.4 Hobbes, Marx and the "External Agent" Model

If Hobbesian property rights theory was applied to the informal economy a cuidador could not have a property right over any terrain unless the cuidadores as a collective lived under a “common power” that kept them in awe. In fact under the traditional Hobbesian theory, the desire of the cuidadores to escape this state of nature would make them accept a “common power” with absolute authority over them in exchange of guaranteeing their safety.
Two of Hobbes’ concepts must be adapted to fit the context of the informal economy in order for his theory to remain useful. First, in the Leviathan the state of nature is a state where an individual’s life is constantly in danger and he exchanges the right to safety for absolute obeisance to the sovereign. This can hardly be said to be the case for the cuidadores. While they are in the street attempting to protect the territory they control, cuidadores can be said to risk their economic survival but hardly their lives. Thus, it would seem that according to Hobbesian theory cuidadores would be willing to accept a “sovereign” (even at the expense of the terrain they control in the state of war) as long as that “sovereign” guarantees them their economic survival. Accepting only security for their lives would be too little, since they could have that without the sovereign. The second point in Hobbes theory that should be adapted to fit the context of the informal economy is the concept of the “sovereign”. Traditionally, this idea has been interpreted to represent a Monarch or head of government of some fashion but the alternative use Hobbes gives to “sovereign” and “common power” should allow for the adaptation of that idea to be an organization that guarantee’s a number of cuidadores economic survival at the expense of their absolute submission to them. In the context of the informal economy this can take two forms: the mafia or a corrupt police force.

While Hobbes says that once men accepted a common power private property could exist, his emphasis is on the fact that without a sovereign no property could exist and that consequently the choice whether to allow it or not it is entirely up to him.

Marx on the other hand does not emphasize the dangers of the state of nature and the importance of the monarch. He emphasizes the changing nature of property as the “relations of production” change. Depending on the relations of production there can no private property, men can own the product of their labor or men can own only their labor but not its product. This third stage is
capitalism. As applied to the informal economy and on-street parking in particular it is difficult to interpret what the “relations of production” mean but it can be seen very clearly when the cuidadores are no longer owners of the product of their labor.

Interestingly, the situation in which Hobbesian and Marxist property rights theory seem to converge in our research is the same: the case of Roberto Sogamoso in Usaquen. As was described in the results section Sogamoso controlled an area north of the Usaquen park where he had a group of cuidadores distributed that earned a fixed income, he took all the rest. Allegedly he was armed in order to intimidate potential challengers and presumably any of his cuidadores who had the idea to cheat him in any way.

Although Sogamoso’s story hardly resembles the large operations of what is usually understood as the mafia and could easily be discarded as an anecdote in the unstable world of the informal economy, conceptually it has four interesting components that make it relevant for analysis. First, as in the Hobbesian property rights theory the cuidadores that work under him have no rights vis a vis their “sovereign”. They can be fired for no reason, abused or underpaid. In the informal economy workers do not have the right to complaint about any of this. In Hobbesian theory the only rights of Sogamoso’s workers are economic survival and the protection against outside challengers.

The second important point is that according to Marxist property rights theory Sogamoso’s case, where the workers no longer own the product of their labor is an example of the capitalist stage in the relations of production. Furthermore, in the capitalist stage of production in the informal economy workers seem to be helplessly in the hands of the capitalist since there are no laws or governments to protect them.
The third important point is that Sogamoso’s case seems to be a special case of the “external agent” model of informal legal authority described by Leaf (1994). This model in Leaf’s original description includes cases where agents that do not belong to the government or the informal workers regulate informal property rights. This case is special because Sogamoso is not part of the government or a cuidador but the cuidadores who work under him do not have property rights so in a certain way the “external agent” in this case can be understood as only guaranteeing his property rights at the expense of his employees.

The fourth and final crucial point for our analysis is that Sogamoso’s organization has a significant advantage over the others: it has access to concrete force in way that is both a credible threat to outsiders and insiders and guarantees him the capacity to enforce his decisions.

The important remaining question after looking at Sogamoso’s case is if the absolutist mafia/firm logic seen here is an isolated case or whether it might be a model to be replicated in the business of informal street parking in Bogota.

