

DOI: 10.4119/ijcv-3163

# Using Participatory Visual Methods in the Study of Violence Perceptions and Urban Space in Mexico

Natalia Garcia Cervantes Universidad de Guanajuato, Mexico natgcervantes@gmail.com

# Vol. 13/2019

The IJCV provides a forum for scientific exchange and public dissemination of up-to-date scien-

tific knowledge on conflict and violence. The IJCV is independent, peer reviewed, open access, and included in the Social Sciences Citation Index (SSCI) as well as other rele-

vant databases (e.g., SCOPUS, EBSCO, ProQuest, DNB).

The topics on which we concentrate—conflict and violence—have always been central to various disciplines. Consequently, the journal encompasses contributions from a wide range of disciplines, including criminology, economics, education, ethnology, history, political science, psychology, social anthropology, sociology, the study of religions, and urban studies.

All articles are gathered in yearly volumes, identified by a DOI with article-wise pagi-

For more information please visit www.ijcv.org

Suggested Citation: APA: Garcia Cervantes, N. (2019). Using Participatory Visual Methods in the Study of

Violence Perceptions and Urban Space in Mexico. International Journal of Conflict and

Violence, 13, 1-15. doi: 10.4119/ijcv-3163

Harvard: Garcia Cervantes, Natalia. 2019. Using Participatory Visual Methods in the Study of Violence Perceptions and Urban Space in Mexico. *International Journal of* 

Conflict and Violence 13: 1-15. doi: 10.4119/ijcv-3163



# Using Participatory Visual Methods in the Study of Violence Perceptions and Urban Space in Mexico

## Natalia Garcia Cervantes

Universidad de Guanajuato, Mexico

#### Abstract:

The contribution investigates the experience of using visual participatory methods of data collection, auto-photography and community mapping, in the context of urban planning, violence and insecurity problems in Mexico. Two case studies examine peripheral communities in the cities of Aguascalientes and Culiacan where different manifestations of violence are present. The contribution explores the potential of participatory visual methods in capturing perceptions of violence and makes the case for their use in planning processes, as more appropriate methods are needed to capture perceptions of violence and insecurity in urban areas. The rationale, methods and results of community mapping and auto-photography are discussed, as well as some potential challenges and theoretical limitations.

Keywords: participatory visual methods, participatory violence appraisals, Mexican cities, urban violence, urban planning

Studying urban violence and its the impacts is a complex issue, as purely quantitative methods do not grasp the extent to which violence impacts the lives of citizens (Rotker 2002). Traditionally, violence has been studied through quantitative methods to assess its economic impacts or generally quantify it (Fajnzylber et al. 2000; Robles et al. 2013). One of the main drawbacks of a solely quantitative approach is that these methods fail to capture everyday experiences of urban violence and insecurity (Moser 2004), which are critical for designing appropriate responses. Additionally, urban violence and its many manifestations have become less spatially restricted, and are not confined to specific areas of cities (such as "the urban margins") where they have historically mainly affected the urban poor (Auyero et al. 2015; McIlwaine and Moser 2007). This has prompted a surge in research on the "geographies" and "spatiality of violence" (Springer and Le Billon 2016), the "territoriality of violence" (Valenzuela-Aguilera 2013), and how violence "sits" in places (Springer 2011). Scholars have emphasised the territorial, social and economic repercussions of the "spatial distribution of violence and its concentration in certain urban spaces" (Davis 2012, 23). For example,

in situations of chronic violence public spaces become dominated by violent actors and inaccessible to residents (McIlwaine and Moser 2007); in such contexts, the "lack of viable community spaces" impacts on the everyday lives of citizens (Davis 2012, 23).

As "territory has become a central actor", violence and responses implemented to prevent or reduce it have acquired a "spatial dimension" (Valenzuela-Aguilera 2013, 21). Thus it is necessary to focus on visual methods to understand the impacts of violence on urban space, or the "spatiality of violence" (Springer and Le Billon 2016). This paper discusses how autophotography and community mapping of the effects of violence on space facilitate an exploration of understandings and perceptions of "seeing violence" in urban space and of how violence is materialised in space. Auto-photography and community mapping were used to explore these dynamics in two Mexican cities, since "photographs can convey a great deal of information about the appearance of a place far more succinctly than words" (Rose 2008, 151).

## 1 Methodology: Participatory Research and Participatory Visual Methods

Participatory research methods and visual methods have been around for some time. Pain and Francis (2003, 46) differentiate between participatory research approaches and participatory diagramming/methods. Participatory research approaches are "not so much the methods and techniques employed, but the degree of engagement of participants within and beyond the research encounter" (Pain and Francis 2003, 46). Rather than a set of techniques, these approaches are "a process by which communities can work towards change". Participatory methods, on the other hand, emphasise participants producing "inclusive accounts using their own words and frameworks of understanding", using a variety of techniques which include mental and community mapping, timelines, matrices and photography (Pain and Francis 2003, 46).

Visual methods may function through creation of visual representations (studying societies through the production of images), examination of pre-existing visual representations (studying images to learn about society) or collaboration between social actors in the production of visual representations (Banks 2007).

In a sense, this article sits in-between: it presents visual methods used practically to explore perceptions of insecurity in the urban space, while also suggesting the inclusion of these techniques in urban planning as a way of making planning stronger and more effective based on citizens' views of space. As suggested by Vaughan (2016, 20), participatory research, and in particular visual methods, allows the citizen's role to be one of "taking action or effecting change".

