

The Methodological Intervention of Artificial Intelligence in Social Research

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Abstract

This theoretical and analytical study examines the changing role of generative artificial intelligence in social research, particularly the shift from using AI as an auxiliary tool to relying on it in ways that may influence decisions throughout the research process. The study argues that the expression “use of artificial intelligence” is not sufficient to understand this influence. What matters is not only how much AI is used, but also where it is introduced, what functions it performs, and the extent to which its outputs shape research decisions. To address this issue, the study proposes the concept of “methodological intervention of artificial intelligence,” examined through four dimensions: location, function, degree of influence, and traceability. The analysis is based on a critical reading of six recent studies, complemented by relevant sociological literature and the UNESCO Recommendation on the Ethics of Artificial Intelligence. It identifies a need for a framework that connects different forms of AI intervention with the limits of delegation and scientific responsibility. The study therefore develops an integrative framework linking the researcher, the machine, and knowledge across the stages of social research. Within this framework, social interpretation, methodological judgment, and scientific responsibility remain with the researcher, while AI can support technical and organizational tasks under human oversight. A hypothetical example of AI-assisted interview coding is used to illustrate the application of the framework. The study concludes that the significance of AI in research depends less on the amount of its use than on the extent to which it becomes involved in research decision-making. As a theoretical contribution, the study provides a framework that can be further examined and refined through empirical research.

Keywords: Generative artificial intelligence; social research; methodological intervention; research practice; traceability; human oversight.

Introduction

Generative artificial intelligence is changing the way digital technologies are used in the production of knowledge. While earlier technologies were mainly associated with computation, prediction, and

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automated classification, current AI systems can also generate texts, classify information, and produce forms of analysis that resemble tasks traditionally carried out by researchers. This development raises a broader question about the place of AI in scientific practice, beyond its technical capabilities. In the social sciences in particular, it is important to consider how the growing use of AI may affect the way research problems are formulated, data are handled, and findings are interpreted.

This question is particularly important in the social sciences because their subject matter involves human beings, social relations, institutions, values, and the meanings people attach to their actions. Social data therefore cannot be understood only in terms of their quantitative or textual form. Their interpretation also depends on the context in which they are produced and on the meanings they have for the people and groups being studied. The growing use of AI consequently raises questions about how these contexts and meanings are handled when some research tasks are delegated to computational systems. A system may detect a pattern in a set of data, for example, without necessarily being able to account for its social significance. In social research, the aim is not always to find a single “correct answer” in a computational sense, but to understand meanings, contexts, and complex social relationships.

Recent studies have documented the expanding use of artificial intelligence in social research, from generating research ideas and supporting research design to data collection, analysis, and the writing of results (Andersen et al., 2025; Christopher A, 2024; Davidson, 2024). These possibilities have also raised concerns about bias, reliability, replicability, and ethics. However, simply identifying the areas in which AI is used does not tell us enough about its methodological significance. Different forms of use do not have the same implications for research. Assisting with the linguistic revision of a paragraph, for instance, does not raise the same methodological questions as using AI to classify field interviews or to suggest an interpretation of a social phenomenon.

This distinction is particularly relevant in the Algerian context. (Brahmi & Nesba, 2025) point to researchers’ awareness of the potential benefits of AI tools, as well as their need for training and regulatory frameworks. At the same time, there is still a need for a clearer methodological framework capable of distinguishing between different forms of AI use and determining when such use begins to influence the research process itself.

The central issue addressed in this study is therefore not simply whether AI is used in social research, but how its intervention can be understood and assessed. The expression “use of artificial intelligence” covers very different practices, ranging from limited linguistic or organizational assistance to activities that may influence classification, analysis, interpretation, and the formulation of conclusions. Treating these practices as equivalent may obscure important differences in the way AI affects the production of knowledge.

Accordingly, this study proposes the concept of “methodological intervention of artificial intelligence” to examine the place and influence of AI within the research process. The concept focuses on four dimensions: location, referring to the stage at which AI intervenes; function, referring to what the system does; degree of influence, referring to the extent to which its outputs affect research decisions; and traceability, referring to the possibility of reconstructing and reviewing this intervention. These dimensions make it possible to move beyond simply describing AI use and to consider its methodological consequences for the production of social knowledge.