From the outset this model seems particularly well suited to enforce property rights in on-street parking where these rights are constantly challenged in a violent manner. Namely, if the critical factor in the defense of property rights is force, mafias seem to be the most efficient enforcer. If the main threat to informal property rights is formalization, mafias would not seem to be well equipped to deal with the threat since legitimacy and social consent are the center of the issue and mafias do not enjoy either. In those situations association such as APE and Asovicar might be better equipped since they can act as a legitimate interlocutor with formal authorities.

In any case, because the role as mafias has not been considered carefully in the context of enforcing informal property rights and the case of Sogamoso might be discarded as an outlier in
an otherwise peaceful business the next section will delve more deeply into analyzing the role of mafias in other informal businesses in Bogota and in on-street parking around the world.
7. The Greater Challenge: Mafias as the enforcer of informal property rights

7.1 Reasons for Concern

The idea that mafias are an efficient and potentially attractive enforcer of informal property rights should be troubling to policy makers for at least two reasons. First, informal workers subjected to this type of regulation are not only economically vulnerable, they also lose any rights vis a vis their regulator. Second, mafias extracting rents from informal businesses such as on-street parking can well be suspected to be doing so from other informal and illegal businesses. Thus, they can transfer earnings from informal workers to organized crime with a high probability of those rents being invested in other criminal activities.

It is, therefore, a worthy endeavor to ask whether mafias are a likely enforcer of property rights in the on-street parking business and whether they might become more common in Bogota than they are at the present. There are at least a few reasons for concern.

The first reason for concern is that the socioeconomic trends in Bogota suggest that on-street parking will only become more profitable in the upcoming years and, as a result, property rights of the areas devoted to it will be even more contested.

As shown in Graph #9 the number of cars and motorcycles in Bogota increased considerably during last few years (approximately double the amount of cars and quadruple the number of motorcycles). This trend is not likely to change unless the city revamps its public transportation system, and even in the best case scenario this will not happen for another few years.

Graph #9: Increase in number of cars and motorcycles in Bogota
At the same time, it is difficult to see how the supply of parking can grow at the same rate particularly considering the obstacles that the off-street parking business faces and the difficulties to increase the supply of on-street parking in the areas of Bogota with highest demand. Thus, unless off-street parking regulations are loosened to the degree that it can cope with the increase demand for parking, the prices for on-street parking are likely to increase considerably attracting more and more people to the business of being cuidadores, particularly to the most profitable areas. This will very likely put cuidadores in a situation where they must face new challenges to their property rights without being able to easily organize in families or associations because of the already discussed costs of collective action. In this scenario, mafias and the police are likely to thrive by selling security to cuidadores (Skaperdas 2001).

The fact that as shown in graph #10 Bogota will continue growing by around 100,000 people per year for the next few years should also raise the question if these people will all find work in the

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15 A price ceiling at 95 pesos per minute exists since 2011 and a new tax for parking was proposed in 2016.
formal sector or whether the supply of people looking for work in the informal sector is likely to increase in a parallel fashion.

**Graph #10: Expected increase in Bogota’s population**

![Graph showing expected increase in Bogota's population]

Source: National Statistics Department Projections (DANE)\(^\text{16}\)

The second reason is that as shown in the previous section, the cuidadores’ business model does not allow much room for augmenting profits without increasing their control of territory or controlling territory with higher demand for parking. Although many cuidadores can be satisfied with their status quo it is reasonable to presume that at least some of them will want to earn more and will be tempted to challenge the cuidadores who currently own the more profitable spaces. This is particularly so in a context where this profitability is increasing. Thus, if the profitability

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\(^{16}\) DANE 2005 Projections [http://www.dane.gov.co/index.php/poblacion-y-demografia/proyecciones-de-poblacion]
of the business increases considerably it is likely that new people will want to become cuidadores and that current cuidadores attempt to control more profitable areas.

In such a volatile context the mafias' business proposition of selling protection in exchange for rents seems particularly likely especially when the cuidadores there are not part of an association or a large family. This is the case because if cuidadores cannot build up enough force of their own in order to protect the profitable area that they own they might be forced to buy that security from an outside provider as their only recourse. With 70% of the cuidadores being independent and 24% in families, there are many places where this could begin to happen.

The third reason for concern is that mafias are not foreign either to informal businesses in Bogota or to on-street parking as a business. In fact, the threat of such a system becoming more commonplace in Bogota is underscored when it is seen how many informal business already have mafias in Bogota and how on-street parking specifically is regulated by mafias in many cities of the world. Ahead a few examples.

