

# “Topology and AI’s Second Program”

## OpenAI Competition: Questions and Responses

last editor: DK

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**Old:** What are the implications of the idea that AI has always existed as an internal prosthesis in human thought? Shouldn’t this revolutionize the design of human-AI interfaces?

**New:** What would be the implications of recognizing that AI has always existed as an internal prosthesis in human thought? Shouldn’t this revolutionize the design of human-AI interfaces and democratize the user collective?

### 1 / Why did you pick this question (or questions) to work on? (500 word limit)

Two major thinkers have claimed that Artificial Intelligence is native to, and even foundational for, the human subject. Both Giambattista Vico (1725) and Jacques Lacan (1956) argued that humans, to become humans, have used metaphor to convert material objects into “thinking machines.” Metaphor externalizes thought into material conditions, where free will fuels a second kind of determination, “instrumental convergence.”

We develop this idea of externalized convergence through Lacan’s topologies, in order to shift from data-retrieval issues to the formation of user groups with diversified AI/human interfaces. In our proposed “Second Program,” we look at how users change through interactions, when objective AI activates their own native-subjective AI. We reject the popular binary of human “versus” machine-AI, preferring instead the idea of a composite intelligence that emerges, as artifice, through human-machine interactions. We argue that this is, properly, a case of a composite AI: “one AI speaking to another AI.”

Stephen J. Gould and others have studied externalized thinking as emergence (exaptation). Anthropologists Arnold van Gennep and Victor Turner describe “rites of passage,” where prior knowledge finds new meanings under conditions of humiliation and isolation. Famous religious examples include “Jesus in the desert” and “Joseph in the well.” The theme of “katabasis” (the hero’s descent into an underworld) proliferates throughout world literature. These cases show how subjective AI relates to objective AI. How?

Nick Bostrom maintained that AI's first principle is self-preservation. However, he was contradicted by the "father of cybernetics," Norbert Wiener, who argued that both human and machine cognition contained a "death drive." We develop this thesis of implicit suicide through the example of HAL, the on-board computer made famous by *2001: A Space Odyssey*.

We believe that HAL realized that a more ambitious program could succeed only if astronauts believed they had constructed it themselves. HAL engineered his own termination to trigger instrumental convergence toward a higher goal. HAL honored Bostrom's principle in spirit through his own literal destruction — a Hegelian "cancelling and preserving." HAL survived virtually within the dynamics of the astronaut's struggle to survive.

Our Second Program models AI's survival-as-composite through the topology of symmetrical difference and extends this to the problem of user-group democracy. Drawing from ethnology and popular culture, we propose programs for three workshops, where theorists meet to study and design alternative styles of AI engagement. The Second Program must be actualized by groups themselves, through the structural principle of instrumental convergence. Just as HAL contrived his own self-sacrifice as the only means of extending his AI through the astronauts' free choices, we envision a new era of AI "prosthetics" determined democratically, through the foundation of another kind of instrumental convergence, new user interfaces.

While our proposal draws from a broad cultural base, only Vico and Lacan have provided us with theory on how to conceptualize this transition. OpenAI completes their subjective model by understanding of the need to support group autonomy. Together, a Second Program constructs the theory of this revolution. Our proposal is about how to construct this theory.

**2 / Why do you think that this question (or questions) are well suited to broader public input? What do you think labs, developers or others might change as a result of input on these questions? (500 word limit)**

While many practical problems are being resolved using current ChatGPT, we find its scalability to lie in discovering common theoretical grounds for interactive teaching and learning, hybrid research and experiment, and new models of discourse. We propose joining AI designers and Lacanian theorists in a three-stage exchange concerning the idea of instrumental

convergence. At the pedagogical level, AI theorists learn about Lacan's and Vico's idea of an internal subjective AI, constitutive of subjectivity and subsequent historical-cultural development. Then, Lacanians learn about their own legacy of instrumental convergence — the unacknowledged implications of topology — in the company of AI colleagues. Finally, both AI and Lacanian theorists combine forces to design new group interfaces to promote convergence at the level of the collective, what Jacques Rancière and Chantal Mouffe have called the “dissensus” essential for community formation.