Based on this perspective, the study develops an integrative framework around the relationship between the researcher, the machine, and knowledge. The framework does not treat AI as a replacement for the researcher. Instead, it distinguishes between tasks that may be supported or performed by AI and decisions that require human methodological judgment and scientific responsibility. A hypothetical example of AI-assisted coding of field interviews is used to illustrate how different levels of intervention may be identified and how verification can be maintained when AI contributes to the research process.

The study is guided by the following central research question:

How can the methodological intervention of artificial intelligence in social research be conceptualized and assessed in relation to research decision-making and scientific responsibility?

This question leads to several related questions:

- At which stages of social research can AI intervene?
- What functions can it perform at these stages?
- To what extent can its outputs influence epistemic decisions?
- And how can such intervention be traced, verified, and documented?

Objectives of the Study

This study aims to:

- clarify the methodological significance of AI use in social research, particularly when its outputs influence research decisions. It seeks to develop the concept of “methodological intervention of artificial intelligence” by identifying the main dimensions through which AI enters the research process.
- It also aims to distinguish between different forms and degrees of AI intervention and to propose an integrative framework based on the researcher, the machine, and knowledge. The framework seeks to clarify the limits of AI involvement while maintaining methodological judgment and scientific responsibility with the researcher.
- Finally, the study aims to provide a basis for assessing and tracing AI intervention in research and to identify directions for further empirical examination of the proposed framework.

1. Conceptual framework

This study is based on four premises drawn from the literature reviewed. These premises make it possible to examine AI as a technically influential element in knowledge production rather than simply as a neutral tool.

1.1. Detecting patterns and interpreting meaning

Applied studies distinguish between tasks that AI can perform efficiently, such as organizing, describing, and classifying data, and tasks that still depend on the researcher’s judgment, such as selecting appropriate inferential tests and defining criteria for qualitative coding (Combrinck, 2024). (Davidson, 2024) further emphasizes that questions of interpretation, transparency, and reliability remain relevant even as the efficiency of AI tools increases. This distinction provides a basis for differentiating between detecting regularities in data and understanding their social significance, which depends on context, actors, and the conceptual framework adopted by the researcher.

1.2. AI outputs are not epistemically neutral

The literature warns that AI outputs may be affected by biases associated with training data and assumptions embedded in the design and operation of models, potentially influencing findings in social research (Christopher A, 2024; Combrinck, 2024). The issue is not limited to the possibility of random errors. Such biases may also influence what the system selects as relevant information, how it classifies that information, and what it identifies as a salient pattern or theme within the data. Consequently, AI-generated classifications or interpretations cannot be treated as neutral outputs, even when the researcher retains the final decision, because such outputs may indirectly shape the researcher's reading of the data.

This issue becomes particularly important when analyzing social data involving differences in contexts, categories, and representations. Uncritical reliance on AI outputs may reproduce assumptions that do not necessarily correspond to the context under study. (Rossi et al., 2024) argue that data generated by large language models raise epistemological questions that differ from those associated with earlier forms of synthetic data. This requires the social sciences to examine the conditions under which such data are produced and the nature of the knowledge that can be constructed from them.

The concept of methodological intervention adopted in this study emerges from this concern. The effect of AI should not be measured by the volume of its use alone, but by the extent to which its outputs influence what the researcher considers important, possible, or interpretable within the data. The greater the contribution of AI to shaping what the researcher notices or to guiding an epistemic decision, the greater the methodological significance of its intervention, even when the task itself is limited in scope.

1.3. Delegation and responsibility

(Jeon et al., 2025) show that the ethics of using AI in social research cannot be reduced to a set of general rules or formal disclosure procedures. Rather, they are connected to the institutional context in which knowledge is produced, the nature of the decisions assigned to AI systems, and the limits of the role they are allowed to play in the research process. Similarly, the UNESCO Recommendation on the Ethics of Artificial Intelligence (UNESCO, 2022) emphasizes human oversight, transparency, and accountability, implying that AI outputs should not be treated as substitutes for human judgment or as independent sources of responsibility.

On this basis, delegating certain technical tasks to AI does not mean delegating scientific responsibility to the system. The researcher remains responsible for decisions that affect the construction of knowledge, including selecting outputs, accepting or rejecting them, and verifying their suitability to the context under study. As the influence of AI on epistemic decisions increases, the need for human oversight, verification, and documentation also increases, making it possible to identify where AI intervened and how its outputs contributed to the final result.

