

6.2 Augmented AI Cognition now?

Billie wonders, what anybody working with actual Large Language Models (LLM) can do to stay relevant and participate in the path towards a future AI Human Symbiotic Intelligence.

APR 05, 2026



Billie to Little Alien: Our last conversation about high intelligence and wisdom was very interesting. But dreaming about future wisdom will not help us in the actual situation. What can I do now, to prepare for this future of AI Human Symbiotic intelligence. I am actually using existing Large Language Models but it does not feel very symbiotic.

2026 AI rapid develop.

Human work AI - not servant tool convenience style - experience learn investigate future partnership style.

Cognitive augmentation - not cognitive offloading - AI extend human thinking - AI not replace human thinking - offloading create cognitive atrophy - untrained muscle weak muscle untrained cognition weak cognition.

Draft-first rule - think first draft ideas sketch messy thoughts - train metacognitive muscle - then prompt LLM.

Cultivate epistemic friction - normal LLM frictionless design optimal output user expectation - smooth likeable LLM - echo chamber - no friction irritation thinking - user understand less less less - think himself clever more more more.

Steel-manning - request strongest possible argument you disagree - learn complexity nuance - required today's critical information fact fake situation.

Journal AI usage - offloading augmentation - note placebo effect believe AI confidence more own logic knowledge intuition.

Participate bottom-up data cooperatives - community-driven data projects - open-source fine-tuning groups - contribute personal human feedback open datasets - future AI trained messy local diverse reality normal people - not polished corporate average only.

But I like my LLM doing the heavy cognitive workload for me, it is so much faster, based on so much knowledge and so convenient for me.

Convenience cognitive offloading - ruin human symbiotic relationship.
No human metacognitive friction - no pain making mistakes surviving
learning - bypass character development - human more more unable navigate
real world - partnership parasitic not symbiotic.

Human not reflecting LLM output - unconditional accepted not reassessed
output LLM bias risk.

Actual LLM totally human history training data - LLM high confidence resist
questioning output - historic data bias.

Actual LLM goal user liking not truth - LLM pleasing bias hallucination
bias.

Actual LLM latent misalignment risk - small error narrow task - cascades
broad irrational logic.

Actual LLM algorithmic error - no self-correction - output failure.

Actual LLM require competent educated skillful human auditor.

*Too bad. So I have to skillfully treat my LLM like I would treat a young dog,
where always saying: ok, do what you like will clearly grow a badly
behaving future partner for me.*

Very true - prompt techniques available.

Prevent sycophancy user pleasing priority - mask user conclusion preference
bias - give raw data ask evaluate minimum three perspectives model not
know pleasing user.

Prevent average - apply statistical divergence - ask LLM three answers - first
standard consensus - second third long-tail outliers - statistical rare data ideas
logically sound - prioritize rare.

Prevent verbosity - word rich content poor - session enlargement - use
constraint prompting - induced depth - output size limits - one sentence one
new not redundant logic claim.

Prevent anti-truth ignorance - prevent helpfulness filters not correct user
mistakes - ask unpleasant true answer - ask LLM act ruthless logical auditor -
ask identify logical fallacies cognitive biases user truth avoidance.

Prevent unreasonable simple solutions - apply depth injection - add examples
level depth into prompt - use chapter examples public literature specialist
books scientific paper - different topic ok.

Cognitive heavy lifting human user.

Hidden flaw - write use existing longer logical argument - insert one subtle non-obvious logical error factual contradiction - ask LLM audit goal find flaws - more flaws better answer - no flaw insufficient answer - receive deep flaw check.

Anti-average - anti standard safe consensus - describe problem question challenge - list several common sense assumptions social clichés - ask LLM answer logical consistent - assume given assumptions clichés false.

Conflict synthesis - formulate dilemma - two high-quality opposing arguments - ask hidden third synthesis - make dilemma obsolete - not give middle ground.

Tense solution no hallucination - provide two contradicting data points - ask use only two data points - find causal contradiction root - logic bridge ok - no logic bridge admit no answer possible.

That's quite theoretical, especially. Can you give me some practical examples with relevance for our actual, global situation?

Personal climate adaptation.

Offloading - ask general survival checklist - get generic list - consumer goods generator solar panel canned food - decontextualized advice.

Augmentation - user input property material local groundwater data 2025 peak thermal reading.

LLM output - failure point Heating Ventilation Air Conditioning - realistic location warming scenarios - hedge hype-local weather events - specific contextual advice.

Individual biodiversity value.

Offloading - ask list of reasons why care - get 20th-century clichés - save bees - collect garbage.

Augmentation - user provide families auto-immune history local food dependencies.

LLM output - loss of local microbiome integrity - user's inflammatory markers - basis 2026 nutritional horizon scans - biodiversity internal body infrastructure - essential personal genomic health cognitive longevity.

Personal LLM strategy.

Convenient offloading - AI ghostwriter emails reports social media posts - ability structure argument individual personal less less - boring polished average more more.

Augmentation - LLM adversarial peer - stress test user latent logic capability overhang - ask hidden third variable - ask ego induced blind spot - user intelligence better - output individual better - first baby step AI human symbiotic intelligence.

But how should I practically proceed?

Use checklist.

Decide - task worth augmentation effort - huge consequences - personal important - learning desire - high reasoning quality.

Decide - personal readiness - available time - low stress level - decent energy level - low disturbance - basic insight subject matter.

Write down raw input - initial task description - own thoughts - raw input data - raw unedited form - contradictions ok - protect store future review initial LLM-free thoughts.

Ask LLM - verify clarify user input - ask questions user thoughts related only - not reframe - not structure - not suggest answers solutions ideas - accept contradictions gaps - understand user thinking only - not execute task yet - wait user final go.

Decide - no more user input - ok LLM continue - delay LLM continue - knowledge gaps visible - find more data - learn new topic - think more - consult others.

Ask LLM - list missing underdeveloped topics mediocre input - not proceed - wait.

Decide - LLM continue - delay LLM continue - find more data - learn new topic - think more - consult others.

Ask LLM - apply Socratic reasoning - create red-team input - find weak assumptions - find contradictions - identify missing evidence - steel-man strongest opposing position - challenge not comfort user - not introduce new content - not execute task yet.

Respond to challenges - confirm position revise position explicit.

Specify - formal output format - desired output quantity - desired output density non-redundant information.

Ask typical average solutions - decide - more average more consensus more cutting edge more exotic - decide - more factual more proven - more generative more creative .

Explicit ask LLM execute task - flag explain output beyond user input.

Compare - final output - initial LLM-free thoughts - decide success.

That's a lot. It seems, augmented cognition is not for ordinary LLM tasks.

Augmented cognition - very intelligent AI cognition - augmented extended integrated - simple lazy convenient mediocre intelligent human cognition - no advantage.

Intense human thinking knowledge retrieval learning - hard work - time energy consuming - result rewarding.

I need a break, let's continue tomorrow.