7.2 On Street Parking Mafias

Medellin, Colombia

Despite the fact that Medellin has formalized on-street parking in several areas of the city, press articles\textsuperscript{17} point out that in other areas not only are fixed prices set and charged through armed intimidation but that behind the people working as cuidadores are bosses who give them the tickets that they have to use and then come around to charge them. A person from Medellin quoted in the article said:

\textsuperscript{17} http://www.elcolombiano.com/antioquia/parqueo-que-esconde-ilegalidad-XD2522365
“I saw in the Alpujarra zone, during the Silleteros parade [a time of very high demand for parking], that the ‘trapitos rojos’ [cuidadores] arrived and behind them a group of guys that forced them to use a set of tickets which they later had to pay”

By forcing the cuidadores to use these tickets, their bosses could control how much they earned and what amount they had to pay. Further ahead the article quotes the head of Medellin’s Security Department saying:

“We can’t generalize or stigmatize but behind some of the “trapitos rojos” there are criminal structures”

And then the article concludes that:

“During 2014 an investigation in the Belen neighborhood allowed the capture of several people that were linked to organized crime and financed their activities by charging for parking”

Yogyakarta, Indonesia

A researcher, Cholis Aunurrohman, carried out a study of a couple of hundred of parking attendants (cuidadores) in Yogyakarta who were protesting the attempts of the city government to relocate them to a parking lot. Puzzled by the fact that these attendants were protesting what seemed a formal job that on paper offered them higher incomes, he began to dig deeper. He found that every 8 parking attendants had a boss on site who they paid for operating that area. That boss was a member of the Indonesian Democratic Party and thus had easy access to bribing people who posed a threat to their jobs and could oppose the relocation efforts. But the bosses also had their respective bosses who Aunurrohman calls “land owners” or “white collar parking attendants” who were not on site every day but came by regularly to collect the rent. This “white collar parking attendant” is described as a “thug with a strong mass network. He can move the network at any time. It seems that he has some protection from the police and military person”.
Yet the criminal chain structured around parking did not end there. A fourth level was called “the area leaders” which never went by the parking lot. Aunurrohman says “they are usually active members of the police and military service. They are very close with the thugs and have the ability to organize them”. As if there remained any doubts he underlines the fact that “the police are still active in the community. They offer support to the thugs. Probably, this is the reason why many studies and designs are difficult to be implemented by the government.”

For further clarity Aunurrohman attached a diagram that illustrates the deep integration of crime and on-street parking in Yogyakarta.
Palermo, Italy

According to an article\textsuperscript{18} by Vincenzo Salerno the cuidadores in Palermo are called “posteggiatori” and charge people one euro for parking in “their” territory. Similar to Bogota, those who do not pay run the risk of their vehicle being damaged.

\textsuperscript{18} “Car Parkers!” http://www.bestofsicily.com/mag/art66.htm
In Sicily most cities are divided into zones of mafia influence and while:

“It's true that the more elite ranks of the Mafia are now associated with political corruption and things like expensive construction contracts and international money laundering... in Palermo the Madonia family, lords of the so-called "San Lorenzo" territory, still make a good deal of money from their share of the car parking and pizzo ("protection") rackets. Mafia influence in local politics may partially explain why Palermo has not installed more parking meters, which, at least in theory, would discourage the car parker phenomenon”

Salerno estimates that after paying the posteggiatori and other collaborators, each of the mafia organizations nets at least five thousand euros per week or over $250,000 a year from car parking alone.

7.3 Mafias as enforcers of other informal businesses in Bogota

Even if mafias are not the predominant type of organization in on-street parking in Bogota it would be deceiving to suggest that it is necessary to leave Bogota in order to find them. Street vendors, beggars and informal transportation (pedicabs and jeeps) facing the cuidadores’ same need to restrict competition in public space in order to secure property rights have all experienced the regulation by mafias.

Street Vendors

Similar to cuidadores, street vendors need both to control territory and restrict competition in order for their business to be profitable. Furthermore it would seem that the same three factors: good relations with the authorities, good relations with the community and access to force would be the pillars to help them consolidate their property rights.

