

Course Description

*“Whatever else AI is, it is not neutral, and neither can we be. AI is political because it acts in the world in ways that affect the distribution of power, and its political tendencies are revealed in the ways that it sets up boundaries and separations. The apparatus of AI forms feedback loops with the rest of society: it’s “a structured structure that becomes a structuring structure” (Bourdieu, 1980)” – Dan McQuillan, *Resisting AI, an Anti-fascist Approach to Artificial Intelligence**

*“...rituals of reversal... “rewire” the crucial connections in the social structure by providing symbolic statements of traditional social imperatives and basic categories of...world view.” – Evon Z. Vogt, *Rituals of Reversal as a Means of Rewiring Social Structure**

Pandaemonium Architecture was introduced at the 1958 *Mechanisation of Thought Processes* symposium as an early pattern recognition model. Named for the demon-inhabited city in Milton's *Paradise Lost*, the *Pandaemonium Architecture* assemblage employs 'daemons' – bits of information or code – that 'scream' in order to ascend a hierarchy of algorithmic hurdles. The metaphorical implications were not lost on the early innovators of AI.

Evon Vogt's *Rituals of Reversal as a Means of Rewiring Social Structure* examines the annual Highland Maya Zinacanteco rituals invoking the reversal of social, gender, and even species roles as a means of “rewiring” the social structure of the community. Contemporary social structures are being “rewired” with ever-increasing speed by often invisible algorithmic and predictive processes. FANG’s (Facebook (Meta), Amazon Netflix, Google) and Tiktok’s algorithms are the best-known examples of an increasingly pervasive methodology quietly remaking society while data capture, surveillance, and AI-augmented analytics and finance are similarly remaking political-economy.

This course examines whether artists employing machine learning, generative algorithms, predictive models, and other technics–tools of what Deleuze called “*the Societies of Control*”– can make art that is evocative, powerful, critical, perhaps even socially transformative. To this end the course examines the history, development, and political economy of Machine Learning and AI, from precomputational wargames, cryptography, game theory, and cybernetics to today’s powerful AI/ML assemblages and related technics and the ways in which these technologies are reshaping society.

Increasingly, AI//ML is being employed in artmaking and can be 'trained' on almost any information, making it a powerful tool: Diffusion Models are widely used to generate images from text prompts, LLMs (large language models) are being used to generate text and code, Generative Adversarial Nets (GANs) combine generative and adversarial operations and function as rapidly iterated critique, analogous to artistic critique or ultrafast natural selection, quickly evolving their objects to high levels of complexity; Predictive Analytics employs game theory, statistical analysis, scenario planning, and modeling and simulation to create increasingly accurate predictive models.

Social Engineering and social media operate on individuals and masses to influence social and political outcomes. Financialized “smart contracts” and AI abstract and exert increasing control upon political-economy, aesthetics, and human relations. Addiction maximizers abstract and gamify human needs and relationships. These are the tools of technocracy- artists should familiarize themselves with them. This course considers whether it is possible to turn them to artistic use.

The course explores the history of theoretical and philosophical thought informing Machine Learning and AI, including the work of the Churchlands, Sellars, Chalmers, and Negarastani and critical perspectives including the birth of the internet in counterinsurgency, Modeling and Simulation's insights for philosophy, the critique of cybernetics, critical analyses of AI, crypto, and defi, *Agential Realism*, 'demontology', the fragmentation of the information landscape, and the increasingly pronounced social and political-economic effects engendered by new technology will be examined throughout.

Conceptual skills, computer literacy, and basic programming skills are required. Advanced coding will not be necessary however advanced coders are encouraged to participate. Tools, texts, and platforms are presented agnostically, the course will attempt to give context but use your judgement.

Grades will be based on class and lab participation and the completion of a project, individual or collaborative. *Readings are recommended but not required. Additional Reading/Primary Documents* are provided for additional context and investigation.

Introductory Readings: Dan McQuillan, from *Resisting AI, an Anti-fascist Approach to Artificial Intelligence*

Additional Reading/Primary Documents: James Brusseau, *Deleuze's Postscript on the Societies of Control for Big Data and Predictive Analytics*

1. September 9 *A grin without a cat "Information does not exist, it is a useless notion in biology It is a useful notion for design for understanding systems that are very well specified, you may describe relations in these terms but living systems do not operate in those terms."* – Humberto Maturana

A cybernetic system (cat trips out), *Cheshire cat in Decentraland*; *Balancioga Potter*: deepfakes, parasocial masking, and inducements; Fake Drake, Tupac verse, Metro Boomin *BBL Drake*; *Metaruins*: Metaverse, Cryptovoxels, Decentraland, defi, crypto, and sus AI: LaMDA, Cybele/Replika, tripwires, confidence, riffing, and tailoring; MIME-NET (military–industrial-media–entertainment network), FANG and inducement; The Lowest Tide; Illuminati Pirate, Dead Internet Theory, Bad Bots and the Alien Internet; Infrastructure=carrier-wave, Iconicity=carrier-wave–mid, mass, singularity

