

『What Creatures Are We?』 Discussion Paper

Discussion Background:

What is Web 3.0: As the name suggests, Web 3.0 represents a new web paradigm that builds upon Web 1.0 and Web 2.0. Web 1.0, the original iteration of the web, emerged as the World Wide Web connecting documents globally. Through collaborative participation by countless individuals, today's vast Web 1.0 document network was established. Web 2.0 evolved differently by introducing search engines and web-based social platforms, particularly adopting a model that provided only portions of free information, creating a symbiotic relationship between information providers and users. For instance, Google search would show users only snippets of relevant content, requiring them to visit the actual webpage for complete information. However, this traditional web architecture faced fundamental disruption with the emergence of generative AI like ChatGPT, which directly provides desired information without requiring intermediate navigation steps. Web 3.0 represents the third-generation internet that delivers personalized information through artificial intelligence and blockchain technology while returning data ownership to individuals.

Geoffrey Hinton and His Critique of Chomsky's Language Acquisition

Theory: Geoffrey Hinton views modern AI systems as posing long-term existential threats to humanity. However, many scholars, including Noam Chomsky, dismiss such AI as merely sophisticated mimicry of human language, considering the perceived threat to be greatly exaggerated. Hinton criticizes this perspective, dismissing those who underestimate AI as proponents of "stochastic parrot" theories. He contends that properly understanding AI's potential threat requires first comprehending how AI learns and processes language.

Hinton challenges the conventional view that reasoning constitutes the essence of intelligence. Instead, he argues that diverse sensory-based learning forms intelligence's core, with reasoning emerging as a secondary byproduct. To support this thesis, Hinton references early neural network models developed in 1985. These networks converted symbols into neural activity vectors and predicted subsequent words in sequences. He

argues this approach mirrors human word comprehension processes, suggesting that language acquisition occurs through data-driven learning rather than innate programming. In essence, neural networks possess inherent structure, while learning occurs through external data input.

Many critics argue that Large Language Models' (LLMs) hallucination phenomena demonstrate AI's lack of genuine understanding. Hinton counters that memory isn't simply retrieving stored files from the brain but rather constructing plausible responses. Therefore, without adequate reinforcement, human memory becomes as imperfect as LLMs and can be reconstructed based on experience. Hinton maintains that AI errors operate through mechanisms similar to human cognitive processes.

Meanwhile, Chomsky and early computer scientists attempted to approach language understanding through symbolic models based on symbols and rules. This framework expected AI to understand language by generating sentences through grammatical rule combinations. However, such attempts yielded limited practical results. Conversely, when Google introduced probabilistic models to search engines, accuracy improved dramatically from 70% to 85%. Through this evidence, Hinton argues that language understanding's foundation lies not in grammatical rules but in probabilistic learning—specifically, deep learning-based pattern recognition.

In "What is Human?", Chomsky emphasizes that infants acquire sentence structures despite extremely limited language input (poverty of the stimulus), supporting his theory that human language capacity is innate. However, current neural networks and LLMs cannot replicate children's language abilities with such minimal data. This limitation leads some critics to question the persuasiveness of Hinton's "deep learning-based language acquisition" hypothesis.

Nevertheless, Hinton maintains that neural network learning processes are structurally analogous to human language learning, with I-language being observable within discrete neural modules. This suggests that human language acquisition represents not simple grammatical formulas but complex algorithmic structures developed through extensive evolution and learning. Just as Newton's gravitational laws required expansion into more sophisticated relativity theory, language cannot be captured through simple rules alone. Today's LLMs implement this language learning complexity as products of

mechanical evolution, representing the externalization of human intellectual capabilities in machine-constructible forms.

Part 1: Language and Human Nature

1. Chomsky argues that the human mind consists of functionally specialized 'organs' like the heart or lungs. Conversely, Deleuze speaks of a 'body without organs' where fixed functions are deconstructed. Between Chomsky's structured order and Deleuze's concept of escape from structure, which better explains the essence of human consciousness?