Accordingly, the scope for delegation should diminish as AI use approaches the core of the epistemic decision. Delegation may be broader for technical and linguistic tasks with limited implications for meaning, but should become more restricted when AI is used to interpret findings, construct classifications, or formulate conclusions. Human responsibility is therefore not merely an ethical requirement; it is also a methodological component that ensures the traceability of AI intervention and enables its effects on knowledge production to be reviewed.

1.4. Artificial Intelligence as technical practice

Recent sociological literature indicates that generative AI is no longer treated merely as a technical tool employed in social research. It has also become an object of analysis and a mediator with technical agency within some of the practices through which knowledge is produced. In this context, (Pilati et al., 2024) show that generative AI requires social research to rethink its position within the research process, given the possibility of using it both as an object of study and as a mediator in knowledge production.

Similarly, (Solaroli & Garzonio, 2026) propose an analytical framework that approaches AI through the concepts of agency, communication, and memory, while distinguishing among three dimensions: AI as an object, as a practice, and as a method. This distinction makes it possible to move beyond viewing AI as a technology detached from its social context and instead examine how it enters research practices and influences processes of knowledge production.

From this perspective, the present study focuses on AI in its methodological and practice-oriented dimensions within social research, not as a substitute for the researcher but as a technology that can intervene, to varying degrees, at different stages of knowledge construction. Methodological intervention is therefore understood as a form of technical agency that may influence epistemic decision-making by proposing patterns, classifications, formulations, or relationships that the researcher subsequently re-examines and evaluates, without implying a transfer of interpretive authority or scientific responsibility from the researcher to the machine.

2. Previous Studies: A Critical Reading

The selection of the studies analyzed here is based on four main criteria: their focus on AI in scientific or social research; their relevance to one or more stages of the research process; their discussion of methodological or ethical limitations alongside potential benefits; and their contribution to the construction of the research problem and the proposed concept. The studies are examined through a common set of questions concerning the function assigned to AI, the research stage at which it intervenes, the degree of researcher involvement, and the limitations identified by each study.

The UNESCO Recommendation (UNESCO, 2022), together with the three sociological studies by (Pilati et al., 2024) and (Rossi et al., 2024) and (Solaroli & Garzonio, 2026), was used primarily to construct the conceptual framework presented in Section 1 and is therefore not included among the six studies selected for critical analysis. This selection is necessarily limited by its selective nature, as well as by the recent emergence and rapid development of AI-related literature. The findings of any selective review in this field are therefore open to revision as new studies emerge.

The six studies converge in recognizing that the use of AI in research involves methodological and ethical limitations, but they differ in their analytical focus and in the research stages they address. (Christopher A, 2024) and (Davidson, 2024) discuss the possibilities offered by AI for social research while drawing attention to risks related to bias, reliability, and replicability. (Andersen et al., 2025), based on a survey of 2,534 Danish researchers from different disciplines and an assessment of 32 use cases, demonstrate that AI use extends across multiple stages of the research process and cannot be reduced to writing assistance.

(Combrinck, 2024) addresses AI use at an applied level through the analysis of mixed-methods research data. The study highlights the usefulness of AI for certain descriptive and organizational operations while emphasizing the continuing importance of human judgment in methodological decisions concerning test selection and qualitative interpretation. (Jeon et al., 2025) shift the discussion toward

the ethical and institutional dimensions of AI use, emphasizing institutional context and the distribution of responsibility. In the Algerian context, (Brahmi & Nesba, 2025) based on interviews with doctoral researchers, provide an initial indication of researchers' awareness of the possibilities and challenges associated with AI and of the need for training and regulatory frameworks.

However, comparison of these studies reveals an analytical space that remains insufficiently specified. Some studies focus on the possibilities and risks of AI use, while others address the stages in which it is employed or the ethics of its use. Few, however, provide a unified criterion for determining when AI use becomes a methodological intervention that affects epistemic decision-making, how the degree of such influence can be assessed, and how its consequences can be traced. The present study therefore moves from the question "Is AI used in research?" to a more specific set of questions: Where does it intervene? What function does it perform? To what extent does it influence the epistemic decision? And how can this influence be traced?

