

EPISTEMOLOGY AND INSTRUMENTALIZATION OF INTERDISCIPLINARY STUDIES: AN ITINERARY ON SCIENCE, METHODOLOGY AND FEMINIST PERSPECTIVE IN RESEARCH



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ABSTRACT

The positivist and Cartesian influence on what we know today as science determines a compartmentalization of knowledge that can be an obstacle to the studies of complex society. In this sense, interdisciplinary works are options for the construction of knowledge that not only reflects reality, but that serves to build a better society. Interdisciplinarity, however, needs to be connected to a methodological rigor that guarantees the scientificity of the knowledge built. In this sense, this article aims to outline a hypothetical-deductive theoretical itinerary regarding the multiple possibilities of interdisciplinary work, which involve overcoming the compartmentalization of knowledge built from an obsolete epistemology, towards a science with an objective perspective, which comes to be illustrated from feminist studies.

Keywords: Science, Interdisciplinary Studies, Feminist epistemologies.

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INTRODUCTION

Some cultural discussions are classically compartmentalized between areas of knowledge. Although it served the development of the scientific method, the compartmentalization of knowledge presented itself as a possible obstacle in the discussion of complex problems of society. This issue emerged along with the discussions about the supposed neutrality of science and the methodology of scientific research, unveiling critical perspectives on the classic Cartesian and post-positivist stance.

Thus, due to their complexity, many issues in society cross the barrier of compartmentalization of knowledge. In order to contemplate the convergence of knowledge for the study of complex issues of society, interdisciplinary works take a seat. However, works that transit through different areas of knowledge need to be methodologically well positioned, and this positioning may not be so clear to each of the areas individually. The craft of presenting an interdisciplinary work requires a solid theoretical foundation (Morin, 2001).

In order to reflect on the epistemological and methodological conditions from which an interdisciplinary work can be built that enables the analysis of the various areas of knowledge, the present work aims to reveal the multiple possibilities of interdisciplinarity for the enrichment of the scientific knowledge produced, especially from the feminist perspective. Thus, the work begins with a reflection on how what we call science today started from the compartmentalization of knowledge and the dissociation between subject and object of research during the emergence of the scientific method that, although it has served scientific rigor, today can hinder the interdisciplinary exchange for the understanding of the knowledge produced itself. Next, the next topic deals with how to face the possible methodological obstacles of an interdisciplinary work, so that the sciences dialogue with each other, influence each other's production of knowledge, but also maintain the methodological rigor that, after all, configures the production of knowledge. Finally, the third topic, the work discusses the function of feminist epistemology in the study of issues that deal with women. This session will deal with the transition from a masculinist hegemonic science, supposedly and deceptively neutral and objective, to the proposition of a feminist epistemology that recognizes as objectivity the assumption of the exact perspective from which it is being produced - the feminist perspective. The construction of the article is of the hermeneutic theoretical order, carried out by the hypothetical-deductive method, based on bibliographic research on the subject.

FROM THE COMPARTMENTALIZATION OF KNOWLEDGE TO INTERDISCIPLINARITY

The positivist scientific thought that influences the scientific community to this day was consolidated through a philosophical program known as logical positivism, a philosophy that was born in the famous "Vienna Circle". This scientific philosophy dealt with the almost obsessive requirement of observation in the constitution of science (Dittrich, 2009), creating a question related to what scientific knowledge would be. For logical positivists, science should reflect only what is observable and verifiable (Morin, 2001).

Thus the Western scientific tradition was constituted, under the influence of rationalist Cartesian and logical positivist. As this paradigmatic formation originated in the disconnection between science and philosophy, the humanities and social sciences were left on the margins of the experimental scientific method, raising discussions about their participation in science. On the other hand, logical positivist Cartesian science itself has become the target of questions regarding the pragmatism of its objectivity and the reliability of the acclaimed neutrality, in a movement that is moving towards a reunion between the humanities, the social sciences and the natural sciences.