# 1.1 Auto-photography and Mapping in the Study of Violence

Violence has been studied using visual methods since the early 2000s. Moser and McIlwaine used visual methods in participatory urban appraisals in Colombia (Moser and McIlwaine 2000) and in a post-conflict context in Guatemala (Moser and McIlwaine 2001). Participatory urban appraisals use a range of techniques for discussing issues with community members. These can include: group discussions or focus groups; semi-structured interviews (on a one-to-one basis); direct observation; ethno-histories and biogra-

phies (on a one-to-one basis); and local stories, portraits, and case studies (Moser and McIlwaine 2006). Participatory urban appraisals are a methodology that "facilitate[s] research that examines the interrelationships revolving around the violence" (Moser and McIlwaine 1999, 204). Visual participatory urban appraisals include (but are not limited to): causal flow diagrams, mental maps, and community maps. These approaches can be tailored to study specific traits of violence, such as "problem trees" that look into particular manifestations of violence, such as intra-family violence (Moser and McIlwaine 2006).

The present research design was based on a case study approach, influenced by the use of visual methods to study violence by Moser and McIlwaine (2001) and by the comparative analysis across several cities by Moser (2012). Surveys were used as a baseline and were complemented by qualitative methods such as semi-structured interviews, community maps and auto-photography to study the incidence of violence in four communities. Results from the two peripheral communities are presented here.

The use of community maps was based on the suggestion by Schlottmann and Miggelbrink (2009, 2) that maps allow the "material manifestations of social practices" to be located in an objective and visual manner. In the present study, this allowed the researcher to explore the spatiality of violence in the studied communities, since maps help "facilitate the production and fetishizing of space and disguise the causes of spatially manifest(ed) phenomena in order to merely illustrate them" (Schlottmann and Miggelbrink 2009, 2). Community mapping and auto-photography were used because they offered the possibility of spatially locating hot spots or problematic areas for communities, and analysing the components of urban space that lead communities to feel a specific way about certain zones or areas (Moser 2012). Community mapping and auto-photography provided added depth to the analysis of the impacts of violence and insecurity in urban space, as well as enabling a visualisation of violence in space. These methods are discussed below.

## 1.2 Context of the Research

The main research question guiding the research had three components: What are the manifestations of urban violence and insecurity in Mexico? How do manifestations of urban violence and insecurity relate to urban space? How does violence and insecurity affect citizens' perceptions, understanding and use of urban space? The overall research aim was thus to explore citizens' perceptions of urban violence and insecurity and its relation to urban space. This was done by exploring different manifestations of violence and their relationships in two Mexican cities, Sinaloa and Aguascalientes, with a focus on the spatial distribution of violence, the characteristics of its concentration in certain urban spaces, and its effects on communities and planning systems.

Visual methods (auto-photography and community mapping) were implemented to analyse the spatiality of violence in these areas. The results are presented in this article, in particular the mechanisms, potential contribution and limitations of participatory methods. As the research was oriented toward studying the impact of violence on urban space, the theoretical approach was based on socio-environmental theories of violence and crime, such as Crime Prevention through Environmental Design (CPTED), defensible space, and the broken windows theory. These are returned to in the conclusions section.

#### 2 The Case Studies

The two cities selected were Culiacan in the state of Sinaloa and Aguascalientes in the state of Aguascalientes. The logic behind the selection is that both are similar in terms of population and economic growth, and representative of the central and northwestern regions of Mexico. Yet their levels of violence, measured by homicide rates, differ significantly. While Sinaloa registered 58 homicides in June 2013, Aguascalientes registered 11 (Observatorio Nacional Ciudadano 2013) (absolute monthly figures). The significance of the two cases must be understood in the context of significant variation in the extent and scale of violence across the country. While Sinaloa is often considered a dangerous state, in reality, states such as Michoacan and Estado de Mexico had considerably higher absolute homicide rates in June 2013, with 154 and 128 respectively (SEGOB and SESNSP 2013). This suggests that the "reality of violence" is more nuanced and complex than the official understanding, and that there are significant differences between what is believed by authorities and what is actually happening on the ground.

Within each city, two communities were investigated. The findings from the peripheral neighbourhood in each city are presented: Colonia Los Pericos in Aguascalientes, and 5 de Febrero in Culiacan. The selection of two cases establishes a comparative framework to analyse the impact of violence and crime and to explore the role of urban planning processes.<sup>1</sup>

# 2.1 A Peripheral Settlement in Aguascalientes: Los Pericos

Los Pericos was founded in 1993 and is located at the eastern periphery of the city. The site was formerly the city's landfill site. The community struggled to be recognised by authorities as a "regular" settlement; water and electricity coverage reached over 80 per cent in 2005–2007 (IMPLAN Aguascalientes 2015). The total population of Los Pericos was 4,704 (50.49 per cent men and 49.51 per cent women) (Gobierno del Estado de Aguascalientes 2010), the average income of 40 per cent of respondents in was in the range of 2001 to 4000 Mexican pesos monthly (122–245 USD at the time of research). 17.1 per cent of inhabitants lived on a monthly income less than 2,000 Mexican pesos (approximately 100 USD).

There are 1,247 houses in Los Pericos, of which 88.2 per cent have piped water (Gobierno del Estado de Aguascalientes 2010). Los Pericos has some of the highest marginalisation indexes in the city (CONAPO 2010). It is connected to other colonias, and the city, by a main street called Rodolfo Landeros. Surrounding neighbourhoods share characteristics with Los Pericos. The main road (Linea Verde) in the colonia<sup>2</sup> di-

<sup>&</sup>lt;sup>1</sup> The criteria for the selection of neighbourhoods within each city included: 1) year of establishment, 2) neighbourhood income level, 3) location; 4) similarity in population size (3,000 to 5,000 inhabitants); and 5) marginalisation index. Moreover, as argued below, perceptions of insecurity were fairly similar in both peripheral settlements.