Table 1. Critical comparison of previous studies on the use of artificial intelligence in scientific and social research

Study	Focus	Main contribution	What it leaves open
Bail, 2024	Possibilities and risks	Highlights the potential of AI in social research while drawing attention to limitations related to reliability and bias	Defining a criterion that clarifies the limits of delegation and its effect on epistemic decisions
Davidson, 2024	AI in sociological research	Broadens the discussion of AI use and the need for transparency in the research process	Specifying the degrees of methodological influence of AI intervention
Andersen et al., 2025	Stages of the research process	Demonstrates the extension of AI use across multiple stages of the research cycle	Specifying how the methodological influence of these uses varies according to their location and function within the research process
Combrinck, 2024	Mixed-methods data analysis	Shows the usefulness of AI for certain descriptive and organizational operations while emphasizing the continuing role of human judgment	Determining when technical assistance exceeds the limits of support and becomes a methodological intervention
Jeon et al., 2025	Ethics and institutional context	Links AI use to responsibility and the institutional context of research	Linking responsibility to the degree of AI influence on epistemic decisions

Brahmi and Nesba, 2025	Algerian context	Highlights researchers' awareness of AI's potential and the need for training and regulation	Developing a methodological framework that defines degrees of intervention in the Algerian research context
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Source: Prepared by the researchers based on the studies reviewed above.

3. The Methodological intervention of artificial intelligence

This study proposes the concept of methodological intervention to examine the effects of AI intervention on the epistemic decisions that shape the course of social research, from formulating the research problem and constructing concepts to collecting, organizing, classifying, and analyzing data, and finally interpreting findings and formulating conclusions. This intervention is not measured by the volume of work performed by the machine or by the number of tasks assigned to it, but by the extent to which its outputs contribute to shaping what the researcher observes, selects, interprets, or decides in the process of knowledge production.

The concept of methodological intervention is defined through four interrelated dimensions:

- **Location:** the research stage at which AI intervenes, such as problem formulation, conceptual construction, data collection, classification, analysis, interpretation, or drafting the final text.
- **Function:** the nature of the task performed by the system within the research stage, whether executing a procedure, making a suggestion, classifying data, generating content, or proposing a possible interpretation.
- **Degree of influence:** the extent to which AI outputs contribute to changing what the researcher considers important, possible, or interpretable, ranging from marginal influence that can easily be set aside to more directive influence that contributes substantially to shaping an epistemic decision.
- **Traceability:** the possibility of reconstructing the path of AI intervention, including the task assigned to the system, the outputs it generated, how those outputs were examined and reviewed, what the researcher accepted or rejected, and how the intervention was reflected in the final research output.

This concept is connected to the dimension of “practice” in the framework proposed by (Solaroli and Garzonio, 2026), because it does not treat AI as a technical entity detached from its context, but focuses on how it enters research practice and influences knowledge production. From this perspective, the significance of AI lies not only in its technical characteristics, but also in its position within the network of decisions and procedures through which social research is conducted.

Methodological intervention also differs from the notion of automation level discussed in human-automation research. Automation measures the amount of work whose execution is transferred to a system, whereas methodological intervention focuses on the location of that work and its effect on epistemic decision-making. A large-scale automated task, such as organizing thousands of records or cleaning data according to predefined rules, may have limited methodological influence if it remains subject to clear criteria and researcher review. Conversely, a limited intervention, such as proposing an interpretation or classification that influences the researcher's reading of the data, may have a substantial methodological effect because it directly affects the construction of meaning.

Accordingly, the central questions are not “How much work did AI perform?” but rather: Where did it intervene? What did it do? To what extent did it influence the epistemic decision? And can this influence be traced and reviewed? The concept of methodological intervention thus provides a basis for moving beyond merely describing AI use toward assessing its methodological effects on the production of social knowledge.

4. The Integrative Framework: researcher, machine and Knowledge

The proposed integrative framework is based on a triadic relationship among the researcher, the machine, and knowledge. The researcher represents scientific judgment and methodological responsibility; the machine represents a computational and generative capacity that can be employed at different stages of the research process; and knowledge represents the resulting output, which is subject to evaluation in terms of validity, relevance, and context. This relationship is not based on replacing one party with another, but on regulating the limits of intervention and determining where responsibility lies in the production of knowledge.

This relationship is governed by four interrelated principles:

- gradation of intervention according to the research stage;
- non-delegation of interpretive judgment and the final decision;
- verification of every output that influences epistemic decision-making; and
- documentation proportionate to the degree of influence.