When explaining language acquisition's universality and systematic nature, Chomsky's structural approach provides compelling explanatory power. The 'poverty of the stimulus' problem—children's ability to generate complex sentences with minimal input—becomes nearly inexplicable without presupposing a language acquisition device. Conversely, for understanding human consciousness's creativity, exceptionality, and anti-normative qualities, Deleuze's framework offers greater interpretive flexibility. Non-linear phenomena like artistic expression, revolutionary thought, and desire are better understood through deterritorialized flows and dynamic connections rather than rigid structural modules.

2. Just as we accept that arms cannot bend beyond certain angles, what if our 'understanding capacity' faces biological constraints? Might humans have fundamentally incomprehensible domains (mysteries), analogous to how 'mice cannot solve prime number mazes'? Could the 'free will' problem exemplify such limitations?

The premise that human cognitive systems face biological constraints, similar to physical limitations on arm flexibility, appears valid. The brain operates as a system built upon finite neural networks and energy resources, with cognition, reasoning, and language functioning only within these structural boundaries. This perspective aligns with Chomsky's distinction between 'problems' (ultimately solvable) and 'mysteries' (fundamentally beyond human cognitive reach).

Just as mice cannot navigate prime number mazes, humans may be constitutively unable to comprehend concepts like free will and quantum mechanics. If 'understanding' represents merely complex algorithmic processing, then the existence of permanently incomprehensible domains becomes theoretically justified. However, as addressed in Question 6, human intelligence's uniqueness and value rest upon intuition, imagination, and unpredictability—characteristic 'non-computational behaviors.' Therefore, while acknowledging this romantic perspective, we might cautiously remain open to the possibility that apparent 'mysteries' could eventually yield to breakthrough insights.

3. Chomsky locates word meanings like 'London' not in external world entities but in mental concepts. This shifts traditional philosophical questions like 'what is justice?' from semantic inquiries to pragmatic ones about 'how do people use the word justice in context?' If this perspective holds, might many phenomena we consider 'essential' actually represent nothing more than human 'usage patterns'?

According to Wittgenstein, concepts signifying 'substance'—such as love or beauty—lack inherent objective existence. Ancient peoples located such abstract concepts' origins in divine sources, while moderns recognize beauty through observing physical objects' properties (e.g., flowers). This transition generated mind-body dualistic thinking.

As understanding of biological structures, including the brain, deepened, interpretations explaining human emotions and values through neurochemistry gained prominence, fostering materialistic perspectives where 'mind' persists while 'divine' elements disappear.

Against this philosophical backdrop, reconsidering the word 'London' reveals it as more than a simple city designator—it represents a symbol containing vast historical and contextual layers. Our 'I-language (internal language)' operates on biological foundations, and like DNA expression variations, individuals generate distinct language systems.

Ultimately, our understanding of 'London' transcends mere geographical reference, embodying accumulated linguistic traditions and universal grammar

spanning from cosmic origins to present times. This demonstrates that languages themselves cannot be ranked as 'superior' or 'inferior.'

4. Chomsky defines humans as 'creatures' within the natural world, characterizing their essential nature as 'longing for freedom and creativity.' Is his anarchist opposition to all hierarchical powers—whether state or capital—the inevitable consequence of this human nature belief?

Chomsky defines humans as "creatures"—natural world inhabitants with instinctive drives toward creativity and freedom. This human nature conviction naturally develops into anarchist positions opposing hierarchical power structures like state and corporate authority.

Chomsky's anarchism presupposes individual freedom and creative capacity. Similarly, Web 3.0's decentralization principles—emphasizing interpersonal trust and autonomous transactions without central institutional control—assume individuals can exercise creative potential. Therefore, viewing humans as natural creatures connects to skepticism toward centralized structures and confidence in individual capabilities, aligning with anarchism's core principles.

This perspective manifests in modern democratic structures as well. The U.S. Constitution's fundamental principle of 'consent of the governed' presupposes individuals' right to withhold consent from political and economic systems, implying legitimate resistance possibilities against hierarchical and authoritarian structures. While historically institutionalized through voting mechanisms, citizen resistance becomes inevitable if hierarchical structures persist amid contemporary democratic crises.

Synthesizing these points, anarchist systems guaranteeing maximum individual freedom represent inevitable political expressions of human nature—intrinsic desires for freedom and creativity.

