

Beyond algorithm: How Human-AI Hybrids Decode History

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Executive Summary

Large language models (LLMs) can identify stylistic patterns, cultural markers, or historical motifs in images and texts. Yet without human contextual grounding, their outputs remain diffuse—offering possibilities rather than coherent interpretations.

This study examines a case in which ChatGPT-5 (OpenAI) was asked to analyse inscriptions and caricatures in a Chinese propaganda poster (Fig. 1). The model provided accurate structural descriptions and general political context, but could not - under current ethical constraints - link caricatures to specific historical actors or establish a precise temporal setting.

Human expertise decisively redirected the interpretive process. The human collaborator recognised Jiang Qing (Mao’s widow), interpreted the broken instrument string as a metaphor for her collapsed cultural authority, and placed the posters immediately after the 1976 arrest of the Gang of Four. This contextual anchor constrained temporal hypotheses, reweighted symbolic cues, and shifted the AI system from broad pattern recognition to targeted historical reasoning.

Once anchored, the model amplified human insight by identifying post-1976 propagandistic conventions, clarifying semiotic structures, mapping parallels across posters, and articulating relevant historical background.

This case demonstrates that Human–AI Hybrid Identities (systems in which human contextual creativity and AI analytical depth interact) produce more precise interpretations than either alone.

While sensitive to erroneous human input, such hybrids represent a powerful model for future interpretive scholarship.

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Background

Recent scholarship has examined both the capabilities and limitations of large language models in interpretive tasks (Bender et al., 2021; OpenAI, 2023). Digital humanities researchers have on the other hand explored productive human-machine collaboration (Underwood, 2019). This study builds on theories of distributed cognition (Clark & Chalmers, 1998) and recent frameworks for understanding AI's role in judgment-intensive tasks (Agrawal et al., 2022).

Factual Capacity Without Human Context Is Insufficient

Current Large language models (LLMs) have a major flaw. They can identify stylistic features, cultural motifs, propagandistic tropes, and historical patterns embedded in images and texts. However, without contextual grounding, these results remain diffuse — a field of possibilities rather than a targeted interpretation.

We thus set up to perform an analysis of this flaw and how to overcome it, by drawing on established methods of visual semiotics (Barthes, 1977) applied to Chinese propaganda imagery, a genre extensively documented by Landsberger (1995). The historical setting—the immediate aftermath of the Gang of Four's arrest in October 1976—has been thoroughly examined by MacFarquhar and Schoenhals (2006).

In an analysis of a single image of visual propaganda from the late Cultural Revolution, the author asked ChatGPT5 (OpenAI) to translate the Chinese writings and assess the caricatures in **Figure 1**.

The AI provided correct but broad descriptions: structural analogies across posters, typical symbolic elements, and generalized political context. This information was valuable, but not directionally meaningful. The model, unfortunately, could not independently and under current ethical constraints, tie the caricatured figures to specific historical actors, nor could it establish the temporal moment with certainty.

Figure 1: Propaganda posters signaling the definitive overthrow of the Gang of Four.



Human Input Redirects and Reweights the Interpretive Space

Human expertise provided by the author however transformed the analysis. The human recognised Jiang Qing from the caricature, and pointed out that the string in the instrument is broken,

identifying the ruptured musical instrument thus as a metaphor for her broken cultural authority. The author also proposed to situate the posters in the immediate aftermath of the arrest of the so-called Gang of Four in October 1976. Hence, the human collaborator provided a high-precision contextual anchor.

This single intervention fundamentally altered the model's interpretive trajectory:

- It constrained temporal hypotheses.
- It reweighted symbolic elements toward late-Cultural-Revolution iconography.
- It shifted the model from general pattern recognition to targeted historical interpretation.
- It enabled the AI to exclude irrelevant explanatory paths and enrich relevant ones.

Human input thus functioned as an epistemic vector, transforming a space of possible interpretations into a coherent historical account.

AI Amplifies Human Insight Through Structure and Depth

Once the human had established context, the AI accelerated the interpretive process by:

- identifying propagandistic conventions used after the fall of the Gang of Four,
- clarifying the semiotic structure of caricatures,
- mapping similarities across multiple posters,
- articulating historical background with high precision, and
- expanding the symbolic interconnections in a systematic manner.

The resulting interpretation was not merely additive. It represented a **qualitative leap**: an integrated account of symbolism, political context, artistic tradition and semiotics that neither human nor AI could have produced alone.

Hybrid Intelligence as a Superior Mode of Historical Understanding

This case exemplifies the emerging concept of **Human–AI Hybrid Identities** — collaborative cognitive systems in which human contextual creativity and AI structural analysis converge to generate higher-order insight.

In historical studies involving images, the division of cognitive labour becomes especially clear:

- **Humans** detect implicit meaning, cultural nuance, narrative continuity, emotional valence, and symbolic resonance. They recognise what is “between the images”.
- **AI systems** provide breadth, pattern integration, historical scaffolding, and rapid analytical expansion.

The hybrid is more than the sum of its parts. The human establishes interpretive direction; the AI amplifies and structures it. Together, they transform isolated information into understanding.

It has to be noted of course, that humans may also provide historically false context and may prompt false narratives. This likely would diminish the validity of outputs. To say it bluntly. Also Human-AI hybrids can become stupid, if the Human part is acting like an idiot.

Conclusion

This case study employed iterative human-AI dialogue using ChatGPT-5's multimodal capabilities (OpenAI, 2023), with the human researcher providing historical expertise on Cultural Revolution visual culture.

This collaborative reconstruction of Cultural Revolution propaganda underscores an emerging principle for the future of interpretive scholarship: neither human intuition nor machine analysis alone is sufficient for deep historical reasoning. The most powerful insights emerge when both operate as a unified system, i.e. when they interact and share and learn from each other.

Human–AI Hybrid Identities provide a practical pathway toward such integration, enabling new forms of knowledge creation in fields where context, symbolism and meaning extend far beyond what is explicitly encoded in data. Their success suggests a future in which human expertise and AI capability co-evolve, not as competitors, but as complementary components of a single interpretative intelligence.

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