Boaventura Santos (1987) poses this question regarding a supposed dichotomy between natural sciences and social sciences (Santos, 1987), which allocates the concepts of human being, culture and society in a mechanistic view of nature and matter. For the author, it is necessary to introduce consciousness into the object of knowledge itself, thus transforming the subject/object relationship of knowledge. In this way, another paradigm of knowledge emerges, which tends to overcome the distinctions that previously seemed obvious, such as "nature/culture, natural/artificial, living/inanimate, mind/matter, observer/observed, subjective/objective, collective/individual, animal/person" (Santos, 1987, p. 40). According to this new paradigm, the epistemological and methodological conditions of scientific and social knowledge are reconceptualized, in the sense of identifying the scientificity that was previously hindered in relation to the social sciences. And as the natural sciences and the social sciences come closer together, they find themselves invested with the humanities. The overcoming of this dichotomy points to a revaluation of humanistic studies in the sciences (Santos, 1987). For Brandão (2024), the search for this interdisciplinarity is the search for the rediscovery of man, of the subject.

Thus, instead of admitting that there is a dichotomy between social sciences and health sciences, it becomes more logical to assume their complementarity. For Morin (2001), science also derives from sociology. It is necessary to see the scientific community

as a community united by common epistemological principles, according to which one can have critically objective knowledge, which can be verified and tested through the activity of investigation and research.

However, science is not just that. Rather, it is constantly under the effect of manipulations and practices of power, even though it maintains its cognitive dimension. The idea that scientific knowledge is a pure reflection of reality is naïve, as is the idea that theoretical certainty is absolute, infallible certainty (Morin, 2001). Therefore, the author also concludes that there is a need to break the isolation and compartmentalization of science.

Scientific problems are also philosophical problems, for they are "those of nature, of the mind, of determinism, of chance, of reality, of the unknown." (Morin, 2001, p. 94). Scientific problems are philosophical because they concern all people. They make it necessary to communicate between scientific culture and humanistic culture, and the communication of science with the culture of citizens. They make it necessary to search for interdisciplinarity (Morin, 2001).

Max Weber was the precursor of this position when he placed scientific research in the humanities between the positivism and historicism of his time. Other authors, such as Kauffmann, continue this methodological stance, which situates the social sciences between the logical empiricism of the Vienna Circle and Husserl's phenomenology. However, although Weber made an effort to dialogue between the methodology of the natural sciences and the social sciences, to this day this methodological dualism remains in the dialectical and hermeneutic approaches of the social sciences (Oliveira Filho, 1995).

In the last century, the distinctions between natural sciences and sciences of the spirit (Geisteswissenschaften), or of culture, nomothetic and ideographic sciences, marked the beginning of the dualist conception in epistemology (differences in knowledge), methodology (differences in methods) and ontology (differences in the nature of objects). (Oliveira Filho, 1995, p. 112)

The dualism between social sciences and natural sciences reserves the field of empirical and positivist investigations to the latter. Although it facilitates certain reductionisms, "it also hinders contacts with the methodologies of the natural sciences in an adequate way, through a critical dialogue" (Oliveira Filho, 1995, p. 113).

On the one hand, positivism served the rise of scientificity, with its principles - which applied to the natural sciences, it is true - of observation, verification and experimentation. In methodological terms, it was the first identity of science, responsible for the initial search for an adaptation of the positivist matrix to the social sciences. The principles of supposed

scientific neutrality and objectivity provided an idea that phenomena could be studied separately from the research subjects and the researcher. And although, when applied to some more reductionist contexts, these principles were really well made up, within the social sciences they soon proved to be a deception. Other philosophical matrices, such as the constructivist perspective, sought to encompass the complexity of studies involving people and behaviors, through the recognition of their places as part of the research.

In relation to constructivism, or social constructivism, it groups under its label different starting points, such as Piaget's tradition, radical constructivism, social constructivism, and constructivist sociology. What these positions have in common is "that they analyze the relationship with reality when dealing with constructivist processes in their approaches" (Flick, 2009, p. 79). Thus, it is not possible to affirm that constructivism is a unified program, but rather a direction that guides research in the approach to realities, since "the realities we study are social products of actors, interactions and institutions" (Flick, 2009, p. 80).

For Flick (2009), the genesis of knowledge and its functions can be described from a constructionist point of view, since all knowledge about the world involves constructs, that is, "a set of abstractions, and generalizations, formalizations and ideations, specific to the appropriate level of the organization of thought" (Schutz, 1962 apud Flick, 2009, p. 80). The very acts and methods related to research are part of these social constructions of what constitutes research, as well as the constitutive acts of writing for what constitutes the spheres under study (Flick, 2009).