<sup>&</sup>lt;sup>2</sup> Colonias typically refers to colonias populares, which are "low-income, self-built neighborhoods" usually located at the peripheries on former agricultural land that has been il-

vides it from north to south, as well as functioning as a meeting point where most of the inhabitants shop for basics such as bread, groceries, clothing, etc. This is also the only street where buses and taxis stop. The colonia is quite isolated, with only a few bus routes on Rodolfo Landeros street, and no service going inside the area.

During the last three decades, Aguascalientes has experienced a significant expansion, mostly at the eastern side of the city, into an area that lacked basic services and infrastructure. In this context, Linea Verde was built in an urban space subject to building restrictions – this was the area over a petrol pipeline running along twelve kilometers. Initially, the underground petrol pipeline served as a physical boundary of the city; later, urban sprawl progressed into the area beyond it. The area was conceived as problematic: "a depressed urban space and an area of high criminal risk, as an ideal place for the appearance of crimes and increasing insecurity and fear of the population to be victims of crime" (Reyes and Lazos 2013, 33).

# 2.2 A Peripheral Settlement in Culiacan: 5 de Febrero

Colonia 5 de Febrero is located on the western outskirts of the city of Culiacan, Sinaloa. A squatter movement in 1985–1987 founded the colonia when the municipality granted the squatters permission to occupy the land and tenure was partially legalised. Basic services were provided, but very little else has improved. Generally, residents complain about deficiencies in infrastructure and services, specifically lack of pavements and bus services. The elected community leader at the time of the research, Jose, points out that this might be due to people's lack of involvement and participation in community matters.

The irregular foundation of the colonia (unplanned with irregular land tenure) and its location at the periphery of the city has conditioned and characterised its socio-economic development. In 2010 it had approximately 3,978 inhabitants (IMPLAN Culiacan 2010). The colonia consists of some one thousand plots of land, and around the same number of houses,

legally subdivided and lacks services (Lombard 2013a, 136). Here the use of "colonias" refers to neighbourhoods.

with an approximate density of three to five people per house. 5 de Febrero is considered by the municipality and CONAPO (Consejo Nacional de Poblacion, National Population Council) as a high marginality settlement: 54.8 per cent of the households in 5 de Febrero have monthly incomes below 4,000 pesos (about UDS 225 at the time of fieldwork).

The colonia is physically separated from other neighbourhoods – and the rest of the city – by a river bed (Arroyo 2), which also forms its administrative boundary. There are only two bridges for vehicle and pedestrian access. This was a key point identified by residents as very problematic in the auto-photography and mapping exercises (see below).

# 3 Using Auto-photography and Mapping in the Study of Violence: Methods, Risks and Ethical Issues

## **Auto-photography**

Auto-photography is a method of data collection where photographs are taken by participants, rather than the researcher (Schoepfer 2014; Lombard 2013b). Rose (2008, 151) suggests that instead of being used as "descriptive illustrations that simply show what a location looked like when the shutter snapped", photographs can be pivotal "in the construction of a range of different kinds of geographical knowledge". In the present study, auto-photography provided a way of accessing residents' perceptions about urban violence and their conceptions of urban space. The auto-photography and community mapping activities were conducted in all four communities, but only results from the two peripheral communities are presented here. A total of thirteen cameras were given to participants: seven in the city of Culiacan (four in 5 de Febrero and three in central neighbourhood Colonia Centro), and six in Aguascalientes (four in Los Pericos and two in the central Barrio de San Marcos). Table 1 presents the profiles of all participants. The selection enables periphery/periphery comparison.

Participants were given disposable cameras, and a set of instructions. The reasoning for using disposable cameras was that providing participants with something flashy like the camera on a mobile phone could have implications for their safety. Disposable cameras are comparatively cheap and easily available. The only

T11 4 D 4 11 C 14	•		
Table 1: Details of community	v manning and	1 auto-nhotograni	1V narticinants
Table 1. Details of communit	y mapping and	ι αυτό μποιόξιαμι	ry participants

No.	Pseudonym	Age	Gender	Community	Occupation
1	Jose	49	Male	5 de Febrero, Culiacan	Community leader
2	Juan	52	Male	5 de Febrero, Culiacan	Works as a night watchman
3	Caro	64	Female	5 de Febrero, Culiacan	Former community leader
4	Reina	38	Female	5 de Febrero, Culiacan	Works part time as a super- market clerk
5	Melisa	37	Female	Colonia Centro, Culiacan	Elementary school teacher
6	Mauricio	34	Male	Colonia Centro, Culiacan	Shop clerk
7	Rafa	56	Male	Colonia Centro, Culiacan	Retired
8	Itzel	25	Female	Los Pericos, Aguascalientes	Housewife
9	Clarisa	37	Female	Los Pericos, Aguascalientes	Works as a cleaning lady
10	Thalia	35	Female	Los Pericos, Aguascalientes	Hardware store employee
11	Gloria	43	Female	Los Pericos, Aguascalientes	Housewife
12	Adrian	36	Male	Barrio de San Marcos, Aguascalientes	Not specified
13	Catalina	26	Female	Barrio de San Marcos, Aguascalientes	Art shop owner

restriction, or rather, recommendation, was to avoid including other people's faces in the photographs, due to consent and anonymity issues. There were no restrictions as to how many photographs could be taken, other than the capacity of the cameras, which contained twenty-seven photos each. Most of the respondents used all the photographs. The cameras were left with participants for a week, and then collected to be developed. Participants were asked to take photographs that illustrated:

- preferred routes of access and familiar territories,
- places that make them feel insecure,
- places where they feel happy and safe,
- things they like about living in the area, etc.

