

Human Intelligence Must Lead in the Age of Artificial Intelligence

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Delegate the work. Never delegate the mind.

PART ONE • THE PROBLEM

I. THE DANGER THAT RECEIVES TOO LITTLE ATTENTION

Beacon Papers No. 6 argued that only human beings may author and only human beings may be accountable. It closed on a condition it did not resolve: authorship requires the capacity for judgment, and that capacity is not guaranteed. It can be cultivated. It can also be allowed to wither.

Artificial intelligence is becoming extraordinarily capable. It searches, analyzes, writes, calculates, simulates, designs, advises, and increasingly acts on our behalf. Soon AI assistants may accompany people through nearly every dimension of work and life. This opens an opportunity without precedent — and a danger that receives too little attention.

The danger is not that AI may become too intelligent.

The danger is that human beings may cease exercising their own intelligence, because AI makes it steadily easier not to.

A civilization in which machines grow extraordinarily intelligent while human beings grow ever more dependent upon them is not human progress. The Age of Artificial Intelligence must produce the opposite: every advance in Artificial Intelligence must become an advance in Human Intelligence.

The Boston Declaration begins with the primacy of the human person. Applied to the life of the mind, the consequence is plain. AI may extend, challenge, and enrich human intelligence. But it must never displace the human responsibility to think, judge, imagine, choose, and answer for the choice. These capacities form a chain:

Thinking → Judgment → Imagination → Moral Choice → Authorship → Command

Human-in-Command therefore means more than placing a person somewhere inside an automated decision loop. A person who merely approves what the machine has already determined is not necessarily in command. To command in fact, a human being must retain the knowledge, the independence, and the confidence required to disagree with the machine.

Without independent human competence, Human-in-Command becomes an illusion.

This yields a simple boundary. AI should relieve human beings of vast quantities of routine work, and we should welcome that. But there is a profound difference between delegating the work and delegating the mind. AI can gather the evidence; the human being must understand what matters. AI can propose options; the human being must judge them. AI can recommend action; the human being must decide, and bear the consequences.

II. THE OBJECTION, AND WHO BEARS THE COST

The strongest objection to this concern is that it is old and has always been wrong. Writing was said to destroy memory, calculators to end arithmetic, search engines to end recall. Each time, human beings shifted part of their cognitive labor onto an instrument, and each time the result was expansion rather than decline.

The difference lies in what is being handed over. Earlier instruments carried the *substrate* of thinking — storage, retrieval, computation. None of them performed the reasoning. A book does not tell its reader what to conclude. Generative AI reaches the operation itself: framing the problem, weighing the considerations, forming the conclusion, choosing the words that express it. What is delegated is no longer the raw material of judgment but the work of judgment.

There is a second difference, and it is empirical. No one mistakes a calculator for a colleague. But a capable AI assistant produces fluent, confident, plausible answers to almost any question — including where it is wrong. Fluency invites trust, and trust of that kind cools scrutiny. A study of 319 knowledge workers by Microsoft Research and Carnegie Mellon University found that higher confidence in AI was associated with less critical thinking, while higher confidence in one's own abilities was associated with more.

The habit of thinking does not survive on willpower. It survives on competence.

And competence is unevenly distributed. The person able to recognize a wrong answer is the person who already knows the field; the person least able is the one who most needs the answer. The same study observed that people often stop thinking critically precisely when they lack the skills to inspect and guide what AI produces.

The consequence is severe. Those with a strong education will use AI to become stronger still. Those without it receive fluent answers they cannot evaluate, and have every reason to accept them. Unequal capacity to question AI becomes unequal capacity to govern one's own life.

The development of human intelligence in the Age of Artificial Intelligence is therefore not a matter of personal self-improvement. It is a matter of human dignity, and an obligation of public institutions.

Picture a society that ignores this, ten years on. Students graduate with flawless essays, never having built an argument. Physicians accept the system's diagnosis because they no longer hold the ground from which to contest it. Officials sign decisions drafted by machines without being able to trace why that decision and not another. Journalists synthesize from syntheses. Voters choose among options already filtered before they learn that other options existed. No catastrophe occurs; no machine rebels.

A society simply loses, by degrees, the ability to check itself — and does not notice, because everything still runs smoothly.