Table 2. Proposed roles of the researcher and artificial intelligence and verification mechanisms across the stages of social research

Stage	Proposed Level of Intervention	What remains with the researcher	Verification and traceability
Formulating the problem and conceptual framework	Low: brainstorming and proposing questions and preliminary formulations	Defining the problem and final concepts	Recording the prompts and outputs used by the researcher
Literature review	Medium: summarizing, organizing, and suggesting search directions	Selecting sources, reading them, and evaluating their relevance	Checking every citation against the original source and verifying its content
Data collection	Medium: preliminary	Selection, piloting,	Documenting

	drafting or linguistic improvement of research instruments	adaptation, and ethical approval	instrument versions before and after AI use
Classification and coding	Medium to high, subject to human review	Building the coding scheme, assessing its suitability, and reviewing a sample of codes	Dual human coding where possible, checking agreement, and recording modifications and disagreements
Interpretation and conclusions	Very low: suggestions or questions for discussion only	Social interpretation, argument construction, and formulation of conclusions	Justifying the acceptance or rejection of any influential suggestion
Writing	High for linguistic aspects, low for constructing the argument	Argumentative structure, scientific content, and responsibility for the text	Disclosing AI use and conducting a final review of the text

Source: Prepared by the researchers

This distribution demonstrates that extent to which tasks can be delegated is not uniform across all stages of research. Tasks that can be delegated to AI to a greater extent in linguistic or organizational domains cannot be delegated to the same degree when they concern the construction of meaning or the interpretation of social phenomena. The proposed levels of intervention should therefore not be understood as fixed rules applicable to all forms of research, but as a starting point for assessing methodological risks according to the nature of the task and its context.

The framework can be used to assess AI applications through a central normative question: Can this output change what the researcher regards as a significant pattern, meaning, or relationship in the data? If the answer is yes, the intervention acquires greater methodological significance, even if the task is limited in volume. If, however, the machine's role is confined to executing a technical procedure according to clear criteria, and its output remains subject to researcher review without affecting the interpretation of the findings, the methodological effect of the intervention is lower.

Thus, the significance of methodological intervention is not determined by the quantity of work performed by the machine, but by its position within the chain of epistemic decision-making and by the degree to which its outputs influence knowledge construction. Processing large amounts of data for organizational or formatting purposes may remain limited in methodological effect when its rules are clear and open to review, whereas a single suggestion at the interpretation stage may have substantial influence if it changes how the researcher understands a pattern, meaning, or relationship in the material under study.

Accordingly, the relationship between the researcher and the machine should not be understood through a simple "replacement/non-replacement" dichotomy, but through a graduated distribution of

functions and epistemic authority. The machine can execute, suggest, organize, and assist, while the researcher retains interpretive judgment, the final decision, and responsibility for the knowledge produced.

5. Applied example: coding field interviews

To illustrate the application of the proposed framework, consider a hypothetical qualitative study based on forty interviews concerning young people's representations of work. After reading ten interviews, the researcher develops an initial set of codes and asks an AI system to apply them to the remaining interviews. In this case, the intervention occurs primarily at the classification and coding stage and may be assessed as medium to high because the machine's outputs may influence which themes subsequently emerge as recurrent patterns in the data.

Under the proposed framework, the researcher retains responsibility for constructing the coding scheme, defining the meanings of the codes, and determining the boundaries of their application, while the machine performs the more operational task of classifying text segments. To assess the effect of this intervention, the researcher independently codes a sample of interviews and compares the human coding with the machine-generated coding, examining areas of agreement and disagreement. Where appropriate to the nature of the data, agreement indicators may also be used. Such agreement should not be interpreted as automatic evidence of coding validity; rather, it serves as a means of identifying points of disagreement that require further review and analysis. Any modifications to the codes or to the rules governing their application should also be documented.

The nature of the intervention changes when the researcher moves from requesting classification to requesting interpretation. If, for example, the system is asked about the reasons for the recurrence of the theme of "frustration" in the interviews, its function shifts from classifying textual segments to proposing a possible meaning or explanation. At this point, the intervention approaches interpretation, and the system's response should therefore be treated as an analytical hypothesis open to examination, rather than as a ready-made research finding. The researcher must test the proposed interpretation by returning to the contexts of the interviews, comparing different cases, and examining its relationship to the remaining data and to relevant social knowledge concerning the actors under study.

