

REFLECTION ARTICLE

FROM CARTOGRAPHY TO TERRITORY: CHALLENGES TO SPATIAL STUDIES
IN THE HEALTH AREAAndré Luis Machado Bueno*
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ABSTRACT

This reflection consists in a rereading of concepts about space and territory, with the objective to contribute to the expansion of analytical proposals regarding territorial phenomena, beginning with space studies in the health area. It is to start with the fact that the disciplines of geography have difficulty in the use of space and territory concepts which in many cases damages the analysis and consequently the intervention in the health area. Thus, it is understood that the notions of space and territory, as well as its use for several areas of knowledge present themselves as open field for new contributions. This reflexive proposal approaches the concept of space and territory, transposing the spatial dimension to the social dimension, supported in the simultaneous co-existence of the society in its relation with the nature. It is intended as analytical advancement in order to invest in interpretative proposals of space phenomena, beginning with the space and territory concepts while considering the multiplicity of factors that constitute the socio-environmental relations.

Keywords: Epidemiology. Spatial Analysis. Public Health.

INTRODUCTION

This reflection has the objective of contributing to the expansion of the analytical proposals of territorial phenomena from the space studies in the area of health, based on the concepts of space and territory supported by Rogério Haesbaert⁽¹⁾ and Marcelo Lopes de Souza⁽²⁾. To this brief review of concepts are added contemporary studies in the area of health and geography which are able to assist in the understanding and interpretation of some possibilities of the analysis. It is understood that the systematic incorporation of the category space-territory in epidemiological studies can mean an increase in the quality and effectiveness of health actions developed locally. This expansion of the proposed analysis can subsidize more understandable interventions of the health and illness processes based on behaviors and life dynamics.

Firstly, it is needed to understand that space and territory are not synonymous, although much quoted as such in studies conducted for

disciplines far from geography. A simplistic definition, or why not say skewed, of space could classify it as the delimitation of the physical environment, the establishment of borders, disregarding the social relations that precede and streamline training and occupation. In this sense, this reflective essay strives for expansion of the concept of space for studies in the health area, transposing the analytical capacity of the spatial dimension to the social dimension, sustained and supported by the simultaneous co-existence of society and its relation with nature⁽¹⁻³⁾.

Anyway, in this brief exercise of conceptual insight is to face the difficult task of transforming the territory into a separate analytical category of the notions of space or even place; experienced and perceived spaces. Territory is defined by power. The author does not deny cultural and economic interventions, as well as personal identities, however he states that territory is delimited and defined through these relations. In this perspective the central issues are not the geological features and natural resources of a certain area, what is produced or

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who produces, but who owns or influences is how people in their territories are dominated or influenced. It is understood, in this perspective, that the territory is constituted by complex social relations (politics, economics and culture), historically and culturally constituted interdependently. These aspects, although they can be distinguished for analytical purposes, are not separable in reality. A view that crosses vertically these territory forming plans, aiming at a contextualized analysis of spatial phenomena, is therefore necessary⁽¹⁻³⁾.

The study of the behavior of the health and illness phenomena challenges the researcher to go beyond the venue. The location of a given phenomenon is obviously important; however it presents a problem of precise research when you consider that, for example, major cities produce and are products of distinct places, spaces and territories. This is the distinction where the establishment of social inequalities can be observed. As an example, it is possible to mention the big cities and their peripheries which are defined in areas of social exclusion — based, among other difficulties, on the precarious urban and housing structure — resulting from the difficult accessibility of public services, basic sanitation, education and income. As to evaluate the occurrence of particular health and disease phenomena in these locations, it is necessary to relate to this respective phenomenon which social and environmental vulnerability factors as well as determined social intercourse it is subject to⁽⁴⁻⁵⁾.

It becomes essential to advance in the analytical techniques with support of the space and territory concepts, aiming to increase the awareness of the determinants and predisposing factors for health and illness situations and their dynamic interaction with the environment and society.

Advancing a little more in this discussion it is to pose the question: Would territory exist without space? As a theoretical basis for the reflection and the spatial analysis, the idea needs to be adopted that no territory exists without space and moreover, that space is preceding the establishment of territories and territorialities. Therefore, the space represents the relations between nature and society; while the territory is

the result of relations of power and dominance over society and socio-cultural space⁽¹⁻³⁾.

It cannot be said that there are homogeneous regions, once the space is infinitely divisible and differentiated and relations of power and dominance are constantly changing. It is therefore necessary to make the analytical effort, mainly in the health area, even in larger scales, in order to try to understand how people live and relate to the places and spaces where they live as these spaces were constructed in the past and furthermore how the existing structure of the territories in these locations developed⁽⁴⁻⁶⁾.

Though not equivalent [...] space and territory can never be separated, since without space there is no territory — the space not as another type of "notch" or "empirical object" [...] but, in a more epistemological framework, as another level of reflection or a "another view", wider and more abstract, and whose specific "problematic" is intertwined with one of the fundamental dimensions of society the spatial dimension. The territory would fit within this dimension, a centralized focus on spatiality of power relations (1:105).

This means, in particular, that epidemiological studies of spatial character can benefit from open dialog between space and territory, since it is in this perspective that the problems are seen, comprehensive elements are developed and solutions are formed. In proposing this extended analysis perspective for spatial studies, it is not intended to devalue or reject the intellectual production from this field of knowledge. On the contrary, it is believed that the exercise of representing socio-environmental phenomena via mapping requires from the researcher a set of knowledge that enables the proposing of a complex reality analysis. This set of knowledge is intended to add the space and territory concepts, aiming to contribute to the multiple and various issues involved in the elaboration of studies in this area of knowledge.

Spatial analysis: potentials and limitations for epidemiological studies in the health area

Epidemiology is a science with a centennial buildup of studies and reflections, its capacity being notorious to add analytical perspectives to the discussions and spatial studies are one of its latest possibilities as interacting epistemological path and not just as a scenario of happenings.

Under this perspective is the new role of space in epidemiological studies, characterized as a product and producer of profiles of morbidity and mortality, which exceeds the initial proposals of "scenario of occurrence". In this sense, the incorporation of the variable space-territory in health studies incurs an important role in the differentiation of living conditions and well-being of populations with similar social profile but residing in different places⁽⁷⁾.

The processing and analysis of spatial geo-data and consequently their georeferencing tend to improve the understanding of the interactive processes of health and illness through their spatial correlations. The regional differentiation of health problems allows for the implementation of policies and practices adapted to different realities. Concepts like risk and vulnerability — coupled with cultural, social and environmental determinants — can, locally, give priority to the elaboration of measures which may positively intervene in the health and welfare management of collectives^(6,8).

The choice of the representation scale regarding the phenomenon, aggravation or process doesn't make sense if they are not qualified with the reality by means of socio-cultural, environmental and economic factors which are potentially constituents or directly responsible for the studied phenomenon. Thus, considering that the cartographic representations are static attempts of representing a reality in constant motion, the awareness of the limits and potentialities which this tool can offer the space studies in the large field of health is necessary⁽⁶⁾.

The root of this representation problem, both analytical and cartographic, seems to be in the misleading assumption that there is a real phenomenon, distinct, limited and visible, and that we are able to represent it with accuracy and precision, whether through a descriptive language or through a cartographic language. Well, we know that a large proportion of objects and phenomena we have drawn on a map, for example, are not proportional to the size we have chosen to represent them. Many times, they could not then appear if the choice was effectively guided exclusively by the proportion of the size. This is the case of roads, pathways, hydrographic networks, small towns, villages etc. In fact, each map is an arbitrary framework of choices, objects and phenomena that we wish to put into relation. The map is thus a kind of graphic device used as a

tool to demonstrate the relevance of certain relations (6:40).

It is understood that there is no single and exclusive "sight" of the analysis, to the contrary, spatial phenomena are perceived differently in different scales. Furthermore, there are no spacial-social phenomena and processes with a beginning and end in themselves, yet there are interrelations between the territorial expressions of certain phenomena, constructed on different scales in the same space^(3,6).

Thus, it is believed that one of the analytical challenges for future studies in this area is the difficult task of proposing interventions that take the various factors of spacial-social components into consideration, stage for disease and health of the populations.

Analytical territory: contributions to space studies in the health area

While admitting earlier that territory conceptually deals with power relations, it is also to acknowledge that the constitution of these has a direct influence on the use of space.

A good example of such spatial use or "ownership" can be observed in the process of occupation of space in big cities. This process occurs in a clear manner in the outskirts, poorer regions with intense social inequalities. It is believed that the urban space is constituted in fragmentary form, making it possible to distinguish the various social and economic contexts, the molders of territories. In this sense, the territory assumes the role of expressing social, political, economic and cultural relations of a particular place, at a particular time. Thus, it is in the constitution of the territory where the reference to the social production and appropriation of nature is to be found and moreover, the territory also assumes a figurative role of venue for the conflicts of gender, class and ethnicity^(9,10).

In situations of health and/or disease, one could see carnal cultures as producers of health vulnerabilities, which are potentiated considering the inhabited spaces in urban cartographies of social exclusion, verified in cases of violence, for example.

In the same line of reasoning it should be noted that territory is the expression of power immersed in society-space relations of domination and/or ownership. It is a socially

constructed territory, starting with the occupation of space over the appropriation of nature up to the constitution of power relations⁽¹¹⁾.

[...] within a process of domination and/or appropriation, the territory and the territorialization must be worked on in the multiplicity of its manifestations – that is, also, and above all, multiplicity of powers, embedded in them through the multiple agents/subjects involved. Thus, we must first distinguish the territories according to the subjects that constructed them, may they be individuals, social groups, the state, companies, institutions [...]. The reasons of social control through space vary by society or culture, the group, and often with the proper individual. A "geographical area", i.e. the "territory", is controlled with the aim to "achieve/affect, influence or control people, phenomena and relationships" (11:31).

It is understood that there is no way to define the individual, the group, the community and the society without inserting them in a particular geographic-territorial context. Therefore, it is necessary to add the constituent aspects of the territories to many of the proposed spatial analysis under the risk of being disregarded or predisposing factors of these products in certain phenomena. In the health area it is imperative to use the concepts of territory for a better understanding of the relations that predispose or not the individual or community to a particular harm or damage^(1,3,11).

Understanding how spatial-territorial relations are organized and reproduced socially in the construction and constitution of spaces and territories seems inevitable as analytical advance. In this sense, it means social inequalities as producers of different spaces and territories being also responsible for the situation of health and disease as well as social well-being or malaise^(1,3,12).

Thus, in social contexts of intense asymmetry of living conditions and increasingly exclusionary power relations, the need for analytical studies and proposals which are capable of bringing data from reality, taking into consideration the close relation of these factors with the formation, use and appropriation of spaces and territories is to consider. It should be noted that the urban space reflects faithfully the dichotomy between social classes and the

generation of inequality, being conditioned by and conditioning certain phenomena and/or harms to health, in particular one can refer the external causes of morbidity and mortality in their complex socio-cultural casuistry^(10,13,14).

The territory, in this stage of social disparities, fits the purpose of improving the understanding of the relation of the subject with the environment. It is also known that preventive and promotional health measures — if dislodged from the local reality — can contribute little or no effect to its focus of action and are therefore unable to produce transformation. In this regard, the notions of territory and space can help in understanding, formulation and application of adjusted measures based on the local needs taking into account the specificities of individuals and collectives.

FINAL CONSIDERATIONS

Far from proposing a thorough conceptual analysis or even discuss concepts, this brief reflection aimed at stimulating the reader to pay attention to the need for expansion and readjustment of analytical tools in the use of the notions of space and territory in space studies in the health area.

Based on the fact that geographically distant disciplines have difficulty in the proper use of the concepts of space and territory which in many cases undermines the analysis and consequently the intervention in the health area. The notions of space and territory, as well as their use by the different areas of knowledge present themselves as open field for new contributions.

Thus, it is understood that space and territory are not separated and therefore cannot be studied without reference to the fact that one directly influences the structuring of the other. That said, it should be noted that it is necessary to invest in new forms of interpretation of spatial phenomena in which analytical proposals regard the multiplicity of factors that constitute social and environmental relations, the synergy between these factors to predispose illness and health situations, interventions that take the complexity of the social space as stage of the populations' health and illness situations into account as well as the different relations between

sociology and space in a perspective of interaction with the concept of territory.

The extension of analytical possibilities when designing studies with this perspective also depends on the capability to develop, as researchers, a dialog with subjects of other areas

of knowledge. Finally, it is believed that the dialog regarding knowledge and practices can shorten distances between problems and solutions in light of a complex reality of understanding.

DA CARTOGRAFIA AO TERRITÓRIO: DESAFIOS PARA OS ESTUDOS ESPACIAIS NA ÁREA DA SAÚDE

RESUMO

Esta reflexão consiste em uma releitura dos conceitos sobre espaço e território, objetivando contribuir para a ampliação das propostas analíticas dos fenômenos territoriais, a partir dos estudos espaciais na área da saúde. Partiu-se do fato de que as disciplinas distantes da geografia têm dificuldade na utilização dos conceitos de espaço e território, o que, em muitos casos, prejudica a análise e, conseqüentemente, a intervenção no campo da saúde. Assim, entende-se que as noções de espaço e território, bem como sua utilização pelas diversas áreas do conhecimento situam-se como campo aberto para novas contribuições. Essa proposta reflexiva aborda o conceito de espaço e território, transpondo a dimensão espacial para a dimensão social, sustentada na coexistência simultânea da sociedade em sua relação com a natureza. Pretende-se como avanço analítico, investir em propostas interpretativas dos fenômenos espaciais, a partir dos conceitos de espaço e território, considerando a multiplicidade de fatores que constituem as relações socioambientais.

Palavras-chave: Epidemiologia. Análise Espacial. Saúde Pública.

DE LA CARTOGRAFÍA AL TERRITORIO: DESAFÍOS PARA LOS ESTUDIOS ESPACIALES EN EL ÁREA DE LA SALUD

RESUMEN

Esta reflexión consiste en una re-lectura de los conceptos sobre espacio e territorio, con el objetivo de contribuir con la ampliación de las propuestas analíticas de los fenómenos territoriales, a partir de los estudios espaciales en el área de la salud. Se comienza con el hecho de que las disciplinas distantes de la geografía tiene dificultad en la utilización de los conceptos de espacio y territorio, lo que, en muchos casos, perjudica el análisis y, conseqüentemente, la intervención en el campo de la salud. Así, se entiende que las nociones de espacio y territorio, bien como su utilización por las diversas áreas del conocimiento se sitúan como campo abierto para nuevas contribuciones. Esa propuesta reflexiva aborda el concepto de espacio y territorio, trasponiendo la dimensión espacial para la dimensión social, sustentada en la co-existencia simultanea de la sociedad en su relación con la naturaleza. Se pretende como avanço analítico, investir em propostas interpretativas de los fenómenos espaciales, a partir de los conceptos de espacio y territorio, considerando la multiplicidad de factores que constituyen las relaciones socio-ambientales.

Palabras clave: Epidemiología. Análisis Espacial. Salud Pública.

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Submitted: 19/03/2013

Accepted: 11/03/2014