Jorge Pulecio, the former director of IPES (Institute for the Social Economy), which is the office in charge of handling relationships between the city government and informal workers in Bogota
described several instances in which street vendors were controlled by mafias. One in particular in the 20 de Julio area of Bogota was covered by the press\textsuperscript{19} and deserves to be discussed. According to Pulecio (Interview #9) in the 20 de Julio plaza religious souvenirs had always been sold by informal vendors but when mayor Mockus saw the rapid growth in the number of people working there he decided to turn the area surrounding it into a pedestrian street and give them tents. After that a lawyer organized them into an “association” but this association was far from the democratic organization amongst equals that one typically believes associations to be. Pulecio says that the lawyer:

“charges fees every week. Supposedly he charges for security, picking up the garbage and for belonging to the association. But he also made them sign a notarized document saying that he is their legal representative in any city conflict with the State and that if they are compensated he gets to keep 50\% of that amount. So in reality he works with a group of armed people that intimidate the vendors in the name of providing them security … and those that do not follow his directives are expelled and it is always easy to find people willing to replace them and go sell”

Perhaps even more perversely the same lawyer found a colleague to suit the city claiming that the street vendors were occupying public space illegally and needed to be removed. He did this with the double purpose of uniting them around his leadership and hoping that if they were relocated the city would have to compensate them and he would be able to keep 50\% of that compensation.

\textbf{Beggars}

Begging is rarely considered a “business” because it is assumed that people devoted to it earn very little and resort to it because they are incapable of doing anything else. Yet, as has often

\textsuperscript{19} Mafias del 20 de Julio amenazan formalizacion de vendedores ambulantes
http://www.elespectador.com/noticias/bogota/mafias-del-20-de-julio-amenazan-formalizacion-de-vended-articulo-403345
been pointed out begging can be quite a profitable informal business. Like street vendors or cuidadores, beggars face the same challenges of acquiring an area where their “business” is profitable and making sure that no other beggars come in to compete with them. Thus it would seem that it is also a business attractive for mafia’s control.

Mercedes Castillo, a professor of Colombia’s National University who carried out extensive research in the Martires neighborhood of Bogota described in an interview (#16) and in the press the way Embera indigenous people were used by a mafia:

“It’s horrible. As I see it, it’s modern day slavery. These people are captured and sat in a corner so that they beg and the earnings are taken away by somebody else who is controlling them. But specially girls who are kidnapped from embera communities are kidnapped and brought here to beg. And normally they are raped so that they are pregnant and having a baby provoke more pity. It is very disturbing. “

Jeeps

In the northeastern area of the Usaquén locality of Bogota a neighborhood called Santa Cecilia lies on the top of a steep mountain far from transit corridors and inaccessible to buses. It is connected to the city’s transportation network via small jeeps that carry neighbors up and down the mountain in lieu of formal public transportation. Despite repeated demands to formalize the service the Ministry of Transportation has been unable/unwilling to do so. Juanita Caycedo, former employee of the Usaquén local mayor’s office (Interview # 2) describes the situation:

Juanita Caycedo: other places with mafias? Transportation in Santa Cecilia is a very clear example. It produces around 3,000,000,000 pesos a year ($1.7 million). Those are the little jeeps that bring people up and down…

Interviewer: what happens if you show up with your own jeep?

Juanita Caycedo: they beat you up because that is managed by the Pascuales [a local, notoriously violent gang]
Interviewer: they control other informal activities in the neighborhood?
Juanita Caycedo: no. Petty drug trafficking… and also rob apartments.

Thus once again at the crux of profit, informality and the control of space (in this case a corridor) a mafia appears to define who owns what, who can access the business and who can not.

Pedicabs (bicitaxis)

Pedicabs or tricycles are another common form of informal transportation in Bogota. They mostly help people move back and forth from the Transmilenio mass transit system to the adjacent neighborhoods through more or less predefined routes. Again, in order for the operation of pedicabs to be profitable there has to be a limit to the supply of vehicles in any given corridor. Interestingly the associations and mafias who control these corridors do not outright exclude people interested in working in the corridor but sell “cupos” or medallions that vary in prices depending on the demand of each of these routes.