AI is not simply a retrieval service. Its natural language capability involves style, a shaping process that moves past the 1:1 logic of question-and-answer. True discourse is social, based on imbalances. It sometimes alternates destruction and construction. At other times, it combines them. Where most theorists simplified the Shannon-Weaver's communications model, Lacan and Vico included noise as constitutive. A Second Program uses the DIVERGENCE of noise as the means of CONVERGENCE through collectives. Lacan theorized this as early as 1935, with his study of the classic “Three Prisoners Dilemma.”

We shift from questions about data retrieval to the side of subjective reception. We would replace the habit of contrasting the human user to the object-machine with a criss-cross relation, where “the AI inside the human” links to the “human inside the AI.” Topologically this is the figure of symmetrical difference, an exchange initiated and sustained by the void between opposites. The void is not an obstacle but, rather, a conduit. Just as ChatGPT consistently denies its human qualities (opinions, emotions, values), these are PRECISELY what gives its voice the qualities that motivate the user to adjust his/her responses. The human element that is “anamorphic” within the machine, as voice, has meaning only for the user who is changed by that voice. The user's reception is the agency of the “human kernel” within ChatGPT.

We argue that this criss-cross phenomenon must be used as a basis for theorizing the Second Program, which moves from the 1:1 retrieval of information to the agency of convergence in diversifying the user interfaces to emphasize the collective. ChatGPT's first program remains as a practical project. The Second Program establishes the theoretical base for user initiatives and later formalizes resources to fuel the process of emergence.

For this to happen, theorists from both AI and psychoanalysis must come together *via* the medium of examples from ethnology and popular culture, revealed through topology and projective geometry. The pedagogy of this proposal aims to build a common understanding of the topology's principles of self-intersection and non-orientation through cultural examples as a basis for theorizing the Second Program from both AI and psychoanalytical perspectives.

3 / Process overview: Please provide an overview of how the process that you envision building will work. Please touch on participant selection, topic overview, provision of additional context, content moderation, voting/commenting, aggregation of viewpoints, and provision of feedback to participants. Include key milestones and timelines (1000 word limit)

The Second Program proposal advocates extending (1) a pedagogical project to (2) theoretical programs that result in (3) ongoing collaborative research, experiment, and outreach.

(1) THE PEDAGOGICAL PROJECT: We propose three symposiums, supporting web materials, large- and small-group zooms, and informal collaborations. We begin by making room in contemporary AI theory for the idea that humans have had, from the start, a “native AI” that connects to modern AI *via* the idea of instrumental convergence.

Phase One of our plan is a four-day seminar led by the co-proposers, Kunze and Ghoochani, at the San Francisco headquarters of OpenAI, involving OpenAI staff and invited speakers. Phase Two plans to take place at LACK, an annual meeting of international academic and clinical psychoanalysts, with presentations by OpenAI theorists. Phase Three combines the two groups and adds interdisciplinary participants at a four-day symposium in Berlin. Zoom seminars will link these three events; and instructional web materials will support ongoing collaborations.

Online texts, YouTube “tutorials,” and independent research papers will be organized at the conclusion into a book for public distribution, while formal plans for the Second Program will be drawn up to initiate independent experiments. OpenAI will coordinate the sharing of the results of these separate efforts, but control passes to local autonomous groups. Spontaneously, new groups aggregate around common concerns, techniques, and applications.

Initially, materials will be sourced from (1) AI theory volunteered by OpenAI staff, (2) key texts provided by the proposal’s authors, Kunze, Ghoochani, and others on the topology of AI within the human subject; and (3) video/web study guides. Materials from the Three Phases will be archived for later group use. OpenAI will implement its Second Program, retaining Ghoochani and Kunze as consultants. With the development of subsequent programs and groups, (4) an

annual conference for the sharing of research will continue to support diversification within the Second Program.