The distinction between positivism and constructivism supposedly proposes to point out distinctions between qualitative research and natural sciences (or research produced by the social sciences according to the parameters of the natural sciences) (Flick, 2009). However, philosophical perspectives are constituted on the same issue: doing science. The understanding of the different philosophical perspectives that guide scientific research in each area of knowledge contributes not only to the understanding of science as a whole, but also to a dialogue that enables the construction of knowledge that comes close to the truth and contributes to the improvement of people's lives. Dialogue also provides the influence of one perspective on another, as is the case of qualitative research under the constructivist epistemological discussion. Thus, the approximation of the natural sciences and the humanities points to the transdisciplinary direction that enhances the production of knowledge.

At this point, it is important to point out the conceptual distinction between multidisciplinary, which is the variety of disciplines studying about an object, and transdisciplinarity and interdisciplinarity. The latter come to overcome multidisciplinary, at the moment when dialogues are made, and these dialogues influence the different fields of scientific knowledge, making the isomorphic analysis between the different areas of knowledge opportune and useful. Most sciences have been adopting the systemic perspective, in order to relate to other fields of scientific knowledge (Vieira; Clement; Days; França Filho, 2017).

Finally, we can see that the hierarchization of the veracity of scientific knowledge between supposedly dichotomous fields, such as health sciences and the humanities, can often correspond to a methodological and conceptual confusion, arising from the lack of knowledge of non-Cartesian and non-positivist philosophical positions. On the contrary, the correct understanding of the philosophical matrices and the applicability of each current enables dialogues and exchanges between the various fields of knowledge, in a transdisciplinary interaction that contributes to the production of knowledge that contributes materially to the improvement of people's lives.

Corroborating all these postulates is the feminist scientific perspective, which emerges as a questioning of the theoretical foundation in the practice of research, both by challenging the "normalities" and routines studied and by challenging the practice of research itself (Flick, 2009). Criticism and the feminist perspective in research occupy the next item of this work.

OBJECTIVITY AND PERSPECTIVE IN FEMINIST STUDIES

The individualistic perspective of the disembodied Cartesian subject is altered from the 70s onwards, when the importance of socially constructed knowledge is considered. In this sense, Ketzer (2017) states that feminist epistemology arises with the aim of investigating the role of gender in epistemic activities, considering that gender issues influence theoretical and empirical scientific production. Feminist research reclaims the body, "disembodied" by Descartes (Ketzer, 2017).

Thus, feminist and gender studies emerge as a critique of social science and research in general, which followed the pace of male dominance, ignoring particularities about women's lives. Feminist research seeks to build a new epistemology within the production of knowledge. In the author's words (Ketzer, 2017, p. 98), central concepts that

guided discussions about knowledge and science were built based on gender stereotypes, so that "Feminist Epistemology questions these concepts and asks whether a conceptual revision would block sexist movements in the production of knowledge", through questions such as: "What problems arise from the privileging of a universal male subject? Is there a radically different way of producing science from the male one? Would it be interesting to highlight differences between the sexes by endowing them with a universal explanatory force?" (Ketzer, 2017, p. 98)

In the words of Donna Haraway (2019, p. 177), the dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture, men and women, primitive and civilized are "all ideologically in question. The real situation of women is defined by their integration/exploitation into a world system of production/reproduction and communication." It is in the defense of an implosion of borders, of binarisms, which uncritically reproduce demarcations of identities and ontologies, that the author situates her defense of localized knowledge and a new cyborg politics.

The main objective of thinking about a feminist epistemology in science is to produce knowledge that is not only *about* women, but that is capable of meeting their emancipatory interests. It also comes in the sense of requiring an authority over knowledge, based on the recognition of a science that until then was not neutral, but rather produced from a masculinist view. Within the feminist agenda, the critique of science advances beyond requiring the numerical participation of women in the world of science, it also points to the questioning of its own basic methods and assumptions (Sardenberg, 2007).

Sardenberg (2007) argues that, for a feminist political and scientific project in the social and human sciences, one of the first necessary deconstructions is that of the Enlightenment philosophical roots regarding the issue of neutrality and objectivity of scientific knowledge. All science was produced from somewhere, by a few people, and these places and people indicate positions of a certain type of power. In this sense, Haraway (1995) states that "all internal-external frontiers of knowledge are theorized as movements of power, not movements towards truth" (p.9), making absolute scientific neutrality a fallacy that must be considered in the analysis of the knowledge produced.

It was the feminists of the second wave who came across the androcentric bias of traditional theories, identifying everything from the distorted view and representation of women to the complete exclusion of the feminine. Harding (2019) exemplifies some sexist positions in the social sciences, showing that in this field, the lens of gender stereotypes in

the disciplines has led to women's nature and activities being "ignored as natural or misdescribed. Presumed differences between the sexes were re-examined based on empirical studies that identified that the normativity of social relations was what created the supposedly 'natural' form of women's daily lives"⁶ (Harding, 2019, p. 145)

In the natural sciences, women's bodies have often been studied without considering their differences from those of men (Harding, 2019). In this way, it is possible to conclude that the evaluative neutrality of science is a fallacy (Harding, 2019). There is no such impartial and neutral science, and all knowledge has a perspective from which it is produced. Ketzer (2017) agrees that:

We can see that the defining concepts of what science is and even the methodologies used for the development of scientific research exclude women from the process, being excessively masculinist. From this, it is noted the need to think, in addition to a feminist epistemology that questions and reformulates the concepts of rationality, objectivity, among others, also a feminist methodology that avoids biased results. (Ketzer, 2017, p. 103)

However, once the sexist and androcentric positions and practices that have shaped investigations in biology and the social sciences have been identified, new distinguishing criteria are needed to maximize objectivity in research (Harding, 2019). Although the feminist movement in the sciences agrees on the illusory neutrality of knowledge built in an androcentric environment, regarding the epistemological strategies that could build feminist knowledge, the debates are more heated (Sardenberg, 2007). Such discussions reached the point that some voices were raised in the 1970s, calling for the abandonment of the ideal of objectivity in the sciences (Harding, 2019).

In this regard, Haraway (1995) reminds us that this critique of objectivity in feminist studies represents a dichotomy, in the sense that it is part of a critique of science, whose most extremist pole presents this temptation to refute any type of version of this movement theorized by power interests. However, the critique of scientific objectivity also exists because it threatens the collective historical performance of a feminism that reclaims the body, and that navigates the feeling of subjectivity. Thus, it is necessary to admit that such

⁶ As an example, the author indicates that "the activities of "women's daily gathering" proved to be the main economic resource for all, the daily resources of such societies consisted primarily of seeds, fruits, foliage, roots, and small mammals and birds captured by women. Anthropologists argued that the economic contribution of "manhunting" was relatively infrequent and did not guarantee daily sources of sustenance. Women, not men, were the main "breadwinners" in hunter-gatherer societies. Economists have set out to challenge the way in which "work" has been conceptualized in such a way that part-time, temporary, and seasonal jobs, their manufactures and services done at home, housework, "care work" for children, relatives, and other dependents, sex work, and volunteer work do not count as work" (Harding, 2019, p. 145)

disembodied scientific objectivity is really a fallacy, yes, but in order to overcome such a dichotomy, the author suggests not the abandonment of any ideal of objectivity, but rather a feminist view of objectivity (Haraway, 1995).

Although the constructionist program seemed promising in this sense, because it did not reduce the issues related to scientific bias to the opposition between bias and objectivity, or science versus pseudoscience, it did not seem to have arrived at this new conception of scientific objectivity. Such a view does not constitute a new doctrine of objectivity, or a new doctrine about the world, but rather the use of modern critical theories regarding how meanings and bodies are constructed, not to deny these meanings and bodies through homogenization, but to assume these differences in the construction of objective knowledge (Haraway, 1995).

Science has always been involved in the search for universality: a language for all its versions. So in the natural sciences, in the social sciences and in the humanities. This is the fantasy of objectivity, at the service of positivism, which determines what can or cannot be valid as knowledge. However, as one circulates through the discursive terrain, one perceives the ambiguity of the terms science and objectivity. That is why the debates about it are relevant, so that reliable explanations can be used, which are not reducible to what the author calls "scientific, positivist arrogance" (Haraway, 1995, p. 17).

Therefore, it is necessary to stop having to choose a side between radical constructivism and feminist critical empiricism. The author suggests the use of the feminist vision as a way to construct a usable doctrine of objectivity, through feminist writing, which links "the objective to our theoretical and political instruments in order to name where we are and where we are not, in the dimensions of mental and physical space that we barely know how to name" (Haraway, 1995, p. 21). It is through this partial perspective that one can expect the promise of the objective vision, which opens and not closes. Feminist objectivity is about assuming a non-division between subject and object, but rather being responsible for its vision, and of elaborate specificity regarding the point of view. The author calls this embodied and situated knowledge, which arises in response to unlocatable and therefore irresponsible postulates (Haraway, 1995).

Obviously, the objectivity of the partial perspective does not propose a new (and equally false) neutrality. It is necessary to understand that partial perspectives are not innocent positions, even when they are positions of the subjugated. "On the contrary, they are preferred because, in principle, they are the ones that are least likely to allow the denial

of the critical and interpretative core of all knowledge" (Haraway, 1995, p. 23), because they present more adequate and objective perspectives, transforming the world, although they are still partial visions, but from a responsible place. Thus, not just any partial perspective applies. It is necessary to have a recognized partiality, self-criticism, and one that seeks the perspective of points of view that cannot be known in advance (Haraway, 1995).

The perfect, fetishized object, which sometimes appears even in feminist theory, does not exist either, because it is not possible to be simultaneously or entirely in all positions, including critical positions. Therefore, positioning oneself is the basis of knowledge from vision, it is the way to organize Western scientific and philosophical discourse. Knowledge admitted from an assumed vision, determined by social practices and orders, ways of life and practices of visualization can only be valid as rational knowledge, whether in the exact, natural, social or human sciences (Haraway, 1995):

"How to see it? Where to see it from? What are the limits of vision? See for what? See with whom? Who should have more than one point of view? In whose eyes is sand thrown? Who wears visors? Who interprets the visual field? What other sensory power do we wish to cultivate besides sight?" (Haraway, 1995, p. 28)

Possible objectivity is embodied and therefore accountable. In the various criticisms of the empiricist or reductionist scientific view or even of scientific authority, the issue is not the relativism of the knowledge produced, but rather the position, the view from which knowledge is produced. This position does not invalidate knowledge - only if the intention is to generalize - but rather makes it even more specific, therefore, more objective and true. It is objectivity produced responsibly (Haraway, 1995).

It is in these terms that Soares (2024) presents Haraway's proposal for a feminist objectivity that concerns situated embodiment and not a "false vision that promises transcendence of all limits and responsibilities" (Haraway, 2009, p. 21), considering embodiment not as a fixed materiality, but in direct reference to his cyborg and the cyborg writing and politics that inhabit the fractured borders of world history. Thus,

We do not want a theory of innocent powers to represent the world, in which languages and bodies submerge in the ecstasy of organic symbiosis. Nor do we want to theorize the world, let alone act on it, in terms of Global Systems, but we do need a network of connections to Earth, including the partial ability to translate knowledge between very different – and power-differentiated – communities. We need the power of modern critical theories about how meanings and bodies are constructed, not to deny meanings and bodies, but to live in meanings and bodies that have the possibility of a future (Haraway, 2009, p. 16).

For Haraway (1995), feminist responsibility needs to be aligned with reverberation, which encompasses the differences, the tonalities, the individualities of the body. Feminist embodiment, therefore, does not deal with a fixed, unique body, but with bodies and their differences. When it comes to reporting the history of the world, it is not possible that objectivity needs a fixed, single vision. The author treats vision as a metaphor for the technology of feminist epistemology, inviting us to investigate beyond fixed appearances, in the situation in which allocation, positioning, and partiality (non-universality) are the conditions that determine that knowledge is rational. But above all, this rational knowledge is not uncompromising, belonging to everywhere and at the same time to nowhere. Rather, it is a process of continuous critical interpretation (Haraway, 1995).

In the words of Soares (2024, p. 07), Haraway understands that "the great insight of the feminist reading of objectivity was to insist on the agency and authorship of objects, historically seen as passive facts". This fact would not eliminate the importance of facts for science, but would introduce a critical notion about the way they are manufactured by science: as localized knowledge. "Sex and nature, or their non-discursive substrate: the body and the world, in her terms, constitute examples that she uses to demonstrate her analysis, since both have been marked in the history of Western science as objects in relation to their binary pairs: gender and culture" (Soares, 2024, p. 07), so that, Haraway does not propose an inversion of the pairs, but a conversation, a responsible analysis in which the positions - their epistemic and alternative values - in relation to these pairs are equally justified.

In this sense, Harding (2019) presents the concept of "strong objectivity". Despite the conception that objectivity is an essentially controversial concept, the author suggests that one can extract a core shared by the different senses, which is the idea that objective research needs to be fair to evidence, with objections to it and fair in relation to criticism. In order to maximize objectivity, it suggests operationalization through the use of good research methods. Such tools are those capable of identifying "social values, interests, and assumptions that researchers bring to the research process" (Harding, 2019, p. 148). In addition, it suggests starting the research beyond a discipline, beyond the dominant conceptual framework on the research object (Harding, 2019), which again refers to interdisciplinarity.

The perspective approach begins with a clear recognition of the way science is actually practiced in the real world. "It does not start from an abstract ideal that would make

science perfect" (Harding, 2019, p. 162). In addition, it aims to identify the main problems of conventional, supposedly - and illusorily - neutral practices, among them the homogenization of academic communities, which results in the reproduction of a specific type of research and knowledge production. The proposal of strong objectivity, based on a responsible view, is based on "best practices", rather than on "an abstract ideal imposed outside such practices" (Harding, 2019, p. 162). Finally

Their positions and practices are aligned with insights from the social studies, science, and technology movement. Such characteristics make such a proposal simultaneously a methodology, an epistemology, a philosophy of science and a sociology of knowledge. That is why the proposal of strong objectivity and the approach to perspectives find an echo in so many disciplines (Harding, 2019, p.163).

Finally, it is necessary to emphasize that there is no supposed "feminist science" parallel to the field of sciences. All the reflections previously presented about what science is, the overcoming of the dichotomy between health sciences and social sciences, the role of interdisciplinarity for better scientific practice are itineraries of a path that necessarily leads to feminist epistemology, when it comes to understanding issues related to women and producing a science that can make a difference in their lives. In this sense, Haraway (1995) also refuses to resolve the ambiguities of not differentiating the range of possible contexts that can refer to "science". The author recalls that in every field of meanings related to what science would be, there is the expectation of fidelity when providing explanations of a "real" world, without considering, however, how mediated these explanations are and how complex and contradictory this "real world" is. Thus, insisting on the power of her ideological struggles, the author prefers to admit a meaning in science as a whole (Haraway, 1995).

FINAL CONSIDERATIONS

Still, considerations regarding partial perspective and responsible objectivity may seem to have a safeguard in relation to the social sciences and humanities. There is a historical assumption that social and cultural elements should be removed from research, so that areas such as physics, chemistry and biology can have repercussions as "pure sciences". However, it is necessary to understand that the processes of these studies are also constituted with their social order (Harding, 2019).

To think of a methodology that encompasses the feminist vision, that seeks to supplant power relations that permeate the production of knowledge, is to assume the political context of the research (Ketzer, 2017). Obviously, it is not only theoretical research that has a political context. Feminist research focuses on the political valorization of research and the recognition of the need for its usefulness to improve women's living conditions (Ussher, 1999 apud Flick, 2009), "considering the search for social justice for women as the main theme of investigation" (Ketzer, 2017, p. 103). It also seeks historical reparation, because the construction of current knowledge took place from a dominant point of view, which historically seems to have ignored, in the research process, specific experiences, such as those of women (Ketzer, 2017).

It is also necessary to recognize that the natural sciences and the social sciences (and the formal sciences, such as mathematics and statistics, for example), have common technical, methodological, logical and epistemological characteristics, but also differentiated (Oliveira Filho, 1995). The methods of validating statements, hypotheses and conclusions, and operationalizations are specific to each area of scientific knowledge (Vieira; Clement; Days; Franca Filho, 2017) and while adopting the dialogue of one science with the other, and recognizing the importance of this transdisciplinary interaction for the construction of what finally becomes "science", it is certain that the operationalization, the construction of theories and the generation of scientific, causal and teleological explanations are diverse.

Thus, methodologically, it is necessary to strictly respect each specificity. The proposition of a unified methodology becomes inadequate and can slide into a pathological eclecticism, through which the use of "concepts outside their respective conceptual schemes and theoretical systems" (Oliveira Filho, 1995, p.111), alters the meanings of these concepts, resulting in the emptying of discourse at the theoretical and metatheoretical level and makes it impossible to construct a solid methodological instrument (Oliveira Filho, 1995). Adopting the feminist epistemological perspective, demarcating the place from which one researches, assuming a responsible and objective view, does not mean abandoning the methodological rigor inherent to the technique of operationalizing research in each area of knowledge. Rather, it means evaluating them with the same epistemological perspective.

REFERENCES

1. Becker, H. (1977). De que lado estamos? In H. Becker (Ed.), *Uma teoria da ação coletiva* (pp. 122–136). Rio de Janeiro: Zahar.
2. Boas, F. (2023). *Método de pesquisa em antropologia* (J. C. Pereira, Trans.). São Paulo: Contexto.
3. Boto, C. (2012). Instrução pública e projeto civilizador: O século XVIII como intérprete da ciência, da infância e da escola. In E. C. B. Sbittar (Ed.), *Metodologia da pesquisa jurídica: Teoria e prática da monografia para os cursos de direito* (10th ed.). São Paulo: Saraiva.
4. Braga, M., Guerra, A., & Reis, J. C. (2008). Breve história da ciência moderna: V. 4: A belle-époque da ciência (séc. XIX). *Breve história da ciência moderna*, 4, 185.
5. Brandão, J. (2024). Interdisciplinarity: In search of the human whole. *Lumen et virtus: Revista Interdisciplinar de cultura e imagem*, 37(XV), January–June. ISSN 2177-2789.
6. Bressiani, N. (2011). Redistribuição e reconhecimento: Nancy Fraser entre Jürgen Habermas e Axel Honneth. *Caderno CRH*, 24, 331–352.
7. Creswell, J. W., & Creswell, J. D. (2021). *Projeto de pesquisa: Método qualitativo, quantitativo e misto* (5th ed., S. M. Mallamnn da Rosa, Trans.). Porto Alegre: Artmed.
8. Demo, P. (2001). *Pesquisa e informação qualitativa*. Campinas, SP: Papirus.
9. Diniz, D., & Foltran, P. (2004). Gênero e feminismo no Brasil: Uma análise da Revista Estudos Feministas. *Revista Estudos Feministas*, 12, 245–253.
10. Dittrich, A., et al. (2009). Sobre a observação enquanto procedimento metodológico na análise do comportamento: Positivismo lógico, operacionismo e behaviorismo radical. *Psicologia: Teoria e Pesquisa*, 25, 179–187.
11. Flick, U. (2009). *Introdução à pesquisa qualitativa* (J. E. Costa, Trans., 3rd ed.). Porto Alegre: Artmed.
12. Haraway, D. (2019). Manifesto ciborgue: Ciência, tecnologia e feminismo-socialista no final do século XX. In H. B. de Hollanda (Ed.), *Pensamento feminista: Conceitos fundamentais* (pp. 157–210). Rio de Janeiro: Bazar do Tempo.
13. Harding, S. (2019). Objetividade mais forte para ciências exercidas a partir de baixo. *Em Construção: Arquivos de epistemologia histórica e estudos de ciência*, 5.
14. Ketzer, P. (2017). Como pensar uma epistemologia feminista? Surgimento, repercussões e problematizações. *Argumentos*, 9(18), Fortaleza, July–December. Available at: <2017_art_pktzer.pdf (ufc.br)>. Accessed: August 11, 2024.
15. Morin, E. (2001). *Ciência com consciência*. Rio de Janeiro: Bertrand Brasil.

16. Oliveira Filho, J. J. J. de. (1995). Teoria das explicações científicas, regras metodológicas e a metodologia das ciências sociais. *Plural*, 2, 109–117. <https://doi.org/10.11606/issn.2176-8099.pcco.1995.68046>. Available at: <https://www.revistas.usp.br/plural/article/view/68046>. Accessed: August 9, 2024.
17. Santos, B. de S. (1987). *Um discurso sobre ciências*. Porto: Edições Afrontamento.
18. Sardenberg, C. (2007). Da crítica feminista à ciência a uma ciência feminista? *Labrys: Estudos Feministas*, 11(1), 45–62.
19. Soares, M. H. S. (2024). Donna Haraway e a implosão do projeto moderno de ciência. *Revista Estudos Feministas*, 32(2), e93449. <https://doi.org/10.1590/1806-9584-2024v32n293449>.
20. Vieira, A. A. N., et al. (2017). Metodologia científica no Brasil: Ensino e interdisciplinariedade. *Educação & Realidade*, 42(1), 237–260. <http://dx.doi.org/10.1590/2175-623654484>.