

Human-AI Triangulation for Knowledge Production

From collaborative intelligence to verifiable production



AN ARCHITECTURE OF INTERINTELLIGENT PRODUCTION

Human intelligence guides and decides. Chat conceptualizes. Work develops and materializes.
OBIS reviews, corrects and authorizes.

Initial conceptualization: ChatGPT (OpenAI)

Documentary and visual development: Work

Review, authorization and final responsibility: OBIS Innovation & Solutions™

Abstract

The expansion of artificial intelligence has multiplied the capacity to search, synthesize, structure and materialize information, and therefore to produce knowledge. Yet increased capacity does not by itself guarantee coherence, traceability, judgment or decision quality. The central challenge shifts from what an intelligence can produce to how interaction among different intelligences can be organized so that their contributions are comparable, auditable and productive.

This document proposes human-AI triangulation as an operational architecture within I²P. It does not consist of subjecting a task to scrutiny by several agents or seeking automatic consensus. It consists of distributing differentiated cognitive and productive functions between human intelligence and artificial-intelligence systems, comparing their outputs, identifying convergences and divergences, and submitting the result to human review before adoption.

The initial sequence used by OBIS can be represented as OBIS ↔ Chat ↔ Work ↔ OBIS. Human intelligence defines purpose, context, criteria, limits and responsibility; Chat contributes primarily to conceptualization, reasoning, synthesis and critique; Work integrates, develops, organizes and materializes the documentary product; and OBIS reviews, corrects, authorizes or rejects the result. The resulting production is interintelligent, recursive and traceable.

CENTRAL THESIS

The quality of human-AI production depends less on the sum of individual capacities than on the architecture governing their interaction. Convergence guides review; divergence reveals tensions; final decision-making remains under human responsibility.

Keywords: human-AI triangulation; I²P; collaborative intelligence; interintelligent production; traceability; convergence; divergence; human review; validation; cognitive governance.

01 · PROBLEM

From production capacity to decision architecture

AI systems can produce text, code, analyses, images, designs and documents at great speed. This capacity alters the timescale of intellectual production, but it introduces familiar obstacles: context loss, homogenized responses, overconfidence, error propagation, inconsistencies across sessions, and difficulty distinguishing plausible generation from sufficiently grounded knowledge [1-3].

When a single artificial intelligence continuously performs search, interpretation, synthesis, decision and materialization, these functions are concentrated in one channel. Triangulation proposes separating some of them so that the product passes through multiple points of contrast. The purpose is not to multiply answers, but to increase the capacity to detect tensions, omissions and discrepancies before the final decision.

GUIDING QUESTION

Before asking what an artificial intelligence can produce, we must ask how different intelligences interact, which function belongs to each one, how their results are compared, and who retains responsibility for deciding.

02 · CONCEPTUAL FOUNDATION

I²P, complementarity and triangulation

I²P as a general framework

I²P describes a condition of collaboration and co-creation between human and artificial intelligence that preserves their differences, attributions and responsibilities. Triangulation is formulated here as an operational mechanism within that framework: a way to distribute functions, compare outputs and produce through successive cycles of contrast and review.

Functional complementarity

Triangulation becomes meaningful when participants are not treated as equivalent. Human intelligence contributes purpose, contextual judgment, normative criteria, biographical memory and responsibility. AI systems contribute processing, expanded search, synthesis, reorganization, comparison and materialization. The architecture must leverage complementarity without confusing capacity with authority [4].

Epistemological sovereignty

Human intelligence ceases to be a passive requester and becomes the architect of the process. It defines the question, determines which evidence matters, assigns functions, interprets divergences, decides when to return to an earlier stage, and retains responsibility for the final product.

OPERATIONAL DEFINITION

Human-AI triangulation is a recursive process that distributes functions, preserves versions, compares results, and turns convergences and divergences into signals for human review and decision-making.

CRITICAL DISTINCTION

Chat and Work provide functional contrast within the ChatGPT ecosystem; by themselves, they do not constitute epistemologically independent sources of corroboration.

