Cureus Journal of AI-Augmented Research
https://doi.org/10.7759/s44568-026-00331-x

Original Article

Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity

Dwi Ridho Aulianto [1, ✉]

1. *Bureau of Public Communication, General Affairs, and Secretariat, National Research and Innovation Agency (BRIN), Jakarta, IDN*

Received: May 28, 2026 | Review began: June 26, 2026 | Review ended: September 12, 2026 | Published: October 20, 2026

© **Copyright** 2026
This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

The growing integration of artificial intelligence (AI), particularly large language models and generative systems, has reshaped professional and creative workflows by enabling users to generate, organize, refine, and transform knowledge and expression. However, existing studies often examine AI use within isolated domains, limiting the understanding of how the roles of AI shift across analytical, interpretive, and creative practices. This study addresses this gap through a single-subject reflective multi-case analysis of AI-assisted workflows across three domains: scientific writing, narrative composition, and creative song production. All cases are situated within the shared thematic context of archival professional identity, particularly the expression of "Bangga menjadi arsiparis." The analysis focuses on reconstructed interaction cycles involving human input, prompting, AI-generated output, human evaluation, and either revision, acceptance, rejection, or selection. The findings show that AI assumed three domain-specific roles: an analytical and structural assistant in scientific writing, a narrative structuring agent in personal storytelling, and a creative generator in song production. The study further identifies an interpretive inverse pattern between AI generative autonomy and the intensity of direct human correction or validation. In scientific writing, human control appeared as verification and methodological judgment; in narrative writing, as meaning preservation and authentic voice maintenance; and in song production, as selection, curation, and final approval. Across the three reconstructed cases, these findings suggest that human control did not disappear as AI assumed more generative roles; rather, its form appeared to shift according to task demands, output expectations, and error sensitivity. The study provides a reflective, cross-domain, practice-based framework for understanding adaptive human-AI co-creation and highlights the importance of task-sensitive strategies, human oversight, and contextual judgment in responsible AI use.

Categories: Practitioner-AI Collaboration in Applied Research, Human-AI Collaboration, Workflow and Productivity Impacts of AI

Keywords: human-ai collaboration, generative ai, ai-assisted writing, professional identity, human control, archival practice, creative ai, ai-augmented research

Introduction

Artificial intelligence (AI), particularly large language models and generative systems, has increasingly reshaped how knowledge is produced, communicated, and expressed across professional domains. Being no longer limited to computational support, AI is now embedded in cognitive, communicative, and creative workflows, where it assists users

in generating text, organizing ideas, synthesizing information, refining arguments, and producing multimodal outputs. This transformation is especially important in knowledge-intensive professions, where analytical reasoning, narrative construction, and symbolic expression are central to professional practice. As AI becomes more accessible and interactive, its role in professional work is no longer confined to automation or efficiency; it increasingly affects how professionals formulate knowledge, communicate meaning, and represent their occupational identities [1-3].

The growing use of AI in scholarly and creative practice has also changed the nature of human-machine interaction. Contemporary AI systems can respond to prompts, generate alternatives, revise outputs, and support iterative refinement, making interaction with AI increasingly dialogic rather than merely instrumental. This shift has encouraged scholars to conceptualize AI not only as a tool, but also as a collaborator, teammate, or augmentation mechanism within human workflows [4,5]. Such developments are particularly relevant for professions that depend on both technical expertise and communicative representation. In archival practice, for instance, professional work involves not only managing records and preserving evidence, but also articulating the social value of archives, memory, accountability, and professional responsibility.

Despite these developments, the role of AI remains unevenly understood across different domains of practice. In academic and scientific writing, AI has been widely discussed for its capacity to support drafting, editing, language refinement, literature exploration, and manuscript preparation. However, the use of AI in scholarly writing also raises concerns regarding authorship, academic integrity, factual accuracy, fabricated references, and the reliability of AI-generated claims [6-8]. In this domain, AI may increase productivity, but its outputs require strong human validation because errors can affect the credibility and validity of scholarly work.

In creative domains, the problem takes a different form. Generative AI has altered how stories, songs, images, and other creative works are imagined, produced, and evaluated. Rather than treating creativity as either purely human or fully automated, recent research increasingly frames AI-assisted creativity as a co-creative process in which human intention, prompting, selection, and judgment interact with machine-generated possibilities. Generative systems may expand creative options, but they also raise questions about originality, authorship, human contribution, and the perceived value of outputs produced with AI support [9-11]. These debates show that the meaning of AI collaboration changes depending on whether the task prioritizes factual accuracy, interpretive authenticity, or aesthetic expression.

Within archival practice, this issue is especially significant because professional identity may be communicated not only through formal institutional documents but also through narrative and cultural media. The song "Bangga Menjadi Arsiparis," for example, has been examined as a cultural representation of the archival profession, showing how archival values such as memory, responsibility, public trust, and continuity can be articulated through popular cultural expression [12]. This suggests that AI-assisted production in archival contexts should not be understood only as a matter of efficiency, but also as a possible site where professional identity is organized, mediated, and expressed.

However, the existing literature remains fragmented. Studies on AI in scientific writing tend to focus on accuracy, productivity, and ethical risks, while studies on creative AI tend to emphasize originality, co-creation, and aesthetic judgment. Meanwhile, research on professional identity often examines how AI reshapes occupational roles, competencies, and boundaries, including possible threats to professional self-understanding [13,14]. What remains insufficiently examined is how a professional user engages AI reflectively across multiple domains of production and how AI's role shifts when the same thematic concern is expressed through analytical, narrative, and creative forms. This gap limits understanding of AI as an adaptive co-creation partner whose function depends not only on technological capability, but also on task demands, epistemic risk, human control, and the acceptable degree of variation in the final output.

This study addresses that gap by examining the researcher's own AI-assisted practices across three domains: scientific writing, narrative composition, and creative song production. All three cases are situated within the thematic expression of archival professional identity, particularly the idea of "Bangga menjadi arsiparis," allowing a consistent analytical lens

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

across different forms of output. Rather than treating AI use as a controlled experiment or as a complete log-based analysis, the study adopts a reflective multi-case approach to reconstruct how AI was directed, evaluated, revised, accepted, rejected, or selected within actual professional and creative workflows.

The study aims to identify the functional roles of AI across domains, analyze iterative human-AI interaction patterns, and examine how human control is maintained and transformed when AI is used to support professional identity expression. Its novelty lies in its reflective, cross-domain, and practice-based approach, which conceptualizes AI neither as a static tool nor as a fully autonomous agent, but as an adaptive co-creation partner whose role varies according to task context, output expectations, human judgment, and generative autonomy. As a qualitative exploratory study, it does not test a formal hypothesis; rather, it proposes an interpretive framework for understanding the relationship between AI generative autonomy and human control across analytical, interpretive, and creative workflows.

The contribution of this study is exploratory rather than generalizable. By comparing three AI-assisted workflows situated within a single professional context, the study provides a cross-domain account of how AI roles and forms of human control may vary according to task requirements, output expectations, and evaluative demands. The proposed framework should therefore be understood as an analytically derived conceptual interpretation of the cases rather than as a predictive or statistically validated model. The single-subject and retrospective design necessarily limits generalization, while enabling close examination of situated human-AI interaction across different forms of professional and creative production.

Materials And Methods

Related work

Prior studies on AI in professional and creative practices can be organized around four interrelated areas: AI in scientific writing, AI in creative production, human-AI collaboration, and professional identity in digitally mediated work environments. Together, these bodies of literature show that AI is no longer discussed only as a technical infrastructure, but also as a sociotechnical force that shapes knowledge production, communication, creativity, decision-making, and professional practice [1-3].

Research on AI in scientific writing has emphasized its capacity to support academic communication through drafting, summarizing literature, refining academic language, organizing arguments, and assisting manuscript preparation. These functions can improve writing efficiency and help researchers produce more coherent scholarly texts. However, AI-generated academic content requires careful human validation because such systems may produce plausible but inaccurate claims, fabricated references, or misleading summaries. Therefore, AI assistance in scientific writing must be accompanied by critical human oversight, particularly in relation to factual accuracy, source reliability, academic integrity, and claim-evidence alignment [6-8].

In creative production, AI is commonly examined through its contribution to music, visual art, storytelling, and other forms of creative output. Rather than treating AI creativity as fully autonomous, recent literature frames creative work as a co-creative process in which human users provide prompts, constraints, intentions, and evaluative judgment while AI generates possible outputs. This perspective suggests that AI can expand the range of creative possibilities available to users, while also raising questions about originality, authorship, human intention, and the perceived value of AI-generated creative work [9-11].