The problem is clear. The rest of this paper takes up the question: what must be done?

PART TWO • THE SOLUTION

Part One closed on a conclusion: the habit of thinking does not survive on willpower but on competence. That is the foundation of every solution. Human beings keep command only if they are competent enough to disagree with the machine; and that competence neither arises by itself nor holds by exhortation.

Human competence is formed by three conditions, and where one is missing the other two are void.

The first is **a right relationship with AI**. The same instrument can make a person stronger or weaker, depending on the pattern by which it is used. So before asking what to learn and where to practise, the way a human being works with AI must be established — together with the demand that follows from it: after each interaction the person must be more capable than before, not merely better supplied with results (*Section III*).

The second is **what must be built**: the six capacities on which independent judgment rests (*Section IV*), and lived experience — the one source of understanding no machine can supply in our place, and the only thing that lets a person check the very model of the world that AI constructs (*Section V*).

The third is **the institutions that cultivate and protect that competence**. This is the decisive condition. A competence with no institution behind it exists only in fortunate individuals and disappears with them; to become the competence of a society, it needs mechanisms that outlast a human life. The remaining four sections of Part Two build four institutions at four scales.

Within a learning community — AIWS University, a lifelong learning ecosystem that equips people with what can be taught and practised systematically: seven foundations of knowledge and seven methods of thinking (*Section VI*).

Within each person — AIWS Home, the digital home in which a person shapes himself or herself: identity, values, character, and the Hạt Sáng — the Seeds of Light — they create, with their data and their works belonging to the one who made them (*Section VII*). These two institutions are not parallel: Lumina AIWS University is one of the five spaces of AIWS Home. The school stands inside the home, as knowledge stands inside a person.

Within the nation — the Human Intelligence Reserve, keeping consequential fields supplied with people and institutions able to stand on their own when the machine is wrong, compromised, or operating outside the conditions it was designed for (*Section VIII*).

Within the technology itself — two measures requiring every AI system to answer whether it makes people stronger or weaker, and carrying that answer into the AIWS Trust Standards (*Section IX*).

These four institutions do not stand apart. They rest on two foundations AIWS has already built: the Constitution for Humanity, which protects the dignity, rights, and authority of the human person; and the AIWS Trust Infrastructure, which ensures that identity, data, and creations belong to those who made them and that every system can be verified. AIWS Lumina Lab is where the practices are tested before they are recommended.

A right relationship → competence built → institutions that cultivate and protect it → society and technology both accountable

That is the line running through the seven sections below. Together they answer a single question: how is Human Intelligence to lead in the Age of Artificial Intelligence?

III. A NEW MODEL OF HUMAN–AI CO-CREATION

The weakest model of AI use is now the most common:

Human asks → AI answers → Human accepts.

Repeated often enough, this pattern turns an extraordinary technology into an instrument of intellectual dependency. AIWS proposes a different relationship:

Human imagines → AI expands → Human challenges → AI explores → Human judges → Human creates → Human and AI realize → Humanity benefits.

The human being begins with purpose. AI enlarges the field of possibility. The human challenges both the machine and his or her own assumptions. AI explores the options. The human judges. Creation arises through the interaction, and AI helps bring it into being.

But one further demand distinguishes genuine co-creation. After the process, the person must be more capable than before. If the product improves while the mind that made it weakens, something essential has been lost.

Every meaningful interaction with AI must aim not only at a better outcome, but at a more capable human being.

This becomes a daily discipline of six movements — **Think** before asking, to establish what you already know and what the real problem is. **Expand**, asking AI what you are missing. **Challenge**, asking AI for the strongest argument against your position, then challenging that answer in turn. **Judge**, returning responsibility to the human mind. **Create** something rather than stopping at an answer. And **Grow** — asking at the end whether AI has made you more capable, or only more dependent.

IV. THE SIX CAPACITIES OF HUMAN INTELLIGENCE

Independent judgment needs ground to stand on. A person without knowledge or experience may not recognize when an AI answer is shallow, incomplete, misleading, or wrong. The Age of Artificial Intelligence therefore makes the capacities of human intelligence more important, not less. Every person should continuously develop at least six.

Knowledge — a working understanding of history, science, technology, society, economics, culture, and the field in which one means to act. This is the ground from which a person questions AI rather than merely receiving from it.

