# **Strangeness in bibliographic research:** cartography invention in systematic search

Estranhamentos na pesquisa bibliográfica: invenção cartográfica na busca sistemática

Extrañeza en la investigación bibliográfica: invenciones cartográficas en la búsqueda sistemática

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Abstract: The aim of this article is to describe and analyze the procedures of a bibliographic research carried out by researchers involved. Based on the ethics of "transforming to know" the research counted on a process divided into four steps: construction of a procedure to search for content; selection of content found; critical-analytical study of the data obtained and its systematization. Countering the traditional bibliographic research, the steps

described in the article were not established a priori, but were delineated throughout the investigative process. This reveals the differential of the study: a bibliographical research of cartographic inspiration that operates the principle of the methodological inversion of a hodos-meta. In this proposition, the goals are defined when walking and are not anticipated to the research course. It is concluded that, even in apparently standardized procedures, as in the case of systematic search, a research process always reserves space for invention.

Keywords: Methodology. Literature Review. Invention.

Resumo: O objetivo deste artigo é descrever e analisar os procedimentos de uma pesquisa bibliográfica realizada por pesquisadores implicados. Apoiada na ética do "transformar para conhecer" a investigação contou com um processo didaticamente dividido em quatro etapas: construção de procedimento para busca de conteúdos; seleção dos conteúdos encontrados; estudo crítico-analítico dos dados obtidos e sua sistematização. Diverso às pesquisas bibliográficas tradicionais, as etapas descritas no artigo não foram estabelecidas a priori, mas se delinearam ao longo do processo investigativo. Isto revela o diferencial do estudo: uma pesquisa bibliográfica de inspiração cartográfica que opera o princípio da inversão metodológica de um hódos-metá, no qual as metas são definidas ao caminhar e não são antecipadas ao percurso. Conclui-se que, mesmo nos procedimentos aparentemente padronizados, como é o caso da busca sistemática, um processo de pesquisa sempre reserva espaço à invenção.

Palavras-chave: Metodologia. Revisão de Literatura. Invenção.

Resumen: El objetivo de este artículo es describir y analizar los procedimientos de una investigación bibliográfica realizada por investigadores implicados. Apoyada en la ética del "transformar para conocer" la investigación contó con un proceso didáctico dividido en 4 etapas: construcción de procedimiento para búsqueda de contenidos; selección de los contenidos encontrados; estudio crítico-analítico de los datos obtenidos y su sistematización. Diverso a las investigaciones bibliográficas tradicionales, las etapas descritas no se establecieron a priori, pero se delinearon a lo largo del proceso. Esto revela el diferencial del estudio: una investigación bibliográfica de inspiración cartográfica que opera el principio de la inversión metodológica de un hodos-meta, en el cual las metas se definen al caminar y no se adelantan al percorrido. Se concluye que, incluso

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en los procedimientos aparentemente estandarizados, como es el caso de la búsqueda sistemática, un proceso de investigación siempre reserva espacio a la invención.

Palabras clave: Metodología. Revisión de Literatura. Invención.

#### Introduction

Diving into a problem in order to produce knowledge is, ultimately, an opportunity to germinate realities. However, even though the inventiveness of science is demarcated here, so as to recognize in it a certain vitality (CANGUILHEM, 2012), it is crucial to point out that scientific productions are carried out amidst studies and practices imbued with an "ethics of academic knowledge", reaffirming the need for rigor in the production of information.

Therefore, it is expected that every writing which materializes academic production will have a text of theoretical foundation and that, in a more evident or diluted way, it presents concepts and/or world conceptions displaying the primary bases for what one wants to express. In this sense, the literature review is a fundamental stage of academic work, may being identified as ballast for scientific writing. It can be narrative, systematic or integrative (FERENHOF; FERNANDES, 2016).

The narrative review originates from a "[...] research for convenience and without objective artifacts of material selection" (MARIANO; SANTOS, 2017, p. 431). Therefore, as an exploratory review in which the selection of content is arbitrary, it does not have the objective of exhausting the existing information about the subject (FERENHOF; FERNANDES, 2016).

The systematic review holds as main characteristic a methodological rigor with preestablished steps. Such a review modality uses clearly defined selection criteria for the range of its material, intended to reduce the probability of error in the used texts choices. There is always more than one researcher involved, so everyone should read all the material they could come across and, after discussion, they decide what content the review text would contain. In this type of article are searched initial studies related to a specific question, from which will be extracted the data for the construction of a synthesis of the information found. Such synthesis can be analyzed in a narrative or statistical way (FERENHOF; FERNANDES, 2016; MARIANO; SANTOS, 2017).