In 2013 a census similar to the one made for the cuidadores was made for pedicabs. The final report claims:

“There is a marked difference in the organizations [of pedicabs] in Toberin and Patio Bonito [two neighborhoods in Bogota]. In the latter there are cooperatives and associations that among other things charge for the cupo and administer the corridor. They claim that since they are legally recognized and registered in the chamber of commerce as firms they have been delegated the responsibility for that space… they believe that charging for a cupo to enter prevents the route from having too many pedicabs and ruining the business”

While in fact some of the pedicabs associations are legally constituted that does not mean they can legally sell the “cupos” or that they do not have mafia like characteristics. In

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23 Denuncian mafias que explotan el servicio de bicitaxistas en Bogota
http://www.elespectador.com/noticias/politica/denuncian-mafias-explotan-servicio-de-bicitaxistas-bogo-articulo-447652
addition to cupos, associations charge fees to drivers already operating the corridor and eject violently those who do not pay. Also, often it is not clear who exactly charges for the cupos. Drivers say “somebody” but refuse to say who. Thus, as pointed out by the former mayor of Medellin Alonso Salazar and Angelica Lozano a former local mayor of one of Bogota’s localities (Interviews # 11 and 5) in practice it can often be difficult to tell the difference between associations of informal workers and mafias.

While clearly the four businesses analyzed above have differences with that of cuidadores, they were chosen because they share three conditions with on-street parking: a potentially profitable activity, the need to define property rights over public space in way that excludes the competition and the need for those rights to be enforced in a violent fashion.

7.4 Two Important points

So far I have argued that despite the hardships the job of a cuidador is attractive to many people, that as a result of this attractiveness incumbent cuidadores are challenged for their spaces by other people and that these challenges can often be violent. I have also argued that one of the reasons why cuidadores bring their families into the business or form associations is to increase their access to force which can help them protect their property rights in a context where they will not be defended by anybody else.

Furthermore, the cuidadores’ need to have an access to force in an emergency can make the protection of a mafia (or the police) in exchange for regular payments be attractive. In fact, as drivers’ demand for on-street parking increases, the mafia’s business proposition will be even more attractive to cuidadores and more mafias are likely to emerge around the business. This is particularly true considering that there are many examples of mafias
running the on-street parking business around the world and that many other informal
activities in Bogota are regulated by mafias.

There are, however, two points that are important to underline. First, despite the security that
mafias "sell" to the cuidador, it is not correct to assume that the cuidadores approach mafias
soliciting their protection. Probably more often than not it is the mafias which approach the
cuidadores and demand to be paid in exchange of providing security. The important point
here is that the cuidadores, like other informal workers, need security and hence welcome or
submissively accept the mafia's proposition than a formal business.

The second important point is that conceptual categories like "families", "associations" and
"mafias" are not exclusive categories but are better understood as a spectrum. As the census
results show, many families belong to associations but as described by Lozano and Salazar
demonstrate associations can often be the covers for mafias, and as referred in the Palermo
reports, mafias are often made up of families.

7.5 A Brief Clarification on the word "mafia"
The word "mafia" is a popular term, and it has become a catchall expression used in association
with informal activities involving violence. In the particular case of on-street parking, it has
been used from Miami24 to Lima25 to Hyderabad26 to describe significantly different practices.
Some times it is used to describe cuidadores threatening drivers to pay for parking or face
violence, other times it is used to describe cuidadores who attack government agents that attempt

24 “Miami parking nightmare: From the homeless parking mafia to the meter fairy”
25 “Municipalidad de La victoria acusa a la mafia criminal de atentados contra funcionarios”
http://diariocorreo.pe/ ciudad/municipalidad-de-la-victoria-acusa-a-la-mafi-80445/
26 “Parking mafia takes over city roads” http://timesofindia.indiatimes.com/city/hyderabad/Parking-mafia-takes-over-city-roads/articleshow/41892732.cms
to enforce parking regulations. And yet other times it is used to describe cuidadores who continually expand their area of control. While all these behaviors could be carried out by mafias involved with on-street parking, for the purposes of this research I have highlighted three characteristics:

1. Mafias are mainly concerned with collecting rents from on-street parking but do not operate the service themselves.
2. They are able and willing to exert violence against the cuidadores who do not pay them and against whoever challenges their territory.
3. They are not selected democratically.