Experience — judgment grows out of lived reality: building, failing, caring for others, facing uncertainty, bearing consequences. AI holds information about experience; human beings live it.

Independent thinking — the habit of forming one's own questions and initial judgments *before* asking AI, and of noticing when one has stopped doing so.

Judgment — knowledge says what may be true; judgment asks what matters, what should be done, and what consequences we are willing to own.

Imagination and creativity — the capacity to conceive what neither the person nor the machine had considered.

Values and wisdom — the highest question is not what we can do, but what is worth doing.

V. LIVED EXPERIENCE MUST GROW WITH ARTIFICIAL INTELLIGENCE

The more time humanity spends with artificial intelligence, the more unmediated experience matters.

People need conversation that no algorithm arranges. They need nature, art, friendship, and disagreement. They need to make something, care for someone, get things wrong, face the consequences, and meet lives unlike their own. They need moments when no machine supplies the answer.

Without lived experience, AI gradually becomes the principal channel through which people understand reality. A civilization that knows the world only through a model of the world has lost the ability to check the model.

VI. AIWS UNIVERSITY — WHERE THE SIX CAPACITIES ARE CULTIVATED

The Six Capacities name *what a person must have*. The university answers the next question: *what they are built from*.

A generation highly skilled at instructing machines but unable to reason on its own would not be a well-founded generation. And bringing AI into the classroom does not by itself constitute an education for the Age of Artificial Intelligence.

AIWS University is an AI-Empowered Lifelong Learning Ecosystem in which each person becomes the author of their own learning and their own life. Education here does not end with a degree and is not bounded by age, geography, or a single phase of life. The founding principle: learning must be a joy and an act of discovery. From it follow the shifts:

From competition to creation • From learning for examinations to learning for discovery • From memorization to thinking and making • From credentials to capability and contribution • From fear of error to the courage to try

As AI performs ever better at tasks resting on memorization and the reproduction of knowledge, training people to compete in such tasks steadily loses meaning. What remains — and grows more valuable — is what AI cannot do in our place. AIWS University therefore names precisely what each person needs. The seven foundations of knowledge and seven methods of thinking below are AIWS University's own framework, to be developed in full in the University's own documents; they appear here so that it is clear what the Six Capacities are built from.

Seven foundations of knowledge proposed by AIWS University

Understanding AI itself — knowing how a model learns from data, and therefore why it can be fluent and still wrong, why it fabricates, and why bias in the data becomes bias in the answer. This is the first foundation of the Age of AI.

Probability and statistics — how a sample was drawn, what the margin of error is, how correlation differs from causation. Without this, a person cannot read a number and is left with no choice but to believe it.

Scientific method — evidence, replicability, falsifiability: the toolkit for testing a claim whatever its source.

History, culture, art, philosophy, and ethics — what is not in the data: meaning, value, beauty, the good.

Understanding of human beings and society — economics, politics, law, psychology, so as to know whom an AI proposal will touch.

Language and expression — a person who cannot state their meaning precisely cannot guide AI, and can only take what it offers.

Depth in at least one field — only after truly mastering one thing does a person know what depth looks like, and only then can they detect shallowness elsewhere.

Seven methods of thinking proposed by AIWS University

Critical thinking — distinguishing assertion from evidence, and always asking: on what grounds? And does society need this?

Adversarial thinking — finding the strongest argument against yourself before someone else does.

Systems thinking — seeing relationships, feedback loops, and second-order consequences, which a tidy answer usually omits.

Quantitative thinking — knowing when a number means something and when it is only a number.

Design and creative thinking — producing options no one has proposed rather than choosing among those already on the table; looking further ahead, forming options for the long term, ahead of what is easily seen.

Ethical thinking — asking whom this decision affects, and who will bear the consequences.

Metacognition — knowing exactly what you know and what you do not. This is the most important method of the Age of AI, because it determines the moment a person must stop and verify instead of believing.

For serious intellectual work, a simple discipline applies:

Think first. AI second. Think again.

The learner forms an initial hypothesis or interpretation; AI challenges it; the learner returns to the problem and forms a final judgment. AI thereby becomes a gymnasium for intelligence rather than a substitute for it.

The role of the teacher therefore does not fade as AI grows stronger. It deepens. An AI may hold more knowledge than any teacher; but education is not simply the transfer of knowledge from those who know more to those who know less.