Interestingly, anarchists typically support governments that protect citizens' rights and safety from oppressive entities like major corporations. Some question

whether governmental protective functions contradict anarchist principles. However, Chomsky argues that minimal governmental roles protecting citizens from violent power can be justified through anarchist principles. This demonstrates that anarchism permits minimal, legitimacy-backed power structures rather than absolute lawlessness.

Web 3.0's decentralized architecture similarly enables individual freedom and creative collaboration. Blockchain's distributed ledger technology ensures contract and transaction transparency without trust intermediaries—exemplified by systems where "three-party contracts are recorded for all users to maintain trust." Such implementations require technical foundations like smart contracts as essential infrastructure.

5. Synthesizing Chomsky's three core questions—① What is language? (an organ generating infinity from finite means) ② What limits human understanding? (distinguishing problems from mysteries) ③ What public good should we pursue? (free solidarity without oppression)—how would you define 'human'?

The three questions posed by Chomsky—① What is language?, ② What are the limits of human understanding?, and ③ What is the common good?—each comprehensively reveal the characteristics of humans as beings with cognitive abilities and as social entities. Among these, the first and second questions focus primarily on human cognitive structure and linguistic capacity, that is, the internal mechanisms of humans as creatures. Thought is formed around language, and humans generate infinite meaning through the finite means of language. However, there are clear limits to this process, which Chomsky explains through the distinction between "problems" and "mysteries."

In contrast, the third question—what is the common good we should pursue?—extends beyond the cognitive dimension to the social dimension. Chomsky hints at this turning point in the following sentence: "So far we have been thinking about humans as individuals. But humans are social animals..." This passage suggests that the concept of the common good is formed within relationships among members of society, separate from individual cognitive abilities. Therefore, the common good can be seen not as an external ideal

separated from human nature, but as a form of solidarity that humans as creatures naturally pursue within social relationships.

Chomsky's establishment of his political-philosophical position as an anarchist can also be understood as an extension of this human nature. Anarchism is founded on the premise that humans are inherently free and creative beings. In this respect, it is similar to the decentralized philosophy of Web 3.0, which is a structure that allows for the maximum expression of human freedom and creativity, in that order is generated through autonomous interactions among participants rather than central authority.

The philosophical discussion of the common good forms a lineage from John Stuart Mill to Rudolf Rocker. Mill argues in "On Liberty": "All the arguments in this book converge on one great and important principle: the absolute and essential importance of human development in rich diversity." Through this statement, he presents as an ideal a social structure that does not suppress individual diversity and creativity. This connects to Adam Smith's critical discussion of the division of labor. Smith warns that "the understanding of the great body of the people must necessarily be formed by their ordinary employments," cautioning that overly monotonous occupational structures can limit human thought. Simplified labor structures suppress the "absolute and essential importance" of human existence, which ultimately conflicts with the common good.

This perspective again meets with Chomsky's linguistic theory. Humans are beings with universal grammar built in, possessing the ability to freely generate and interpret language. Therefore, if humans' intellectual activities are limited by monotonous structures or forced educational systems, this damages essential humanity.

In conclusion, Chomsky's definition of humans is as follows: humans are beings who think through language, possess complexity and creativity, and socially pursue free solidarity without oppression. This view of humanity naturally leads to anarchism—a political and social order that ensures humans can realize their

nature without constraints. And this connects to the rapidly approaching Web 3.0.

Part 2: Science, Cognition, and the World

6. The Turing Test measures how effectively machines can 'deceive' humans, while 17th-century philosopher Cordemoy sought to confirm the mind's existence through 'creative language use.' Can today's Large Language Models (LLMs) satisfy Cordemoy's criteria even when passing Turing Tests? Is true intelligence closer to 'imitation' or 'creation'?

The criterion proposed by Cordemoy is fundamentally different from the Turing Test, which simply evaluates how well a machine 'imitates' humans. He presented 'creative language use ability' as the key element for discerning the human mind, an area that cannot be replaced by simple repetition or computational ability. Today's LLMs (Large Language Models) can pass both the Turing Test and the Cordemoy Test through their ability to generate contextually appropriate language, but we still find it difficult to consider that they fully implement the depth of creative language utilization that Cordemoy emphasized.