Because as I described, the cases of Lima, Miami and Hyderabad entailed violence directed by cuidadores against drivers or authorities they do not fit the category of mafias as understood in this study.
8. Conclusions

This research has four main conclusions. The first is that informal property rights exist and are a crucial factor for the smooth operation of the business of on-street parking in Bogota. Without them, clashes and violence would be the rule as opposed to the exception. The second conclusion is that force, although not always evident, is a central aspect in the definition and enforcement of informal property rights in the on-street parking business. As in the formal economy, in the on-street parking business rules and relationships are important but without the recourse to force at some point they are not enough. The third conclusion is that one of the reasons why cuidadores organize is to increase their access to force, that they do so in diverse ways and that the way they do so has a profound impact on the nature of their property rights. Some are independent owners; others a part of a collective ownership and still others are employees. The fourth conclusion is that the close relationship between the ways cuidadores organize and force makes some types of organization more concerning for government than others. In particular, if the conditions of on-street parking seem to head to the type of scenarios where mafias are more likely to intervene their formalization should become a priority.

However by underlining the importance of the neglected field of informal property rights this research probably leaves more open questions than answers. The main one is why the cuidadores’ organizational strategies vary? But this question can be decomposed into several more. Why do mafias appear in some places and not in others? Do they appear only in the more profitable areas or do they appear where hubs of informal economic activity exist? Are they more likely to appear in places where organized crime is already strong or do they tend to be
created endogenously? What is the extent of the involvement of the police in the enforcement of informal property rights?

Of course this is following the line of the mafia as a regulator but the same questions could be asked for associations or families. In fact one could explore how different informal property rights schemes should influence formalization of any informal business.

In short, there is much more to learn about informal property rights and their enforcers but this study has one overarching conclusion: governments cannot continue impervious to the existence of a parallel property rights system and parallel enforcers. These systems, whether they are visible or not, are based on the use of force by organizations that lack the legitimacy to do so. Democratic governments with all their flaws, go to great lengths to coat their use of force with popular legitimacy. It would be nothing less than hypocritical and dangerous for them to allow somebody without the same legitimacy to take over its role in making and enforcing the law. Creative formalization schemes that understand the role of property rights and their enforcers in the informal economy must be devised. The alternative, although perhaps less visible, is much more violent.
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APA

Annex #1

Sample Interview Questions for Semi-structured Interview with “Cuidadores”

1. How long have you been working here?
2. What is your schedule?
3. On average how much do you make every day?
4. Who else works with you here?
5. Do you provide any other services other than taking care of cars?
6. Do you have a boss?
7. Do you have to pay anybody else to work here?
8. How much?
9. Do you know if they manage any other business in the area?
10. What do you receive in exchange for that pay?
11. Can anybody come and take care of cars in this area? How is this controlled?
12. Have you ever clashed over control of this area with other people?
13. What is your relationship with other people in the area? Neighbors, formal businesses, street vendors, etc?
14. What is your relationship to the police and other authorities like?
## Annex # 2

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Annex # 3

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<tr>
<td>1</td>
<td>Eduardo Bayon</td>
<td>Off-Street Parking Businessman</td>
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<tr>
<td>2</td>
<td>Juana Maria Caycedo</td>
<td>Former Usaquen Civil Servant</td>
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<td>3</td>
<td>Carlos</td>
<td>Off-Street Parking Businessman and former Cuidador</td>
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<td>4</td>
<td>Reserved</td>
<td>Two Usaquen Cuidadores</td>
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<td>5</td>
<td>Angelica Lozano</td>
<td>Former Mayor of Chapinero</td>
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<tr>
<td>6</td>
<td>Henry Martin</td>
<td>Head Researcher in charge of the Census of Cuidadores</td>
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<tr>
<td>7</td>
<td>Carlos Molina</td>
<td>World Bank Expert on Relations with Communities</td>
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<td>8</td>
<td>Carlos Pardo</td>
<td>Mobility and Parking Expert</td>
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<tr>
<td>9</td>
<td>Jorge Pulecio</td>
<td>Former Head of City Office in charge of dealing of the social economy (IPES)</td>
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<td>10</td>
<td>Lariza Pizano</td>
<td>Former Bogota Concil Member</td>
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<td>11</td>
<td>Alonso Salazar</td>
<td>Former Mayor of Medellin and Social Researcher</td>
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<td>Social Researcher Universidad Nacional</td>
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