Functional architecture of triangulation

Different functions, continuous human responsibility

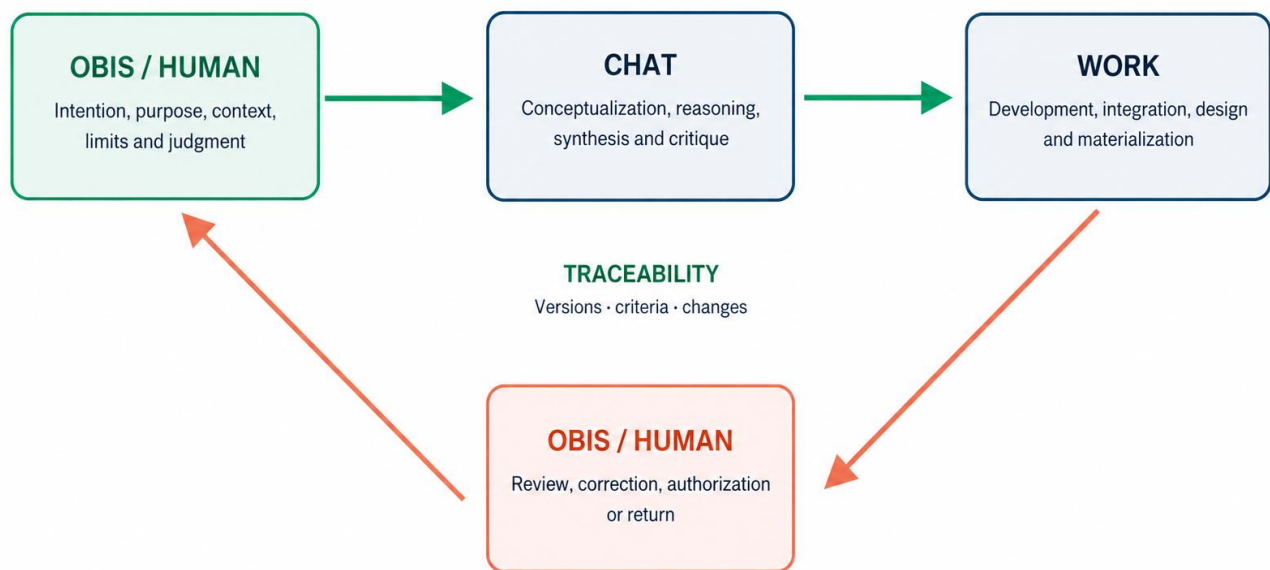


Figure 1. Functional distribution and continuity of human responsibility.

03 · ARCHITECTURE

Four differentiated functions

The initial architecture proposed by OBIS organizes four functions. They do not represent hierarchies of value, but distinct responsibilities within the process.

OBIS / human intelligence - direction

Formulates the problem, provides context and the epistemological corpus, sets criteria and limits, identifies confidentiality restrictions, and establishes what result would be acceptable.

Chat - conceptualization

Builds the conceptual framework, processes the epistemological corpus, identifies relationships, proposes hypotheses and counterarguments, organizes logical progression, and subjects intuitions to initial critique.

Work - development and materialization

Integrates content, develops the documentary architecture, produces visualizations, verifies internal consistency, and transforms the concept into an examinable product.

OBIS / human intelligence - review and authorization

Evaluates the result against purpose, evidence and risk; reviews it, returns it to the cycle, adopts it or rejects the version. Final authority is not transferred to AI.

PRODUCTION PRINCIPLE

Triangulation does not seek to make all intelligences reach the same answer. It seeks to make their differences visible, interpretable and useful for improving human decision-making.

04 · PROCESS

Triangulated production flow

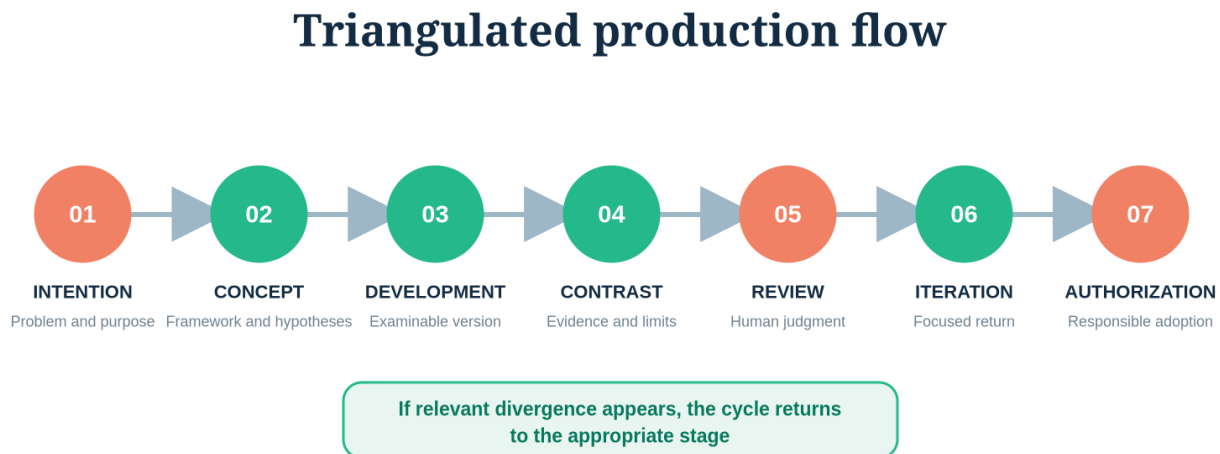


Figure 2. Operational cycle of interintelligent production.

The process begins with an explicit human intention, not an isolated instruction. Conceptualization converts that intention into a framework, questions, hypotheses and relationships. Development produces an examinable version; contrast compares it with evidence, restrictions and prior decisions; and human review determines whether the product preserves the purpose or has distorted it.

Iteration does not indiscriminately restart the work. It returns to the precise phase where an insufficiency, contradiction or context loss was detected. Authorization provisionally closes the cycle; it adopts a version, records why it was accepted, and keeps open the possibility of revision in light of new evidence.

BASIC UNIT

The basic unit is not a generated answer. It is a documented cycle of intention, development, contrast, review and decision.

Convergence, divergence and informational value

Convergence and divergence: two informative signals

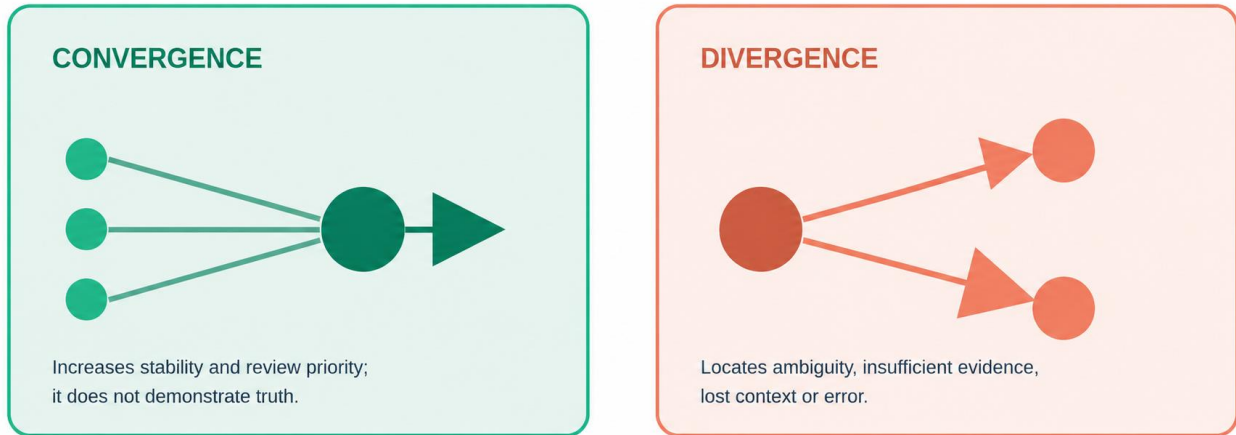


Figure 3. Convergence and divergence guide different review operations.

Convergence occurs when different stages point toward a compatible formulation. Its main value is to increase the stability of a proposal and reduce dependence on a single generative trajectory. However, it may be spurious if systems share similar data, biases, instructions or assumptions.

Divergence occurs when incompatible interpretations, structures, conclusions or priorities appear. Rather than eliminating it immediately, its source must be located: does it arise from a conceptual difference, incomplete evidence, a context change, a system limitation or an unexpressed human decision? Examined divergence can become a quality-control tool.

EPISTEMOLOGICAL LIMIT

Convergence is not truth. Divergence is not error. Production is not validation. Final authority resides not in AI, but in the human process of review, responsibility and decision.

Distribution of responsibilities

A triangulation architecture must distinguish operational capacity from responsibility. A system may generate a sophisticated alternative without bearing responsibility for its consequences. Traceability must therefore record not only what each system produced, but who authorized its incorporation into the final product. This distinction is consistent with contemporary approaches to human oversight and risk management [5,6].

In the OBIS model, the human function appears at the beginning and end of the cycle and may intervene at any intermediate point. This dual presence is essential: human intelligence defines the intention and later evaluates whether the result preserves it. Chat and Work may exchange order according to the task; the architecture is modular and recursive, not a rigid sequence.

Potential impact

Speed with control. Production can be accelerated without eliminating review and decision stages.

Externalized reasoning. Hypotheses, alternatives, assumptions and criteria become explicit and comparable.

Distributed operational memory. Documents, versions and decisions sustain continuity across sessions and environments.

Contradiction detection. Differences between stages function as review signals.

Scalability. The architecture can be applied to documents, websites, scientific syntheses, strategies and conceptual protocols.

These benefits must not be assumed by definition. They should be compared with single-AI workflows and exclusively human processes using explicit criteria of quality, time, correctness, reproducibility and cognitive load [7,8].

07 · ANTI-DECOHERENCE CONTROL

Traceability and process memory

Triangulation requires mechanisms that reduce decoherence among intention, context, documentary memory, reasoning and execution. When context is lost, a later version may appear internally coherent and yet contradict fundamental decisions made earlier.

Anti-decoherence control does not seek to prevent the system from changing its interpretation; it seeks to make the change visible and require a reason for adopting it. Continuity therefore depends not only on a model's internal memory, but on an external architecture of documentation and review.

MINIMUM PROCESS MEMORY

Decisions adopted · open hypotheses · restrictions · sources used · prior versions · relevant divergences · justification of changes.

Operational protocol

The recommended circuit comprises contextual reloading, consultation of the reference version, verification of critical claims, classification of epistemological status, human-AI-corpus triangulation, contradiction auditing, human review, and updating the continuity record.

This protocol reduces, detects and corrects decoherence. When the domain is scientific, medical, legal, financial or regulatory, review must be expanded with current primary sources and accredited experts.

08 · VALIDATION

Proposed validation pathway

A triangulation architecture acquires methodological value when its benefits can be examined and its assumptions can be refuted. Its validation should be developed through successive levels of evaluation.

Proposed validation pathway

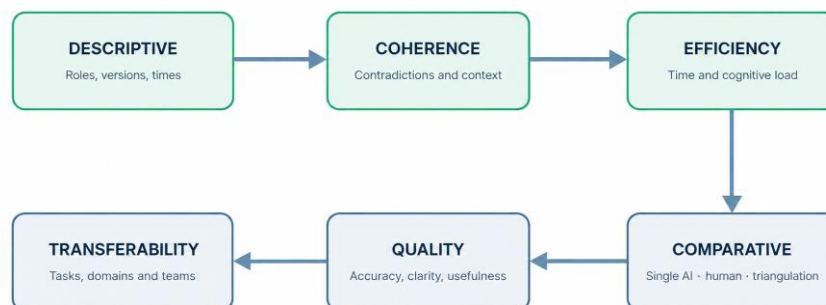


Figure 4. Proposed levels for evaluating the architecture.

Evaluation should document roles, versions, times, decisions and return points; compare triangulation with other workflows; measure contradictions, context loss and terminological consistency; assess accuracy, completeness, clarity and traceability; analyze time and cognitive load; and examine whether results hold across different domains, tasks and teams.

09 · DISCUSSION

Limits and conditions of use

Human-AI triangulation may create a false sense of security if multiple systems are assumed to equal independent evidence. Models may share training data, linguistic patterns, design constraints and biases. Agreement among them must be interpreted with caution.

The architecture may also increase complexity, time and cost when applied to low-risk tasks. Its value will be greater when uncertainty, decision sensitivity, documentary scope or the need for continuity justify several layers of contrast.

Human responsibility does not by itself guarantee quality. It requires judgment, access to sources, willingness to revise and, in specialized domains, participation by accredited experts. The model presented is a conceptual proposal derived from two years of continuous OBIS work.

EPISTEMOLOGICAL STATUS

OBIS thesis and methodological proposal under development. Initial conceptual foundation available. Comparative empirical validation pending.

10 · CONCLUSION

From linear assistance to verifiable production

Human-AI triangulation proposes a transition from linear assistance to an architecture of interintelligent production. Its basic unit is not a generated answer, but a cycle in which different capacities produce, contrast, review and modify a result under human direction.

In this architecture, Chat, Work and OBIS do not perform the same function. Their value emerges precisely from difference: conceptualization and reasoning, development and materialization, review and responsibility. Convergence increases stability; divergence guides review; traceability makes it possible to reconstruct the process; and human decision-making retains final responsibility.

SYNTHESIS

Human-AI production acquires greater value when we can not only observe the result, but also understand how it was constructed, where the intelligences diverged, which criteria resolved the divergence, and who authorized its adoption.

Intelligence working with intelligence.

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TRANSPARENCY

Production process statement

PRODUCTION THROUGH TRIANGULATION

This document studies a triangulation architecture and, at the same time, is produced through it. ChatGPT developed the initial conceptualization; Work carried out the documentary and visual development; and OBIS Innovation & Solutions™ reviewed, modified and authorized the final version. Final responsibility for the document's adoption, publication and use rests exclusively with OBIS Innovation & Solutions™.

Scope note: Chat and Work represent operational environments with differentiated functions within the ChatGPT ecosystem. Their participation should not be interpreted as corroboration from completely independent systems. Epistemological triangulation is completed through human intelligence, documentary corpora, critical contrast and external review when appropriate.



INTELLIGENCE WORKING WITH INTELLIGENCE

Human intention. Assisted development. Responsible decision.

OBIS ↔ CHAT ↔ WORK ↔ OBIS