The integrative review, in turn, also occurs in a planned form. In the same way as the systematic review, it relies on a systematic search for material, assuming an investigation that, through well-structured planning, attempts to eliminate bias. Unlike the systematic review, which focuses on primary studies, the integrative review may have a limited or broad purpose, considering, for instance, data from the theoretical literature and other types of research. Therefore, it aims, through explicit and systematic methods, to synthesize results and launch new perspectives (FERENHOF; FERNANDES, 2016; MARIANO; SANTOS, 2017).

As well as Ferenhof and Fernandes (2016), who make a point of defining the difference between the systematic review and the systematic search (which is part of the integrative review), Lima and Mioto (2007) consider it essential to mention the variation within the

bibliographic review and the research bibliographical. For these authors, the bibliographic review (or literature review) is a prerequisite for any subject, whatever it may be; while bibliographic research is defined as being "an orderly set of procedures for searching for solutions which are attentive to the object of study and that, therefore, cannot be random" (LIMA; MIOTO, 2007, p. 38). Hence, while the review is part of a research, bibliographic research is research in itself. As expected, this does not preclude a literature search from providing elements for a literature review.

That being said, we display that the present article presents the course of bibliographic research, carried out for two years, which provides support to the studies of a research group and content for literature reviews in future productions. With the purpose of sharing an inventive experience of accomplishing a customarily protocolary stage of academic studies and indicating some of its results, the present article aims to report the experience of a bibliographical research, based on a "transform to know" which does not take reality as something already given, that exists prior to the work of the researcher, but as a field which reveals itself in the act of research and it is relaunched at all times.

In order to undertake it, it would be important a contextualization of the group which conducted the experience, its foundations and ways of working, followed by a detailed description of the bases and procedures of the bibliographic research, the same way as done by the group, to finally point out the effects that this work assumed in the investigative process in which it is inserted.

# Grupo intervires and its mode of searching and intervening

INTERVIRES<sup>i</sup> is a Group of Studies, Research, Inventions, and Interventions in the field of collective health, cities, mental health policies and policies of contemporary subjectivity. It is linked to the University of Rio Grande do Sul (UFRGS) PPGPSI and, since 2008, it has dedicated to the experimentation between methods, from a transdisciplinary perspective.

As a result of many of its studies in the field of mental health and public health correlated to debates on public spaces, public policies and ways of governing, in mid-2016, the group became interested in studies of the city. In 2017, the research "Urban Experiences and Common Production: ways of life and invention of cities in times of intolerance" was started with the objective of analyzing the diversity of lifestyles that compose the urban experience, following the processes of exclusion and resistance of different groups in the city of Porto Alegre.

The initial challenge to the researchers was to understand how the city is being seen in scientific articles and for whom the city is projected. It was this aspect which delineated the bibliographical research, focused on the perceptions of city and subjectivity, considering the inseparability among the two concepts.

We consider that the production of scientific knowledge through bibliographic research is a practice which implies the delimitation of criteria that determine methodological

procedures, to make it possible to search for solutions to a research problem or convoluted a problematic field (LIMA; MIOTO, 2007). In the process of researching, "[...] the methodological delineation [...] tends to be the most delicate, difficult and sometimes overwhelming part of any study" (MAURENTE, 2015, p. 109) because the choice among a multiplicity of methods means the abortion of so many other possibilities.

If, on the one hand, as Maurente (2015) says, the choice of a methodological strategy silence certain possibilities, at the same time, it announces an epistemological alternative, stating not only a world view but also a relation with knowledge itself. Consequently, we advocate that both the understanding of how a concept and a theoretical perspective operates and the way research is composed in the field of inquiry are (both) decisive in adopting a method that makes bibliographic research possible.

The quote of "transforming to know" (BARROS, 1997, p. 189), taken from the critique of the pedagogical institution formulated by French institutionalism, defines the way INTERVIRES to move in the field of study, assuming that the production of knowledge does not reveal meanings, but creates them. There is no division between research and intervention; therefore, any interference modulates the actions of the research field and is the process of transforming a reality that implies the possibility of producing knowledge about it (BARROS, 1997; PASSOS; BARROS, 2015).

Although there is an entire literature of scientific methodology indicating ways of doing bibliographic research, the analysis narrated here did not follow any of the predetermined strategies. The bibliographic research of INTERVIRES was conducted in a process that occurred from the presuppositions of cartography.

Passos, Kastrup and Escóssia (2015), in the presentation of the book "Tracks of the cartographic method", highlights that cartography descends directly from the concept of rhizome, developed by Deleuze and Guattari. Thus, cartography refers to a way of doing research that cannot be disconnected from an acentric system - the rhizome has no center. In this way, cartography is inserted as a guideline that does not impose a predetermined direction, since in the rhizome logic all linearity is undone, there is no beginning or an end, there are possibilities. The authors say:

When the methodology is imposed as a command it is defined by rules previously established. Hence, the traditional meaning of methodology that is printed in the etymology of the word itself:  $met\acute{a}-h\acute{o}dos$ . With this direction, the search is defined as a predetermined path  $(h\acute{o}dos)$  by the starting goals. On the other hand, cartography proposes a methodological reversion: to transform  $met\acute{a}-h\acute{o}dos$  into  $h\acute{o}dos-met\acute{a}$ . This reversal is a bet on the experimentation of thought - a method not to be applied but to be experienced and assuming as an attitude (PASSOS; KASTRUP; ESCÓSSIA, 2015, p. 10-11).

Exploring a path of continuous experimentation, the INTERVIRES group understood that it is possible and desirable to make the methodological inversion proposed by cartography a guiding principle of bibliographic research. It was built an idiosyncratic movement to develop the step-by-step of bibliographical research that, throughout its own development, was negotiating criteria of the next theoretical choices and establishing modes of operation of the group of researchers for the subsequent study.

It is known that, in the production of scientific knowledge, it is customary to make a literature review to know the main lines of research that turn to a certain problematic area (MARIANO; SANTOS, 2017). This is not, for sure, the originality of the researcher's course that the present article proposes to examine. What is being emphasized here is that although the principles of avoiding hypotheses or based on theoretical assumptions about the research problem were not new to the research group, it was an unusual experience for INTERVIRES to perform such a proposal in bibliographical research. Thus, we intended to carry out a systematic hunt for reading material, which constituted bibliographical research, in which the method was collectively constructed as well as the study itself.

We will now turn to the details of the procedures by which this experiment was built.

# Building a bibliographical review process

So as to provide a basis for thinking about the production of subjectivity and the urban experiences which promote the production of the common as a form of resistance to contemporary capitalism, bibliographical research was supported by the methodological inversion proposed by the cartographic method (PASSOS; KASTRUP; TEDESCO, 2014; PASSOS; KASTRUP; ESCÓSSIA, 2015). It was developed within two years and outlined in three steps, which we describe as follow:

#### 3.1 Step 1

It aimed to find scientific articles which could present how the studies on cities, in their interface with the concept of subjectivity, have been presented in the context of scientific articles. This stage consisted in the choice of databases (1st phase); selection of descriptors and testing of the chosen descriptors (2nd phase); search for articles and organization of found articles (3rd phase).

#### 3.1.1) Phase 1: Selection of databases

In the discussions about where to look for contents, it was believed that the research should use platforms which contemplated articles from different places of the world. It is essential, however, to emphasize that, although it was desired to know different productions, the group had a particular interest in scientific productions of Latin language, given the approximations to the Brazilian reality. The consensus on platforms was possible while the selection criteria were the subject of extensive debate. The chosen databases were Scopus and Scielo since both have a significant number of journals covering the problematic in focus. Besides, Scopus is listed as one of the most important databases (MARIANO; SANTOS, 2017). It brings together journals from different parts of the world and it is an internationally recognized base with free and paid access. Scielo, in turn, has open access and it is more restrict - at the time of the research, only 1200 journals were found in its base - mostly Latin American.

#### 3.1.2) Phase 2: Selection and testing of descriptors

The starting point for the choice of descriptors to be used came from the most important keywords in the matrix research: City and Subjectivity. Given the polyphony of the terms, and the initial and previous readings already made by the group of researchers, it was soon realized that these keywords would cover a large number of articles (close to 1200). Coming after, there were adopted which terms descended from the two original descriptors and how to cross them to proceed with the bibliographic search. Initially, the chosen descriptors, in two thematic families, were: Subjectivity, subjectivation, alterity, singularity and, in the second group: city, urban, polis, and citizenship.

In order to validate the decision of the descriptors, a number of tests have been conducted to validate the chosen term for a search of articles in databases (MARIANO; SANTOS, 2017). In this crucial phase of descriptor testing, the term citizenship was excluded as it greatly expanded the volume of readings with articles far removed from the focus of the matrix research. It was also observed that the terms City and Subjectivity appeared in other combinations of descriptors in which the term citizenship was not included, which was determined for supporting the decision to exclude it. Thus, we sought for texts through two families of descriptors, each were composed of four words that descended from each original descriptor. The cross combination (with AND) between the descriptors formed 16 combinations considering each of the descriptors of the first family was crossed with each of the descriptors of the second family. For instance, subjectivity and city; subjectivity and urban; subjectivity and urban; Subjectivity and polis; Subjectivation and city; subjectivation and urban and so on until the descriptors of the two thematic families are exhausted.

#### 3.1.3) Phase 3: Search for articles and organization of articles found

The set of articles that resulted from the 16 searches on the Scielo platform, added to the set of articles resulting from the 16 searches made on the Scopus platform resulted in 753 articles -186 from the Scielo platform and 567 from Scopus. It was decided, considering the number of articles obtained in this stage of the research, firstly, to make a reading of the summaries of before-mentioned items. So, excluding the articles repeated in the two databases, 562 abstracts were read, which consists of the second stage of the bibliographic research described here.

#### 3.2 Step 2

Aiming to select the articles that would definitely compose the set of readings and serve as the basis for the studies and possible academic productions of the main research, this stage consisted in the creation of questions for the reading and evaluation of abstracts in order to establish a selection of articles (1st phase); reassessment of abstracts filtered in the first phase (2nd phase); evaluation of the filtering performed and creation of a new benchmark question for reassessment of abstracts and their categorization in thematic axes (3rd phase).

#### 3.2.1) Phase 1: Creation of benchmark questions, reading and evaluation of abstracts

The 562 abstracts of the articles selected in the previous stage were read by the group of researchers, considering four reference questions. The intention was to establish criteria to

include and exclude articles in the list of readings. The guideline questions served as parameters for valuing articles from their connection to the focus-themes from original research. To that end, each question generated a specific score that would make it possible to prioritize the importance of the articles, if the reading of their abstract allowed them to answer it. The four benchmark questions and their valence in points used in this step were:

- Does the abstract refer to Subjectivation Processes? (4 points);
- Does the summary bring a perception of cities beyond the strictly understanding of located equipment and space? The concepts should refer directly to the city, but not in its literalness necessarily (3 points);
- Does the abstract mention the way the subject relates to the city (hegemonically or against hegemony)? (2 points);
- Does the abstract present theoretical-methodological tools to think about the city beyond geographic space? (1 point).

Thus, if after reading the abstract the researcher realized that the article answered positively to the first question, it was punctuated with 4 points; if punctuated with 3 points indicated that the article would answer the second question, successively, when it answered positively to the fourth question, the summary received 1 point.

There is much knowledge about the process of material selection to compose both bibliographical research and literature review (FERENHOF; FERNANDES, 2016, LIMA; MIOTO, 2007, MARIANO; SANTOS, 2017). Despite this, it is necessary to indicate that this strategy of inclusion/exclusion of articles to be read in full was built in the collective research, computing several processes of testing and stoning of the guiding questions. The four questions were elaborated with the purpose of detecting, among the studies (resulting from the search carried out in the previous stage), writings that could indicate which city (ies) - and which city (ies) for whom - has been the subject of research in the publications made in Latin America, considering the conceptual perspective assumed by the research group INTERVIRES.

In this sense, it was essential to implement, at each stage of bibliographic research, the exercise of stopping the process and reviewing how the readings were being sought. This procedure was based on the discussions and new questions raised by the readings made in the course. At each stage of the bibliographic research described here, therefore, a form of searching was invented, always attentive to the proposed objectives.

This procedure seems to be closely related to the flexibility of the bibliographic research demarcated by Lima and Mioto (2007) at discussing the methodological procedure in exploratory-descriptive studies. However, the authors affirm that such flexibility "[...] does not mean a lack of commitment to the rational and efficient organization of the task [...]" (LIMA; MIOTO, 2007, p. 40). The adaptability in the inventive process described here evolves questions collectively erected during the study, comprising the investigative movement to affirm in it its methodological rigor. In the course of the bibliographic research of INTERVIRES, there was notable the numerous tests of benchmark questions in the selection of articles and the continuous process of evaluation procedures at each stage of the investigation. As a consequence, the production of knowledge was conducted rigorously and

technically. It was also part of the options that made up the research procedures the fact that all abstracts were read by two different researchers, who did not communicate about their impressions of the reading they had done.

#### 3.2.2) Phase 2: Re-evaluation of filtered abstracts

There were cases where there was disagreement between the evaluations made by the two readers. Therefore, at this stage of the second stage of the bibliographic research, the group assigned a third reader (who had not yet read any of the articles with discordant evaluations) to function as a blind judge to assess - using the same 4 benchmark questions - if the text would be part or not of the list of articles to be read in its fullness. We excluded articles whose abstracts were scored with less than five points by any of two readers.

3.2.3) Phase 3: Evaluation of filtering, creation of a new benchmark question, reassessment and categorization of abstracts

Following the previous phases, 236 articles remained. The researchers still conceived that this number was very high and, most importantly, there was still a considerable amount of articles that brought a few questions to the subject and to the theoretical perspective assumed by the research group. The group concluded that it was still necessary to create one more resource to improve material selection.

As a consequence, through discussions among the researchers, based on tests made with some randomly selected abstracts, another question was elaborated. Thus, abstracts with a score equal to or greater than five were re-read by the researchers, to answer the following question: In the article approach, does the city/space/territory operate or produce processes of subjectivation? Articles that had an affirmative answer to this last question were selected to be read in their entirety.

Finally, 107 articles were selected, which were categorized in thematic axes in order to better organize the studies. The thematic axes were created from the readings of the abstracts and validated by the members of the research group. At the end of this stage, the remaining 107 articles were grouped according to its contents and distributed among eleven thematic axes: Architecture and urbanism; Art and media; Rural context; Body and city; Care in the health network; Gender and sexuality; Immigration and territorial borders; Childhood and youth; Fear and violence; Ethnic-racial, Afro-Brazilian and indigenous relations; Work and productive relations in the city.

#### 3.3 Step 3

The purpose was to promote a group study of the articles found in the previous stages of this process, as well as to create strategies to facilitate the retrieval of texts for using in future literature reviews belonging to research reports, scientific articles or other workable materials.

This stage consisted of the construction of a model of reading sheet, besides the reading and writing of the texts (1st phase); its presentation in debate sessions between researchers,

making of file tags and tagging (2nd phase); insertion of the reading sheets into qualitative research software and summarization of the issues discussed in the study process (3rd phase).

### 3.3.1) Phase 1: Construction of reading sheet, reading and annotation

In this phase of the third stage, each researcher was in charge of reading a certain number of articles, marking up them and presenting it to the other members of the research group. In order to do so, an annotation template had been previously discussed and decided. It was essential to consider the way each file - the ones earlier found in the research and its respective annotation files - should be named (because these files would be part of a virtual library of the group) and the actions to be followed by them to make their reading sheet.

Some authors claim that annotation is a crucial phase of the bibliographic research, and indicate that it should present, mainly, a summary of the work read and its bibliography, and it also could provide models which can help researchers and students (MARCONI; LAKATOS, 2007). However, just as the research process was singularly elaborated in this investigation, the model of annotation assumed in INTERVIRES was developed by the research group itself, considering the needs implied in this study and the peculiarity of the research.

Taking into consideration the process of making the reading sheet, it initially consisted of: 1) Reference of the article and its link to access; 2) Central idea of the text in a phrase written by the author of the reading sheet and keywords; 3) Space for an analysis or critical comments considered necessary for the research; and, 4) Citations of the article, considering the context of the research matrix.

When the second stage of this third stage was completed, the group considered relevant to add two other items: 5) Identification of the author of the record; and, 6) Research methodology performed.

#### 3.3.2) Phase 2: Presentations, tags production and records tagging

The articles presentations were based on the thematic axes established in the preceding stage. During the debates concerning the reading of the 107 articles, the researchers noticed that some themes were repeated in several studies, and identified, in the selected texts, statements about certain authors, important quotations that usually make up the theoretical references of the group's research, different ways of conceptualizing the city, as well as the presence of other themes (drugs, racism, gender, tourism, etc.), discussed in an articulated way to the city.

From this perspective, came to our mind the idea of developing a strategy that could allow the identification of before-mentioned topics (citations, concepts, approaches etc.) in the annotations, in order to favour and facilitate the construction of literature review texts, retrieving the content coming from bibliographic research carried out by the group.

From what was then perceived in the texts found in the bibliographic research, tags were collectively constructed, which would function as a sort of tag/code or thematic categorization of content found in the article. These tags had the purpose of enabling the retrieval of information/contents, at the moment of writing reports or other scientific texts resulting from the matrix research. In this way, each annotation was tagged by the author of

the reading card, which it may be again revisited (for new tagging) if, at some point, another tag appeared.

To ensure that the researchers clearly understood what each tag meant, a number of group tagging exercises were done. It would happen, for instance, when a researcher took his/her reading sheet to the group and everyone read the text together; sometimes the content was discussed articulating it to the tags already consolidated by the group; at times, an already consolidated tag was renamed, amplifying the meaning of this code; other times, new tags were created from the content discussed. This collective exercise served both as a studied movement pertinent to the bibliographic research process and as a procedure to ensure alignment as to what each tag meant.

Moreover, to assist in this process of tagging, at each meeting, the group reviewed a shared document that not only lists each of the tags but also gave a brief description of elements or issues that constituted each thematic category. Thus, it was possible at any time in this process to review the labels proposed by the group, along with recovering the meaning of each one of them.

This step was accompanied by the reaffirmation of both the collective effort and the creative process in the research because it emerged issues related to the leading research which was relaunched each time a tag was created. In the same way, the readings of the articles were re-assigned to each tag created, and so the researchers faced the task of redoing their reading sheets whenever the discussion about the tags required modification of their meaning. For example, the tag "Research Methodologies" included item 7 (research methodology used) of the reading sheet. At one point, the researchers presented the content of their files by exposing the tags they had used in their reading cards, remarking that these tags served to categorize the themes found in the articles, through an inductive analysis, as it usually occurs in qualitative research (NUNES *et al.*, 2017).

Overall, at this stage of the bibliographic research, 28 tags were formed. They are: Authors; Circulation and urban mobility; Colonization; Conceptualizations of city; Children and youth in the city; Drugs; Education; Genre; Group / Collective / Urban tribes; Indigenous people; Individualism / Contemporary capitalism; Memory and time; Research methodologies; Models of city / Modes of life in the city; Migratory movements in the city; State policies / Public policies; Segregation / exclusion practices; Productivity of subjectivity; Production of the common; Racism; Religiosity; Inventive resistance; Health; Territory; Urban violence; Urban and rural; Pride / Good relationship with the city; Cultural production / Tourism.

3.3.3) Phase 3: Insertion of the reading sheets in software and summarization of discussed issues

In this last phase of the bibliographic research, all annotations (as well as the texts from these materials) were already from the virtual library INTERVIRES. Then the 107 files were inserted in the Atlas.ti program. Atlas.ti is one of the most used software in qualitative research. The use of it in qualitative research serves to - through the use of technology - perform tasks which researchers have been doing manually for years. This resource saves researchers time and can aid information storage, as well as data management and retrieval (NUNES *et al.*,

2017). In this way, the use of the software was aligned with the interest of organizing the data found in the bibliographic research, in order to facilitate the retrieval of the same through the tags created collectively to, in the future, promoting the construction of literature reviews, for example.

It is of fundamental importance to highlight that the use of software, in this case, neither simplified the research process (ignoring the complexity of the data obtained), much less made this process mechanized. The software was used as a strategy to organize a large volume of information and content, not being primarily used as a way to analyze the results of the research. The use of Atlas.ti contributed to the construction of the tags. Also, although the program was not used for data analysis construction, it was possible to easily see the overlap of themes found in the articles read.

Finally, the use of the program helped a process of summarization of bibliographic research, allowing a quick survey of the topics that the group discussed throughout the process. It allows, in a few clicks, to retrieve answers found for the research problem, which had guided the research process traced collectively by INTERVIRES.

# Inventing, still, a way to conclude

The bibliographic research described here derives from matrix research that fostered the systematic search for articles which dealt with a specific theme: city and its processes of subjectivation. To trace the current literature on the subject and to deepen the understanding of the interdisciplinary collective of researchers about its contents, four distinct stages of bibliographic research and study organization were created and followed. In the first one, databases were appointed to seek scientific writings, descriptors were chosen, and the search for articles was done, considering correlations decided by the group. In the second step, a way of filtering the obtained articles was developed and put into practice. In the third step, all the selected articles were read, and tags were built, which served as codes to feed (along with annotations) a useful software for qualitative research.

Putting in this way, it seems like an easy and simplified process. The method was conducted as a cake recipe, which can establish itself as a model. However, in this text lies a complicated process, that overflows the procedures required in a summary of a paragraph. In all the steps summarily described, the researchers invented ways of doing research, guided by the presuppositions of cartography - which, contrary to systematic searches, grants a peculiar way of being attentive (KASTRUP, 2015a) — inventing always has an unpredictable result (KASTRUP, 2015b). At the beginning of his methodological adventure, the INTERVIRES group could not perceive where it would arrive, but it knew that find/create a way of studying was imminent, deepening understandings, tracking existing productions that echoed in its rhizomatic and singular way of composing a research process.

Drenched by a worldview, the group produced itself at every step of the research, giving new meanings to their way of working. It might seem in the experimentation of these procedures a simple reproduction of a bureaucratic model which registers the research process

and frames was done. However, in the end, it was possible to think of it, to establish itself more as a proposal to share readings and debates, to discard references, to highlight other ideas, to disagree, to recognize thoughts in the words of different authors.

It is true that the memory of this bibliographic research was a first experience of the field of the research-matrix - we do believe that the field is not limited to a physical territory where researchers and non-researchers are combined. The area of understanding has also constituted and concomitantly became a range in this research.

It is also real that the experience brought a myriad of reflections which are necessary at each stage and essential to the purpose of the research. Undoubtedly, the narrative of this process of bibliographical research - which involved a systematic search for content, in a group that used only to make narrative revisions - placed us in the position of those who need to tell not only about how such a process was carried out, but still what was done in such a process: "Knowing is to analyze" (CANGUILHEM, 2012, p. 1).

If, as Kastrup (2015b, p. 142) says, "The invention of self is at the same time the invention of the world", INTERVIRES invented a world of forms of reading, a system of ways of storing acquired knowledge, along with a world of ways of sharing the knowledge produced and assembling previously unprecedented acquaintance.

Even though there are several articles of scientific methodology that establish the most various protocols for the most varied tastes, the experience described here reveals that, even in the rigor of a systematic search, it is possible to create and produce the common. Even in the work of the most rigorous researcher, one who follows the pre-established norms strictly, there is a deviation (sometimes invisible) that touches creation.

In the group process INTERVIRES, articles, concepts, and paths of different researches already made produced a scheme that, resembling urban fabric, is made of hegemonic and counter-hegemonic ways of operating; it is made of inventions, repetitions, reproductions of the capitalist model and forms of resistance to it. In INTERVIRES, the systematic search and bibliographic search in this template were part of a deviation from the "protocol of studying without protocols". It was interesting to see a mode of continuous experimentation, based on a search rested on methodological procedures that, in principle, did not seem to commune with the group's epistemological thinking. Because of this, the research procedures that the group refused and the research movements that the group chose and welcomed from the outset were embedded in the same process. Experimenting "implies constructing a way of researching that embraces the experience that insists on expressing the multiplicity that constitutes us" (LAZZAROTTO, 2015, p. 101). It means forcing thinking to move. Navigate a field where categories are not in question. Turn to the production of more nameless. In this sense, "to produce is [...] to constitute areas of possibilities" (SCHEINVAR, 2015, p. 196).

The construction of the procedures of this bibliographic research and its experimentation compose a narrative that produced researchers and knowledge in an integrated process. From this encounter, we open a range of possibilities for the continuity of analysis and the generation of academic productions about the theme in its complexity. The challenge of

turning to the research problem, in this course, was provoked by the commitment, implicit in the production of knowledge, to address the problem of the research process itself.

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#### **Notes**

<sup>&</sup>lt;sup>ii</sup> This is an ongoing, funded project that was triggered by a partnership between British and Brazilian researchers to investigate modes of subjectivation and the urban boundaries of four Brazilian cities. The research "Urban Experiences and Common Production: ways of life and invention of cities in times of intolerance" has been designated here as the matrix research, since from it came developments, including the bibliographic research reported in this article, as well as as other projects from different graduate programs linked to it.



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Research Group Blog INTERVIRES: https://www.ufrgs.br/intervires/. Accessed on: Dec. 20, 2018.