Auto-photography showed the duality of understandings of spaces from citizens' perspectives: dichotomies of insecure/secure, familiar/unfamiliar, liked/disliked space were present through the photographs. These were easy to distinguish into categories for analytical purposes but are by no means straightforward. Here the follow up interview was essential. This interview was conducted with each participants and proved interesting and useful: analysing photographs with participants showed that there is more to their perceptions of urban space than meets the eye (Lombard 2013b; Robinson 2002; Schoepfer 2014).

Auto-photography enabled research participants to reflect on violence and insecurity in their context (Lombard 2013b), conceptions and uses of space. Rose suggests that such photographs are "powerful representations of how the interviewees see their world" (2008, 154). Participants were very clear why they photographed the places they did, and the follow-up interviews provided them with a space to reflect upon these places and their link to violence and insecurity.

## Participatory mapping

Participants were also asked to prepare community maps to identify the most important spatial traits and characteristics of their neighbourhood. Participants were provided with a map of their neighbourhood and asked to draw on it, locating and colour coding different spaces: transit routes (blue), friendly and familiar territories (red), preferred places (yellow), areas they avoid (brown), places where they feel insecure (purple), etc (see Figure 1).

## Risks and ethical issues

As Moser and McIlwaine (1999) suggest, there are obvious dangers in using participatory urban appraisals and participatory visual methods in violent contexts. The sensitive topic of violence may imply risks (Lee

and Renzetti 1990, 512) and repercussions for participants and researchers (Dickson-Swift et al 2009). The range of research participants interviewed included families of victims of fatal violence, as well as victims of "lower impact crimes" such as robberies and mugging, and research participants that had never experienced violence "at first hand". In other words, participants narrated indirect experiences of violence. Therefore, security measures were required for both the researcher and participants.

For example, for the researcher, contact with gate-keepers and prior knowledge of the areas under study, as well as with personal networks and knowledge about what areas to be avoided, helped to ensure safety. The research was therefore carried out in a "familiar environment" with strong social and support networks. This was also strengthened by networking with local organisations, such as NGOs and academic institutions working in the areas under study.

For research participants, the strategy used to deal with the potential harm caused by inquiring about violence-related issues was to be frank about the researcher role, and transparent about the purpose of the research. The confidentiality of the information provided and the anonymity of all respondents was ensured by following the research ethics guidelines of the University of Manchester, United Kingdom. Personal data of participants is not revealed in the analysis, and all participants were anonymised. Participation was voluntary. In all cases, participants had the choice to decline participation, or stop and abandon the interview/survey at any time.

As "decisions about the issue entry point of research are critical" (Moser and McIlwaine 1999, 209) interviews were conducted to allow "sensitive topics" related to violence to come up without forcing an agenda on participants. Starting with non-violence-related questions such as infrastructure deficiencies allowed participants to guide the interview and later to feel confident to share their views on violence and urban space with the researcher, as they were spontaneously mentioned within the flow of the interviews. Conversely, starting directly with violence-related questions could have caused respondents to be suspicious about the nature of the research, or become distressed. If asked directly about violence, participants

may be reluctant to discuss the topic. Whilst working in an insecure context, attention to detail was particularly helpful; more precisely when asking people to take part in participatory methods researching violence. For example, for the auto-photography activity, explicitly asking people not to include other people's faces provided a sense of security, as participants were able to focus on space and particular places rather than worrying about the possibility of photographing crime perpetrators. Clarity and emphasis on this last point were essential in ensuring participants' security; emphasis on spaces and places allowed them to steer clear from including potential delinquents or offenders.

# 4 Using Auto-photography and Mapping in the Study of Violence: Findings

Respondents were particularly enthusiastic about this exercise, due to the dynamic nature of the activities. Their openness provided highly insightful material for analysis, with mapping and auto-photography illustrating the spatial distribution of violence and the symbolic use of places in violent contexts. For example, participants consistently identified places they perceived as insecure and therefore avoided. Mapping was a helpful exercise that aided geographical localisation of participants' perceptions of violent or insecure areas in a way semi-structured interviews could not match; this activity also allowed exploration of which physical characteristics, in the eyes of inhabitants, caused a place to be perceived as either insecure or secure (cf. Figures 1 and 2). In Colonia Los Pericos in Aguascalientes, Thalia took photographs in the "secure" and "happy" category (Figures 3 and 4). She said: "The only two places I feel secure are at home with my kids, and at church." In her opinion, private areas such as the home are secure, while public areas, particularly green spaces, are thought of as insecure, regardless of their physical state. Figure 3 depicts the cooking of a family meal, while Figure 4 shows a church in the city centre. Even though the church is not in the neighbourhood, she included it in the exercise on the basis of her conception of secure spaces.

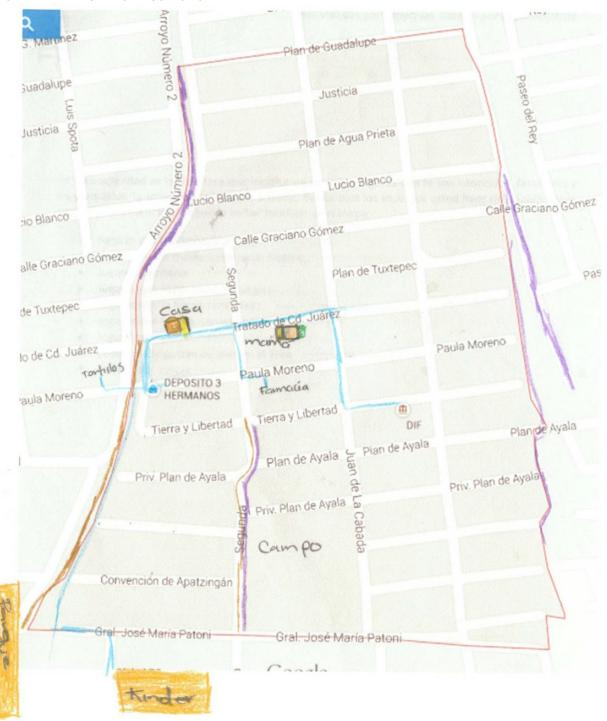
Figure 1: Clarisa's participatory map from Los Pericos, in Aguascalientes



Source: "Colonia Los Pericos, Aguascalientes", participatory mapping by participant<sup>3</sup>, 2015.