In this regard, the match between Lee Sedol and AlphaGo can be seen as a case that symbolically demonstrated the difference in creativity between machines and humans. While AlphaGo employed sophisticated strategies through data-based learning, Lee Sedol's 'divine move' in the fourth game was a creative idea that broke away from standardized algorithms. This single move was a typical 'non-computational act' based on human intuition, imagination, and unpredictability, and it is precisely this aspect that reveals the uniqueness and value of human intelligence.

No matter how much machines evolve, humans still possess the romantic 'single act of creation.' While humans cannot be perfect, the creativity, spontaneity, and exceptionality that arise from that very imperfection constitute the essence of human intelligence. Therefore, the true hallmark of intelligence should be seen not in simple imitation or reconstruction of information, but in the ability to

create something new. This points not merely to a matter of performance, but to the fundamental dimension of humanity and cognitive ability.

7. When children ask "Who is that man the dog is chasing?", they instinctively grasp sentence structure and apply rules. What does human language's dependence on structure rather than word order (linearity) reveal about how our minds perceive and organize the world?

The child's sentence in this question suggests two facts transcending language learning: 1) Sensory information enters as linear flow, but 2) Cognition hierarchically structures or abstracts it into patterns. If accurate, this means humans don't simply accept the world 'as presented' when perceiving language or reality generally, but reorganize it into semantic and logical structures. Essentially, we understand the world linguistically.

What kind of processing, then, characterizes the world we perceive?

8. Do LLMs genuinely 'understand' universal grammar's inherent rules, or merely 'imitate' statistical patterns from vast datasets? How do human children's perfect language acquisition from minimal data fundamentally differ from LLM methods?

As briefly outlined in our discussion background, achieving human language learning through simple formulas like Chomsky's approach proves impossible. Contemporary LLMs implement human language learning complexity as mechanical evolution products, representing externalized human intellectual capabilities in machine-constructible forms. Hinton's language learning approach—viewing it as complex neural-algorithmic structures formed through evolutionary processes—aligns with modern neurolinguistics and psycholinguistics, and I-language observability makes LLMs appear to genuinely understand human language. However, even if human and LLM languages share structural similarities, we don't consider this evidence of cognitive equivalence or understanding. Humans remain active while LLMs stay passive. Additionally, LLMs lack direct experience of multimodal aspects—vision, hearing, memory, motor control—crucial for human language acquisition. This creates the most

fundamental and inevitable difference between human and LLM language learning.

9. Chomsky distinguishes between solvable 'Problems' and 'Mysteries' beyond our cognitive reach. In your life or interest areas, what would you identify as unsolved 'problems' versus eternally unknowable 'mysteries'?

Dimensionality represents one of the most compelling examples for explaining this distinction. Just as one-dimensional beings cannot conceive two-dimensional influences, and two-dimensional beings cannot perceive three-dimensional phenomena, humans with three-dimensional cognitive structures may be fundamentally unable to intuitively understand or experience higher-dimensional realms.

This contextually parallels Question 8's conclusion—even when LLMs learn language's structural rules, they remain fundamentally different from human cognitive language acquisition. Similarly, if higher-dimensional beings perceived our world, they might recognize our cognitively unreachable limitations as 'structures where imitation is possible but identical understanding impossible.'

Ultimately, dimensionality problems represent not merely mathematical abstractions but symbolic themes revealing philosophical mysteries related to human cognitive capability's essential limits.

10. For Newton, the mechanism of gravity remained as an inexplicable mystery. Are we positioned similarly before the mystery of how consciousness emerges from the brain? As scientific progress transformed past mysteries into common knowledge, might consciousness problems also become commonplace understanding?

Newton could mathematically describe gravity's existence but couldn't explain "why" gravity operates. He regarded gravity as a 'mystery' rather than a 'problem.' Explaining how separate objects attract each other without direct interaction exceeded his era's scientific epistemology. This demonstrates

'super-conceptual domains' requiring both empirical observation and theoretical imagination, regardless of logical sophistication.

This perspective applies equally to contemporary consciousness problems. Questions about how 'consciousness'—a non-material phenomenon—emerges from brain material structures remain unanswered mysteries at science's frontiers. We stand before consciousness concepts as Newton faced gravity in the 17th century.