Borderline Case: Summarization as Intervention

Summarizing a field interview may appear to be a neutral descriptive task. Yet summarization necessarily involves selecting what should be highlighted and what may be condensed or omitted. The use of AI to summarize interviews may therefore influence how the researcher subsequently reads the original material, even when the system provides no explicit classification or interpretation.

This borderline case demonstrates that methodological intervention is not determined solely by the declared function of the tool, but also by the effect that its outputs may have on the course of reading and epistemic decision-making. An intervention that appears technically limited may therefore acquire methodological significance if it changes what the researcher perceives as salient in the data.

6. Discussion

The proposed framework demonstrates that the methodological problem is related less to the quantity of AI use than to the location of the intervention and the degree of its influence on epistemic decision-making. From this perspective, transparency does not merely mean disclosing the use of AI. It also involves making it possible to understand the effect of that use on the research process, identify the

stages at which the system intervened, determine the nature of its outputs, and establish how those outputs were examined, accepted, or rejected.

This conception is consistent with the principles of human oversight, transparency, and accountability emphasized in the UNESCO Recommendation (UNESCO, 2022). However, the proposed framework places these principles within the methodological logic of knowledge production rather than treating them solely as ethical concerns external to research practice. The closer AI intervention comes to decisions that determine the meaning of data or the direction of conclusions, the greater the need for verification and documentation and the more limited the possibility of delegating epistemic judgment independently.

In the Algerian context, this issue acquires additional significance in light of (Brahmi & Nesba, 2025) findings of concerning researchers' awareness of AI's potential and their need for training and regulatory frameworks. In a preliminary sense, the proposed framework may provide a basis for developing training programs that help researchers distinguish between low-impact uses and uses requiring stronger methodological oversight. It may also contribute to the development of clearer standards for disclosing AI use in academic research.

The concept of methodological intervention also opens sociological questions that extend beyond the scope of this study: Who controls the digital tools that shape the possibilities and conditions of research? How are standards of "acceptable use" formed within universities and scientific journals? And do researchers differ in their ability to critically assess AI outputs according to their methodological training and technical resources? These questions suggest that integrating AI into research is not merely a matter of technical efficiency; it is also connected to the distribution of resources, skills, and epistemic authority within the academic field.

In its current form, the proposed framework remains analytical and requires empirical testing on actual research cases to assess the applicability of its dimensions, particularly with regard to estimating degrees of intervention and determining whether researchers can reach a meaningful level of agreement when classifying such interventions. This limitation opens the way for subsequent studies that test the concept across different research stages and practices and seek to develop more precise indicators for assessing the influence of AI on epistemic decision-making.

Conclusion

In conclusion, this study argues that the expression "use of artificial intelligence" is no longer sufficient to assess its effects on social research. These effects depend on where AI is positioned within the research process, the functions it performs, the extent to which its outputs influence research decisions, and the possibility of tracing this influence. The study therefore proposed the concept of "methodological intervention of artificial intelligence" as a way of examining the role of AI in knowledge production, not simply as a neutral technical tool, but as a mediator that can, to varying degrees, shape what researchers observe, classify, and interpret.

The study also developed an integrative framework based on the researcher-machine-knowledge triad. Rather than viewing AI as a replacement for the researcher, the framework understands its integration as a gradual redistribution of functions within the research process. AI can execute, organize, classify, suggest, and generate, while the researcher remains responsible for assessing the relevance and validity of its outputs, situating them within their social context, and making the final scientific decisions.

The study thus answers the central research question by showing that the significance of AI does not depend simply on how much it is used, but on the extent to which it becomes involved in research decision-making. This involvement can be examined through four dimensions: location, function, degree of influence, and traceability. The closer AI comes to classification, interpretation, and the construction of meaning, the greater its methodological significance and the stronger the need for verification, review, and documentation. Accordingly, interpretation, judgment, decision-making, and scientific responsibility should remain with the researcher, while technical and organizational tasks may benefit from AI when they remain subject to human oversight.

This perspective also has sociological significance, as it places AI within broader transformations in scientific practice and in the distribution of roles and epistemic authority within the academic field. AI does not enter research as a technology detached from social actors; it operates as a mediator that can reshape some of the conditions and relations through which knowledge is produced. However, the proposed framework requires empirical testing to develop more precise indicators for assessing different degrees of AI intervention and their effects on research decision-making. Future research could further examine questions of scientific trust, epistemic authority, and methodological responsibility as AI becomes increasingly present in social research.

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