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THEMATIC CLUSTER: INTERACTION TURNS IN KNOWLEDGE PRODUCTION



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Epistemic activism and the production of spatial knowledge in Argentina

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ABSTRACT

In this article, we analyze the existence of spatial activism in Argentina, characterized by the production of spatial knowledge. This type of activism is part of what is called here "epistemic activism." The hypothesis held by this research is that contemporary activism appears on the condition that: it invents and mobilizes (uses) concepts to produce and channel public deliberation in a framework that enlightens the social problem in question in a new fashion, and in turn, influences political action. Thus there is awareness (a form of reflection) about the fact that the transformation of this world depends radically on epistemic ascent. The desire to change the world is mobilized by the imaginary those concepts allow.

To this purpose, this is an in-depth analysis of the underlying epistemic processes of the activist group Iconoclasistas*, which developed a methodology for collective mapping and a spatial expertise based on work in different cities worldwide. Drawing from the contributions made by Science, Technology, and Social Studies, the contents of the maps are studied in the dynamics of their production, their social forms of legitimization, and how they entered the ecology of spatial knowledge, being differentiated from knowledge or maps produced by academic, state or company experts. *Iconoclasistas: This word is the result of blending the Spanish nouns for icon and class, to convey the idea of constructing class images.

RESUMO

O presente trabalho tem como objetivo analisar a existência de um ativismo espacial radicado na Argentina que se caracteriza pela produção de conhecimentos sobre o espaço e o território. Este tipo de ativismo forma parte do que é chamado aqui de "ativismo epistêmico." A hipótese desta investigação é que o ativismo contemporâneo se apresenta com esta condição: inventa e mobiliza (utiliza) conceitos para produzir e canalizar a deliberação pública num quadro que ilumina de uma forma inovadora o problema social em causa e assim influencia a ação. política. Ou seja, existe uma consciência (uma forma de

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reflexividade) de que a transformação desse mundo depende radicalmente da ascensão epistêmica; o desejo de mudar o mundo é mobilizado pelo imaginário que estes conceitos permitem.

Por isso analisam-se em profundidade os processos epistêmicos subjacentes do grupo ativista *lconoclasistas*, que desenvolveu uma metodologia de mapeamento coletivo e uma expertise espacial a partir do trabalho em diversas cidades do mundo. Desde as contribuições oferecidas pelos Estudos de Ciência, Tecnologia e Sociedade indaga-se sobre o conteúdo dos mapas elaborados, a partir das dinâmicas de sua produção; das formas sociais de sua legitimidade e sobre como os mesmos ingressaram na ecologia dos saberes espaciais, diferenciando-se dos conhecimentos e ou mapas produzidos por expertos académicos, estaduais ou empresariais.

RESUMEN

Este trabajo tiene por objetivo analizar la existencia de un activismo espacial radicado en la Argentina que se caracteriza por la producción de conocimientos espaciales. Este tipo de activismo forma parte de lo que aquí se denomina "activismo epistémico." La hipótesis sostenida en esta investigación es que el activismo contemporáneo se presenta con esta condición: inventa y moviliza (utiliza) conceptos para producir y encauzar la deliberación pública en un marco que ilumina de manera novedosa el problema social en cuestión y, con ello, incidir en la acción política. Esto es, hay una conciencia (una forma de reflexividad) de que la transformación de ese mundo depende de manera radical del ascenso epistémico; el deseo de cambio del mundo está movilizado por el imaginario que esos conceptos habilitan.

Con tal fin se analizan en profundidad los procesos epistémicos subyacentes del grupo activista *lconoclasistas*, que desarrolló una metodología de mapeo colectivo y una experticia espacial a partir del trabajo en diversas ciudades del mundo. Desde los aportes que ofrecen los Estudios de Ciencia, Tecnología y Sociedad se indaga en el contenido de los mapas elaborados; en la dinámica de su producción; en las formas sociales de su legitimación y cómo los mismos ingresaron a la ecología de saberes espaciales diferenciándose de aquellos saberes y/o mapas producidos por expertos académicos, estatales o empresariales.