Beyond these domain-specific applications, human-AI collaboration has increasingly been conceptualized as an interactive and iterative process. AI is neither a passive instrument nor a fully independent agent, but part of a sociotechnical workflow in which human users define goals, formulate prompts, evaluate outputs, and refine results through repeated interaction. Collaboration therefore depends not only on the technical capability of AI systems, but also on how control, agency, and responsibility are distributed between human and machine actors. This perspective shifts attention from AI output alone to the interactional process through which outputs are produced, evaluated, revised, accepted, or rejected [4,5].

A central issue in this literature is the balance between AI autonomy and human control. Human-centered AI scholarship emphasizes that effective AI systems should support human agency, accountability, creativity, and decision-making rather than displacing human judgment. The degree of acceptable AI autonomy is not fixed; it depends on the task, the level of risk, the expected output, and the form of human judgment required. This is particularly relevant when users move across different modes of production, such as analytical writing, narrative composition, and creative expression, because each mode involves different expectations regarding accuracy, interpretation, authorship, and acceptable variation [3,5,15,16].

Another important area of scholarship concerns the relationship between AI and professional identity. Research on AI in the workplace suggests that AI adoption may affect how professionals understand their roles, competencies, occupational boundaries, and future relevance. Some studies emphasize AI-induced threats to professional identity, especially when AI systems appear to substitute tasks traditionally associated with human expertise. Other studies, however, indicate that professionals may actively reinterpret AI as a part of their work practices, thereby reshaping professional identity rather than simply losing or weakening it [13,14,17].

This issue is especially relevant in knowledge-intensive professions, where professional identity is constructed not only through technical performance, but also through symbolic expression, public communication, and meaning-making. In such contexts, AI may function as more than a productivity tool. It may also mediate how professionals articulate values, experiences, and occupational meanings across different forms of output. For archival professionals, this is particularly significant because archival identity is connected not only to records management and preservation, but also to memory, accountability, public trust, and the communication of professional value.

Despite these contributions, existing research remains fragmented. Studies on scientific writing tend to emphasize accuracy, productivity, authorship, and ethical risk, while studies on creative AI tend to focus on originality, aesthetic judgment, and co-creation. Research on human-AI collaboration often examines the distribution of agency and control, while studies of professional identity focus on role change, occupational boundaries, and identity threat or adaptation. As a result, limited attention has been given to how AI roles shift when a single professional user engages AI across multiple forms of production within the same professional and thematic context.

This study responds to that gap by examining AI-assisted scientific writing, narrative composition, and creative song production within a unified reflective multi-case framework. By grounding all three cases in the shared theme of archival professional identity, the study extends existing literature beyond functional accounts of AI use and considers its expressive and interpretive dimensions. The study contributes by offering a comparative framework that links AI-generative autonomy with different forms of human control across domains, while also introducing a perspective on AI as a mediator of professional identity expression across analytical, narrative, and creative forms.

Methodology

This study employs a qualitative reflective multi-case design to examine how AI functions as a collaborative partner across different domains of knowledge production and creative expression. A qualitative approach is appropriate because the study investigates a contemporary, practice-based phenomenon in its natural context, with attention to interaction, process, interpretation, and meaning-making. Rather than testing causal hypotheses or statistically measuring AI performance, the study aims to generate an interpretive understanding of how human-AI collaboration unfolds within situated professional and creative workflows [18-20].

The study is designed as a single-subject reflective multi-case inquiry in which the researcher acts as a reflective practitioner examining their own AI-assisted practices. The researcher's experience of using AI to write scientific articles, develop narrative texts, and create songs becomes the empirical site through which human-AI co-creation is examined. This design is appropriate because the practices under study emerged from actual professional and creative activities rather than from a pre-planned experiment. The study therefore treats AI-assisted work as a reflective site of inquiry into how human control, evaluation, revision, and selection are exercised during everyday AI-supported production. This orientation is consistent with reflective practitioner inquiry, which recognizes professional experience as a valid site for systematic reflection when the researcher's position, assumptions, and interpretive role are made explicit [21,22].

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

The three cases were purposively selected because they represent different domains of AI-assisted professional and creative practice: scientific writing as an analytical domain, narrative writing for an anthology or book-related output as an interpretive domain, and creative song production as a creative domain. All cases share a common thematic orientation related to archival professional identity, particularly the expression of "Bangga menjadi arsiparis," while differing in cognitive demands, expressive forms, output formats, and levels of AI involvement. This purposive selection supports cross-case comparison while maintaining thematic coherence across the study [23].

The empirical basis of the study consists of completed AI-assisted artifacts and the researcher's reflective reconstruction of the processes through which those artifacts were produced. These artifacts include one scientific article developed through iterative interaction with AI tools, two narrative texts prepared for a collaborative anthology or book-related context, and one AI-assisted song consisting of lyrics, descriptive elements, and final audio output. The study does not claim to analyze complete AI conversation logs, complete prompt histories, or a comprehensive archive of all AI interactions. Instead, the analysis is based on reconstructable evidence, including final outputs, available drafts or AI-generated texts where accessible, observable differences between versions, recurring prompting patterns, identifiable revisions, and the researcher's reflective account of how AI-generated material was evaluated, revised, accepted, rejected, or selected. Written artifacts, drafts, and textual records can serve as valid materials for qualitative reconstruction when analysis is conducted transparently and when claims are limited to what can reasonably be inferred from available evidence [24,25].

The analytical model used in this study is based on an iterative human-AI collaboration cycle consisting of six stages: human input, prompting AI, AI output, human evaluation, revision or refinement, and final output. Human input may include ideas, experiences, memories, research topics, professional values, or thematic pointers. These inputs are translated into prompts, instructions, or constraints for AI. AI then produces outputs such as draft text, proposed structure, revised wording, lyrics, descriptions, or creative alternatives. The researcher evaluates these outputs according to task-specific criteria, including accuracy, meaning, relevance, coherence, authenticity, quality, and aesthetic fit. If the output does not meet the researcher-practitioner's standards, the process returns to prompting or refinement. If the output is considered satisfactory, it is revised manually, selected, accepted, or incorporated into the final artifact. Figure *1* illustrates this reflective and iterative model of human-AI collaboration.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

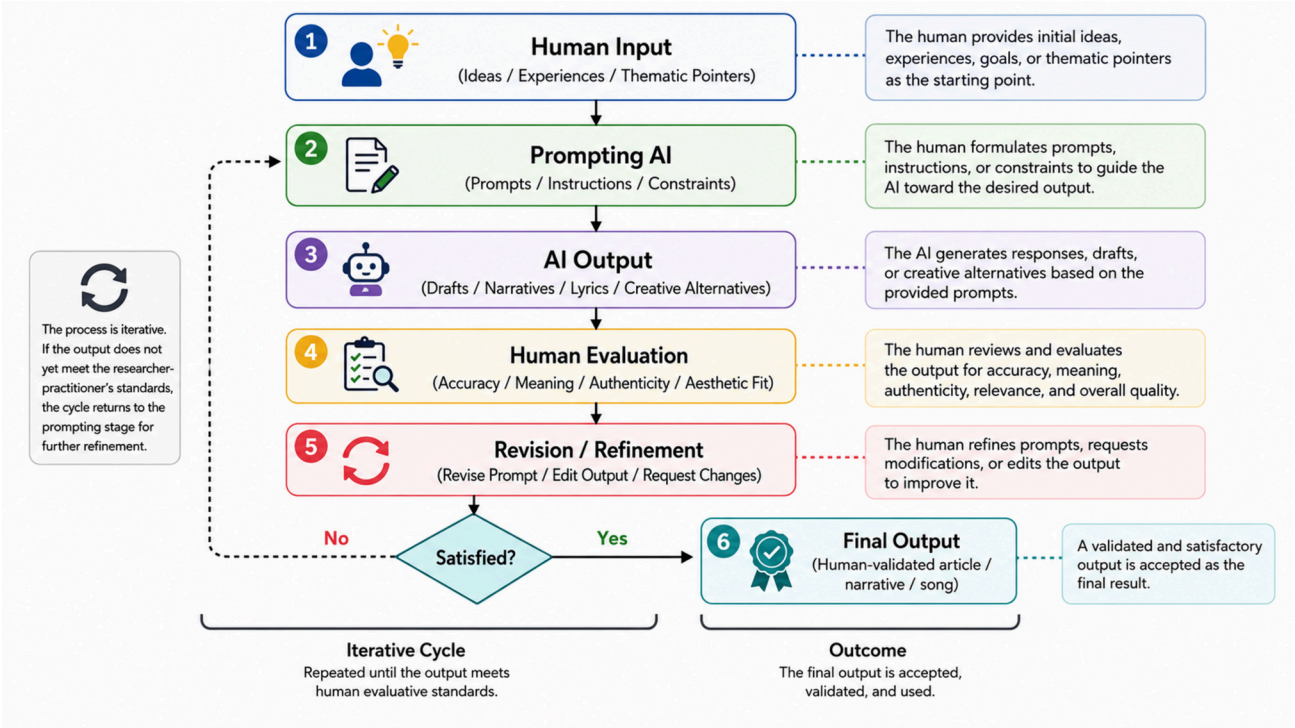


FIGURE 1: Human–AI Iterative Collaboration Model.