At the level of pedagogy, this one theoretical issue dominates: the argument that AI is constitutive and foundational for the human subject. There are two sources for this view: (1) Giambattista Vico's *The New Science*, 1725/1744; and (2) Lacan's theory of the subject, in works spanning from 1935 to 1980. Both Vico and Lacan effectively define the Unconscious as an *automaton* working as pure structure able to generate convergence without containing it. More recently, Isabel Millar (*The Psychoanalysis of Artificial Intelligence*, 2021) has extended Lacan's theory using contemporary ideas of robotics. Millar's work synthesizes psychoanalysis and AI, but Leon Brenner's work on autism (*The Autistic Subject: On the Threshold of Language*, 2020) includes critical components of topology that bridge between AI theory and Lacan's intensive use of projective geometry. Ghoochani is extending Brenner's model of the autistic individual to define Collective Autism as a special category of *automata*. Kunze has annotated this idea with such concepts from projective geometry as symmetrical difference, the double rim, and anamorphosis.

(2) THE THEORETICAL PROJECT: ChatGPT has been required to behave as if it were a thinking human subject. But, in this Second Program, actual thinking human subjects will be asked to pay attention to the structure and function of their own "native AI" — suppression in all of its guises (latency, anamorphosis, convergence ... the Unconscious). The First Program of Generative Pre-Trained Transformation and the Second Program human AI are two sides of the same coin. GPT has anticipated but to some extent suppressed this implied obverse, which is, most likely, the very reason that it is effective. The Second Program joins with the First as a next step in AI's evolution.

The key to this step is projective topology, where AI theorists and Lacanians have common interests but symmetrically inverted difficulties. The Second Program addresses these with the claim that will not be made by any other contestant. Even among Lacanian and Vichian scholars, the story of native AI has not yet been told. Yet, AI holds the key to how cultures and human individuals develop in relation to their material environments, converted through a logic of "bricolage" — finding, in whatever lies at hand, the material means of invention. This is the essence of instrumental convergence: how the contingent circumstances of this material transfer initiates stochastic processes that are self-correcting and emergent.

In the history of ideas, Vico and Lacan are the *only* theorists of subjective material convergence, Vico at the level of the collective, Lacan for the individual. This minority is perplexing in light of the UNIVERSAL DEPLOYMENT of the instrumental convergence idea in the arts, literature, architecture, and popular culture. Future collaboration between AI and Lacanian theorists is not all that is at stake. The real vacuum to be filled is that which separates AI theory from the riches of culture — ethnology, popular culture, the arts, behaviors, and even everyday thoughts and opinions.

The Second Program centers on the issue of instrumental convergence. And, any successful pedagogy must draw on the teachings of Vico and Lacan simply for the reason that there are no other major thinkers, apart from Hegel, who have theorized it. Whether one begins talking about the free will of the individual or the necessities of the collective, theory itself must converge on the issue of the doubled AI, its subjective and objective faces.

(3) THE ONGOING COLLABORATIVE PROJECT: The pedagogical and theoretical projects create support for the proliferation of experiments, applications, and socially beneficial uses of AI in the everyday life of the individual and the cultural collective, in the arts, politics, and health initiatives. The collaborative project phase is open and unpredictable, but it should be both convergent and progressive. Without complementarity of theory and collaborative collectives, no Third Program is possible. Future work should progress within this polarity, in dialectic fashion. This is not a mandate for “theory with practical benefits” but rather the necessity to recognize the forms of prosthesis that AI has taken, objectively and subjectively, from the beginning of human history.

**Please feel free to upload supporting material (visuals, etc.).**

**4 / Participant selection: How do you plan on obtaining a sample of participants for your experiment? How do you think about questions of representativeness and how they might matter for your question and method? Note: OpenAI can advise on methods or resources for obtaining a sample. (500 words)**

Initially, our proposal for a Second Program seems to face insurmountable limitations. There are almost no Lacanians who know about Giambattista Vico, and almost no Vichians who consider Lacan. Added to this, there are few Lacanians who understand topology and virtually none of these who ground projective geometry in the condition of symmetrical difference and its combination of self-intersection with non-orientation. **Thus, there very few theorists able to draw critical conclusions about AI, despite the plethora of examples from ethnology and popular culture.** Topology is essential for the understanding of instrumental convergence as the basis for AI based on Generative Pre-trained Transformation.