1. Introduction

Kingston (2010) called our attention to the prominent role played by the re-discovery of space and place in the research agenda of the twenty-first century. More specifically, in the field of Science, Technology, and Social Studies (STS), a spatial turn has also occurred. In other words, it is acknowledged that a spatial and local situation must be incorporated into the analysis to understand how science and technology are produced, gain social support, circulate, and are used (Shapin 1998). However, there are only a few studies

on the epistemic processes (Knorr Cetina 2007), e.g. as regards how spatial knowledge itself is produced, communicated, and validated.¹

The production of spatial knowledge is generally identified as an activity linked to certain experts, grounded on rules of disciplines such as geography, cartography, topography, field surveying, mathematics, architecture, urbanism, regional or urban planning, etc. (cf. López Vilchez 2009 and Soja 2009).² Three institutional fields of expertise can become visible with their characteristics – values, norms and interests – in the way they produce spatial knowledge: University, State, and Companies. However, the development of another way of producing spatial knowledge linked with social movements has been brought to attention (Cobarrubias and Pickles 2009) which does not have institutional social acceptance or epistemic legitimacy. Particularly, it is of interest here to inquire about activist social movements as producers of knowledge, which we call "epistemic activism."³

To gain insight into production ways, type of knowledge, and methodology of validation of knowledge deployed by these epistemic activists, it is fruitful to explore them from an STS perspective. Such perspective allows for an accurate account of the double reference of spatial knowledge: the objects to be known (space) and society which produces them and brings them into the social dynamics, whether incorporating them into social action (Arriscado Nunes 2014; Barnes 1988), limiting, or excluding them.⁴ Therefore, it is not only a representation of the world but also ways of objectifying and intervening in social processes (performative dimension).⁵ This work aims at achieving some advancement in the research of the epistemic processes underlying spatial knowledge as well as granting visibility to the types of "non-expert" spatial knowledge produced by civil society in a non-traditional (expert) manner.

The first part of the work describes the institutions constituting the ecology of spatial knowledge (Akera 2007) and categorizes epistemic activism as a novelty in the production of spatial knowledge (Harley 2005). The second part analyzes the production of spatial knowledge on the part of the *lconclasistas* and other related activist groups.

¹In this work, the expression "spatial knowledge" identifies what is socially recognized as knowledge of the space, understood as a material and symbolic coordinate on which social life emerges and is organized. Some research work has identified spatial knowledge as ambiguous (Shavit and Silver 2016) and has also recognized its nature of social production (Bridge 2018). For a current agenda of geographical knowledge and spatiality, see Shoorcheh (2018). In this text, spatial knowledge is identified from a naturalistic perspective (Barnes 2010), understood as the result of the systematic observation of the social game of acknowledgement of knowledge, of its individuals or agents, and of its institutions.

²In fact, various disciplines have produced spatial knowledge. For example, for the study of the Covid-19 pandemic by mobilizing spatial metaphors (Kremer and Felgenhauer 2022) as well as for the analysis of its expansion worldwide (Bissell 2021). In Latin America, there is now a new way of producing spatial knowledge through collective mapping linked to citizen science. This production is channelled through the Geocensos Foundation (http://www. geocensos.com/2014/01/ciencia.ciudadana.html/).

³The research group has been raising the concept of epistemic activism as recognition of a form of activism that produces an epistemic rise over the sphere of intervention in the public space. This concept finds a relevant antecedent in Medina and Whitt (2021), and Medina (2022), with a similar sense in that they recognize the role that concepts play in the collective public action of activism. However, an analysis of the epistemic processes underlying the production of new knowledge is proposed here. The concept raised by our group has a more general perspective since it recognizes that the condition of epistemic ascent is a condition of a new type of activism.

⁴This general hypothesis underlies the consideration that the STS approach is claiming to have a place and it also justifies a central role in the ecology of knowledge of the contemporary world.

⁵The work of Castelnuovo Biraben (2015) is particularly relevant. He analyzed the role of Guarani women in the production of geographical knowledge about space in the context of a territorial conflict in Argentina.

2. Methods

This study adopts a case-study approach. The case study is based on empirical and conceptual harvesting of social reality. This study uses archival research to build a *corpus* of documents, and the analytical categories presented in the first paragraph were used to analyze this corpus.

A case-study approach was adopted to obtain further in-depth information on the ways in which epistemic activism promotes epistemic ascent.⁶ To this purpose, we studied the case of the *lconoclasistas* activist group located in Argentina, which was formed in 2006. These groups carry out their activity in an artistic dimension, a political, and an academic one, and since 2008 they have developed a collective mapping methodology and spatial expertise based on their work in different cities worldwide.

To understand the production of knowledge by epistemic activism, variables have been developed from theoretical categories such as the characterization of epistemic activism as a new form of activism, the epistemic processes developed, the epistemic instruments, and the knowledge produced. These variables were used in the analysis of the case. Among others, we can mention the use of collective mapping and pictograms as epistemic instruments, the narrative dimension of the epistemic process, the valuing of the knowledge of the participants in the process, the ways of communicating the produced knowledge.

A corpus is the result of a research and analysis process of the documents issued by individual or collective agents constituting the empirical reference group (Iconoclasistas). The documents from different processes, activities, and interventions are part of the text material (printed or digitally published) to disseminate their activities and positioning of such activist movements. This file includes documents generated by the reference group itself, which can be diffuse and ephemeral (Cvetovick 2019). Moreover, it includes speeches that remain from the processes of organization and distribution. The selection of those which constitute the corpus is the result and condition of the questions raised in this investigation (Aguilar et al. 2014). Regarding the methodological aspect, these questions refer to the senses and knowledge constructed from practices (Rey 2022). The work with the materials of *lconoclasistas* requires at the same time looking at the process of construction of spatial knowledge as part of a collective activity, the iconographic materials that organize the narratives about the territory, and the graphic pieces that the group itself produces and that give an aesthetic closure to the collective process. Knowledge, in this case, is collective in different dimensions and the way knowledge is mobilized is also collective. For this reason, these epistemic activisms develop ways of evaluating, testing, and pondering those collective constructions (Calvo and Candón-Mena 2023), which have a contextual character since it is knowledge produced for agitation in the public sphere.

Therefore, among the documents generated by *lconoclasistas* and incorporated into the analyzed corpus, the following can be found: documents on the collective maps, a Collective Mapping Manual produced by the group, a set of pictograms produced by them,⁷ and reports of activities also generated by them, which are considered to be relevant for evidencing the epistemic processes identified in this work.

⁶Epistemic ascent is a concept built from the analogy with semantic ascent. That is, a device makes knowledge the topic, instead of what is intended to be known (Quine 1960).

⁷Maps and a set of pictograms can be accessed freely on their website: https://iconoclasistas.net/.

In addition, we resorted to the literature review as a secondary source, to contextualize and identify the epistemic work done by these activists. Several research works have approached aspects such as their structure, financing sources, political action, etc. (Mullins et al. 2012; Silveira 2021; Sosa and Milomes 2021). However, a smaller group of works is devoted to clarifying the epistemic processes underlying their action (Holmes 2012; Urtubey 2018). Finally, an exploratory participant observation was carried out by two authors, in both workshops to produce spatial knowledge by *lconoclasistas* in the city of Santa Fe in 2014.

Due to the small size of the dataset, it was not possible to extrapolate this description to other spatial activism cases. In this sense, the analysis of other case studies and the comparison of variables can improve the characterization of this particular epistemic activism.

1. Epistemic activism and the field of production of spatial knowledge

In the ecology of spatial knowledge, it is possible to identify at least four types of institutions producing spatial knowledge: academic institutions, state institutions, companies, and civil society (Harley 2005). Such institutions shape the production of spatial knowledge according to rules, needs, norms, and specific cultures which are to be considered to understand the positioning of an ecology of knowledge.

The spatial knowledge produced by academic institutions is likely to be organized by disciplines (Forman 2012) or domains (Shapere 1984a) with a certain degree of autonomy, although it may be pointed out that some authors remark on the crisis of autonomy (Burke 2017). The name "spatial knowledge" encompasses a wide category when it is used within the academic field, since it covers knowledge produced by very varied disciplines ranging from geometry to geography, from cartography to ecology (López Vilchez 2009). Spatial knowledge is claimed by various disciplines to appear not as a single unit, but rather from a piecemeal approach (Shapere 1984b), i.e. producing knowledge with well-defined realms. Even so, the production of spatiality (Warf and Arias 2008) in the contemporary world is associated with a knowledge regime (Pickering 1995) which establishes ways of linking heterogeneity among disciplines, institutions, and agencies. Barnes and Farish point out that this regime/method/system is based on mixing and integrating elements in unforeseen ways (Barnes and Farish 2006; Pickering 1995), requiring interconnected knowledge that underlies the production of spatial knowledge. As stated by Biagioli (2009), one of the current trends in the production of academic knowledge is to go forward beyond disciplines, being organized based on the collaboration among groups. Academic Institutions are not excluded from the spatiality-production modes which connect them with the state, companies, and civil society.

The spatial turn has also reached studies of the State (Moisio et al. 2020) and there is a progressively higher consensus that the State is a *spatial entity* (Brenner et al. 2003; Mann 1991a and 1991b). However, as we have already stated, such recognition is not always accompanied by delving into how the state produces or incorporates spatial knowledge effectively to define and apply binding decisions (Jessop 2014). The State produces spatial knowledge associated with its four constituent components: territory, population, ideas or state notions, and the state apparatus.

From such perspective, some research work has been conducted on how the state produced spatial knowledge to draw its boundaries (Lois 2015; Minghi 1963) and how state agencies were created, but also power on spatial issues (for example, the current *Instituto Geográfico Nacional* – the National Geographic Institute – and the present units of georeference). The spatial lexicon developed -territory, place, scale, and network (Jessop, Brenner, and Jones 2008) – identifies the areas in which the state operates. In this sense, knowledge production in the state area appears as performative (Barnes 2002; MacKenzie 2007) and experts within it become tacit agents of state power. Therefore, spatial knowledge is associated with the production of spatiality on the part of the state, and it constitutes a fundamental part of binding decisions, not only for the population but also for whatever is rooted in state territory.

Capitalist companies, as a specific institutional form, hold complex relationships with space. In principle, space as Harvey points out, is "a necessary element in every production and human activity" (Harvey 1982, 340), in a way that an action continued in space is part of how the profit obtained in a competitive scenario is organized (capital accumulation). As Arrighi mentions, the relationship of the capitalist companies with territory seems to exist as a function of that objective: "Capitalist dominant logics (...) identifies power with the degree of control over scarce resources and considers territory acquisitions as the means and by-product of capital accumulation" (Arrighi 1994, 49). However, in the course of time, capitalist companies transformed the territory and its organization into goods and in an active way of constituting capital spaces (Harvey 2007). The relationship with space turned capitalist companies into an institution producing internal spatial knowledge or constituting knowledge-producing companies in the shape of consultants "since business stakeholders request the opinion of experts regarding commercialization feasibility, location preferences, (natural as well as human) resource availability, environmental constraints ... such institutions produce a wide range of geographical knowledge" (Harvey 2000, 233). These spatial knowledge styles take part in a conflicting ecology of knowledge.

Those who generate spatial knowledge are identified as "experts" within the state as well as within companies. Such category evidences formal education and an institutional accreditation of knowledge. These experts present "the ability to do and understand things that could not be done or understood before" (Collins 2013, 254). However, civil society – as an agent that produces spatial knowledge – does not have as a starting point the quality of expertise exhibited by the agents linked with companies, the state, and the academic environment. Therefore, we find spatial knowledge scattered in society.

This paper considers civil society as a field of citizen action outside the state, "in the sense of a social space of actors linked by horizontal social relationships, of cooperation or reciprocity, and in search of common goals" (Camou 2003, 69). For STS scholars who are interested in the social dispute about knowledge (Jasanoff 2004, 2011; Nowotny 2011), the idea of civil society is fundamental, since it is a sphere constituted outside the academic and state environments, that produces actions that limit or redirect the state agencies, whether governing science or using science and technology in governing the social, natural, and artificial worlds. Civil society and their organizations claim autonomy from the state and pose a strain on its rationality, even though these organizations emerge from and develop in state spaces.

One of the dynamics characterizing our recent societies is the dispute around knowledge, held in two dimensions. The first one is due to the social appropriation of knowledge and scientific and technological products, among which spatial knowledge is found. Such knowledge is aligned with the interests of dominant classes and groups (MacKenzie and Wajcman 1999). This triggered the emergence of alternative and altering radicalized movements. This emergence installed a second dimension, the claim for knowledge (Casas-Cortés 2005) in terms of a dispute for the recognition of knowledge and expertise outside the academic institutions, the state, and companies. Such a dispute for knowledge emerged with the environmental movements which questioned scientific and technological knowledge (Shiva and Shiva 2020); then this space widened and incorporated movements within its own scientific and technological activity (Breyman et al. 2016). These internal movements politicize science and technology and establish relationships between them and urgent social problems.⁸ This general framework of social problems happens to be a common area of conflict since much dispute arises, for instance, in the need to produce knowledge that is alternative to that of sciences and technologies. The revitalization of the figures of radical democracies on the part of these groups is one of the frontiers of the political scenario and the new forms of citizenship (Jasanoff 2011).

A particular category of these social movements is *activism*, or *new social movements* (Calle 2003; Melucci 1999), which are different from labor movements or the social movements contesting the public sphere in the field of culture, economy, environment, or the recognition of autonomy (Tilly 2005; Tilly and Lesley 2017). Social movements of the turn of the century had already shifted the focus of attention toward the conflict around productive systems or the political structure established by the state. Activism is a form of collective action constituted by a process in which the social agents discover that the conflict they are involved in or is affecting them requires organized and continuous collective intervention. Thus activism is an institutional way of activating citizen enrollment or arousing citizen interest to form groups that assume varied identifications.

In the current society of knowledge, activist groups such as feminists or environmentalists construct a repertoire of collective actions as well as expressive and epistemic resources that enable recognizing the type of conflict or issue in which they are involved, identifying or imagining actions that must be taken within the group organization as well as towards the public sphere, and also exploring the effects of the sustained collective action. We call this activism *epistemic activism*, characterized by producing or inventing concepts to understand the conflicts in which they are involved and their connections with the general conditions of the current world to direct its transformation. The specificity of these forms of collective actions makes these epistemic processes constituting moments. This means that epistemic processes are the basis not only for action in the public sphere but also to summon realities experienced by different agents, and to organize them around what is common, a narrative of what is common. Epistemic processes appear on a double coordinate: conceptual and narrative, and that of the epistemic instruments.

The hypothesis held by this research is that contemporary activism appears on this condition: it invents and mobilizes (uses) concepts to produce and channel public deliberation in a framework that enlightens the social problem in question in a new fashion, in turn, influencing political action (Casas-Cortés and Covarrubias 2007). Thus there is

⁸A recent example of this type of scientific or expert activism in Latin America is the group Unión de Científicos Comprometidos con la Sociedad y la Naturaleza de América Latina (UCCSNAL) (Scientists Committed to Society and Nature of Latin America), formed in June 2015, editors of Ciencia Digna magazine (http://uccsnal.org/documentoconstitutivo-uccsnal/).

awareness (a form of reflection) about the fact that the transformation of this world depends radically on the concepts used to think and talk about it. The desire to change the world is mobilized by the imaginary those concepts allow. This construction of concepts emerges from epistemic processes (Knorr Cetina 2007), deployed by social agents in a non-traditional way. To identify the epistemic processes of activist groups, it is relevant to consider the underlying epistemology, taking into account at least two dimensions. The first one is the institutional dimension rendering this knowledge available or legitimate, and the assumed responsibility. The second dimension is centered on the procedures through which knowledge is generated, validated, and communicated (Knorr Cetina and Reichman 2015).⁹

The epistemic processes deployed by this activism are the grounds for the constitution of non-traditional expertise. Collins (2007) states that expertise is not an attribution – the relational conception of expertise – but a real and substantive possession of groups, which individuals acquire by association. Two forms of expertise can be considered: Interactional expertise on the one hand, and contributory expertise on the other. Interactional expertise identifies the set of skills and talents linked to language and communication. Contributory expertise refers to those that are needed to contribute to the realm of interest. It is also possible to identify the so-called ubiquitous expertise: these are the skills and talents required by the social system in general. Identifying these types of expertise is relevant when considering how epistemic activism can identify and plan actions around social problems.

The activisms of interest in this work have a peculiar relationship with territorial action and their attention includes not only intervention in the territory but also knowledge of it. In other words, our research is interested in activisms that produce an epistemic ascent; i.e. they focus on conceptual production or invention as a way of disputing in the public space and of orienting activist collective action. As Casas-Cortés and Cobarrubias state, "a way of producing knowledge specifically for social movements in order to evaluate steps taken, to understand new contexts, or to open up new issues of struggle" (2006, 114).

A key point to be considered about activisms is that they are formed by constant agitation which, traditionally, was deployed within trade unions, political or student spheres, and then moved toward public spaces in general. This condition of "agitation" which produces graphic pieces for agitation is expressly recognized by *lconoclasistas*.

One of their workshops was even called *agit-pop*, a laboratory for the development of graphic pieces of popular agitation.¹⁰ This rise of activisms to form epistemic activisms has been well documented, despite the fact that different nomenclatures have been used (Casas-Cortés and Cobarrubias 2006). Even spatial epistemic activism is one of the first experiences of epistemic activism insofar as the ascent towards territorial knowledge shows that space is part of public disputes (Misgav 2015).¹¹

¹⁰In this regard, see: https://archivo.argentina.indymedia.org/news/2010/11/761328.php.

⁹Such a concept is relevant since it is based on the observational, conceptual, and methodological accumulation of STS researchers, who have progressed in making visible the ways in which scientists and experts come to know objects and processes of their interest. As Mackenzie (2011) points outs, such progress is evidenced in a series of concepts developed to understand the epistemic processes deployed by social practices: "local scientific cultures"; "subcultures" and "rival traditions"; "experimental cultures"; "epistemic cultures"; "evidence cultures."

¹¹For Misgav, "space activism" is not a new form of activism but a tool of analysis; for us, it constitutes a new type of activism within epistemic activism.

In the following section, we analyze a type of activism that produces knowledge on space or territory. By taking part in the conflict from knowledge there is an established ascent, and the conflict of how space should be occupied emerges here – an epistemic conflict in the sense of which is the best way to know and account for space. This activism develops spatial knowledge to orient their political action to occupy, inhabit or go along space in certain ways understood as territories. At the same time, this knowledge allows for interventions in the public sphere to generate opinion and channel political actions which are wider than those of the group.

3. Spatial epistemic activism: Iconoclasistas

3.1 Emergence scenario

The early twenty-first century in Argentina witnessed the emergence of different epistemic activist groups that produce spatial knowledge as the basis of collective action in the public sphere. We will refer to two activist groups that make mapping the tool for organizing what is collective as well as the graphic piece of accusation, which we consider to be the *lconoclasistas*' relevant background.

Madres de Ituzaingó is a group formed by mothers of a neighborhood called Ituzaingó, adjacent to the city of Córdoba. This group started action when they verified the worrying succession of illnesses and deaths around the neighborhood. This group is constituted from the epistemic dispute for the causes and ways to participate politically demanding illnesses and deaths to stop. The group associates illnesses and deaths with agrotoxicals on transgenic soy crops, since the neighborhood is located on the border between the city and the countryside. It is of interest to consider that, as part of group formation, mapping is made and thus there is a spatialization of the problem, through "The Map of Death"¹² (Berger and Ortega 2010).

There are two epistemic operations produced in spatialization: (a) setting limits and (b) connecting the neighborhood and what is beyond. The making of *The Map of Death* allowed the inscription of each ill or affected person (Latour 1998), their illnesses and deaths, in that space and in a common narrative. Mapping was part of the collective construction faced with what appeared as individual. Mapping worked as an epistemic tool to shape what is common or collective and the map, as a result of such collective activity, also became an instrument of accusation, an act of eloquence for the political fight accompanying public demonstrations where the situation was reported.¹³

Another relevant precedent is the cartographic actions of a group of street artists, *Grupo de Arte Callejero* (GAC). This group was formed in the late nineties, in a cultural environment filled with impunity, individualism at its peak, the predominance of what is private substituting what is public (Longoni 2009). GAC with the group called H.I.J.O.S.,¹⁴ formed a group of action against the impunity gained when President Menem granted pardon to those who had been judged and sentenced for state terrorist acts during the last civic-military dictatorship in Argentina. Those responsible for acts of

 ¹²See https://www.reactiva.com.uy/wp-content/uploads/2018/10/ituzaingo-anexo2-2-696×468.jpg.
¹³http://ecoscordoba.com.ar/wp-content/uploads/2012/11/Fotos-005.jpg.

¹⁴This is the resource acronym of the group Hijos e Hijas por la Identidad y la Justicia contra el Olvido y el Silencio (sons and daughters for identity and justice, against oblivion and silence). This group is formed by sons and daughters of missing people, and in a wider sense, victims of state terrorism.

state terrorism are called *genocide criminals*.¹⁵ Under the motto "No justice, public accusation," they organized street actions of accusation and they designed specific iconography, a "cartographic" methodology and signage. *Iconoclasistas* considered that the maps produced were tools and a slogan for the struggle at the same time (Iconoclasistas 2016, 59). The aspect that *Iconoclasistas* call "tool" may be better understood if the map is conceived as an instrument of anticipation of street action. Mapping the location where the protest is to take place allowed, in addition to the construction of what is collective, the fundamental operation of anticipating actions on space, establishing the conflicting issues, foreseeing how to reach the site, walking around it, and drawing the limits for signage action. Pablo Ares, one of the members of the *Iconoclasista* pair, took part in the GAC.

Iconoclasistas is the name of a pair formed in 2006 by Julia Risler (PhD in Social Sciences) and Pablo Ares (self-taught, worked for several graphic media), both Argentinian. *Iconoclasistas* participates in national and international activist interventions at collective mapping workshops and in the production of graphic pieces for political agitation. Both members have interactional as well as contributory expertise, which allowed generating a territory-mapping methodology. It was initially formed as a social communication laboratory, which produced graphic and urban interventions. Currently, their actions are taken "in three dimensions of knowledge and practice: artistic (poetry of production and graphic devices), political (territorial activism and institutional drifts), and academic (critical pedagogy and participation research)" (Iconoclasistas 2021). *Iconoclasistas* acknowledges explicitly the role played by spatial knowledge in the organization of collective mapping, and the maps for collective organization and their eloquence in the "social denunciation" that is a substantive part of the activist repertoire.

3.2. Collective mapping and the production of spatial knowledge

The analysis of the epistemic processes of this activist group has several dimensions. The method they follow to produce knowledge is collective mapping. This method recognizes the background of social cartography or participative cartography, which emerged in the 1960s in Canada (Acselrad and Coli 2008). Values are forming the practices of collective mapping. A central value is the special consideration of traditional or popular knowledge in the territory as they conceive a tight relationship between knowledge and lifestyle, i.e. traditional and popular knowledge shapes the orientation of lifestyles in the territory, which are very different from those promoted by companies or even the state based on expert knowledge.

This device, the map, is not subjected to the parameters of academic cartographic science. In other words, the product does not necessarily provide an image of the territory that is coherent with a cartographic projection or a satellite image (even though it can be originated by the latter).

¹⁵Since 1985, there have been a number of legal trials to civilians and military men who committed crimes against humanity during the self-proclaimed "National Re-organization Process" (1976–1983). In 1989 and 1990, the president of that time, Carlos Menem, signed about ten decrees granting pardon to more than a thousand and two hundred people sentenced in those trials. For further information, please visit the following: Comisión Nacional sobre la Desaparición de Personas (2011); AAVV 1990 http://sedici.unlp.edu.ar/handle/10915/55099).

Preparation of collective mapping requires the design or development of what *lcono-clasistas* calls "pictograms" (narrative icons). These pictograms must narrate those aspects of the territory about which building common knowledge is of interest. From an epistemic viewpoint, the development and design of pictograms operate as organizers of intelligibility of spatial conflicts and their territorial deployment. In this sense, pictograms act as a specific epistemic instrument of the process deployed by *lconoclasistas*. The product of collective mapping (maps) is not easily appropriable by official cartography.

Collective mapping requires the organization of workshops with an aim: to visibilize certain issues, problems or conflicts on a certain territory. In the origin of cartographies made by *lconoclasistas*, there is a convergence of activism aimed at summoning other community members to take collective action and also to construct a polyphonic but unified narrative of the territorial problems. The enrolling process has two stages: mapping, where the process is epistemic, and map circulation, where it occurs by identification. In both moments the narrative dimension of the epistemic process is evidenced. Its property is enrolling new agents into collective action. The enrolling aspect which has an epistemic base occurs as the discovery of that individual or personal perspective converges in a collective perspective. The case of mapping carried out in the neighborhood of Santa María La Ribera, Mexico City, shows this process: "In this neighborhood of such varied contrasts -most times extreme ones- we decided jointly with the organizers to focus these exercises and mapping on documenting the quality of life here" (lconoclasistas 2020, 6).

At least two categories of participants can be differentiated: (a) those who conduct the workshop (*lconoclasistas* members and those who have been trained by them) and (b) attendants. All those invited to participate in the workshop are included in the latter category. The issue regarding the context where the participants' knowledge is legitimized must be answered considering the reflective nature of the workshops, where the contribution of each participant is questioned, debated, or accepted by the rest of the participants, thus leading to a social validation of such knowledge.

Valuing the knowledge of participants is done by reflecting on the perceptions and prejudices existing on certain territories and their contrast with those who inhabit or move around in them. In this dialogic exchange, contradiction is expressed in the resulting map. Discordant icons can coexist and this is to be part of the process of constructing collective knowledge. Reflecting on the different viewpoints about the territory is stated in the concept of multi-planes (Iconoclasistas 2016, 28), which grants thickness to the narrative. The layers constructed build the memory of the various interventions and at the same time express materially the different perspectives about the territory, existing views which are not always expressed in a common narrative. Collective mapping methodology focuses strongly on the determination of what is common; notwithstanding, it does not force a single narrative into existence, and the multi-plane perspective allows for the materialization of such differences.

Communicating the knowledge produced is one of the main objectives of holding collective mapping workshops. The use of visual resources in the workshops "encourages recalling, exchanging and signaling thematic issues" (Iconoclasistas 2016, 14). But this use is reserved for the moment of communication, since the aesthetic and symbolic dimensions they channel broaden understanding of territorial realities.

The scope and the political objectives of maps produced by *lconoclasistas* are different. In most cases, the attendance and reflection at the workshop enable actions by 12 🕒 O. VALLEJOS ET AL.

organizations or groups calling out from the public sphere.¹⁶ In many situations, the workshop allows problem-realization or deconstruction of naturalized perspectives on certain issues. For instance, "the map obtained was the first step for the realization of the importance of the existence of professionals who have been accompanying and guaranteeing access to legal and safe abortion" (Iconoclasistas 2018).

4. Conceptualizing activist intervention in early twenty-first century

Research into activist action and organization shows a set of practices that we have conceptualized as "epistemic." The internal organization of activism-enrollment methods, the definition of strategies, and the determination of spheres of intervention -as well as their positioning in public spaces- are crossed by epistemic processes. This paper makes some of them visible in the analysis of an activism that is linked to the production of spatial knowledge.

The hypothesis we offer to account for these new methods of collective action is that of epistemic activism, which allowed casting light on how the epistemic processes built up the internal organization and also the intervention in the public space. The epistemic dispute about how social problems appear was granted a space by these activisms. On the occurrence of spatialization of problems using collective maps, the limits of such problems are redefined, and furthermore, a device for the construction of what is collective is created. Those who are affected discover themselves in a collective group, and this epistemic operation thus becomes a political operation.

The incorporation of epistemic processes to public action is evidenced when street actions are organized from the anticipations that can be made in the maps created collectively. This mode of spatialization identifies, constitutes, and locates social problems, at the same time such maps constitute elements for accusations. The latter is considered the core issue by *lconoclasistas*, who produce devices for collective mapping. Focusing reflections on the narratives about the territory and how maps account for them – or not – produces iconographic materials to identify problems and assign them a territory.

Such iconographic materials are constituted by, e.g. pictograms. Pictograms allow epistemic activisms to organize actions and knowledge about the territory. In this sense, epistemic processes are linked to concentrating or focusing on specific problems on a territory and identifying knowledge and its individuals or agents.

Finally, the analysis of *lconoclasistas* also allows enlightening an area that is usually thought for expert knowledge: circulation and transmission of activist knowledge. Collective mapping, the spatialization of social problems, is also learnt and taught from activist actions which think of (its) learning stage as the fundamental moment of (epistemic) activism.

5. Conclusion

This work offers an analysis of the emergence of a new type of spatial activism, the epistemic type, characterized by the production of knowledge entering the ecology of

¹⁶For example in the collective mapping on Montevideo and Ciudad Vieja "the possibility of forming a stable group to work on this issue in depth was strongly emphasized" (Iconoclasistas 2018a).

spatial knowledge that until recently only included knowledge produced by experts, whether academic, state, or company knowledge. For this aim, the activities of the *lconoclasistas* and other related activist groups were described and analyzed. The position taken by these activists on spatial knowledge raises the dispute about space; i.e. not only material conditions of spatiality are disputed but also the epistemic dimension itself.

The study of epistemic processes developed by the *lconoclasistas* group evidenced the ways to generate a new form of producing so much knowledge as well as the epistemic instruments which produce that knowledge. In the field of spatial knowledge, these works have a relevant background in Argentina, and have left a legacy of two significant epistemic operations: drawing limits and establishing connections between the affected area and beyond. In the case of the activism studied, the value granted to non-academic knowledge about the territory is essential in the practice of collective mapping, which permits diverse participants to enroll in the epistemic process. In addition, the use of pictograms allows the condensation of information and the acceleration of the narrative processes about the territory to be informed. The communication of this knowledge to the general public or to certain social agents in particular is part of the political objectives of the generated spatial knowledge.

Therefore, the epistemic processes of *lconoclasistas* led to a space configuration that shed light on the pre-established social organization. Likewise, the epistemic processes underlying methodology and mapping permitted the participation of non-experts in their processes when considering and acknowledging that citizens are carriers of relevant knowledge.

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