Análise qualitativa: teoria, passos e fidedignidade

Qualitative analysis: theory, steps and reliability

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Abstract This essay seeks to conduct in-depth analysis of qualitative research, based on benchmark authors and the author's own experience. The hypothesis is that in order for an analysis to be considered reliable, it needs to be based on structuring terms of qualitative research, namely the verbs 'comprehend' and 'interpret', and the nouns 'experience', 'common sense' and 'social action'. The 10 steps begin with the construction of the scientific object by its inclusion on the national and international agenda; the development of tools that make the theoretical concepts tangible; conducting field work that involves the researcher empathetically with the participants in the use of various techniques and approaches, making it possible to build relationships, observations and a narrative with perspective. Finally, the author deals with the analysis proper; showing how the object, which has already been studied in all the previous steps, should become a second-order construct, in which the logic of the actors in their diversity and not merely their speech predominates. The final report must be a theoretic, contextual, concise and clear narrative.

Key words Qualitative analysis, Qualitative research, Comprehension, Interpretation, Dialectics Resumo Neste ensaio busca-se aprofundar a reflexão sobre o processo de análise na pesquisa qualitativa a partir de autores referenciais e da experiência da própria autora. O texto está organizado em forma de decálogo por meio do qual é tratado o tema processualmente. A hipótese é de que uma análise para ser fidedigna precisa conter os termos estruturantes da investigação qualitativa que são os verbos: compreender e interpretar; e os substantivos: experiência, vivência, senso comum e ação social. A seguir a proposta avança por 10 passos que se iniciam na construção científica do objeto pela sua colocação no âmbito do conhecimento nacional e internacional, na elaboração de instrumentos que tornem concretos os conceitos teóricos, na execução de um trabalho de campo que envolva empaticamente o investigador no uso de vários tipos de técnicas e abordagens, tornando-o um construtor de relações, de observações e de uma narrativa em perspectiva. Por fim, a autora trata da análise propriamente dita, mostrando como o objeto, que já vem pensado em todas as etapas anteriores, deve se tornar um construto de segunda ordem, em que predomine a lógica dos atores em sua diversidade e não apenas as suas falas, dentro de uma narrativa teorizada, contextualizada, concisa e clara.

Palavras-chave Análise qualitativa, Pesquisa qualitativa, Compreender, Interpretar, Dialetizar

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Introduction and text construction strategy

In this article I present a reflection about the qualitative analysis of studies with an empirical base. The text has two sources of inspiration: firstly, the various authors with whom I have been engaged in dialogue for over 25 years. The second is my own experience as an investigator, thesis and dissertation advisor and professor in the area of collective health. Although most of the elements considered here are important for any kind of qualitative analysis, I use particularly the approach which I call hermeneutic-dialectic, that is, the one which seeks comprehension and criticism simultaneously in both the understanding and interpretation processes. Starting with my own experience, I highlight that from all the requests I receive from students and colleagues, the most recurring one relates to how to analyze qualitative material. It is as if all other research phases, project preparation and field work constitute very simple stages that are easy to resolve, in contrast with the difficulties of how to deal with empirical and documental findings. This concern arises because qualitative studies differ from quantitative studies, where data collected in a standardized way and tackled with sophisticated analysis techniques allows the researcher some confidence in his study's reliability. This confidence should nonetheless be questioned¹. In the case of qualitative research, many other problems - which are in fact part of its own contingency and condition - make it difficult to know beforehand if the information gathered and the analyses created could be considered valid and sufficient.

I have divided this work into two parts. In the first, I show that a good analysis begins with understanding and internalizing the philosophical and epistemological terms that form the basis of the investigation and, from a practical point of view, when we begin defining the object. In the second part, I discuss the analysis process itself.

To do Science is to work simultaneously with theory, method and techniques, from a perspective in which this tripod mutually conditions itself: the way of doing depends on what the object demands, and the response to the object depends on the questions, instruments and strategies used in data collection. To this trilogy I always add that the quality of an analysis also depends on the investigator's art, experience and capacity for deepening, which set the tone and temper of the work he is creating.

I have tried to point out some crucial questions that provide the reference points of *objecti*-

vation^{2,3} and of the incomplete, provisional⁴⁻⁶ and approximate character of knowledge⁷.

Discussion

The premises for discussion of qualitative analysis are presented in decalogue form, in an attempt to facilitate understanding for those who seek to familiarize themselves with the qualitative approach.

First: To know the structuring terms of qualitative research. Your raw material is made up of a set of nouns with complementary senses: experience, lived experience, common sense and action. And the movement that informs any approach or analysis is based on three verbs: understand, interpret and dialectize⁸.

The term **experience**, historically used by Heidegger⁹, relates to what human beings apprehend in the place they occupy in the world and in the actions they perform. The sense of experience is understanding human beings are by understanding themselves and their significance in the world of life⁹. As it constitutes human existence, experience increases reflection and is expressed in language. However, language does not bring pure experience, as it is organized by the subject via reflection and interpretation in movement what the subject narrated and lives are ingrained in and by culture, preceding narrative and the narrator¹⁰. As for **lived experience**, it is the product of personal reflection on experience. Although experience can be the same for various individuals (siblings in the same family or people who witness an event, for example), each person's lived experience of the event is unique and depends on their personality, their biography and their participation in history. Although it is personal, each lived experience is supported by the ingredients of the collective where the individual lives the conditions with which it occurs. Common sense can be defined as a body of knowledge springing from the experiences and lived experiences that guide human beings in the various actions and situations of their lives^{6,9-11}. It is made up of opinions, values, beliefs and ways of thinking, feeling, relating and acting. Common sense is expressed in language, in attitude and conduct and is the base of human understanding. Given its character of expressing experiences and lived experiences, common sense is the ground for qualitative studies. **Action** (human and social) can be defined as the exercise of individuals, groups and institutions to construct their lives and cultural artifacts based on the conditions they find in reality. The concept

of action is linked to the notion of freedom to act and transform the world, which, to Heidegger⁴, does not constitute a place but rather a complex made up of the significance of experiences that make human beings historical beings.

The main verb of qualitative analysis is **understand**. To understand is to put yourself in another's place, bearing in mind that, as human beings, we are able to exercise this understanding⁶. To understand, we must consider the individual's uniqueness, because his subjectivity is a manifestation of total living. But we must also know that a person's experience and lived experience occur within the scope of collective history and are contextualized and enveloped by the culture of the group that person is inserted in. All understanding is partial and unfinished; both that of our interviewee, who has a contingent and incomplete understanding of his life and his world, and the researchers', because we are also limited in what we understand and interpret. When we seek to understand we must also exercise the understanding of contradictions: the being who understands, understands in language and action and both are characterized by being conflicting and contradictory due to the effects of power, social relations of production, social inequalities and interests12.

To **interpret** is a continuous act that follows understanding and is also present in it: all understanding contains the possibility of interpretation, that is, of appropriation of what is understood. Interpretation is existentially founded on understanding and not vice-versa, as to interpret is to elaborate the possibilities projected by what is understood^{6,9}.

Second - Define the object in the form of a question or a problematizing sentence and the**orize it –** The initial question guides the investigator during the course of his work. His analytical reflection, at this moment, is directed at adequately outlining the object in time and in space: it should not be so broad as to allow only a superficial view and not so restricted as to complicate the understanding of its interconnections. The definition of an object does not reside in the question itself, but in its clarification and contextualization via theorization, which turns it into a constructed scientific fact. It is obvious that clarity about the object – which will never be total and definitive - can only be reached at the end of research. Any investigation is no more than the search to answer the initial question. As Pascal¹³ reminds us, a work's conclusion should already be latent in its formulation, because all things are caused and causative.

In order to turn the object into a scientific construct it is necessary to invest in national and international accumulated knowledge, dialoguing with it or around it, in case there are no studies about the same subjects, as occurs in exploratory investigations. Once the research sources have been analyzed, the investigator must choose what theoretical framework to adopt, detailing the concepts, the categories and the notions that make sense to his research. This is also the moment to put forward, in a more substantiated way, the hypotheses and presuppositions that already existed as intuitions in the initial questions.

Third – Outline the field strategies. It is important to bear in mind that operational instruments also contain theoretical bases: they are made up of sentences (in the case of scripts) or orientations (in the case of field observation) which should be closely linked with the theoretical framework, with each of these elements being a type of operative concept thought up during the initial theorization.

Fourth – Visit the research setting informally, aiming to observe the processes which occur in it. It is necessary to go to the field without formal intentions and expand the degree of confidence about approaching the object, including, if possible, performing some open interviews, promoting the redesign of hypotheses, presuppositions and instruments, and seeking fine tuning between the theoretical framework and the first entries of reality. The analytical gaze should accompany the whole trajectory of field approach.

Fifth – Go to the field carrying theory and hypotheses, but open to questioning them. It is necessary to immerge in empirical reality in search of information envisaged or not envisaged in the initial script. As Malinowski¹⁴ teaches in his classic work about the principles of anthropological approach, it is fundamental to have all theoretical materials drawn up and all operational instruments ready and available, as if the investigation's success depended on them alone. But it is also crucial to be so attentive and open to novelties in the field that, if necessary, the investigator can let go of his certainties in favor of the inflows of reality. As Lévy-Strauss¹⁵ reminds us:

Field work is the mother and nurturer of every anthropological doubt (...) which consists in knowing that we know nothing also in exposing what we thought we knew, to people who [in the field] can contradict [our dearest truths].

In effective field work, the researcher builds a report made up of personal statements and subjective views from interlocutors, where the words of some are added to those of others and are composed or contrast with the observations. It is gratifying when he is able to weave a collective story or narrative, from which lived experiences and experiences, with their wealth and contradictions, stand out. At this moment, the researcher is already able to piece together the information he receives like a puzzle, and to enrich it, he seeks new interlocutors and makes new observations. It is important to highlight that a collective report does not mean a homogenous story but rather a story where the various interests and views have a place and the possibility of expression. Bertaux16 considers good field work to be at the same time *the construction* of a representation of the socio-anthropological *object.* Both in observation and in interlocution with actors, the investigator is an active actor, who asks, interprets and develops a critical gaze.

Sixth – Order and organize secondary and empirical material and become pervaded by the field information and observations. It is necessary to work on understanding the material brought from the field, giving it value, emphasis, space and time. Bearing in mind that the analysis of qualitative material is supported by the verbs and nouns mentioned in the first decalogue point, any attempt to perform it in a merely technical manner will impoverish the results.

Ordering constitutes organizational work: (1) of the theoretical and reference texts that guided the project and now need to be complemented; (2) of the observation material, which is generally contained in the field diary, a legitimate source of information for composing the analysis; (3) of any geographical, historical, statistical and institutional documents that may exist, have been researched and are likely to help contextualize the object; (4) of the interviews, focus group results and other primary sources (which should have been unrecorded if the interlocution was mediated by recordings). The elements cited in items 1,2, and 3 are contextual. Those in item 4 relate to the content of the words and observations which should, from that point onwards, be given priority in an attentive, reiterative and question-filled reading. I usually call this movement "pervasion" or "saturation".

Seventh – Construct the typification of the material collected in the field and make the transition between empiricism and theoretical formation. The typification process is denser and more intense than the exercise of ordering, but it has the same purpose: appropriation of the wealth of field information, trying, as much as possible, not to "contaminate" it via a premature interpretation. It must be made clear that there is no such thing as a mind empty of prior facts or empty of theories

and ideology. The sense of the understanding effort is to give maximum value to field findings. For this purpose, it is important: (1) to organize the reports and observation data in a certain order. For example, if the empirical research was performed with groups differentiated by social class, age, gender, religion, and historical periods (these are all hypothetical divisions), then various subsets must be created, aiming at a reading of homogeneities and differentiations for it to be possible to draw comparisons between the various subsets. (2) The horizontal pervasion readings give way to a transversal creation of the set or each subset of empirical material, with a specific intention: to cut out each text item, as it was presented by the interviewees10. All this cutting and pasting effort can be technically organized into subsets or drawers, divided by subject, as the first stage of material classification; (3) Then, the researcher takes a further step in understanding the relevance structures presented by the interviewees. The material contained in the many drawers must undergo a new reading and organization in order to be rearranged into four or five topics that the interviewees highlighted, above all, through reiteration. The synthesis effort reduces the number of subsets but does not diminish the wealth of information. It only reclassifies it, emphasizing which are the relevance structures found in the field study. Within each topic, the questions must be dealt with in their homogeneity and in their internal differentiations. A classification movement that prioritizes the sense of field material must not seek an essentialist truth in it, but rather the meaning expressed by the interviewees.

This fundamental moment, where the researcher gradually arrives at the sense of the words and their empirical contextualization, I call the internal logic of the actors, of the groups, or the **segment**. As soon as he understands the sense of what was reported to him and what he observed in the field, the researcher no longer needs to adhere to words: his imprisonment to them is one of the greatest weaknesses of those who perform qualitative analysis, because it means the investigator has not been able to surpass the descriptive level of his empirical material. As Canguillem¹⁷ reminds us: Truth only gains meaning at the end of a controversy. Thus there can be no first truth. There are only first mistakes. First evidence is never a fundamental truth.

Eighth – Exercise secondary interpretation. The understanding engendered by the deep, attentive and pervasive reading that gave origin to the empirical categories or sense units, at this moment, merits a new theorization process. It

could happen that the theoretical references which provided fundamental reference points for the start of the investigation are not enough to contemplate the interpretation of field findings. In the form of topics, in the case of an article, or chapters, in the case of book creation, each of the sense units should then be given a reading of national and international references, so as to place the classified material in the context of the national and international questions that it raises. And it is equally important to enrich the whole set of words and observations with historical and contextual elements: so that, from his "village", the researcher talks to the world and about the world, in an understanding and critical manner.

Interpretation will never be the last word about the object studied, because the sense of a message or a reality is always open in many directions. However, when it is well-conducted, it should be so faithful to the field that, if the interviewees were present, they would share the analysis results. Gadamer⁶ adds, drawing on the thinking of several authors such as Dilthey¹⁸ and Schleiermarcher¹⁹, that interpretation must go beyond the interviewees and surprise them, because when they gave their statements, they were not aware of everything it would be possible to understand, based on their words, about their time, their contemporaries and the society in which they live.

Ninth - Produce a text which is at the same time faithful to the field findings, contextualized and accessible. The conclusion of a qualitative analysis must present a text capable of transmitting concise, coherent and, as far as possible, reliable information. This is because the final research report forms a synthesis in which the study object envelops and pervades the entire text. The context, the closest and most abstract determinations, in this *heavy concrete*²⁰ stage, emanate from the object and not vice versa. Therefore, we consider work to be incomplete or poor if it only describes what was found in the field. But understanding and interpretation, in their final form, also mark a moment in the researcher's praxis. For this reason, it will never be a finished work and its conclusions must be open to new questionings. In his exposition, it is important for the author to include his conditions and difficulties of interpretation, as they are part of the objectivation of reality and his own objectivation²¹.

Tenth – Ensure the criteria of reliability and validity. Popper²² reminds us that objectivity is a social question of scientists, involving reciprocal criticism and *the hostile-friendly division of their work, their cooperation or also their competition*. But the verification criteria must be ensured, and

the scientist must have a degree of attachment to his proposal and his methods, says Popper, because if we subject ourselves to criticism too easily, we will never find out where the real strength of our theories is22. In order to safeguard reliability, we suggest a few steps: (1) The first is the one that guides all scientific research universally: adequate theory, method and techniques, described and able to be evaluated by any other investigator. (2) As it requires the researcher's presence, personal involvement and interaction throughout the process, a good qualitative analysis should explain its field actions, as well as its interests and difficulties in constructing the object. There are some other measures that can be taken during the investigation process to ensure a greater degree of validity: (3) internal *triangulation* of the investigation's own approach²³, which means looking at the object from its various angles, comparing the results of two or more data collection techniques and two or more information sources, for example; (4) validation of the reports, comparing the words with field observations; (5) being alert to the reports and facts that contradict the investigator's proposals and hypotheses, analyzing them and presenting them, rather than hiding them; and (6) **reliability** in dealing with the various points of view, ensuring the diversity of senses expressed by the interlocutors, escaping the idea of a single truth.

Conclusions

Before I finish these reflections, I would like to point out that many technological artefacts have recently been created to produce qualitative analyses. There are researchers who use them and certainly find them to be an important support, as the work of Pope and Mays²⁴ shows.

Maybe because of my habit of being analytically and critically present in every investigation stage, I find it very difficult to outsource the analytical task to these devices, as only one stage is focused on and the intersubjective context, which cannot be dissociated from and is a fundamental part of qualitative research and, therefore, of the analysis process, is not considered.

That is why, in this text, all reflection presupposes the researcher's presence and monitoring in every step of the work, in a movement that simultaneously adds to the previous phase and overcomes it. The investigator's implication in the work becomes a circular perspective: **he only knows reality insofar as he creates it**⁶⁵. Based on this understanding, I believe that not even a good con-

tent technician-analyst can guarantee the quality of a final text when he is not aware of the conditions of his production.

The recognition that there is complementary polarity between subject and object in the qualitative scientific construction process leads, in its turn, to the need for a methodological effort that ensures objectivation, that is, the production of an analysis which is as systematic and profound as possible and which minimizes subjectivism, supposition and spontaneity. In this sense, without contradicting what I said in the previous paragraph, it is necessary to value techniques: for the systematic review or narrative of the initial questioning, turning it into a considered object; for the creation of hypotheses which are consistent with the question and can guide the work; for the construction of the instruments that must transform

the concept into observable items or into guides for field conversations; for the creation of a narrative about the object which also considers the carefully-performed preparation and overcomes it, bringing new findings and relevancies; to organize, categorize, contextualize and construct the final report, always the fruit of a provisional analysis.

The analytical and systematic course, therefore, permits the objectivation of a type of knowledge whose raw materials are human and social opinions, beliefs, values, representations, relations and actions from the perspective of actors in intersubjectivity. Thus, the qualitative analysis of an investigation object concretizes the possibility of knowledge construction and contains all the requirements and instruments to be considered and valued as a scientific construct.

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