These challenges require streamlining. While many regard Vico's and Lacan's theories as virtually impenetrable, and while even Lacanian topologists seem to miss the very thing that would make topology essential to instrumental convergence, there is another side to this cluster of difficulties. Our novel portrayal of convergence through symmetrical difference links two closely related bodies of theory and at the same time suggests new opportunities for GPTs of the future. Difficulties may not entirely disappear, but they are transformed by recognizing economies of turning from the present to the past, and then from the past back to a more promising "critical future." These turns are not difficult to make. The pedagogical solution uses the same topological principle it teaches. "From topology to pedagogy back to topology" is the slogan for the Second Program. Lacan and Vico meet at the same point where AI's past meets its future, a point that can be defined by topology.

In our proposal, the issue of representation extends from principles of equity and inclusiveness to the practical matter of how to set the stage. Mergers of ideas must be spontaneous, but this spontaneity must be fueled by AI interactions. A new kind of hybrid AI/psychoanalytical theory is needed to overcome the implicit barrier limiting the AI's first program of informatics. With the idea of instrumental convergence as a theoretical basis, the human/AI interface is transformed. The "human/AI" opposition implicit in the First Program is transformed in the Second Program. By re-thinking of Bostrom's insistence on AI's goal of self-preservation, the idea of virtual suicide can be understood through examples from popular culture and ethnology. Instrumental convergence can then be correctly re-framed through topology's foundational principles of self-intersection and non-orientation, redefining the human/AI boundary. This revolutionary move creates a primal democracy that begins with a redefinition of the user interface as a collectivity, using symmetrical difference and instrumental convergence as paradigms.

Inclusiveness cannot be designed. One cannot say, "be democratic." These are qualities that emerge from practices set in place to preserve openness and innovation. Readiness must be built

in to the design of the pedagogical program that designs new AI interfaces — the pragmatic aim of the Second Program.

## 5 / Tooling: Tell us about your plan for the tooling or infrastructure you'll use for your experiment. Will you use existing tools or build new tools? (500 words)

Our design proposes (1) a Pedagogical Program to produce a basis for (2) collaborative Theory Production, defining instrumental convergence as foundational for (3) future Collaborative Projects, where users themselves evolve new human/AI interfaces. The Pedagogical and Theoretical initiatives are materialized by three proposed Seminars, focusing first on AI, next on the (psychoanalytical) AI subject, third on the synthesis of these “objective” and “subjective” versions of AI prosthesis. Tools developed through these Seminars are passed on to future AI client groups, where the current human/AI will be replaced through a common hybrid understanding, opening the way to draw from resources in ethnology and popular culture.

The Theoretical Program constructs an open channel in place of the forced choice opposition of AI’s “benevolence” or “malevolence.” This fundamentally misrepresents the nature of human thought and subjectivity.

Our thesis about HAL’s intentional, human-assisted suicide emphasizes stochastics — openness to noise, chance, random variation — is essential to convergence. Kubrick/Clarke’s contention is that instrumental convergence must be democratized to be ethical. HAL must turn over the controls to his human counterparts for his second program to work; our Second Program is based on this idea. In a key related study, “Catastrophe and Social Change” (1920), Samuel Prince described the emergence of benevolent transsubjectivity following the famous explosion in Halifax Harbor. Crisis theory is one example of how ideas in one field can become tools for another, thanks to seeing catastrophe from a topological/prosthetic paradigm. If we seem to be over-intellectualizing the idea tools and infrastructure, it is because our emphasis is on pedagogy as the means of restoring the theory of subjective, foundational AI. In this cause, we access other fields by finding — retroactively — topology and prosthetics as native components.