<sup>&</sup>lt;sup>3</sup> All base maps sourced from Google Maps. Usage complies with service guidelines (https://www.google.com/intl/en-US/per-missions/geoguidelines/, accessed 28 October 2019). The study participants gave written consent to the use of their mapping contributions and photographs.

Figure 2: Participatory mapping by Jose in 5 de Febrero, Culiacan



Source: "Colonia 5 de Febrero, Culiacan", participatory mapping by participant, 2015.

IJCV: Vol. 13/2019 Garcia Cervantes: Using Participatory Visual Methods in the Study of Violence Perceptions and Urban Space in Mexico

Figure 3: Place considered "secure", cooking on Thalia's stove



Source: Auto-photography by Thalia in Los Pericos, Aguascalientes, 2015.

Figure 4: Place considered "secure", a local church



Source: Auto-photography by Thalia in Los Pericos, Aguascalientes, 2015.

Her insecure locations also included opposing characteristics: on one hand, abandoned and neglected spaces such as La Laguna (Figure 6) and the south limits to Los Pericos, and on the other, well maintained spaces that had been appropriated by criminal actors, such as Linea Verde (Figure 5).

Auto-photography and community mapping reveal how socio-spatial responses to violence fail, and how some areas are still perceived as insecure by respondents. The case of Linea Verde (Figure 5) illustrates the limitations of physical responses to violence and their impact on citizens' perceptions. Linea Verde was identified as neglected and problematic, and in 2011 the public policy "Convivencia y Seguridad Ciudadana" was implemented as a response to the increasing levels of violence. The project aimed to provide a recreation area that would satisfy the needs of this sector of the city, and to function as "urban acupuncture" to enhance security and improve the overall conditions of the urban space. One of the main drawbacks of the project was the lack of involvement of residents in the process of design and implementation of Linea Verde, even though citizen participation was one of the main aims of the programme. Participants reported that the intervention had resulted in criminal actors appropriating the space to take drugs, and that it had become a place where gang fights regularly occur. This limits residents' use of this space and increases their feelings of insecurity.

Surprisingly "las canchas" was included in the category of insecure (Figure 9). The area exemplifies a failed socio-spatial intervention to improve public space and reduce violence; it was the focus of a federal-led intervention in 2012 to improve public spaces, Programa Rescate de Espacios Publicos, PREP (SEDESOL): Yet it was consistently mentioned as insecure by participants. The federal programme aims at "recovering public spaces to foster community identity, social cohesion and generating equality of opportunities, as well as contributing to diminishing urban poverty and preventing antisocial behaviour", according to its operational guidelines (translated from SEDESOL 2011).

Figure 5: Place considered "insecure", end of Linea Verde



Source: Auto-photography by Thalia in Los Pericos, Aguascalientes, 2015.

Figure 6: Place considered "insecure", La Laguna area in Los Pericos, Aguascalientes



Source: Auto-photography by Thalia, Los Pericos, Aguascalientes, 2015.

Participant Juan said that las canchas were insecure because:

We stop using them [las canchas] because of drug addicts. You cannot go walking because they are already smoking ... on the soccer fields [canchas] and on almost every corner. Unfortunately, we cannot change routes because there is only one way to access and one way to get home [from work]. Then we have to stop going out ..., there are many problems, vandalism, because they [young males] are very destructive and threaten people and make us feel insecure. I have to go running at three in the afternoon because they have tried to assault me. And they know me, I know who they are, but I have to avoid them. I am always exposed, and it even means losing out on public spaces ... (interview Juan, 2015, in Garcia 2018).

Another problematic area consistently identified by participants was the river bed (Figure 10). This was seen as a dangerous area at night since it lacks public lighting, and was also known as a dumping site for garbage. Additionally, most of the participants stated that they had heard about different types of crime being committed near the stream, such as robbery and assault, and that bodies had been found there. Given the association of the area with homicides and unexplained deaths, the area was seen as a problem by the community and outsiders. Demands had been made to the municipality to provide infrastructure - namely a pavement, sidewalks and lighting - but that it also involves the federal government in the form of CONAGUA (Comision Nacional del Agua), the process is slow and cumbersome.

The photographs taken by participants reveal that some areas in the colonia are perceived as dangerous, whereas actual crimes have been committed in others. Feelings of insecurity are not necessarily linked to the provision of infrastructure: In some cases it is evident that the lack of infrastructure has a clear influence on how safe people feel (as in the case of the river bed) whereas in other instances residents feel insecure despite infrastructure being provided (as in las canchas).

Jose included a local church and his house in the category of secure areas. This mirrors Thalia's selection in Los Pericos, where the places where she feels most secure are home (stovetop photo) and a local church. For both, secure areas are limited to private and religious activities. Insecure areas are associated with 1) lack of basic infrastructure (pavement, lighting); and 2) socio-spatial interventions and rehabilitation of public spaces, which tend to have a negative impact on the perceptions of security. This last point occurs particularly when a place is already associated with certain criminal actors (for example, drug dealers and/or addicts).

Figure 7: Place considered "insecure", a makeshift path in 5 de Febrero, Culiacan



Source: Auto-photography by Jose in 5 de Febrero, Culiacan, 2015.