Lock in/Negative Capability/Black Box "*Negative Capability, that is, when a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason.*" – John Keats

Lock In; The Lowering Tide; Negative Capability; Autonomous agents and cryptointelligence: Bernard Dionysius Geoghegan, Niklas Luhmann, Law v. Art; The Black Box; Ramey on the Black Box of finance

Feedback Mechanisms and Circular Causal Systems in Biological and Social Systems or The Mechanisation of Thought Processes Jasia Reichardt's *Cybernetic Serendipity*, Gustav Metzger, art, and the (D)ARPA pill; Norbert Weiner's Gun Controller, the Whitney brothers, and the birth of cybernetic art; "*Feedback Mechanisms and Circular Causal Systems in Biological and Social Systems*" or The Macy Conferences; Claude Shannon's "*A Mathematical Theory of Communication*", information theory, and Shannon's Labyrinth; *The Mechanisation of Thought Processes* symposia: O.G. Selfridge, *Paradise Lost*, and *Pandaemonium Architecture*; NASA's "computers": Christine Darden, data, and power; Mary Shelley, Ada Byron Lovelace, early alife and code; John von Neumann and Stanislaw Ulam's game theory, cellular automata, and self-replicating machines; Klára Dán von Neumann, Monte Carlo, ENIAC,

and code; John Conway's *Game of Life*, alife and CA; alife to generative ai: *Attention is all you need*, “self-attention”, transformers

Lab generative alife: *Golly*, *Wolframtones*, *Koan to Wotja*, et al; latent diffusion models: *Stable Diffusion*, *Midjourney*, *Dall-E*, video gen; “toy AIs”: *Muglife*, et al.

Readings: Bernard Dionysius Geoghegan, *Agents of History, Autonomous agents and Cryptointelligence*
Yuk Hui, *ChatGPT, or the Eschatology of Machines*
Illia Polosukhin, et al. *Attention is all you need*

Additional Reading/Primary Documents: O.G. Selfridge, *Pandemonium: A Paradigm For Learning*
Martin Gardner, *MATHEMATICAL GAMES: John Conway's new solitaire game "life"*
Illia Polosukhin, et al. *Attention is all you need*
Imperva, *2024 Bad Bots Report*

2. September 16 Honey Pump in the Workplace – Statistical Personae, Snitch Riz “the ‘content’ of the medium is like the juicy piece of meat carried by the burglar to distract the watchdog of the mind.” – Marshall McLuhan

The Hollerith Tabulator, IBM, Technocracy, Inc; Project Phoenix, Arpanet, and the birth of the internet in counterinsurgency; *The Californian Ideology*, *The Silicon Ideology*, statistics, big data, abstraction; Basilisks – Reza’s, Roko’s, Sandifer’s; Snitch Riz, The Truth Tortoise, and The Basilisk of Inducement; Chimeras, *Lemurian Bob*, *Raptor Jesus*, *Shrimp Jesus*, et al.; The art of context collapse; Social media, facial recognition, and biopolitics; First to Second Order Cybernetics, von Foerster, Matarana, Varela, et al; *Sozialeplastik*, *Neuroplastique*, *Abstraction, and the Hack*, Joseph Beuys’ *Sozialeplastik Honey Pump in the Workplace*, Catherine Malabou’s *Neuroplastic*, McKenzie Wark’s *Abstraction and the Hack*; Hacking v. Central Processing

Bunny is a rider/Satellite can't find her “*bene visit qui ben latuit*” (the hidden life is best) – Francis Bacon

Thucydides’ *Melian Dialogue*, Sun Tzu, Francis Bacon, Machiavelli, Napoleon, Clausewitz, War Gaming to Game Theory to Predictive Algorithmics; Max Weber and rationalization; Simulmatics, Inc; Scenario Planning, Prediction Markets, Assassination Markets; Implicit vs. Explicit Models, Modelling for Explanation or Prediction, SEAS-VIS World Simulation; W.E.B. Dubois’ *Megascope*, *The Princess Steel* to PROMIS (Cabazon), Simulex SEAS-VIS to Palantir to KAIROS (Knowledge-directed Artificial Intelligence Reasoning Over Schemas) and the Nooscope, precrime, and full spectrum hegemony; Cybersyn, Project Cyberfolk and “algedonic metering”; big data; strategy in domain-specific AI; Clausewitz, *Cephius*, and Texas Hold’em; How to disappear completely—extreme privacy and its discontents

Ummagumma *The Stefaneschi Triptych*, *the Droste Effect*, *Ummagumma*, and recursion in art; recursion and backpropagation in ML and AI; The Varieties of Neural Net, Deep vs. Simple Learning, ANNs, Sigmoid neurons, convolutional nets, recurrent nets, long short-term memory (LSTM) nets, and autoencoders; Ensemble Learning, Supervised, Unsupervised, and Reinforcement Learning, Simple vs. Deep Learning