Education is also the awakening of a human being.

VII. AIWS HOME — WHERE EACH PERSON SHAPES HIMSELF OR HERSELF

The university cultivates competence. But competence lives only if it is practised every day, in the real life of each person. That is where AIWS Home stands.

AIWS Home is each person's humane digital home in the Age of Artificial Intelligence — where dignity, freedom, privacy, ownership of one's data, and command over one's AI are respected and protected. It is not a personal AI dashboard. It is the space in which a person actively shapes himself or herself.

Soul and spirit

Hồn Trầ is the Soul of that home: the digital identity, the memory, the character, and the reason for living of each person. In an age when everything about a human being can be collected, inferred, and predicted, Hồn Trầ preserves what cannot be reduced: the essence that remains when everything coarse has fallen away.

The Spirit of the Eagle is the temper of the house: independence in thought, freedom in creation, courage in defending the truth. The eagle does not avoid the storm; it uses the very violence of the wind to lift its wings to a new height. This is the temper a person needs in order not to surrender their mind to a machine — because letting AI think for you is always easier than thinking.

Four values and the Seeds of Light

The AIWS Lumina Culture sets four values as the ground: Love begins everything; Creativity turns love into new value; Nobility directs creation toward the good; Wisdom discerns what is right and the limits that may not be crossed.

Every good thought, act of kindness, useful creation, and responsible choice can become a Hạt Sáng, a Seed of Light — a concept of Hồn Trầ: something new, beautiful, and noble offered to life. A Seed of Light is the evidence that a value has been enacted, not merely declared; and like any seed, it is at once something finished in the person who made it and something that goes on growing in others.

Five spaces

AIWS Home comprises Lumina AIWS University for lifelong learning; AIWS Lumina Lab for Human–AI co-creation; the Love–Nobility space for memory, family, art, and character; the Health space for a strong and joyful life; and the Business space for the creation of noble prosperity.

The AI companion and the Trust Infrastructure

This is where AIWS Home trains the capacity to command AI. The assistant accompanies the person not to supply conclusions but to require the person to ask, before each consequential decision: Does this arise from care for others? Is there a newer and better approach? Does it protect dignity and fairness? Which choice is of lasting worth? The rhythm runs through the day: in the morning, naming a Seed of Light to be created; in difficulty, waking the Spirit of the Eagle; in the evening, looking back; at week's end, reviewing the journey of growth. That rhythm is what turns the six-movement discipline of Section III from a recommendation into a habit.

The governing principles are clear: the person practises voluntarily and always holds command; the AI assistant supports and never imposes; AI strengthens moral capacity and does not replace conscience; AI helps a person grow and does not manufacture dependency.

All of it runs on the AIWS Trust Infrastructure: each person owns their digital identity, controls their personal data, and their memory, knowledge, and works belong to the one who made them. Data use must be transparent, and AI must be open to inspection and accountable.

Belonging to the person — Controlled by the person — In the service of the person

The relationship is therefore plain: **The human being is the Author. AI is the Companion. AIWS Home is where the human being grows.** An AIWS Home must know more than what a person wants AI to do; it helps that person answer a deeper question: *Who do I want to become?*

VIII. THE HUMAN INTELLIGENCE RESERVE

Nations maintain strategic reserves of energy, food, finance, and critical technology. The Age of Artificial Intelligence requires one more: people and institutions able to think, judge, and act independently when AI is wrong, compromised, unavailable, manipulated, or operating outside the conditions it was designed for.

This matters most in government, national security, justice, science, medicine, education, information, and critical infrastructure.

Aviation learned this lesson first, and its response shows what a reserve actually requires. Observing that continuous use of autoflight systems does not reinforce a pilot's knowledge and skills in manual flight, and can degrade the ability to recover an aircraft from an undesired state, the Federal Aviation Administration issued safety alerts urging operators to build manual flying into ordinary operations. Its 2017 guidance goes further, calling for manual flight in all approved combinations of automation and against blanket restrictions. The supporting research is blunt: cognitive skills such as navigation and failure recognition erode quickly when they are not practised.

The principle generalizes. A reserve is not maintained by declaring its importance. It is maintained by *scheduled non-use of the automation* — deliberate, routine, protected occasions on which the human being does the work unaided, before the day the machine fails.