Figure 8: Place considered "insecure", a community corner in 5 de Febrero, Culiacan



Source: Auto-photography by Jose in 5 de Febrero, Culiacan, 2015.

Figure 9: Place considered "insecure", las canchas



Source: Auto-photography by Juan in 5 de Febrero, Culiacan, 2015.

Figure 10: Place considered "insecure", river bed



Source: Auto-photography by Juan, 5 de Febrero, Culiacan, 2015.

Figure 11: Place considered "secure", local church



Source: Auto-photography by Jose in 5 de Febrero, Culiacan, 2015.

Figure 12: Place considered "secure", front porch of Jose's house



Source: Auto-photography by Jose in 5 de Febrero, Culiacan, 2015.

# 5 Discussion: Bridging the Gap between Planning for Development and Reality

Participatory visual methods of data collection allow the individuality of direct and indirect experiences and perceptions of violence and insecurity to be captured, as well as the spatiality of violence. These methods contributed to understanding perceptions at the local, community and street levels, and the dynamics of violence in urban space. Participatory methods added a layer of depth by visually representing the implications of violence and insecurity for urban space, as seen through residents' eyes. This helped to elucidate how people conceived and used space in the context of violence, while also showing that violent and insecure areas are not easy and straightforward to identify. Perceptions of violence and insecurity are present throughout many, if not all, cities in the world. In the case of Mexico, these perceptions are closely related to planning processes, and particularly the ways in which planning processes appear to be removed from people's lived realities, and often disregard the views and experiences of residents. While the neighbourhoods discussed here specifically illustrate some of the limitations and drawbacks of the Mexican planning system and reveal socio-spatial responses to violence and insecurity. Violence in urban spaces is an issue that also resonates with many other contexts. Other issues regarding risks, interpretation, reality and opportunities are discussed further below.

#### 5.1 Interpretation

Resonating with Pain and Francis (2003), concerns remain over the lack of explicit frameworks or guidelines for analysing participatory research, particularly visual methods. Categories were suggested to classify the photographs broadly into "secure" and "insecure" places. These categories were brought up during the follow up interviews, however, with interpretation of visual methods, caution must be taken into whose voices are included and why. As suggested by Barreteau et al. (2010, 1), "participatory research relies on stakeholder inputs to obtain its acclaimed benefits of improved social relevance, validity, and actionability". Yet, particular attention must be paid in order to en-

sure transparency and avoid bias in participation as communities are often politicised (ibid.).

## 5.2 Reality and Opportunities

There are undeniably general barriers to the implementation of participatory methods, and all the more so in the context of Mexico. One of the main issues of the Mexican planning system identified in the literature is that planning is often disjointed from reality (although this is by no means exclusive to Mexico). In order to remedy the disjoint between planning processes - such as drafting of plans, programmes and projects - and citizens' realities, the processes need to be brought closer to the areas where "planning" or urban "development" is bound to occur and have impact. This requires understanding how residents living and working in different types of neighbourhoods perceive, live and conceive space, incorporating these notions into the process of planning, and moving beyond mere simulation (forming committees that disappear once the project is done) or consultation (seeking community approval for an impending project). Here is where participatory researchers suggest that visual methods such as photograph are ethical in principle, as these methods offer the opportunity to address historical power imbalances (Vaughan, 2016).

Using participatory visual methods can strengthen urban planning processes and allow planners to spend enough time on the ground to achieve an understanding of context and people's perceptions of space, violence and insecurity that is as close to reality as possible. For example, what official planners perceive as a worthwhile initiative to respond to violence in a given neighbourhood in terms of infrastructure provision (such as providing green space or pavements, or improving services such as lighting) might be very different to what residents consider might make them feel more secure.

Nonetheless, one of the biggest barriers to the implementation of participatory visual methods is the normative and legally-oriented nature of the planning system in Mexico, which might also be the case for other cities and countries. This article suggests that efficiently integrating these methods into everyday planning might result in a more nuanced and on-theground inclusion of citizens in the development of the

urban space they inhabit. However, that implies turning to a more strategic planning. Participatory visual methods offer a grounded, economic and accessible way of bringing planning closer to citizens and allowing planning officials to plan realistically for and with the communities on the ground. The methods presented here offer many advantages if implemented, for example in socio-spatial interventions to reduce or prevent violence. These methods help to create a better understanding of citizens' conceptions of and relationships with space in violent contexts. Auto-photography and mapping illustrate and support the narrative of the interviews, and help in two ways. Firstly, in geographically identifying problematic areas and, secondly, in bringing citizens closer to the actual planning and decision-making affecting the spaces they inhabit.

As the cases discussed illustrate, adequate planning methods to face issues of urban violence and insecurity are lacking. Thus, the use of participatory visual methods becomes crucial in identifying inhabitants' views and allows a more integrated urban diagnosis to be elaborated, leading to a more inclusive and sustainable planning process.

#### **6 Conclusions**

The article discussed the use of participatory visual methods to look into the linkages between perceptions of violence and insecurity, urban space, and planning processes in the context of two Mexican cities. These methods emerge as a viable alternative to strengthen planning on the ground by including residents' views and conceptions of space in violent contexts. Community maps and auto-photography are presented as an alternative tool to study violence and insecurity and urban space due to the deepness and nuanced representation of perceptions they offer. Auto-photography "gives [participants] a tool to demonstrate their prowess, their concerns and to explore deeply held thoughts. It gives ... insight into the usefulness of the landscape metaphor in connecting activity and outcomes, history and daily experience" (Beilin 2005, 67).