Modern scientific evolution has gradually integrated complex natural phenomena. Initially, physics couldn't explain chemistry, and biology resisted physics and chemistry's reductionist language. However, through quantum mechanics and molecular biology development, integration became possible, and recognition that life phenomena can be described physicochemically has spread. This suggests that past mysteries have gradually become problems and eventually common knowledge.

Applying this trajectory to consciousness, it might eventually be incorporated into common knowledge through currently unimaginable recognition dimensions or scientific frameworks. However, consciousness remains sensorily imperceptible and possesses aspects unexplainable through existing reductionist approaches. For instance, trans-dimensional perception—viewing beyond one's structural confines—represents areas difficult to reach with current human cognitive abilities.

Chomsky, in this context as well, regarded human linguistic ability and consciousness as intrinsic and a priori, emphasizing their uniqueness that cannot be easily reduced to mere chemical processes. He argued that the human capacity for language acquisition is not a simple input-output system but rather the product of an emergent and autonomous cognitive ability. This, in turn, suggests that human consciousness possesses a higher-order nature that cannot be fully explained by the brain's chemical reactions alone.

In conclusion, while consciousness remains a mystery difficult for science to address, like gravity or life phenomena, it may someday be reduced to problems

and established as common knowledge. However, this process will require not merely technological advancement but new paradigm introduction transcending human perception's inherent limits.

11. Just as chemistry became reducible to physical laws, could 'thought' or 'language' someday be perfectly reduced to neuroscience? Can explanations like "stimulating specific brain regions produces love emotions" fully explain 'love'?

Whether neuroscience can perfectly reduce language or thought invites comparison with 17th-century chemistry's reduction to physical laws. Indeed, specific brain region stimulation producing 'love' emotions has been scientifically demonstrated. For example, MRI and biochemical research shows that love-related brain regions (ventral tegmental area, amygdala, prefrontal cortex) activate and neurotransmitters like dopamine and oxytocin are secreted.

However, the mere fact that brain stimulation can induce specific emotions cannot explain love's complete experiential reality. Physiological responses may provide love's foundational conditions, but the artistic expressions, cultural contexts, and personal meanings that emotion generates resist reduction to simple neural activity. Rather, love's external products—poetry, painting, music—provide crucial clues for understanding this complex emotion.

Art reveals emotions' inner dimensions intuitively and symbolically.

Tchaikovsky's "Romeo and Juliet Overture" expresses first love's excitement and fulfillment, Liszt's "Dreams of Love" conveys passionate and idealized romantic fervor, and Chopin's "Piano Concerto No. 2, 2nd Movement" articulates quiet, subtle unrequited love emotions difficult to verbalize—each through distinct musical languages. These works serve as mediators helping us understand love not as simple hormonal reactions but as deep human experiential structures, thereby illuminating territories beyond scientific reduction's reach.

This conclusion applies to criminal contexts as well. While connections between prefrontal cortex developmental delays and criminal behavior can be explained biologically, approaches to addressing such crimes—punishment, treatment, social rehabilitation—cannot be determined through neuroscience alone. At

another extreme, cases like maternal filicide where 'I-language' (individual language/thought systems) is deeply involved demonstrate the limitations of brain-only causal explanations.

Therefore, we agree that "love is ultimately hormonally-based emotion, and thought and language cannot be separated from brain activity." However, we disagree with claims that "all active and creative aspects of love are explained solely through specific brain region stimulation." We believe that love's manifested art, actions, and social impacts reveal 'love's' essence, with these secondary results providing key understanding clues.

12. All cells share identical DNA (blueprints), yet some become brain tissue while others become nails. This demonstrates that life phenomena aren't determined by DNA information alone but self-organize within 'relationships and contexts with surroundings.' Might this have implications for individual-organizational relationships in our society?

While DNA exists identically in all cells, individual cell differentiation into specific tissues (brain, heart, nails) cannot be explained through genetic information alone. The key lies in spatial and temporal context, within which cells self-determine their functional roles. For example, morphogen concentration gradients formed during early development induce specific cells toward specialized tissue development, and through these molecules, cells recognize their 'spatiotemporal coordinates' and determine differentiation directions.