Lab introduction to *Colab*, *Github*, *huggingface*, et al

Readings: McKenzie Wark, from *A Hacker Manifesto*
Catherine Malabou, from *What should we do with our Brain?*
Arnd Wedemeyer, *Pumping Honey*

Additional Reading/Primary Documents: Joshua M. Epstein, *Why Model?*
Robin Rombach, et al., *High-Resolution Image Synthesis with Latent Diffusion Models*
David E. Rumelhart, *Learning representations by backpropagating errors*
Michael Bazzell, from *Extreme privacy, what it takes to disappear*

3. September 23 *Degrade the Threads* “*In the past this information has been suppressed/But now it can be told/Every man, woman, and mutant/On this planet shall know the truth of de-evolution*” – Devo

Yuga Labs, Slurp juice, mutation, degens, devolution IP; Brock’s World: *Mighty Ducks*, DEN, IGE, BTC Foundation, Tether; chans, /b, /pol, Ytube, social, and degradation; Cory Doctorow’s “enshittification”, “consensus reality” vs. “burbclaves”; kiwifarms, Wizchan, Rage Comics, f7u12, Trollge, Pill Time, /r/He_comes; Speedrunning, ACE (arbitrary code execution), and TASbot; Adam Elkus’s *Speedrunning Through The Language-Game*

Realitymaxxing; the (a)Social (de)Construction of Reality “*Nothing proceeds from itself. Nothing is Given. All is constructed.*” – Gaston Bachelard

The Sandbox/Minecraft/Roblox Malleability Feeder; Walter Lippmann, Edward Bernays, *Propaganda*, and *Public Relations*; Gregory Bateson, wartime disinfo, and “*black propaganda*”; The XX Committee, counterintelligence, and James Jesus Angleton’s “*wilderness of mirrors*”; Social Engineering, parasocial misdisinfo, pentesting, Redteaming, the 'malicious hacker' to 'offensive security' pipeline; Philip K. Dick, Fredric Jameson, Jean Lyotard, Jean Baudrillard, and Simulationism in Art; Manuel Delanda’s *Philosophy and Simulation*; Nick Bostrom, Sabine Hossenfelder, the Simulation Hypothesis and its discontents; SCL/Cambridge Analytica, OCEAN, Facebook, and Captology; RenTech to NLP (Natural Language Processing) to CA to LLMs (Large Language Models)

Young-Grrrl War-Machine, E-Pimps, Chatters, Ghosts, Theorycels, Operators “*Hustling simps has been an art since the beginning of time!*” – Think Expansion

Alex Quicho, *Everyone is a Girl Online*, E-Pimps, Chatters, Ghosts, Onlyfans, Powerusers and the Pareto Principle; Geoarbitrage, dropping, chargebacks, and package scams; Alpha/Beta Cons; D&D to MUDs to MMORPGs, Social Engineering, ARGs to dreampolitik; ong's hat; the beast, ilovebees, Year Zero, Synydyne, Cicada 3301, Cicada Mach 2, gamejacking, “occult memetics”, and Q; Bernard Suits, C. Thi Nguyen, *Games, Agency as Art*; Gamergate, algorithmic radicalization; APTs: Fancy Bear, et al.; US Cyber Silly Bear leak, CIA “Siren Servers”, NTA (no true airgap), opsec, exploits, zero days *The Deep Private*: PIs/PMCs, Fred Otash, KLAS-TV, Howard Hughes, and *Ice Station Zebra*, Intertel, Resorts International; Black Cube, Psygroup, Palantir, Academi, Anonops, Wikileaks, Resistbot, et al.

Lab LLMs: ChatGPT, GPT4, GPTNeo, et al, coding with LLMs

Readings: Adam Elkus, *Speedrunning Through The Language-Game*
Alex Quicho, *Everyone is a Girl Online*
Ezra Marcus, *The E-Pimps of Onlyfans*

Additional Reading/Primary Documents: C. Thi Nguyen, from *Games, Agency As Art*

Manuel DeLanda, *Introduction to Philosophy and Simulation*
Joseph Matheny, *The Incunabula Papers*
Christopher Hadnagy, from *Social Engineering, The Art of Human Hacking*

4. September 30 Foxacid, Quantumsquirrel, Weeping Angel or The Internet, a restaurant sold out to the Mob "The world circumscribing us [the "circumverse"] aims to have stable circuits, equal cycles, the expected repetitions, and trouble-free compatibility. It intends to eliminate all partial impulses and immobilize bodies...such is the madness of the great central Zero, its desire to immobilize bodies that can only ever 'be' as representation." – Jean-Francois Lyotard, *Libidinal Economy*

"Wilderness of Mirrors", "Strategy of Tension", and TAO: Xkeyscore, Foxacid, Quantumsquirrel, Weeping Angel and Guy Debord's *Society of the Spectacle*, