MAPPING INTANGIBLE PHENOMENA

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Abstract

The article contributes to Cultural Geography through a methodological proposal to map highly specific cultural themes, such as phobia. Focusing on an epistemological reflection about the representation of culture in the surroundings of a cemetery in Salinas City, located in the northern region of the state of Minas Gerais, Brazil, the article advocates a methodological solution based on identities and abandons the pretense of totalizing representations. The result is a useful alternative to studies that evaluate the attributes of landscape and place and a more comprehensive range of studies on perception.

Keywords: Salinas City; Brazil; Cultural Geography; Epistemological Reflection; Culture; Identities; Phobia.

Resumo / Resumen

MAPEANDO FENÔMENOS INTANGÍVEIS

O artigo contribui para a Geografia Cultural por meio de uma proposta metodológica para mapear temas culturais altamente específicos, como a fobia. Com foco em uma reflexão epistemológica sobre a representação da cultura no entorno de um cemitério da cidade de Salinas, localizada na região norte do estado de Minas Gerais, Brasil, o artigo preconiza uma solução metodológica a partir de identidades e abandona a pretensão de representações totalizantes. O resultado é uma alternativa útil para estudos que avaliam os atributos do paisagem e lugar e uma gama mais abrangente de estudos sobre percepção.

Palavras-chave: Cidade de Salinas; Brasil; Geografia Cultural; Reflexão Epistemológica; Cultura; Identidades; Fobia.

MAPEO DE FENÓMENOS INTANGIBLES

El artículo contribuye a la Geografía Cultural a través de una propuesta metodológica para mapear temas culturales muy específicos, como la fobia. Centrándose en una reflexión epistemológica sobre la representación de la cultura en torno a un cementerio en la ciudad de Salinas, ubicada en la región norte del estado de Minas Gerais, Brasil, el artículo aboga por una solución metodológica basada en identidades y abandona la pretensión de representaciones totalizadoras. El resultado es una alternativa útil para los estudios que evalúan los atributos del paisaje y el lugar y una gama más completa de estudios sobre la percepción.

Palabras-clave: Ciudad de Salinas; Brasil; Geografía Cultural; Reflexión Epistemológica; Cultura; Identidades; Fobia.
INTRODUCTION

The reification of culture persists in several traditions (Mitchell, 1995); moreover, under the influence of the Berkeley School (Duncan, 1980; Ley, 1981; Norton, 1987; Cosgrove, 1993; Claval, 2003), the idea of a reified culture was still woven into the thinking of many cultural geographers until the end of the last century. The belief that cultures exist as tangible entities seems to be prevalent in common knowledge. There is even, at a more accurate level of specificity, and, therefore, with a veneer of sophisticated reasoning, an understanding that it is possible to spatially delimit cultural elements (Silva; Costa, 2018a; 2018b). At present, numerous clichés continue to be regarded as true, such as "corruption is part of Brazilian culture," or "Japanese people are disciplined." This notion is not new. For instance, even in colonial periods, the belief that "the colonized natives would always be lazy" was widespread, as Syed Hussein Alatas (1977) rightly denounced. We disagree with these maxims, both the intent to delimit these phenomena (Silva and Costa, 2018a; 2018b) and these stereotyped descriptions claim to totality.

In the post-Cold War academic environment, it was still possible to find theories that mapped and demarcated customs and behaviors under the unrealistic aegis of "civilization." Samuel Huntington's (1996) famous essay and book is a case in point, which is considered his magnum opus due to its great repercussion. Several other labels are noteworthy in the ontological approach to culture, including the idea of a regional culture that refers to completely homogenized behaviors between individuals and, at the same time, explains the differences between modern productive systems (Gertler, 2008).

The traditions that include culture as a tangible entity date back to Anthropology’s origins as an academic field. Outside the university, these traditions mainly refer to the accounts of different peoples’ customs written by travelers throughout history (Amorim Filho, 2008). The publication of Alfred Kroeber’s influential article, The superorganic (Kroeber, 1917), gave rise to a period of notable changes in anthropological assumptions. However, cultural determinism lost strength in the first decades of the twentieth century, although some geographers occasionally appropriated it until the end of the 1950s, when a vibrant period began in paradigmatic breaks in geographical thought (Capel, 2013) and many other disciplines in the Humanities.

In the second half of the twentieth century, modern anthropological studies, as well as their constituent elements, received support from the belief in the permeable, hybrid, and dynamic nature of culture (Saïd, 2007; Eagleton, 2011; Bhabha, 2013; Hall, 1999; 2006; Nandy, 2015). Furthermore, the rejection of the reifying approach to culture became associated with theoretical attempts of identity representations (Cohen, 1993), which developed into an alternative solution to the unrestricted use of totalizing generalizations.

Given the above, this article aims to present a methodological solution for mapping emotions, which despite being collectively intangible, are mappable in the dimension of identity. The field studies focused on identifying phobia, expressed in several manifestations, around a cemetery in the city of Salinas, located in the north of the state of Minas Gerais, Brazil. As this is not a case study, there are no attempts in this article to make sociological interpretations. The study subject was selected to illustrate a theoretical proposal to represent emotions that avoid elaborating totalizing representations of culture. This theoretical effort is justified as it contributes to the execution of other studies that aim at the intersubjective evaluation of landscapes and places. There is also an interest in contributing to the advancement of knowledge in Cultural and Humanist Geography. After all, totophilia is associated with the population's general well-being (Tuan, 1980; Besse, 2014).

It is not our intention to materialize the phobia or even to delimit it spatially; Instead, the purpose is to map the intersubjective records of people who live in the vicinity of the cemetery. The area is used to test the methodology and represents a solution to the theoretical imbroglio permeating cartographic representation of cultural manifestations. Considering this article's assumptions, the attempt to map phobia appears paradoxical as it may seem that it will be delimited and reified. However, as will be seen below, the cartographic representation focuses on uncovering individual feelings and not generalizing the phenomenon, which we consider impossible.
REFLECTIONS ON ATTEMPTS TO MEASURE IMAGINATION AND PHOBIA

Imagination is possibly unique to the human species and is the root of outstanding achievements and a source of anxiety and suffering (Tuan, 1998). Uncertainties and the fear of death, in all its forms, belong to a group of powerful emotions that interfere with human behavior and the organization of landscapes (Marandola, 2018). Individual and family behaviors are the starting point to problematize emotions as variables that explain States' behavior and their impacts on geopolitical arrangements and the international political environment (Moïsi, 2010; Silva and Passos, 2018).

Superstitions are products of the imagination observed in all societies and have two main aspects. First is human beings' appeals to superhuman forces in an attempt to cause positive or negative interventions in their lives. Complementary to this is the impossibility of systematizing these superhuman forces into a set of religious doctrines (Chakrabarty, 2008). Superstitions are also known to reinforce phobias.

The fear of ghosts has its roots in fear of the unknown and the bizarre, although the dead are not feared everywhere. For believers, spirits, especially those of ancestors, can be viewed as a positive source of energy. Strong evidence that people do not always fear the dead is the tradition of burying them or preserving their remains in the houses where they lived (Tuan, 2005), for example, in special urns that store the ashes resulting from cremation.

It is entirely conceivable that individuals exposed to the same phenomena may have different phobia levels influenced by their identities that, according to Maurice Halbwachs, hold individual and collective memories. Each person has these two memories that periodically influence them to make paradoxical decisions. On the one hand, a person's memories influence decisions regarding their personality or personal life. On the other, collective memories can sometimes make an individual behave simply as a member of a group that evokes and maintains impersonal memories, which are of interest to the group (Halbwachs, 1990). This intersubjectivity is found between and within societies, hindering the materialization of fear as a tangible entity or a collective phenomenon that materializes dominantly in space.

Attempts to describe and delimit culture endow it with a reified condition. Its existence is conditioned by the collective imagination, from which the real behaviors of individuals who believe themselves to be submitted to it can be partly explained. Along with numerous elements influenced by living in society, phobia is part of what we conventionally call culture. However, permeability, heterogeneity, dynamism, and hybridity, the hallmarks of culture, preclude any consensus concerning its integral constitution, temporal evolution, and capacity of spatial delimitation. Not even asymmetric power relationships can guarantee cultural homogeneity in a given territory (as if the agents of power could control processes of exchange of experiences). As pointed out by Saïd (2011), this makes a myth of supposed cultural purity:

Who in India or Algeria today can confidently sift the British or French element of the past from the present situation, and who in Britain or France can draw a clear circle around British London or French Paris that excludes India and Algeria's impact upon those two imperial cities? (SAÏD, 2011, p.51)

Phobia is an extremely specific cultural element, together with other elements composing a culture, including hygiene habits, musical taste, and cuisine. Although it is a cultural element, phobia's inherent logic is no different from the description of culture above. Thus, this article does not intend to materialize or delimit phobia or estimate its spatial extent. To delimit emotions such as phobia would clearly contradict our theoretical framework. The measurement of the phobia associated with cemeteries took place individually, qualitatively, and quantitatively, as we believe that aggregating information could convey the mistaken idea of phobias as reified phenomena that faithfully represent a collective sensation. Such a misunderstanding would undoubtedly contribute to the neglect of the intersubjective understanding of the world, constructed by the accumulation of individual experiences and the strength of social conventions and collective rituals.
CEMETERIES AND PHOBIA

Cemeteries have both functional and emotional purposes. They offer space for the disposal of corpses, and, more importantly, they are places where the living can communicate with the dead, honoring their memory (Francaviglia, 1971). Thus, a cemetery can be cultural heritage, a historical archive (Tanas, 2004), or even a repository of artistic masterpieces such as those found in Pisa's cemetery (Andreotti, 2010). Understanding cemeteries apart from the rituals associated with them is a challenge. The rites, symbols, and signs linked to cemeteries give them a symbolic dimension. When repeated in public, certain gestures people make take on new meanings, creating a feeling of shared community for practitioners or observers (Claval, 2001).

The organizational, architectural, and landscape styles of cemeteries vary widely, reflecting the prevailing notion of life and death in a given location, as well as the social and environmental relationships established there (Pitte, 2004). This includes specific variations in the tombstones' styles (Francaviglia, 1971), funeral rituals, and the treatment given to corpses, which, among other rites and practices, can be buried, cremated, or embalmed. Cemeteries can become tourist destinations, where visitors are attracted to celebrity tombs, as is the case of the Hollywood Forever Cemetery in Los Angeles, California, USA. Sophisticated tombstones and mausoleums and how their style has changed over time also have architectural and historical appeal. It is common for some cemeteries to have guided visitation programs, such as the traditional Consolação cemetery, in São Paulo, Brazil, the Recoleta cemetery in Buenos Aires, Argentina and the Père Lachese cemetery in Paris, France. Furthermore, heritage studies have carried out all manner of inventories of cemeteries, including, for example, the survey of the distribution of rocks used in the ornamentation of tombs (LICCARDO; GRASSI, 2014).

However, cemeteries in the urban environment trigger a series of phobias that do not focus exclusively on the supernatural issues associated with religion or superstition. Common phobias associated with cemeteries are:

• environmental concern, including problems related to the conservation of water resources, unpleasant odors, and urban cleaning;
• the purported presence of venomous animals and accidents involving them;
• the supposed presence of ill-intentioned people in their surroundings, including scammers and other criminals;
• fear of the devaluation or stagnation of the real estate value of properties adjacent to the cemetery;
• the shame or discomfort of receiving visitors because the residence is located close to the cemetery;
• the belief in and fear of supernatural phenomena, reinforced by superstitions, can harm the well-being of the residents of the cemetery's surroundings.

This article does not propose a primer of questions to be asked about phobias arising from cemeteries; instead, it is a form of representation that denies cultural reification in cartographic representation. The phobias described here ordered the elaboration of the method outlined below. Despite the bias imposed by a particular social superstructure, we believe this proposal may be useful to other experiences.

MAPPING CULTURAL THEMES

The influence of the intellectual phenomenon known as the "Cultural Turn" has spread to numerous areas of knowledge, widely rearranging both Cultural Geography and Human Geography (Grossberg, 1989; Corrêa, 2011; Almeida, 2013; Pedrosa, 2016). In many ways, the Cultural Turn "has been very positive for geography, allowing new critical theoretical perspectives to emerge, and opening up new spaces for research on topics, such as the body, that were previously considered out of bounds" (VALENTINE, 2001, p.167). Hugely influencing the American and British academic environment in the 1970s, it focused on the cultural themes of meaning and identity (with a strong post-structuralist influence) as the target of cultural investigation. In contrast, the focus on the collective analysis of
culture was left in second place (Jackson, 1997).

The Cultural Turn's assumptions still inspire geographers to question reifying approaches to culture and denounce many cultural representations' inadequacy. It is noteworthy, a priori, that cultural themes have different levels of specificity, as shown in the table below:

<table>
<thead>
<tr>
<th>Regionalization theme</th>
<th>+ Generalization</th>
<th>+Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>The culture itself (&quot;Brazilian,&quot; &quot;Indigenous,&quot; &quot;African&quot;)¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typology, including dances, languages, religions, food, or clothing.</td>
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<tr>
<td>Waking and sleeping times, musical tastes, the strength of rural traditions, hours perceived as suitable for occupation and leisure, positioning concerning abortion and same-sex marriage, among others.</td>
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Table 1 - Hierarchization of some cultural themes. Source: Translated and adapted from Silva and Costa (2018b p.235)

Generalizing cultural themes are didactic as a counter-example evidencing the inadequacies of their cartographic representations. Maps of cultural spatiality are problematic and pretentious, as they set out to represent a collective construction from a particular perspective. In this article's approach, any description and delimitation of a culture, whether on the continental or municipal scale, is considered inadequate. Therefore, we paraphrase Benedict Anderson (2008) by affirming that culture is an imagined community: it exists as an ill-defined entity in its intersubjectivity, it does not materialize in space, and is an intangible collective construction.

The problem persists in cartographic representations of greater cultural specificity. However, some alternatives facilitate the move away from reified approaches to culture in these cases. The desire to create a spatial representation of "Brazilian culture" or "French Riviera culture" requires an assumption of totality that does not match modern anthropological principles. Culture is perceived as a permeable, hybrid, heterogeneous and dynamic entity, making it unfeasible to demarcate. It is important to emphasize that our use of the expression "assumption of totality" refers to the communicative forms used by others that generalize cultural aspects, stigmatize individuals who are under the control of a particular culture, and, ultimately, reify the culture.

More specific cultural themes, such as assessing the pleasantness of the landscapes in a given area, can surrender the pretense of totality as long as the map is created and presented with due singularity. For example, take a spatial representation of the "beauties of Sicily according to the eyes of a visitor." In this case, it is assumed that it is acceptable for the reader to disagree with the cartographic proposition and that the cartographic representation is not intended to be totalizing. The mapped boundaries, in this instance, are solely identity boundaries.

Even though identities are shaped diachronically, the cartographic proposal in question can portray a specific moment in the formative trajectory of identity. For this reason, it seems appropriate to place a date on any cartographic construction. The same precautions are necessary when topics of greater specificity are mapped based on different individuals' points of view, as the claim of totality makes it impossible to set limits.

The theorizations above are fundamental to our methodological proposal for mapping the phobias
associated with the Salinas cemetery, an initiative we call "mapping intangible phenomena". It is an alternative solution for representing elements of high cultural specificity, which is presented below.

**METHODOLOGY**

A 300-meter radius from the central point of the old cemetery in Salinas-MG was used to define the study area (Figure 01), which had 553 residential, commercial, commercial, religious, and government buildings. A team of 50 volunteers conducted interviews on the morning of November 23, 2019. One person from each residence in the area of interest was interviewed. However, some interviews were conducted outside the 300-meter circle because buildings transected by the reference circle's circumference line were included in the study.

The interviews were limited to the residents in the selected area, and the selection criterion for interviewees was to ask for the oldest person residing in the household who was available and willing to answer the questionnaire. As a result, 226 interviews were conducted in the 553 buildings in the study area. The residents were absent in 140 households, and 38 residents refused to grant an interview. Also, 98 residences were identified as abandoned.

Alongside questions that aimed to identify some of the interviewee's characteristics, the questionnaire had six questions about phobias associated with the cemetery. The interviewee was asked to answer the questions on a scale of 0 to 10 to express the phobia's intensity. They were given a numerical bar with this scale to help them express their sensation numerically. A pre-test was carried out the week immediately preceding the survey in a neighboring municipality (Rubelita, Minas Gerais, Brazil) to assess any difficulties or bias in the questions, such as evidence of ambiguity or misinterpretation. These are the final format of the questions:

- How much do you think the cemetery contributes to the generation of garbage, bad smells, and water contamination?
- How much do you think the cemetery can attract undesirable insects and animals, such as cockroaches, spiders, scorpions, armadillos, cats, dogs, etc.?
- How much do you think the cemetery contributes to attracting ill-intentioned people to the surroundings, including con artists and other criminals?
- How much do you think the cemetery contributes to the devaluation of homes in the region?
- How embarrassed are you to tell people that you live near the cemetery?
- How much do you fear ghosts, spirits, or oblations related to the cemetery?

![Study area: surroundings of the old cemetery of Salinas city/Brazil.](Image)
A total of six maps were created, one for each question posed to the interviewees, in which the respondents were represented cartographically according to the values they attributed in their answers. As stated in the introduction to this article, there is no intention to reflect on the mapped data's social and anthropological meanings. Instead, the aim is to present a methodological proposition for the cartographic representations of intangible phenomena.

PRESENTATION OF THE PROPOSITION AND DISCUSSION

Together, the resulting maps present a proposal to represent phobias in space. While acting in the dimension of identity, the assumption of totality is abandoned. Thus, each map represents precisely the individual phobic impressions associated with the Salinas cemetery collected on November 23, 2019. The mention of the date is important as identities reinvent themselves over the inexorable march of time.

It is noteworthy that reflections on assessments of the landscape are strongly associated with the focus of our proposition, namely, the representation of a highly specific cultural theme. After all, landscape and culture form a binomial (Claval, 2001), and therefore the difficulties associated with evaluating the landscape resemble those involved with the spatial representation of culture. This is because both procedures deal with the possibility of creating collective expressions based on syntheses of multiple individual expressions.

Even though phobia is the transversal theme of the questionnaire, the different dimensions of fear or aversion investigated resulted in maps with very varied arrangements. In the six maps presented below, it is possible to observe different spatialities of phobic identity expressions. It is significant that among the responses to our survey, themes related to material perceptions, such as water quality, real estate valuation, and the presence of criminals and unwanted animals, scored more highly for phobia than the more intangible aspects, like the shame of admitting being a neighbor to the cemetery or the fear of spiritual manifestations.

![Individual perception of the risks to water quality in the surroundings of the old cemetery in Salinas city/Brazil.](image)

Figure 2 - Individual perception of the risks to water quality in the surroundings of the old cemetery in Salinas city/Brazil.
Figure 3 - Individual perception of the risks of undesirable animals being present in the surroundings of the old cemetery in Salinas city/Brazil.

Figure 4 - Individual perception of the risks of criminal activities in the surroundings of the old cemetery of Salinas city/Brazil.
Figure 5 - Individual perception of the risk of property devaluation in the surroundings of the old cemetery in Salinas city/Brazil.

Figure 6 - Individual perception of shame of living in the surroundings of the old cemetery of Salinas city/Brazil.
A central question is how emotions can be interpreted. Anderson and Smith (2001) argue that it is difficult to understand emotions and act upon this understanding. Penning-Rowsell (1982) agrees with this argument, stating that the possibility of identifying landscapes with different attributes and valuations is debatable. Clamp (1981) prefers to argue that no landscape assessment method is wholly satisfactory. Jay Appleton (1975), on the other hand, points to the existence of a theoretical void concerning the representation of aesthetic appreciation of the landscape, since no method is free of theoretical constraints, as demonstrated up to the present day in several subsequent publications (Penning-Rowsell, 1975; Crofts, 1975; Swanwick, 1989; Manning, 1995; Brassley, 1998; Aoki, 1999; Lowenthal, 2007).

Appleton (1994) also suggests that, in the absence of a more assertive theory, it is possible to map qualitative attributes of the landscape, as long as the results are introduced as probability maps. The author makes this suggestion because he believes that probability can offer myriad answers about the landscape's qualitative potential.

We disagree with Appleton's (1994) proposition as using average results makes the probability solution totalizing. The use of probability is paradoxical to the theory and incompatible with Appleton's (1994) conclusion regarding the variety of identity in what is conventionally called or understood as a culture. Hence, these average results are only statistical curiosities. They do not represent any tangible phenomenon, as individual perceptions about qualities such as a landscape's beauty and tranquility cannot be estimated from averages. A unitary representation of individuals' perception is ideal, even when the sample size does not represent the totality of the space in question.

If we had chosen to interview all the residents of each household and then calculated an average value for perceptions per household, indicated on the map by a colored dot showing the average value, the mistake above would have been replicated. In this study’s theoretical approach, average values represent absolutely nothing. Each individual is a delicate balance between the forces of the social superstructure and their individual experiences. Statistical averages erase these tracks through a simple mathematical exercise. Harris-Lacewell (2007) published an interesting paper on perceptions after the calamity caused by Hurricane Katrina in New Orleans.

However, when presenting the data, the author organized the results by race, creating the same
perceptual problem. When viewed from a specific social perspective, the statistical grouping disrupts the identity results. Differences in interracial values serve particular purposes, but they are problematic in expressing identity, just as it would be inappropriate for the present study to point to the existence of two cultures or subcultures. It is interesting to add that statistical agglutination proposes another spatiality in cartographic representation, insofar as it creates solid categories that erase the most concrete representation of cultural themes: the expression of identity.

According to David Lowenthal (1978), the use of numerical scales is inappropriate when assessing landscapes. Among his reasons is that the numerical scale's size is subjective: it is not possible to present definitive arguments about a choice between scales from 0 to 5, from 0 to 10, or from 1 to 15. Furthermore, even if the interviewees are given identical numerical gradations, there is no guarantee that they would express themselves similarly in the same situation as each of their identities is a chimera of experiences. The author states that the decision to use numerical scales in landscape assessments results from the erroneous perception that quantitative techniques can confer academic respectability to scientific works that deal with this theme.

Lowenthal (1978) also criticizes the totalizing desire to depict similarities and differences between landscapes spatially using numerical values. Interestingly, this is endorsed by our approach. In our view, the search for polygonal cartographic representations to express perceptual phenomena is fruitless. Instead, numbers were used to express identities without the intention of comparing emotions or tracing emotional zones in the study area. It seems evident that an essential aspect of this imbroglio lies precisely in the distinct analytical plans that cover either identities or the reifications of culture and cultural elements. If it is not possible to compare the interviewees' responses free of constraints, the value of mapping identities is questionable.

Identity cartographies discard totalizing descriptions; instead, their methodological proposal is based on a rejection of the reification of culture and its components. In our view, the quantifying proposals found in some landscape assessments justify themselves by their supposed rationality, enabling the implementation of public policies. For public policies to be approved and implemented, the reports that reach decision-makers often need to be objective. However, this is a paradox in landscape analysis since it contradicts the intersubjective condition of identity manifestations.

In contrast, the results of this study show that in certain situations, our proposal for identity representation may point to areas in which a particular behavioral pattern is observed. Regardless of the intangible balance between the strength of the social superstructure and the individual experience in the composition of identity, it is possible to measure a range of emotions, from suffering to pleasure connected to landscapes, which complements the objective data that will always be relevant to support government actions.

Finally, the proposition introduced here is not intended to replace quantitative information, for example, data on the occurrence of accidents involving scorpions. However, we believe that the measurement of individual perceptions can complement objective data, as it is undeniable that emotions have real impacts on people's lives and cannot be underestimated.

Indeed, the association between emotions and geographic space has grown in academic literature (Gartner, 2012), in surveys like those that use smartphones for the mass collection of voluntary geographic information related to individual perceptions and sensations on social networks such as Facebook or Twitter.

CONCLUSION

Given our approach rejecting reification, we do not agree with the spatial representation of culture. It is a non-consensual concept that flirts with the intangible and has attributes such as space-time dynamism, porosity, and hybridism, and therefore, its delimitation does not seem plausible. This issue seems to affect highly specific cultural themes, such as this article's topic: the dimensions of phobia.
associated with the cemetery in the city of Salinas, Brazil. However, we propose that, unlike the dimension of the culture itself, it is feasible to represent specific cultural themes and opinions and evaluative aspects of the landscape and locations, if the procedures that follow the theoretical framework we have developed are met.

The first step is to abandon totalizing claims in the spatial representation of individual emotions. This cartographic representation makes sense through the identity dimension expressed using points. Each data obtained in the interviews needs to be spatially evidenced. Statistical efforts to form polygons representing averages or patterns erase the most concrete facts, namely, the individual answers to each question. The titles written for identity mappings must also abandon totalizing allusions and precisely express the dimension of what is being mapped.

The second procedure is the temporal determination of the represented data. Just as identity impacts expressions about landscape and place, it must be considered that time is a variable that impacts identities. Alongside the strength of social superstructures, identity is also shaped by experience, which takes place over time. Social superstructures can also change over time, albeit slowly. In this way, to avoid distortions, the mapping of individual responses should be done in the shortest possible time to be understood as a snapshot of the moment. Therefore, identity maps should clearly state the date the surveys took place.

The spatial distribution of points in our mappings indicates several sociological meanings. As the survey addressed the dimension of perception while rejecting totalizing approaches to culture, it is essential to emphasize that there is no intention to suggest that this methodology should be imposed on public policymaking. Data collected by the public authorities, such as accidents with scorpions or water contamination levels, must be employed concurrently with perceptual studies as instruments to promote the population's well-being.

NOTE

1 - The proposal here is that the quali-quantitative method’s characteristics enable it to transcend the dialectical tensions that involve the materiality and immateriality that are the essence of the geographical space. The quantitative approach uses censuses or sample surveys, which can generate information about a population in a statistically proven manner. Through self-expression, the methodologies of the qualitative approach are used to understand the web of meanings attributed by individuals to the environment, based on their experiences.

2 - The Cultural Turn rejects positivist epistemologies and emphasizes studies on meanings. Postmodernism, postcolonialism and post-structuralism help to consolidate their own paradigms.

3 - Such examples are generalizations not because of their spatial scale, but because of the themes they address

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