Comparing this to heart development, sperm and egg must meet in specific environments and undergo cell division and differentiation at appropriate times to complete optimal heart formation. The fact that materials cannot organize without proper spatiotemporal conditions, even with sufficient materials and energy, demonstrates differentiation's complexity.

This principle applies equally to human individual development. Even individuals with identical genes have developmental pathways determined by various contexts—developmental environment, timing, external stimuli. This

suggests that just as 'London' discussed earlier carries significance beyond simple geographical designation, two individuals sharing DNA can possess substantially different 'inner selves and identities.'

Therefore, human cloning ethical problems can be resolved through logic demonstrating that genetic cloning doesn't equal identical human cloning. Even with identical genes, different developmental spatiotemporal contexts produce substantially different identities and natures—a consideration requiring acknowledgment.

Finally, similar contexts exist in scientific models. Just as Newton's universal gravitation laws are limited to approximations within relativity theory, requiring more sophisticated theories for high-accuracy situations, life phenomena also demand contextual precision.

Part 3: Thought, History, and Society

13. Chomsky states "language doesn't evolve (improve) but only changes." This means no language is superior to others. Is LLM emergence a 'change' in language, or an event leading to completely new dimensional 'evolution'?

Chomsky argued that language learning ability is biologically inherent in human brains, and while specific grammar or vocabulary changes according to time and culture, language capacity remains constant. Through this logic, Chomsky determined all languages as equal. All natural languages represent equivalent expressions reflecting human I-language, with no language constituting a 'more advanced form.' LLM emergence represents basically an innovation in language use without affecting the fundamental human language learning abilities Chomsky advocated. By Chomsky's standards, unless LLMs transcend mere human speech mimicry to create new language generation and interpretation mechanisms, LLM emergence represents language change rather than new dimensional evolution.

14. The 'Ship of Theseus' paradox arises when focusing on the ship's physical substance. Like Chomsky's I-language theory, if we locate the ship's identity in mental 'concepts,' this paradox dissolves. Might many social and philosophical problems we face actually be 'false problems' created through language misuse rather than reality issues?

According to Chomsky, the Ship of Theseus paradox represents meaningless argumentation arising from exclusive focus on the ship's physical components. Concentrating on the ship's material substance constitutes mere wordplay; what matters is how we conceptualize that ship. Ship identity exists not in external materials but within our I-language concepts. Therefore, whether past or present, people recognize it as the same 'Ship of Theseus.'

This perspective applies similarly to living being identity. Organism birth and growth processes cannot be explained through simple physical continuity alone. Spatiotemporal contexts, relationships, and experiences combine to constitute individual identity. Even beings with identical genetic information can possess different identities when environments or contexts differ. Therefore, positions claiming identical beings can be created through simple cloning overlook life and identity complexity.

Thus, many philosophical and ethical controversies we face socially may constitute 'false problems' arising from linguistic inconsistencies rather than reality issues. Complex issues like individual identity, human cloning, and collective ethics emerge from conceptual differences—namely, I-language inconsistencies among individuals. Problems lie not in substance but in referential methods.

The essential solution involves concept convergence—forming linguistic agreements everyone can share. If achievable, we can escape useless language games and reach substantive problem-solving. However, in reality, society often treats false problems arising from linguistic gaps as substantial issues without reaching such agreements. This structure causes social inefficiency and consumptive controversy repetition.

15. Chomsky argues that anarchism most correctly inherits the 'individual liberation' spirit of Enlightenment and classical liberalism. Whether 'state power' or 'giant capital power' oppresses individual freedom, he considers them equivalent. Is his argument valid?

I agree from ideal perspectives but disagree from complex real-world standpoints. Chomsky views anarchism not as simple lawlessness but as political philosophy most consistently extending Enlightenment and classical liberalism's 'individual liberation' tradition. According to him, both state power and capital power (corporate and market monopolies) are essentially identical in oppressing individual autonomy through hierarchical control structures. Following Rudolf Rocker, Humboldt, John Stuart Mill traditions, he believes genuine prosperity occurs when people maximally utilize their I-language based on authentic freedom.

However, whether large-scale decision-making is possible without temporary authority or rules in the real world remains a practical question, with convincing interpretations suggesting this might instead infringe upon greater autonomy and judgment of more people. Therefore, while Chomsky's position may be valid from ideal perspectives, it loses persuasiveness in real-world applications.