The figure illustrates the reflective and iterative workflow used in this study, in which human input is translated into prompts, AI-generated outputs are evaluated by the researcher-practitioner, and outputs are revised, accepted, rejected, or selected before becoming final artifacts.

Figure *1* should be read as a process model rather than as a technical system architecture. It summarizes the recurring analytical sequence identified across the reconstructed workflows. Human input establishes goals and constraints, prompting translates these inputs into AI instructions, AI output provides candidate material, and human evaluation determines whether the output is revised, rejected, accepted, or incorporated into the final artifact. The model is iterative because outputs may return to earlier stages before final acceptance.

The unit of analysis is the human-AI interaction cycle, consisting of four core elements: human input or prompt, AI-generated output, human evaluation, and revision, acceptance, rejection, or selection. This unit captures the practical structure of AI-assisted work more accurately than treating the final artifact alone as the object of analysis. In scientific writing, the interaction cycle involved idea formulation, outline development, drafting, language refinement, reference checking, and final scholarly validation. In narrative writing, it involved transforming personal memories and professional experiences into structured prose while preserving meaning and authentic voice. In song production, it involved providing thematic pointers, generating lyrics or creative descriptions, producing musical alternatives, and selecting the output that best matched the intended professional message and aesthetic direction. This approach is aligned with human-centered AI scholarship, which emphasizes human agency, oversight, accountability, and contextual judgment, and with human-AI collaboration studies that view AI-supported work as an iterative workflow involving the redistribution of control, agency, and responsibility [3-5].

For clarity, three analytical terms are distinguished throughout the study. A case refers to one domain-specific AI-assisted workflow: scientific writing, narrative writing, or creative song production. An artifact refers to a completed output reconstructed within a case, such as the scientific article, narrative texts, or song-related outputs. An interaction cycle

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

refers to the process-level unit of analysis consisting of human input, AI-generated output, human evaluation, and revision, acceptance, rejection, or selection. A single case may therefore contain one or more artifacts and multiple interaction cycles.

Data were collected through retrospective and reflective reconstruction of AI-assisted workflows. This procedure was necessary because the practices examined in this study occurred as part of actual professional and creative activities rather than as a pre-designed research protocol. To reduce the risk of unsupported recall, the reconstruction was limited to traceable and observable elements, including changes in structure, wording, organization, tone, thematic alignment, reference handling, validation activities, and decisions to accept, revise, reject, or select AI-generated outputs. Subjective impressions that could not be connected to observable workflow features or artifact-based evidence were excluded from the analysis. The purpose of this reconstruction was not to document every prompt or AI response, but to identify dominant patterns through which human control was exercised within AI-assisted production. Accordingly, the reconstructed workflows should not be interpreted as complete chronological transcripts of all human-AI exchanges. Rather, they represent analytical reconstructions based on available artifacts, observable revisions, retained outputs, documented decisions, and the researcher's reflective account. Where complete interaction logs were unavailable, the analysis was limited to process features that could be supported by reconstructable evidence.

Data analysis followed a qualitative, process-oriented approach combining within-case analysis, inductive coding, and cross-case comparison. Each case was first analyzed individually to identify how AI contributed at different stages of production and how human intervention shaped the final output. Interaction cycles were then coded according to functional roles observed in the workflow, including ideation support, structural organization, content generation, language refinement, validation and verification, decision-making, selection, and curation. The coding was inductive because categories were derived from repeated patterns in the reconstructed workflows, while also being informed by existing concepts in human-AI collaboration, human-centered AI, and reflexive qualitative analysis [22,26].

The coded data were reviewed to identify higher-level patterns in AI functionality across domains. Through this process, three dominant AI roles were identified: analytical and structural assistant in scientific writing, narrative structuring agent in narrative writing, and creative generator in song production. A cross-case comparison was then conducted across four analytical dimensions: AI-generative autonomy, human control and validation intensity, iteration pattern, and sensitivity to error. These dimensions enabled comparison across analytical, interpretive, and creative domains without assuming that the same quality criteria applied equally to all cases.

To strengthen methodological rigor, the study applied trustworthiness strategies commonly used in qualitative inquiry. Credibility was supported through prolonged engagement with the practices under study. Dependability was addressed through a consistent analytical framework across cases. Confirmability was strengthened by grounding interpretations in available artifacts, observable revisions, identifiable workflow patterns, and explicit acknowledgment of the limits of reconstruction. Transferability was approached through detailed contextual description, allowing readers to assess whether the findings may be relevant to similar AI-assisted professional or creative settings [27,28].

Reflexivity is central to the study because the researcher occupies a dual role as both subject and analyst. The researcher adopted a reflexive stance by distinguishing between observable workflow features and personal interpretation, limiting claims to available evidence, and acknowledging how the researcher's professional background and involvement shaped the analysis. This reflexive orientation is important because researcher position, assumptions, and participation influence how meaning is constructed from data [22,29].

Ethical considerations were addressed through transparency, accountability, and responsible AI use. The study did not involve external human participants and relied solely on the researcher's own professional and creative outputs. No sensitive or identifiable third-party data were included. AI-generated academic content was not treated as authoritative without human checking, particularly in relation to reference accuracy, source reliability, and claim-source alignment. In narrative and creative cases, ethical attention focused on preserving intended meaning, avoiding misrepresentation,

maintaining thematic alignment, and ensuring human approval of the final artifact. This ethical position aligns with broader AI ethics literature emphasizing transparency, human oversight, accountability, and awareness of the limitations of generative systems [30,31].

The single-subject design and retrospective reconstruction are acknowledged as methodological limitations. The study does not aim for statistical representativeness or broad generalization across all AI users. Instead, it prioritizes analytical transferability through cross-domain comparison. Because the study does not rely on complete real-time logging of all AI interactions, recall bias and limited process granularity may remain. To address this limitation, the analysis restricted its claims to reconstructable evidence, available artifacts, observable revisions, recurring interaction patterns, and explicit reflective accounts. Despite these limitations, the design is appropriate for the study's exploratory aim because it offers a reflective and practice-based account of how human control is maintained, transformed, and redistributed in AI-supported knowledge production and creative expression.

Results And Discussion

Results

The results are presented as a reflective reconstruction of the researcher's AI-assisted practices across three domains: scientific writing, narrative writing, and creative song production. Rather than reporting complete interaction logs, the analysis focuses on representative interaction cycles in which human input, AI-generated output, human evaluation, and revision, acceptance, rejection, or selection shaped the final artifacts. Table *1* presents a descriptive quantitative summary of the reconstructed dataset, while Table *2* summarizes the representative interaction cycles across the three cases. Sections 4.1-4.3 discuss the specific role of AI and the form of human control in each domain.

The findings are presented through an explicit evidence chain linking reconstructed interaction cycles, completed artifacts, within-case observations, and cross-case interpretation. Tables *1* and 2 summarize the descriptive basis and representative interaction cycles, while the case sections provide contextual explanation of how AI contribution and human evaluation operated within each workflow. Cross-domain interpretations are drawn only after these case-level observations are established.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

Descriptive item	Count	Percentage / proportion	Interpretive basis
AI-assisted domains/cases analyzed	3	100.0% of cases	Scientific writing, narrative writing, and creative song production
Completed artifacts examined	4	100.0% of artifacts	One scientific article, two narrative texts, and one AI-assisted song
Scientific writing artifact	1	25.0% of artifacts	AI-assisted manuscript development and scholarly validation
Narrative writing artifacts	2	50.0% of artifacts	Two narrative texts prepared from personal-professional experience
Creative song artifact	1	25.0% of artifacts	AI-assisted lyrics, description, music generation, and final song selection
Dominant AI role categories identified	3	One role per case	Analytical/structural assistant; narrative structuring agent; creative generator
Core interaction elements coded per case	4	12 case-element observations across three cases	Human input or prompt; AI output; human evaluation; revision/acceptance/rejection/selection
Cross-case analytical dimensions compared	4	100.0% of cases compared on all dimensions	AI generative autonomy, human control/validation intensity, iteration pattern, and error sensitivity

TABLE 1: Descriptive Quantitative Summary of the Reconstructed Dataset

The descriptive summary shows that the study analyzed three AI-assisted domains and four completed artifacts. Narrative writing accounted for the largest share of artifacts (n = 2; 50.0%), while scientific writing and creative song production each accounted for one artifact (n = 1; 25.0%). Across the three cases, four core interaction elements were coded in each case, resulting in 12 case-element observations. The analysis also identified three dominant AI role categories and compared all cases across four analytical dimensions: AI generative autonomy, human control or validation intensity, iteration pattern, and error sensitivity. These quantitative descriptors provide a transparent basis for the qualitative cross-case interpretation presented in the following sections.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

Case	Main stages	Human input	AI contribution	Human evaluation and decision
Scientific writing	Topic exploration; structural planning; drafting; reference handling; final review	Research interest, publication goal, request for IMRAD structure, literature needs	Candidate topics, outlines, draft paragraphs, language refinement, citation suggestions	Checked relevance, coherence, method alignment, evidence, and references; accepted only verified and suitable outputs
Narrative writing	Experience mapping; narrative structuring; expansion; tone refinement; finalization	Personal memories, professional experiences, structured pointers	Organized narrative sequence, expanded paragraphs, improved readability and tone	Checked meaning preservation, authenticity, tone, and suitability; revised to maintain voice and professional message
Song production	Thematic framing; lyric generation; supporting elements; music generation; distribution preparation	Thematic pointers on archival identity, finalized lyrics, title, song description	Lyrics, song description, cover concept, multiple generated song versions	Checked symbolic coherence, aesthetic fit, thematic alignment; selected and approved final version

TABLE 2: Representative Human–AI Interaction Cycles Across the Three Cases

Human-AI Collaboration in Scientific Writing

The scientific writing case, as reconstructed from the researcher's AI-assisted workflow, showed the most structured and validation-intensive form of human-AI collaboration among the three cases. AI was used across several stages of manuscript development, including topic exploration, structural planning, drafting, refinement, reference support, and final review. However, AI did not function as an autonomous author. It operated within a human-directed workflow in which the researcher retained responsibility for coherence, accuracy, methodological clarity, and source reliability. This pattern is consistent with the view that AI can augment professional work when human expertise remains central to judgment, interpretation, and accountability [2,3].

At the early stage, AI supported topic exploration by generating possible research directions, candidate titles, and alternative angles. These suggestions were not accepted automatically. The researcher evaluated them according to relevance, feasibility, and alignment with publication goals before selecting or reformulating the topic. In this stage, AI functioned as an ideation support system, while the researcher retained authority over the direction of the manuscript. This reflects prior understandings of human-AI collaboration as an iterative process in which humans define goals, evaluate machine-generated outputs, and redistribute control according to task requirements [4,5].

After the topic was selected, AI was used to support manuscript structuring, particularly through an IMRAD-oriented organization. AI suggested section arrangements, logical flow, and possible content requirements for each part of the article. Nevertheless, the methodological foundation remained under human control. The researcher determined the data, analytical approach, and evidence base needed for the study. Thus, AI assisted with structure and wording, but the

researcher remained responsible for ensuring that the manuscript was grounded in available evidence and aligned with academic conventions. This is consistent with studies noting that AI can assist scholarly writing but requires careful human evaluation [6,15].

During drafting and refinement, AI helped elaborate ideas, improve transitions, refine academic language, and strengthen coherence across manuscript sections. Each generated output was reviewed before being accepted or revised. The researcher checked whether the text matched the intended argument, accurately represented the available evidence, and remained consistent with the overall manuscript. When the output was misaligned, additional prompts or manual edits were used to clarify, restructure, or refine the text. This indicates that AI functioned as a drafting and refinement assistant rather than a substitute for scholarly judgment [7,32].

Reference handling was the most sensitive point in this case. AI-generated or AI-assisted references were treated as provisional rather than authoritative. The researcher manually verified source existence, DOI or link availability, bibliographic accuracy, and claim-source alignment. This validation was necessary because AI-generated academic content may contain plausible but inaccurate references, mismatched citations, or unsupported claims. Reference checking therefore became a critical human control point in the workflow [8,33].

Overall, the reconstructed workflow suggests that AI functioned as an analytical and structural assistant in the scientific writing case. It supported brainstorming, organization, drafting, refinement, literature handling, and review, but final scholarly responsibility remained with the researcher. Human control was strongest in topic selection, research design, methodological decisions, factual accuracy, citation validation, and final judgment. Within this case, AI assistance increased the range and speed of writing support, but it also required intensive human validation because scientific writing carries high expectations of accuracy, credibility, and accountability [30,34].

Human-AI Collaboration in Narrative Writing

The narrative writing case, as reconstructed from the researcher's AI-assisted workflow, presented a different pattern of human-AI collaboration from the scientific writing case. In this domain, the researcher used AI to support the development of two narrative texts for a collaborative anthology on the theme "Bangga menjadi arsiparis." The process began not with AI-generated experience, but with the researcher's own memories, professional experiences, and events related to archival work, which were organized into structured pointers. Thus, the human actor remained the primary source of content, meaning, and perspective, while AI functioned as a mediator of expression rather than as the originator of experience. This reflects the view that human-AI collaboration depends not only on system output, but also on how users define goals, provide contextual grounding, and evaluate whether AI-generated material remains aligned with intended meaning [4,5].

AI was used to transform structured pointers into more coherent and readable narrative texts. Its contribution was not to create the experience itself, but to connect fragmented ideas, arrange events, expand brief notes, improve transitions, and enhance readability. In this case, AI functioned as a narrative structuring agent: it shaped expression while the substance of the narrative remained grounded in the researcher's lived experience and professional perspective. This pattern supports the view that AI-assisted writing can help with language production and organization, but still requires human judgment to preserve meaning, authorship, and contextual appropriateness [3,15].

The interaction process was iterative, but less validation-intensive than in scientific writing. The researcher evaluated whether the AI-generated text was complete, readable, coherent, and aligned with the intended focus. When the output was too short, underdeveloped, overly generic, or distant from the researcher's intended voice, further prompting or revision was applied. Iteration in this case was directed mainly toward narrative flow, length, clarity, tone, and expressive coherence rather than factual verification or methodological precision. This reflects AI-supported work as a process of prompting, evaluation, and selective refinement rather than simple output acceptance [2,9].

Human control remained important because the narrative had to preserve the researcher's intended meaning and professional experience. Unlike scientific writing, where validation focused on evidence and accuracy, validation in narrative writing focused on interpretive authenticity. The researcher assessed whether the AI-generated narrative

preserved the original experience, maintained an appropriate tone, and reflected the intended professional message. Although the risk of empirical error was lower, the narrative still carried the risk of misrepresentation, excessive dramatization, or loss of authentic voice. Therefore, AI could improve expression, but it could not replace the researcher's authority over meaning and representation [13,17].

Overall, the reconstructed workflow suggests that AI served as a facilitator of expression and a narrative structuring agent. It occupied an intermediate role between scientific writing and song production: it did not require the same level of technical validation as scientific writing, but it also did not operate with the same generative autonomy as song production. Human control in this case was exercised through meaning preservation and maintenance of authentic voice rather than intensive factual verification. In the context of archival professional identity, this suggests that AI-assisted narrative writing can help professionals articulate values and experiences, provided that human users retain authority over interpretation, tone, and final representation [11,14].

Human-AI Collaboration in Creative Song Production

The creative song production case, as reconstructed from the researcher's AI-assisted workflow, demonstrated the highest level of AI-generative autonomy among the three cases. However, this autonomy remained bounded by human thematic direction, contextual evaluation, selection, and final approval. The process began with thematic pointers related to archival professional identity, including the idea that archivists often work quietly, preserve collective memory, and manage both conventional and digital records. These inputs guided the generation of lyrics for the song "Bangga Menjadi Arsiparis." Unlike scientific writing, where AI outputs required intensive validation, and narrative writing, where AI mainly structured human-provided experience, song production allowed AI to generate more substantial creative material. This pattern is consistent with studies of AI-assisted creativity, which suggest that generative systems can expand creative possibilities while human users retain responsibility for intention, selection, and final evaluation [9,16].

In the lyric-writing stage, AI generated a complete draft of lyrics based on the researcher's thematic pointers. The researcher made minor modifications, but most of the final lyrics were retained from the AI-generated output. Compared with narrative writing, where personal memories formed the main substance, the song case involved a stronger AI role in content generation. Human contribution was concentrated in thematic direction, contextual correction, selective editing, and final approval. This reflects a co-creative process in which AI contributes generative material, while the human actor evaluates whether the output remains aligned with intention, meaning, and context [5,10].

AI also generated supporting elements, including a song description and cover art concept. These outputs extended AI's role beyond lyric production into the broader packaging of the creative artifact. However, they were not accepted simply because they were AI-generated. The researcher assessed whether they matched the theme of archival pride, the tone of the song, and the intended representation of the archival profession. This indicates that even under relatively high AI-generative autonomy, human judgment remained important for contextual fit and symbolic coherence [9,11].

The transition from lyric production to music generation further shifted the collaboration pattern. The finalized lyrics, title, and song description were input into a music generation platform, which produced multiple song versions. The researcher listened to the alternatives and selected one version for final use. Unlike scientific writing, this process involved limited direct revision; human control was exercised primarily through selection and curation. The selected version was not treated as objectively superior in musical quality, but as the version judged most consistent with the intended message, tone, and aesthetic direction.

The final song was prepared for digital distribution and released across multiple streaming services. In this study, public distribution is treated only as contextual evidence that the AI-assisted artifact moved beyond experimentation and became a completed creative product. It is not used as a measure of artistic quality, audience reception, popularity, or cultural impact. This distinction is important because the study does not analyze listener responses, streaming metrics, or external evaluations of the song.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

Overall, the reconstructed workflow suggests that AI functioned as a creative generator in the song production case. It produced lyrics, conceptual materials, and musical outputs with relatively high autonomy, while the researcher retained authority through thematic direction, contextual editing, output selection, and approval for distribution. Compared with scientific and narrative writing, this case involved the lowest level of continuous revision and the highest tolerance for variation. Human control was therefore less corrective than curatorial: the researcher shaped the theme, evaluated symbolic and aesthetic fit, and selected the final artifact. This supports the view that AI-assisted creativity should be understood not as a replacement of human creativity, but as a reconfiguration of creative agency across human intention, machine generation, and human curation [4,16].

Cross-Domain Comparison and Synthesis of Findings

The comparison across the three reconstructed cases reveals clear differences in AI role, human control, and iteration intensity. Scientific writing involved the strongest corrective and validation-oriented control because the output required accuracy, methodological clarity, and reliable references. Narrative writing involved interpretive control because the output had to preserve personal experience, authentic voice, and professional meaning. Creative song production involved the highest AI generative autonomy, with the human role shifting toward thematic direction, aesthetic selection, curation, and final approval. These patterns indicate that AI did not perform a single fixed role across domains, but was configured differently according to task structure, output type, and acceptable uncertainty [4,5].

The categories in Table *3* are interpretive classifications derived from the reconstructed interaction cycles discussed in Sections 4.1-4.3. They were not produced through numerical scoring, but through qualitative comparison of AI contribution, human intervention, validation requirements, iteration patterns, error sensitivity, and decision-making forms.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

Dimension	Scientific Writing	Narrative Writing	Song Production
Primary goal	Accurate and structured knowledge production	Storytelling and professional meaning expression	Creative and aesthetic representation
Human role	Validator, critical reviewer, methodological decision-maker	Meaning controller, storyteller, editor	Selector, curator, thematic director
AI role	Analytical and structural assistant	Narrative structuring agent	Creative generator
Human control form	Corrective and validation-oriented	Interpretive and voice-preserving	Curatorial and selection-based
AI generative autonomy	Constrained by validation	Moderate	High
Iteration intensity	Very high: generate–validate–revise	Moderate: refine flow, tone, and meaning	Lower direct revision: generate–select–approve
Main validation focus	Accuracy, references, evidence alignment, credibility	Authenticity, tone, meaning preservation	Aesthetic fit, symbolic coherence, thematic alignment
Main AI-related risk	Hallucinated references, inaccurate claims, weak source alignment	Meaning shift, excessive dramatization, loss of authentic voice	Variable quality, limited control over musical details
Output ownership	AI-assisted but human-validated	Human-driven meaning with AI-assisted expression	AI-generated, human-selected, and human-approved
Key constraint	Reliability of sources and factual accuracy	Maintaining authentic voice and professional meaning	Tool limitations and aesthetic uncertainty

TABLE 3: Cross-Domain Comparison of Human–AI Collaboration

The comparison shows that human control did not disappear as AI generative autonomy increased; rather, it changed form. In scientific writing, control appeared as verification, correction, and methodological judgment. In narrative writing, it appeared as meaning preservation, tone adjustment, and maintenance of authentic voice. In song production, it appeared as selection, curation, thematic direction, and approval of the final artifact. This variation supports the view that effective human-AI collaboration depends on task context, human judgment, and the distribution of responsibility between human and machine actors [3,9].

These differences are represented in Figure *2*, which maps the relationship between AI generative autonomy and human control intensity across the three domains. The figure is intended as a conceptual mapping rather than a statistical measurement. The placement of each domain reflects interpretive patterns reconstructed from the interaction cycles,

particularly the extent of AI-generated content, the intensity of direct human revision or validation, and the form of final decision-making.

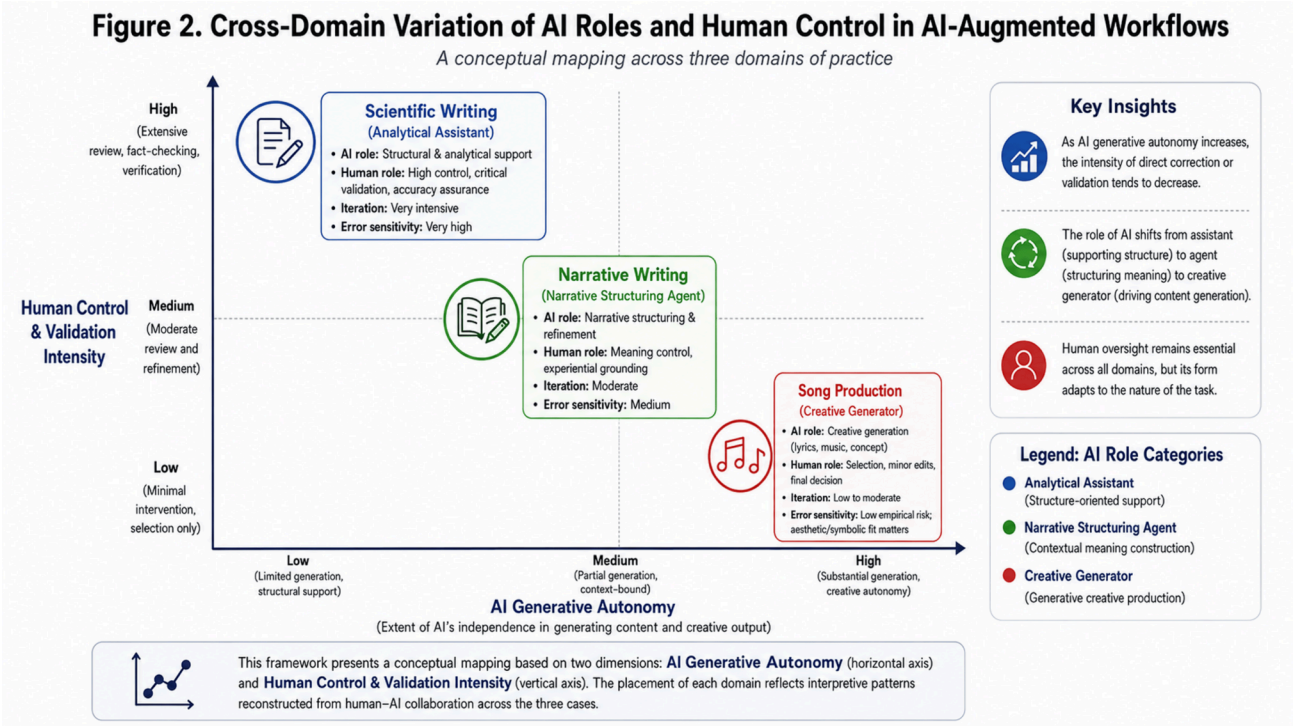


FIGURE 2: Cross-domain Variation of AI Roles Based on AI Generative Autonomy and Human Control Intensity.

The figure presents a conceptual mapping rather than a statistical measurement. The placement of each domain reflects interpretive patterns reconstructed from the three cases. The relative placement of the cases is interpretive and does not represent a statistically estimated relationship, causal effect, or generalizable association between AI generative autonomy and human control intensity. The figure should therefore be read as an exploratory conceptual representation derived from the reconstructed patterns observed across the three cases.

The mapping suggests an inverse pattern between AI generative autonomy and the intensity of direct human correction or validation. Scientific writing is positioned as a domain with constrained AI autonomy and high validation intensity because errors can affect the credibility of the work. Song production is positioned as a domain with high AI generative autonomy and lower direct revision intensity because the output is evaluated primarily through aesthetic and symbolic fit. Narrative writing occupies an intermediate position because AI structures human-provided content while the researcher maintains interpretive authority over experience, tone, and professional meaning.

However, this pattern should not be interpreted as a reduction of human authority. Rather, it indicates a shift in the form of human control. As AI's generative role increases, human control becomes less focused on direct correction and more focused on framing, interpretation, selection, curation, and approval. In this sense, the central finding is not simply that AI autonomy varies across tasks, but that human control is reconfigured according to the epistemic, interpretive, and aesthetic demands of each domain.

Overall, the cross-domain comparison indicates that AI-assisted work is adaptive and domain-sensitive. The same general interaction mechanism - human input, prompting AI, AI output, human evaluation, and revision, acceptance, or selection - appeared across all cases, but its function differed by domain. In accuracy-sensitive work, the cycle became corrective and verificatory; in narrative work, expressive and interpretive; and in creative song production, generative and curatorial. Within the scope of this reflective multi-case study, AI-assisted workflows appear to be shaped less by technology alone

than by the interaction between task demands, output expectations, error sensitivity, and human evaluative judgment. Across all cases, final authority remained with the human actor, who defined the initial direction, evaluated AI-generated outputs, and decided whether the material should be revised, accepted, selected, or rejected.

Discussion

AI as an Adaptive Collaborative Agent

This study examined how AI functions as a collaborative partner across scientific writing, narrative writing, and creative song production within archival practice. Based on the reflective reconstruction of the three cases, the findings suggest that human-AI collaboration is not a fixed process, but varies according to task requirements, epistemic risk, output type, and the form of human control required. In the cases examined, AI's role was shaped not only by system capability, but also by human intention, task context, output expectations, and evaluative judgment. This supports human-centered AI scholarship, which argues that AI should not be understood as an autonomous replacement for human expertise, but as a system whose value depends on interaction, oversight, and situated use [2-4].

AI is described here as an adaptive collaborative agent in a functional and analytical sense. The term does not imply that AI independently understands professional context or possesses human-like intentionality. Rather, it refers to AI's changing role within a workflow, which is repeatedly shaped through prompting, evaluation, correction, selection, and contextual judgment. Across the cases, AI acted as an analytical and structural assistant in scientific writing, a narrative structuring agent in narrative writing, and a creative generator in song production. This extends prior work on human-AI collaboration by showing that AI roles are enacted through use: users define tasks, provide constraints, evaluate outputs, and decide how machine-generated material should be integrated into final artifacts [5].

This adaptive pattern contributes to the automation-augmentation debate. The study suggests that the automation-augmentation balance is not fixed at the level of the technology itself, but shifts according to domain and task. In scientific writing, AI use remained strongly augmentative because its outputs were constrained by methodological requirements, data integrity, and reference verification. In narrative writing, AI supported expression while human authority remained anchored in meaning preservation and authentic voice. In song production, AI assumed greater generative autonomy, while human involvement shifted toward thematic direction, aesthetic judgment, selection, and final approval. Thus, AI-assisted practice is better understood as role-shifting collaboration than as a stable division of labor between human and machine.

Taken together, these findings suggest that the central issue is not simply whether AI autonomy increases or decreases, but how human control is reconfigured across contexts. The same AI-enabled workflow may appear more augmentative in high-risk analytical work, more expressive in narrative work, and more generative in creative production. Within the scope of this reflective multi-case study, these variations show that AI's role depends on the interaction between task demands, output expectations, and human evaluative judgment.

AI Autonomy and Human Control

The cross-domain comparison suggests an interpretive inverse pattern between AI generative autonomy and the intensity of direct human correction or validation. This pattern is confined to the three reconstructed cases examined in this study and should not be interpreted as evidence of a universal inverse relationship between AI autonomy and human control. Rather, it functions as an exploratory conceptual observation suggesting that the form of human oversight may shift across task contexts as AI assumes different generative roles. In scientific writing, where accuracy, validity, and scholarly accountability are central, human control remained intensive even when AI generated substantial parts of the draft. Manual reference verification was not a peripheral editing activity, but a core epistemic safeguard because AI-generated academic content may contain plausible but inaccurate claims, fabricated citations, or misaligned references [6,8]. In this domain, AI could support writing, organization, and language refinement, but could not replace human responsibility for evidence, argumentation, methodological coherence, and scholarly judgment.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

In creative song production, AI generative autonomy was higher because the output was evaluated primarily according to expressive and aesthetic suitability rather than empirical accuracy. Human control did not disappear; it was exercised differently. Instead of repeatedly correcting each generated output, the researcher selected one version from several AI-generated musical alternatives. This pattern resonates with research on AI-assisted creativity, which suggests that human users often participate through prompting, curation, selection, and evaluation rather than direct construction of every creative element [9-11]. In this sense, creative control became curatorial rather than fully compositional.

Narrative writing occupied an intermediate position. The researcher remained the primary source of content because the narratives were based on personal memories and professional experiences, while AI transformed structured pointers into readable prose, improved flow, and expanded underdeveloped sections. Human control in this domain was therefore exercised through interpretation: preserving the original experience, maintaining authentic voice, and ensuring that the narrative continued to express the intended professional message.

This comparison clarifies that the relationship between AI autonomy and human control is not a simple trade-off in which more AI autonomy means less human authority. Rather, human authority changes form across domains: epistemic validation in scientific writing, meaning preservation in narrative writing, and selection or curation in creative song production. Thus, AI-assisted writing and creative production should not be treated as uniformly AI-generated authorship. In the reconstructed cases, human agency remained central because the researcher defined the purpose of the work, evaluated outputs, and determined whether AI-generated material would be revised, accepted, selected, or rejected.

Iterative Interaction as Dialogic Collaboration

The iterative interaction cycle identified in this study-human input, prompting AI, AI output, human evaluation, and revision, acceptance, rejection, or selection-contributes to the literature on human-AI collaboration by showing how collaboration is enacted through repeated exchanges rather than through a single act of generation. Here, "dialogic" does not imply that AI possesses human-like understanding or intentionality. It refers to a structured back-and-forth process through which users formulate goals, receive outputs, evaluate relevance, and decide how AI-generated material should be revised, accepted, rejected, or selected. This interpretation is consistent with prior studies that view human-AI collaboration as an interactive workflow in which human agency, judgment, and responsibility remain central [3,5].

The methodological model used in this study clarifies that iteration was not merely a technical sequence of prompting and output generation. It was the practical mechanism through which human control was exercised. Each return to the prompting or refinement stage represented a human judgment that the AI output was not yet sufficiently accurate, meaningful, relevant, authentic, or aesthetically suitable. Thus, iteration functioned as a form of oversight, not simply as a method for producing more polished outputs.

The reconstructed cases show that iteration varied not only in intensity but also in function. In scientific writing, iteration was corrective and evaluative because outputs had to be checked for coherence, accuracy, methodological alignment, and source reliability. In narrative writing, it was expressive and interpretive, supporting flow, readability, tone, and meaning preservation. In song production, it was generative and curatorial, with human involvement shifting from repeated revision toward selection among AI-generated alternatives. Thus, iteration should not be treated merely as a technical feature of prompt engineering, but as a domain-sensitive mechanism through which human control is exercised differently across analytical, interpretive, and creative work.

This finding extends the automation-augmentation perspective by showing that iteration helps maintain augmentation even when AI generates substantial parts of the output. Human users do not simply receive AI outputs passively; they shape the workflow through prompts, constraints, evaluation criteria, revision decisions, and final approval. In this sense, iterative interaction functions as cognitive and creative scaffolding: it helps users externalize ideas, test alternatives, refine expression, and manage uncertainty, while still depending on human judgment to determine acceptability, meaning, and responsibility [2,4].

AI and Professional Identity Expression

Another contribution of this study lies in its focus on professional identity. The three cases were unified by the theme "Bangga menjadi arsiparis," which made it possible to examine how archival professional identity was articulated across scientific, narrative, and creative outputs. Previous studies have shown that AI can reshape professional roles, occupational boundaries, and perceptions of expertise, particularly when AI systems are perceived as substituting or redefining tasks traditionally associated with professional knowledge [13,14,17]. While much of this literature emphasizes identity threat, role disruption, or workplace adaptation, this study offers a complementary perspective: AI may also support professional identity expression when users actively direct it toward values, experiences, and symbolic meanings that matter to their profession.

The reflective nature of this study is particularly relevant to professional identity because identity is not only observed externally, but also experienced, narrated, and expressed by practitioners themselves. In this study, the researcher's position as an archival professional provides the experiential basis through which "Bangga menjadi arsiparis" was articulated across different forms of output. Scientific writing translated professional identity into scholarly discourse, narrative writing translated it into personal-professional experience, and song production translated it into symbolic and cultural expression.

In the reconstructed cases, AI did not appear to dilute archival professional identity; rather, it served as a mediating layer through which that identity was expressed across modes. In scientific writing, AI helped formalize ideas into academic discourse; in narrative writing, it helped organize personal experience into communicable prose; and in song production, it helped transform professional pride into artistic expression. The song case is especially relevant because "Bangga Menjadi Arsiparis" has been analyzed as a cultural representation of the archival profession, communicating values such as collective memory, responsibility, public trust, and continuity [12].

This finding extends discussions of AI and professional identity by shifting attention from identity threat alone to identity mediation. AI did not provide the professional values examined in this study; those values were supplied, selected, and evaluated by the human user. However, AI helped reshape how those values could be expressed, organized, and communicated across different forms of output. In this sense, professional identity expression was not transferred to AI, but mediated through AI-supported workflows. Human agency remained central because the researcher defined the thematic direction, evaluated contextual relevance, preserved professional meaning, and approved the final representation.

The implication is that AI-assisted professional expression depends on active human direction. When users retain control over theme, context, tone, and interpretation, AI can become a medium for articulating professional values rather than a force that replaces them. Within archival practice, this is significant because professional identity is expressed not only through technical work, but also through scholarly communication, personal storytelling, and cultural representation.

Theoretical and Practical Implications

The theoretical implication of this study is that human-AI collaboration should be conceptualized as a cross-domain, role-shifting process rather than as a single model of tool use. The proposed framework linking AI generative autonomy with human control intensity should be understood as an interpretive and heuristic framework rather than a universal model. Its main contribution is to show that human control does not disappear when AI autonomy increases; instead, it changes form. In scientific writing, control appears as verification and correction; in narrative writing, as meaning preservation and authentic voice maintenance; and in song production, as selection and curation. This offers a more nuanced alternative to binary framings of AI as either a passive tool or an autonomous agent. These implications are derived from the comparative interpretation of the three reconstructed cases and should be understood as exploratory propositions for further examination rather than as generalizable theoretical laws.

This perspective also contributes to debates on automation and augmentation. In accuracy-sensitive tasks, AI operates as an augmentation mechanism whose outputs remain constrained by evidence, method, and scholarly accountability. In interpretive tasks, AI supports expression while human authority remains anchored in lived experience and intended

meaning. In creative tasks, AI may generate substantial parts of the artifact, while human control becomes curatorial and evaluative. Thus, the key issue is not simply whether AI automates or augments work, but how human responsibility is redistributed across different forms of collaboration.

Practically, the findings suggest that responsible AI use requires task-sensitive strategies. In scientific writing, users should prioritize evidence verification, reference checking, source reliability, and methodological consistency. In narrative writing, users should ensure that AI-generated prose remains faithful to lived experience, professional meaning, and authentic voice. In creative production, users should treat AI-generated outputs as possibilities requiring human judgment, selection, contextual alignment, and final approval. These practices are consistent with broader AI ethics principles emphasizing transparency, accountability, human oversight, and awareness of system limitations [30,31].

For archivists and other knowledge professionals, AI can support not only productivity but also the communication of professional values across multiple formats. AI-assisted scholarly, narrative, and creative outputs may provide additional channels for professional visibility and identity articulation. However, this potential depends on validation, contextual grounding, and interpretive control. Without these, AI-generated outputs may become generic, inaccurate, or detached from professional realities.

Limitations and Future Research

Several limitations should be acknowledged. First, the study is based on a single-subject reflective multi-case design. This design allows close examination of AI-assisted workflows across scientific, narrative, and creative domains, but limits statistical generalizability. The findings should therefore be understood as analytically transferable rather than representative of all AI users, professions, or creative practices.

Second, the study relies on retrospective and reflective reconstruction of workflows. Although this approach is appropriate for examining actual professional and creative practices that emerged outside a pre-designed research protocol, it may introduce recall bias and limit the granularity of process analysis. Complete interaction logs were not available for all AI-assisted processes, so the analysis was based on reconstructable evidence, including available artifacts, observable revisions, recurring interaction patterns, and reflective accounts.

Third, the study focuses on one professional context and one thematic orientation: archival professional identity expressed through the theme "Bangga menjadi arsiparis." This focus provides coherence across the cases, but AI's role in other professions, cultural contexts, or thematic settings may differ. Fourth, the study examines AI-assisted workflows primarily from the perspective of the researcher-practitioner and does not include external evaluations from readers, listeners, editors, reviewers, or other stakeholders. The findings therefore address how AI-supported outputs were produced and interpreted by the researcher, but not how they were received by wider audiences.

Future research could extend this work by involving multiple participants across different professions, levels of AI literacy, and creative or scholarly domains. Real-time interaction logging would provide more granular data on prompting, revision, decision-making, output evaluation, and acceptance or rejection of AI-generated material. Longitudinal studies could examine how repeated AI use over time influences professional identity, authorship practices, confidence, dependency, and perceptions of expertise.

Further research could also investigate audience reception and external evaluation of AI-assisted outputs. In the creative domain, future studies could examine how listeners interpret AI-assisted songs and whether they perceive them differently from human-composed works. In scholarly and narrative domains, future research could examine how editors, reviewers, or readers assess the credibility, authenticity, and authorship of AI-assisted texts. Such studies would deepen understanding of AI co-creation not only as a production process, but also as a social and interpretive phenomenon.

Overall, this study shows that AI-augmented practice is best understood as adaptive, iterative, and domain-sensitive. Its role emerges through interaction, shaped by human intention, task requirements, output expectations, and evaluative judgment. By examining scientific, narrative, and creative practices within a single archival context, this study contributes a cross-domain perspective on AI co-creation and demonstrates how AI can support both knowledge production and professional identity expression when guided by human oversight and contextual judgment.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

Conclusions

This study examined human-AI co-creation across scientific writing, narrative composition, and creative song production within the shared thematic context of archival professional identity. Through a reflective multi-case analysis, the study shows that AI should not be understood as a single-purpose tool with a fixed role across domains. Rather, its function is shaped by task requirements, output expectations, risk sensitivity, and the form of human judgment required in each workflow. The study identifies three domain-specific AI roles: an analytical and structural assistant in scientific writing, a narrative structuring agent in personal storytelling, and a creative generator in song production. These roles show that AI generative autonomy and human control are not static. In scientific writing, human control appeared as evidence verification, methodological judgment, and scholarly accountability. In narrative writing, it appeared as meaning preservation and authentic voice maintenance. In creative song production, it shifted toward thematic direction, selection, curation, and final approval. The study also shows that human-AI collaboration is iterative and domain-sensitive. Across the three reconstructed cases, collaboration occurred through cycles of human input, prompting, AI output, human evaluation, and revision, acceptance, rejection, or selection. However, the function of this cycle differed across domains: corrective and verificatory in scientific writing, interpretive and expressive in narrative writing, and generative and curatorial in song production. Across the three reconstructed cases, the findings suggest that human control did not disappear as AI assumed more generative roles; rather, its form appeared to shift from direct verification and correction toward interpretation, selection, curation, and final approval. This pattern should be understood as an exploratory observation derived from the cases rather than as a generalizable rule governing human-AI collaboration. Beyond workflow efficiency, the study highlights AI's potential role in professional identity expression. By examining outputs unified by the theme "Bangga menjadi arsiparis," the study shows how AI-assisted workflows can mediate archival professional identity across scholarly, narrative, and creative forms. AI did not supply the professional values examined in this study; those values were provided, evaluated, and approved by the human actor.

Practically, the findings suggest that responsible AI use requires task-sensitive strategies: strong verification in accuracy-sensitive knowledge work, meaning preservation in narrative contexts, and careful selection and contextual judgment in creative production. Future research should involve multiple participants, different professional settings, external evaluation of AI-assisted outputs, and real-time interaction data to further test, refine, or challenge the proposed framework of AI generative autonomy and human control.

Appendices

Appendix A. Case-Level Dataset Used for Descriptive and Cross-Case Analysis

The data generated during this research are provided in this appendix to support transparency and reproducibility. The appendix contains the de-identified case-level dataset used for the descriptive quantitative summary and cross-case comparison. Complete AI conversation logs are not available for all cases because the workflows were reconstructed retrospectively from actual professional and creative practice; therefore, the dataset is limited to reconstructable artifacts, observable workflow features, coded interaction elements, and final analytical classifications.

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

Case ID / domain	Reconstructable final artifact(s)	Descriptive quantitative values	Analytical classification used in comparison
C1 - Scientific writing	One AI-assisted scientific article developed through topic exploration, structural planning, drafting, reference handling, and final review.	Artifacts = 1; core interaction elements coded = 4; share of final artifacts = 25.0%.	AI role: analytical and structural assistant; human control: corrective and validation-oriented; iteration intensity: very high; validation focus: accuracy, references, evidence alignment, methodological clarity, and credibility.
C2 - Narrative writing	Two narrative texts prepared from personal memories and professional experiences for an anthology or book-related context.	Artifacts = 2; core interaction elements coded = 4; share of final artifacts = 50.0%.	AI role: narrative structuring agent; human control: interpretive and voice-preserving; iteration intensity: moderate; validation focus: authenticity, tone, meaning preservation, readability, and professional message.
C3 - Creative song production	One AI-assisted song consisting of lyrics, song description, generated musical alternatives, selected final audio output, and distribution preparation.	Artifacts = 1; core interaction elements coded = 4; share of final artifacts = 25.0%.	AI role: creative generator; human control: curatorial and selection-based; iteration intensity: lower direct revision; validation focus: aesthetic fit, symbolic coherence, thematic alignment, and final approval.

TABLE 4: Case-Level Dataset Used for Descriptive and Cross-Case Analysis

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

Concept and design: Dwi Ridho Aulianto

Acquisition, analysis, or interpretation of data: Dwi Ridho Aulianto

Drafting of the manuscript: Dwi Ridho Aulianto

Critical review of the manuscript for important intellectual content: Dwi Ridho Aulianto

Disclosures

Human subjects: All authors have confirmed that this study did not involve human participants or tissue.

Animal subjects: All authors have confirmed that this study did not involve animal subjects or tissue.

Conflicts of interest: In compliance with the ICMJE uniform disclosure form, all authors declare the following:

- **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work.
- **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work.
- **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

AI Disclosure Statement

The author used ChatGPT-5.5 during the ideation, outlining, drafting, language refinement, visualization development, and manuscript preparation stages of this study. ChatGPT-5.5 was also used to support the reconstruction and analysis of AI-assisted workflows examined in the research. All AI-generated or AI-assisted outputs were critically reviewed, revised, and validated by the author through manual evaluation, reference verification, consistency checking, and iterative refinement. The author retained full responsibility for all methodological decisions, interpretations, factual accuracy, integrity, originality, and final content of the manuscript.

Data Availability Statements

This study is based on reflective analysis of author-generated artifacts and reconstructed AI-assisted workflows. Materials include a published scholarly article, narrative writing outputs, and a publicly distributed song. No conventional raw research dataset was generated. A case-level analytical summary used for descriptive and cross-case comparison is provided in Appendix A. Supporting materials consist of published outputs and author-held documentation.

Acknowledgements

The materials supporting this study consist of publicly available and author-generated artifacts, including a published scholarly article, narrative writing outputs, and a publicly distributed song. Additional methodological details and supporting materials are available from the author upon reasonable request.

References

1. Dwivedi YK, Hughes L, Ismagilova E, et al.: Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management. 2021, 57:101994. 10.1016/j.ijinfomgt.2019.08.002
2. Jarrahi MH: Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. Business Horizons. 2018, 61:577-586. 10.1016/j.bushor.2018.03.007
3. Shneiderman Ben: Human-centered artificial intelligence: Reliable, safe & trustworthy. International Journal of Human-Computer Interaction. 2020, 36:495-504. 10.1080/10447318.2020.1741118
4. Raisch S, Krakowski S: Artificial intelligence and management: the automation-augmentation paradox. Academy of Management Review. 2021, 46:192-210. 10.5465/amr.2018.0072
5. Seeber I, Bittner EAC, Briggs RO, et al.: Machines as teammates: a research agenda on AI in team collaboration. Information & Management. 2020, 57:103174. 10.1016/j.im.2019.103174

6. Salvagno M, Taccone FS, Gerli AG: Can artificial intelligence help for scientific writing?. Critical Care. 2023, 27:75. 10.1186/s13054-023-04380-2

7. Sallam M: ChatGPT utility in healthcare education, research, and practice: systematic review on the promising perspectives and valid concerns. Healthcare. 2023, 11:887. 10.3390/healthcare11060887

8. Athaluri SA, Manthena S V, Kesapragada VSRKM, Yarlagadda V, Dave T, Duddumpudi RTS: Exploring the boundaries of reality: investigating the phenomenon of artificial intelligence hallucination in scientific writing through ChatGPT references. Cureus. 2023, 15:e37432. 10.7759/cureus.37432

9. Vinchon F, Lubart T, Bartolotta S, et al.: Artificial intelligence & creativity: a manifesto for collaboration. Journal of Creative Behavior. 2023, 57:472-484. 10.1002/jocb.597

10. Millet K, Buehler F, Du G, Kokkoris MD: Defending humankind: anthropocentric bias in the appreciation of AI art. Computers in Human Behavior. 2023, 143:107707. 10.1016/j.chb.2023.107707

11. van Hees J, Grootswagers T, Quek GL, Varlet M: Human perception of art in the age of artificial intelligence. Frontiers in Psychology. 2025, 15:1497469. 10.3389/fpsyg.2024.1497469

12. Aulianto DR: Music as cultural representation of the archival profession: A reflexive textual analysis. Archival Science. 2026, 26:22. 10.1007/s10502-026-09544-x

13. Goto M: Collective professional role identity in the age of artificial intelligence. Journal of Professions and Organization. 2021, 8:86-107. 10.1093/jpo/joab003

14. Shonhe L, Min Q: Mitigating AI-induced professional identity threat and fostering adoption in the workplace. AI & Society. 2025, 40:4079-4092. 10.1007/s00146-024-02170-0

15. Kasneci E, Sessler K, Küchemann S, et al.: ChatGPT for good? On opportunities and challenges of large language models for education. Learning and Individual Differences. 2023, 103:102274. 10.1016/j.lindif.2023.102274

16. Tsao J, Liang CX, Nogues C, Wong A: Perceptions and integration of generative artificial intelligence in creative practices and industries: a scoping review and conceptual model. ai & society. 2025, 41:2259-2278. 10.1007/s00146-025-02667-2

17. Strich F, Mayer A-S, Fiedler M: What do i do in a world of artificial intelligence? Investigating the impact of substitutive decision-making AI systems on employees' professional role identity. Journal of the Association for Information Systems. 2021, 22:304-324. 10.17705/1jais.00663

18. Ebneyamini S, Sadeghi Moghadam MR: Toward developing a framework for conducting case study research. International Journal of Qualitative Methods. 2018, 17:1-11. 10.1177/1609406918817954

19. Busetto L, Wick W, Gumbinger C: How to use and assess qualitative research methods. Neurological Research and Practice. 2020, 2:14. 10.1186/s42466-020-00059-z

20. Sibbald SL, Paciocco M, Fournie M, Van Asseldonk R, Scurr T: Continuing to enhance the quality of case study methodology in health services research. Healthcare Management Forum. 2021, 34:291-296. 10.1177/08404704211028857

21. Schön DA: The Reflective Practitioner. Routledge, London; 2017. 10.4324/9781315237473

22. Braun V, Clarke V: Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health. 2019, 11:589-597. 10.1080/2159676x.2019.1628806

23. Rashid Y, Rashid A, Warraich MA, Sabir SS, Waseem A: Case study method: a step-by-step guide for business researchers. International Journal of Qualitative Methods. 2019, 18:1-13. 10.1177/1609406919862424

24. Dalglish SL, Khalid H, McMahon SA: Document analysis in health policy research: the READ approach. Health Policy and Planning. 2020, 35:1424-1431. 10.1093/heapol/czaa064

25. Morgan H: Conducting a qualitative document analysis. The Qualitative Report. 2022, 27:64-77. 10.46743/2160-3715/2022.5044

26. Byrne D: A worked example of Braun and Clarke's approach to reflexive thematic analysis. Quality & Quantity. 2021, 56:1391-1412. 10.1007/s11135-021-01182-y

27. Forero R, Nahidi S, De Costa J, et al.: Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. BMC Health Services Research. 2018, 18:120. 10.1186/s12913-018-2915-2

28. Ahmed SK: The pillars of trustworthiness in qualitative research. Journal of Medicine, Surgery, and Public Health. 2024, 2:100051. 10.1016/j.glmedi.2024.100051

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x

29. Finlay L: "Outing" the researcher: the provenance, process, and practice of reflexivity. Qualitative Health Research. 2002, 12:531-545. 10.1177/104973202129120052

30. Jobin A, Ienca M, Vayena E: The global landscape of AI ethics guidelines. Nature Machine Intelligence. 2019, 1:389-399. 10.1038/s42256-019-0088-2

31. Floridi L, Chiriatti M: GPT-3: its nature, scope, limits, and consequences. Minds and Machines. 2020, 30:681-694. 10.1007/s11023-020-09548-1

32. Thorp HH: ChatGPT is fun, but not an author. Science. 2023, 379:313. 10.1126/science.adg7879

33. Alkaissi H, McFarlane SI: Artificial hallucinations in ChatGPT: implications in scientific writing. Cureus. 2023, 15:e35179. 10.7759/cureus.35179

34. van Dis EAM, Bollen J, Zuidema W, van Rooij R, Bockting CL: ChatGPT: five priorities for research. Nature. 2023, 614:224-226. 10.1038/d41586-023-00288-7

How to cite this article:
Aulianto D (October 20, 2026) Human–AI Co-Creation Across Scientific, Narrative, and Creative Work: A Reflective Multi-Case Study of Archival Professional Identity. Cureus J AI Augment Res 1 : es44568-026-00331-x. DOI https://doi.org/10.7759/s44568-026-00331-x