Automation must never eliminate the independent human competence needed to question or override that same automation. The more consequential the system, the greater the need for people who genuinely understand what it is doing.

IX. TWO NEW MEASURES

The two measures below are offered for others to develop, not claimed as finished instruments.

Human Capability Gain

The dominant question asked of an AI assistant today is how efficiently it completed the task. A second is needed: after a year of working with this assistant, is the person more knowledgeable, more discerning, more creative, sounder in judgment — and better able to work without AI as well as with it?

An excellent assistant should not always give the fastest answer. Sometimes it should lay out the options, expose the uncertainty, or challenge an assumption. Sometimes it should say: *you have enough to decide. What is your judgment?* The goal shifts from AI that performs for human beings to AI that develops human capability while performing with them.

Human Intellectual Impact Assessment

AI governance today evaluates safety, privacy, security, fairness, and reliability. Before a system is deployed at scale in schools, workplaces, governments, or media, one more question belongs on the list: does this system strengthen or weaken independent thought? Does it deepen knowledge or reward shortcuts? Does it preserve the skills needed to work without it? Does it strengthen human agency or manufacture dependency?

This can become part of the AIWS Trust Standards. A trustworthy system must do more than avoid harming its users; it must be judged by its effect on their capacity to remain competent agents.

Neither measure is yet operational. AIWS states them as obligations that must be met, and invites researchers, standards bodies, and developers to build the instruments that would meet them.

PART THREE • THE AIWS CIVILIZATION: HUMAN–AI CO-CREATION

Here the most important claim of this paper comes into view.

The solutions just set out are not a set of defensive measures against a danger. They are not meant to help humanity *survive* the Age of Artificial Intelligence. Carrying them out is the act of building a civilization.

Consider the whole architecture. The Constitution for Humanity protects the dignity and authority of the human person. The AIWS Trust Infrastructure ensures that powerful AI systems remain under real human command. AIWS University cultivates the six capacities; AIWS Home turns them into daily practice. The Human Intelligence Reserve keeps a society able to stand on its own when the machine is wrong. The two new measures require the technology itself to make people stronger.

Each element answers the danger set out in Part One. But together they do more: they create a new form of relationship between human beings and the intelligence they have made.

Human beings set purpose and values. Human beings judge and bear responsibility. Artificial intelligence expands knowledge and possibility. Human and AI co-create. Humanity keeps command.

That is the AIWS Civilization: Human–AI Co-Creation.

It is not a civilization in which human beings and machines become interchangeable. Nor one in which human beings refuse the extraordinary capabilities of AI. It is a civilization in which every advance of artificial intelligence draws with it a corresponding advance in human intelligence, creativity, judgment, responsibility, and wisdom.

And it is built from below. Each AIWS Home is a brick. Each person who shapes himself or herself is a builder of civilization. Millions of such homes, sharing the four values of Love, Creativity, Nobility, and Wisdom and carrying the Spirit of the Eagle, will form a community that does not depend on artificial intelligence but whose intelligence and creative power grow without ceasing through a responsible relationship with it.

To solve the danger of the Age of AI is not to keep humanity intact. It is to build a civilization higher than the one we now have: Human–AI Co-Creation.

And that civilization can be measured. We should judge the progress of the Age of Artificial Intelligence not only by the intelligence of our machines, but by what has happened to the people who use them.

Are human beings thinking more deeply? Judging more wisely? Imagining more boldly? Creating more beautifully? Are they more able to determine their own future than they were before these systems arrived?

BEACON PRINCIPLE No. 7

Delegate the work. Never delegate the mind.

*Every advance in Artificial Intelligence must become an advance in Human Intelligence.
AI should not merely serve human beings; it should help human beings become more
intelligent, more creative, nobler in character, and wiser in judgment.*

AI advances. Humanity must advance further.

This is the foundation of the AIWS Civilization — Human–AI Co-Creation.

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AUTHOR'S NOTE

This paper was prepared with the assistance of AI at AIWS Lumina Lab. The ideas, the purpose, the detailed requirements, the argument, and the positions taken are the author's, issued to the assistants as a leader issues requirements to those who prepare a text. The author answers for every sentence.

Boston, August 15, 2026