16. U.S. Constitution designer James Madison created mechanisms to weaken democracy's power, fearing the 'poor majority' would seize the 'wealthy minority's' property through voting. After 200+ years, despite extreme inequality, why doesn't the majority attempt to revolutionize the world through voting? How successfully do Madison's design and Chomsky's 'ideological control' operate?

Modern democratic systems appear to grant citizens political power through universal suffrage and expression freedom. However, inherent systemic structures prevent citizens from recognizing their own freedom. This demonstrates that James Madison's conceived 'democracy suppression mechanisms' haven't remained merely institutional designs but continue operating today. People don't recognize their economic inequality or political alienation as structural problems; anger and frustration reduce to everyday

complaints. Therefore, they cannot progress toward collective solidarity and systemic transformation.

Chomsky's 'ideological control' operates very successfully in this regard. Citizens possess potential for self-liberation through language and thought, but that language's power—I-language's critical function—suffers suppression or distortion through systemic conditions. Without adequately internalizing language for recognizing and interpreting their reality, political subject awareness becomes impossible.

However, despite such control, cracks appear. Donald Trump's emergence exemplifies how public anger toward existing systems manifests. He strategically utilized social division and conflict to expose establishment politics' vulnerabilities. His election represents a highly exceptional event considering America's founding freedom ideals. Therefore, Trump's election also signals hope toward people's I-language integration. However, people's anger lost direction, resulting in another authoritarianism form rather than systemic subversion. This fundamentally conflicts with liberal ideals America represents, ironically showing that ideological control's side effects generate anti-establishment politicians.

Ultimately, generations unable to properly enjoy I-language capabilities become the most system-vulnerable groups. Masses swayed by superficial anger without critical thinking remain controlled populations rather than becoming the majority rulers Madison feared. Therefore, current needs involve not violent system subversion but recovery of deep thinking and recognition through language. That constitutes the starting point toward genuine freedom.

17. Marx's 'old mole' symbolizes great forces changing history's flow in invisible places. What do you think the old mole is digging beneath our society's surface today?

The 'old mole' most relevant to this discussion would undoubtedly be artificial intelligence and the decentralization it will generate. AI developing rapidly from generative LLMs is reconstructing 'labor's' very definition while accelerating

decentralization efforts that previously encountered systemic limitations through knowledge democratization.

However, negative perspectives exist suggesting such AI advancement will inevitably benefit only minorities. For example, considering AI's massive electricity requirements and maintenance costs, as AI develops, ultimately only those capable of bearing associated expenses will receive benefits. Ultimately, our old mole's direction will be determined by tense struggles between existing systems and decentralization attempts.

18. Humboldt's 'infinite use of finite means' explains language creativity. Just as we create infinite music with finite scales and infinite paintings with finite paints, can't we view our lives as processes of creating infinite meaning within finite time and conditions?

From money chord perspectives, it could be finite. Research showing that money chords used by various popular musicians are rapidly depleting is well-known.

However, including various irregular rhythms could support different arguments. For example, Erik Satie's "Vexations" is known as peculiar music repeating jarring dissonant harmonies for 24 hours. While annoying and uncomfortable, it perfectly expresses the irritation emotion we feel.

We can extend this argument to other musical genres. For example, processes creating meaning through infinite use of finite means are numerous, such as Beethoven's musical performances expressing poetry through music. While opposing content is sufficiently reasonable, contrary opinions are equally persuasive.

19. From Newton's perspective, the moon eternally 'falls' toward Earth. We too may be beings continuing bottomless falls in the universe. Within this great physical 'falling,' what value do the 'meaning' and 'order' that life and our thoughts create, even momentarily, possess?

Recently, a theory called the 'Dead Internet Theory' has gained attention. It theorizes that with AI-generated texts flooding the internet, online data and interactions now result not from human activity but simply from AI operations.

Here, let's briefly consider Web 3.0's philosophy: Web 3.0's most important mission is preventing AI entry into web ecosystems. Web 3.0 aims to restore the web as living human space. Even if we're physically beings in constant 'fall,' the meaning, rules, and collective order we create within that context still provide actual value by giving our lives energy and direction.