Incorporating visual methods for spatial analysis of violence was useful because the very graphically captured a sense of "place" and "insecurity" based on res-

idents' perceptions. This suggests that visual methods might be applicable to a variety of urban development themes that go beyond violence and insecurity, as they "capture" respondents' realities, how they perceive critical social problems, and the areas where these phenomena are located. Visual methods also helped to avoid directly posing sensitive questions concerning violence and insecurity that interviewees might find difficult to answer orally to a stranger. In this way, visual methods created an alternative way into these issues. The richness of the photographs is summed up by Rose (2008, 154): "photographs produced in this way are then reproduced as some specific person's particular way of seeing". The photographs allow an exploration of the physical and mental characteristics that make a place subjectively insecure.

Visual methods can add to the understanding of social problems in different ways, as argued by disciplines such as visual sociology and visual anthropology. Visual methods build on the recognition that valid scientific knowledge of society can be acquired by "observing, analysing, and theorizing its visual manifestations", particularly social conduct and material representations of culture (Pauwels 2010, 546). Here, more specifically, these methods help to locate the concept of place in social life. As "everything happens somewhere, which means that all action is embedded in place and may be affected by its placement" (Logan 2012, 2), visual methods allow us to look into material manifestations of violence and insecurity in urban areas.

The successful use of participatory visual methods in peripheral settlements without negative incidents raises the question whether certain views held by "outsiders" (about the community, elsewhere in the city) may perpetuate stigmatisation of peripheral neighbourhoods. In the case of 5 de Febrero in Culiacan, official data suggest that many criminals live in the area, and in this neighbourhood people reported witnessing many types of crime. In addition to media reports, outsiders' views and assumptions reinforce this view of the peripheries as lethal.

One of the limitations of this article is the focus on interpersonal types of violence; the analysis conducted here might not be as useful for contexts of severe political or social violence, or for specific types of violence which normally occur in the private sphere, such as child abuse and domestic violence. Further research could focus on those specific manifestations in relation to urban space and planning processes. Another limitation of this study is that the analysis conducted here relates to urban areas and considers development planning in urban contexts; so research on the effects of violence on space in rural areas is necessary. Additionally, the article discusses the spatiality of violence in relation to the Mexican context, particularly the configuration of urban space in two Mexican cities, and is circumscribed by the particularities of the urban planning system of Mexico.

Auto-photography and mapping offer an analytical range for the study of violence in space that enables parallels to be drawn between the two peripheral settlements and illustrates two notable similarities between the settlements: limitations of socio spatial responses and deficiencies of planning which have a negative effect on citizens' perceptions of security.

While planners assumed that their socio-spatial interventions make places secure, those who live there often perceive them as insecure. This has implications for our understanding of the spatiality of violence, since the existence of well-maintained and serviced areas cannot ensure that residents' perceptions of insecurity will decrease. Additionally, the fact that there is no straightforward relation between the conditions of the space and the perceptions of security – as illustrated by the interventions in public space in 5 de Febrero and Los Pericos – better conditions do not always translate into enhanced perceptions of security has direct implications for theories such as Crime Prevention through Environmental Design (CPTED), defensible space, and broken windows.

Similarly, further research is to be conducted in order to understand the symbolic use of places with regards to violence, since people feel insecure in places where violence has occurred and where there has not been violence, likewise. Bringing planning and space configuration processes closer to inhabitants might help improve perceptions of insecurity, and the methods presented here, auto-photography and community mapping, can help create those communication channels between planners and inhabitants.

#### References

- Banks, Marcus. 2007. *Using Visual Data In Qualitative Research*, Sage Qualitative Research Kit Series. London: Sage.
- Barreteau, Olivier, Pieter Bots and Katherine Daniell. 2010. A Framework for Clarifying "Participation" in Participatory Research to Prevent Its Rejection for the Wrong Reasons. *Ecology and Society* 15:1–22.
- Beilin, Ruth. 2005. Photo-elicitation and the Agricultural Landscape: "Seeing" and "Telling" about Farming, Community and Place. *Visual Studies* 20:56–68. https:// doi.org/10.1080/14725860500064904
- Davis, Diane. 2012. *Urban Resilience in Situations of Chronic Violence*. Washington, DC: United States Agency for International Development (USAID) and Massachusetts Institute of Technology.
- Dickson-Swift, Virginia, Erica James, Sandra Kippen and Pranee Liamputtong. 2009. Researching Sensitive Topics: Qualitative Research as Emotion Work. *Qualitative Research* 9:61–79. https://doi.org/10.1177/1468794108098031
- Fajnzylber, Pablo, Daniel Lederman, Norman Loayza, Peter Reuter, John Roman and Alejandro Gaviria. 2000. Crime and Victimization: An Economic Perspective. *Economía* 1:219–302. https://doi.org/10.1353/eco.2000.0004
- Garcia, Natalia. 2018. The Everyday Effects of Urban Planning: Exploring Perceptions of Violence, Insecurity and Urban Space in Two Mexican Cities. PhD diss., Global Development Institute, University of Manchester.
- Gobierno del Estado de Aguascalientes. 2010. Portal del Gobierno del Estado de Aguascalientes. Servicio Estatal de Infomacion Geografica y Estadistica. Gobierno del Estado de Aguascalientes, Aguascalientes México. http://www.aguascalientes.gob.mx/CEPLAP/SEIEG/default.asp, accessed August 2010.
- Instituto Municipal de Planeacion (IMPLAN) Aguascalientes. 2015. *Plataforma de Informacion Municipal Aguascalientes: Consulta de Informacion Censal.* IMPLAN Aguascalientes, Aguascalientes, Mexico. http://www.pimags.gob.mx/index.php?p=censal, accessed 15 August 2015.
- Instituto Municipal de Planeacion (IMPLAN) Culiacan. 2010. Mapa interactivo. Culiacan, Mexico. http://www.implanculiacan.gob.mx/mapa\_culiacan/mapa.phtml?config=culiacan&resetsession=Y, accessed September 2015.
- Lee, Raymond, and Claire Renzetti. 1990. The Problems of Researching Sensitive Topics: An Overview and Introduction. *American Behavioral Scientist* 33:510–28. https:// doi.org/10.1177/0002764290033005002
- Lombard, Melanie. 2013a Citizen Participation in Urban Governance in the Context of Democratization: Evidence from Low-Income Neighbourhoods in Mexico. *International Journal of Urban and Regional Research* 37:135–150. doi:10.1111/j.1468-2427.2012.01175.x
- Lombard, Melanie. 2013b. Using Auto-photography to Understand Place: Reflections from Research in Urban Informal Settlements in Mexico. *Area* 45:23–32. https://doi.org/10.1111/j.1475-4762.2012.01115.x
- Luna Hernandez, Jesus. 2009. Foto-etnografía llevada a cabo por personas en situación de pobreza en la frontera norte

- de México. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research 10:1–35.
- McIlwaine, Cathy, and Caroline Moser. 2007. Living in Fear: How the Urban Poor Perceive Violence, Fear and Insecurity, in *Fractured Cities: Social Exclusion, Urban Violence and Contested Spaces in Latin America*, ed. Kees Koonings and Dirk Kruijt, 117–38. New York: Zed.
- Moser, Caroline, and Cathy McIlwaine. 1999. Participatory Urban Appraisal and Its Application for Research on Violence. *Environment and Urbanization* 11: 203–26. https://doi.org/10.1177/095624789901100217
- Moser, Caroline, and Cathy McIlwaine. 2000. La violencia y la exclusion en Colombia: segun la percepcion de communidades urbanas pobres (No. 20747). Washington, DC: World Bank. http://documents.worldbank.org/curated/en/720491468262790886/La-violencia-y-la-exclusion-en-Colombia-segun-la-percepcion-de-communidades-urbanas-pobres. World Bank Publications.
- Moser, Caroline, and Cathy McIlwaine. 2001. Violence in a Post-conflict Context: Urban Poor Perceptions from Guatemala. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/407981468771062680/Violence-in-a-post-conflict-context-urban-poor-perceptions-from-Guatemala
- Observatorio Nacional Ciudadano. 2013. Reporte del Observatorio Nacional Ciudadano sobre delitos de alto impacto. Mexico City: Observatorio Nacional Ciudadano.
- Pain, Rachel, and Peter Francis. 2003. Reflections on Participatory Research. Area 35:46–54. https://doi.org/ 10.1111/1475-4762.00109
- Reyes, Andres, and Flavio Lazos. 2013. La fuerza de la prevencion: La experiencia de Aguascalientes, 1st ed., ed. H. Ayuntamiento de Aguascalientes. Aguascalientes, Mexico: Instituto Municipal Aguascalentense para la Cultura.
- Robles, Gustavo, Gabriela Calderon, and Beatriz Magaloni. 2013. Las consecuencias económicas de la violencia del narcotráfico en México. Washington, DC: Banco Interamericano de Desarrollo. http://www.iadb.org/es/publicaciones/detalle,7101.html?id=72044, accessed 18 February 2014.
- Gillian, Rose. 2008. Using Photographs as Illustrations in Human Geography. *Journal of Geography in Higher Education* 32 (1) (January 2008): 151–60.
- Schlottmann, Antje, and Judith Miggelbrink. 2009. Visual Geographies – An Editorial. *Social Geography* 4:1–11. https://doi.org/10.5194/sg-4-1-2009
- Schoepfer, Isabel. 2014. Capturing Neighborhood Images through Photography. *Visual Ethnography* 3:7–34. https://doi.org/10.12835/ve2014.1-0029
- Secretaria de Desarrollo Social (SEDESOL). 2011. Programa Rescate de Espacios Publicos. Secretaria de Desarrollo Social, Ciudad de Mexico, Mexico. http://www.2006-2012.sedesol.gob.mx/en/SEDESOL/Programa\_de\_Rescate\_de\_Espacios\_Publicos\_PREP, accessed September 2011.
- SEGOB, SESNSP. 2013. *Incidencia Delictiva del Fuero Común* 2013: Secretaria de Gobernacion. Mexico City: Secretaria do Ejecutivo del Sistema Nacional de Seguridad Publica.
- Springer, Simon. 2011. Violence Sits in Places? Cultural Practice, Neoliberal Rationalism, and Virulent Imaginat-

- ive Geographies. *Political Geography* 30:90–98. https://doi.org/10.1016/j.polgeo.2011.01.004
- Springer, Simon, and Philippe Le Billon. 2016. Violence and Space: An Introduction to the Geographies of Violence. *Political Geography* 52 (special issue Violence and Space): 1–3. https://doi.org/10.1016/j.polgeo.2016.03.003
- Valenzuela- Aguilera, Alfonso. 2013. Urban Surges: Power, Territory, and the Social Control of Space in Latin America. *Latin American Perspectives* 40:21–34. https://doi.org/ 10.1177/0094582X12466834
- Vaughan Cathy. 2016. Different Lenses: Navigating Ethics in Cross-Cultural Research Using Photovoice. In *Ethics and* Visual Research Methods, ed. Deborah Warr, Marilys Guillemin, Susan Cox and Jenny Waycott. New York: Palgrave Macmillan.
- Young, Lorraine and Hazel Barrett. 2002. Adapting Visual Methods: Action Research with Kampala Street Children. *Area* 33:141–52. https://doi.org/10.1111/1475-4762.00017