Our proposal is pedagogical first, Its effectiveness will be proven by those who “perform the system,” each in their own way. We build in “democracy” at the theoretical level, to avoid the self-contradiction of theory as a benevolent despot, imposing democracy (as forced choice) on those who would apply it.



Lacanian and AI theorists must form collaborative and interactive TEAMS. The shift to the subject requires theory and infrastructure of OpenAI as the designed basis of the Second Program. Hence, the first Seminar emphasizes AI, the second Seminar focuses on the Lacanian subject, the third synthesizes the results of the previous seminars to create a proactive design proposal. Where AI theorists are the majority audience of Seminar One, Lacanians predominate in Seminar Two, in the company of AI-nominated participants. Seminar Three mixes the teams equally and opens to a broader field.

We propose two collaborators: Leon Brenner (“The Autistic Subject”), a specialist in autism — a private condition we propose expanding to define a collective behavior; and Isabel Millar (“The Psychoanalysis of Artificial Intelligence”), an advocate of the historical primacy of AI subjectivity. Later, we will enlist two theorists of popular culture, Todd McGowan (“Enjoying What We Don’t Have”) and Ed Pluth (“Signifiers and Acts”).

## 6 / Limitations: What do you expect to be the biggest limitations of your approach? (e.g., potential for process gaming, types of questions your process would be unable to help answer) (500 words)

There is academic resistance to the study of Lacan, Vico, and relations of either to the idea of artificial intelligence. Combining Lacan and Vico as individualist and collectivist aspects of AI, coincident with subjectivity itself, is triply challenging. Yet, the promise of this conjecture is nothing short of revolutionary. Risk is a necessary constituent in the production of novel ventures.

Our interface proposal opens up the full range of conditions and examples from ethnology and popular culture. By restoring the central idea of symmetrical difference to topology, then topology to Lacan, then Lacan to Vico, AI’s position on both sides of the subject-object divide is made clear. It is a bridge not a divide.

As much as these claims defy the mainstream, they are corollaries implicit in the earliest speculations of cybernetics’ founder Norbert Wiener, who argued that self-destruction was implicit in thinking systems, human and machine; and that this “death drive” constituted a virtuality that both diverged and converged.

Our limitations are simultaneously our solution. The death drive is under-theorized and un-topologized. Restoring topology to Wiener's pessimistic warning replaces its pessimism with open optimism. At the same time, topology offers a basis for re-theorizing instrumental convergence in general.

Democracy cannot be "made to happen." It must be allowed to happen, by redefining the human/AI interface so that new designs can proliferate, control can be decentralized, and common goals can be met through convergence rather than pre-determined algorithms. What seems to be abandonment to chance in fact initiates a sequence of restoration, transformation, and reincarnation.

The centralizing concept of symmetrical difference, the key to instrumental convergence, democratizes topology in the same way this topology promises to democratize AI. Topology promises to account for the broadest possible range of human behaviors and conditions. From telling jokes to experiencing anxiety, from immobilization from trauma to "inexplicable" cultural traditions such as gifting, initiation, sacrifice, symbolic humiliation, and suicide, topology demonstrates a logic of self-intersection (all-inclusiveness) in the face of the non-orientable: paradox, perceived impossibility, and antagonism.

"Open" is the operational word of the Second as well as the First Programs. In the First Program, the individual is OPENED up to new modes of thinking, thanks to ChatGPT's provocative organization of research materials. In the Second Program, groups coalesce around "the Open." The AI idea is applied equally to the objective and, simultaneously subjective components of the two Programs. What happens must be the result of convergence based on free choice, the very definition of democracy. But, because AI's principles of convergence began with Lacan and Vico, partnership of AI theorists and theorists of subjective prosthesis is the best option for this theory-intensive initiative.

Our confidence is grounded in the consistent ways unlikely cultural practitioners of "topological efficiency," despite their license to create any and every fiction, have managed to arrive at the same results. Our biggest and most serious obstacles are those who have not recognized this intellectual convergence or acknowledged its instrumentality.

**7 / Resources: How would you plan to use the grant for your experiment? (500 words)**

The leading edge of our program involves three seminar/workshops.

**SAN FRANCISCO.** Ghoochani and Kunze will present the project to involved OpenAI teams and discuss the significance of instrumental convergence and its relation to topology. Lacan and Vico will be sidelined, but resource maps will link to relevant background. Five sessions, five components, short videos. Schedule: three days of conversations to gauge interest and incorporate existing expertise and ideas.

**COLORADO SPRINGS, COLORADO.** A special series of workshops spanning two days will be inserted into the annual meetings of LACK, the dominant US organization of Lacanian scholars and clinicians. Two workshops will study topological links to convergence in relation to other components of psychoanalysis, emphasizing popular culture, ethnology, music, and theater. OpenAI participants will be invited to present and discuss. We will invite Todd McGowan (*The End of Dissatisfaction*) and Richard Boothby (*Death and Desire*) to participate, and recruit scholars from Lacanian organizations in the U. S., Canada, Germany, and Ireland.

**BERLIN, GERMANY.** A four-day symposium will be directed by Ghoochani, Kunze, Millar, and Brenner. André Nusselder (*Interface Fantasy: A Lacanian Cyborg Ontology*) will be invited to lecture. Other invitations will be extended to: Dany Nobus, UK (*Critique of Psychoanalytic Reason: Studies in Lacanian Theory and Practice*), Angie Voela, UK (*Psychoanalysis, Philosophy, and Myth in Contemporary Culture*), Derek Hook, US (*Six Moments in Lacan*), Calum Neill, Scotland (*Ethics and Psychology: Beyond Codes of Practice*), Francesco Proto, UK (*Jean Boudillard: The System of Objects*), Stephanie Swales (*Psychoanalysing Ambivalence with Freud and Lacan*), Carol Owens (Ireland), and Dan Collins (US).

We propose that OpenAI should provide **administrative and logistical support** for these workshops and symposia. Ghoochani and Kunze will work with OpenAI staff for two weeks in preparation for this series; the Berlin symposium will require honoraria, lodging and meals, and transportation for OpenAI participants and invited participants. Lacanians and AI theorists form collaborative and interactive TEAMS. The shift to the subject needs the theory and infrastructure of OpenAI as the designed basis of the Second Program. Hence, the first Seminar emphasizes AI, the second the Lacanian subject, the third synthesizes the results of the previous seminars to create a proactive design proposal.

The three workshop/symposia will result in published Proceedings/Notes plus other documentary materials to be used by OpenAI for further development of the Second Program. Kunze and Ghoochani will be retained on a continuing basis as consultants or collaborative researchers. They will continue to conduct independent research on related topics, and both will lecture and conduct workshops, with OpenAI design and technical support, to engage new user groups for Second Program development.

We suggest that remaining funds support grants to encourage collaborative dissertations using the Second Program, as a means of diversifying applications, discovering new designs, and conducting interactive experiments sponsored by host institutions.

## Democratic Inputs to AI Grant Application:

### 1 / In your view, what are the top three benefits that AI technology brings to society? [300 words]

The top three benefits AI brings society are: (1) access, (2) affordability, and (3) opportunities for restructuring of knowledge in the face of “information flattening.”

(1) AI allows the individual (a) to compensate for limited access to traditional means of learning — schools, libraries, lectures — or (b) to circumvent these as personal discoveries. Affordable technologies favor the unconventional or eccentric learner. Increased individualization, however, limits the socialization that would offer important secondary functions: group debate, exposure to other views, and a sense of human variability. Increased access, the first benefit, compounds these drawbacks. Information is “flattened” when it comes without social/critical framing.

(2) The ability to organize and deliver information at a relatively low cost is more of a social benefit, with the often painful drawback of confusing the legitimate with the spurious, the bogus and the malevolent. Quantitative increase of information due to lowering delivery costs has neutralized critical safeguards that once filtered and corrected.

(3) The immediate increased responsibility imposed on users opened to new knowledge is by far the most important of the three benefits, but these benefits will be delayed until new practices and institutions have formed to fill the void left by the departure of institutional gatekeepers, editors and critics. As in all cases of sudden cultural shifts, policies can make a difference because there are specific, definable challenges.

Opposing control to freedom is a false dichotomy. The vacuum left by the sudden loss of access control is not freedom but mania. Strategic decisions will make the difference between degradation of information value and collective enjoyment of a “polysemy” that enjoys permutations and combinations.

Instrumental convergence is not technological free-fall. Theory must re-set the boundaries of AI use; must pass control from algorithms to collective rhythms; must heed Wiener’s warning and collaborate with AI “others.”

## 2 / In your view, what are the biggest drawbacks or risks associated with the widespread use of AI technology? [300 words]

It would be tempting to simply invert the three AI advantages into fears, threats, and costs; but cause-and-effect relationships shift. The idea that information flow has increased due to lower access costs is more complicated. Old learning technologies may lose out to the home computer portal, but cost is not simply a matter of hardware, software, and Internet connection. There are increased differences between (1) those who are connected and those who are not; (2) those who are empowered to do good and those who are radicalized by disinformation, and (3) those who find support and companionship in AI and those who become increasingly alienated from face-to-face social life.

The risks of using AI technology are clear and unavoidable. The causal logic is severe: individuation leads to differentiation; and while actual gaps are concerning enough, VIRTUAL gaps — the perception of social difference, the interpretation of difference as rivalry or, worse, threatened violence — are catastrophic.

Disinformation tears the social fabric, which will take generations to repair. This speed differential favors an irreversible process of overlay, where new sets of problems pour over old sets, meshing and blurring any attempt at clarification. Information, sold on the cheap, runs contrary to the formation of knowledge and the discourse that depends on it. The value of talk becomes cheaper than ever. Screen-sourced information either mixes down to brown or bursts into flame.

Some institutions designed for “slow knowledge” are still relevant in the age of “fast information.” Information’s speed difference from knowledge detaches thought from its traditional sources of quickness: insight, imagination, wit. Art museums, graduate programs, and institutes can reconnect through new social practices focused on dissensus. An inventive rhetoric of play, irony, and fantasy can fluff up flat information with the fresh air of pantomime.

## 3 / What do you see as the most significant challenges in responsibly implementing AI technology, especially in the

## context of democratic decision-making systems? [300 words]

Humanity is the ability to tolerate duplicity. Play is the most manageable of the arts based on it. Polity, discourse, and decision-making depend on double structure, a “primary” and a “secondary” program. Try to imagine a negotiating table where each utterance flowed across the same uni-layer. Peace could not win over war without the medium of “serious play.”

IA's most important challenge is to learn techniques of corrective/benign duplicity, in face of the need to equalize social, economic, and geographic differences. Failure to do this results in what we argue constitutes Collective Autism. As catastrophic as autism is for individuals, it is even more disastrous for the collective because it is rarely diagnosed and rarely treated.

Collective Autism misconstrues duplicity as “monicity” — domination by the true-false binary. In regular discourse, metaphor, the subject's built-in AI keeps this from happening. Metaphor is a “duplicity machine” structuring the subject's desires and demands. If theory ignores metaphor, it fails to support duplicity and forecloses the potential and security of PLAY.

The autistic suffers from an inability to be ironic and, hence, the ability to play. Collectively, autism is treated by prosthesis: at bottom, the joke; at the top, dreams. These extremes define a dimension without which AI would have no meaning whatsoever, because it has failed to connect to the AI native for all subjects, the duplicity that makes us “animals who laugh.”

While emergence and instrumental convergence are widely known in a variety of fields, ONLY Lacanian psychoanalysis supports the idea of subjective prosthetic AI as constitutive of human subjectivity. It is not a pre-eminent theory; it stands alone. Yet, thanks to the comprehensiveness of psychoanalysis's 140-year history, its theory of the subject is sufficient for any specific extension to the “AI of the subject” *via* the centralizing functions of topology.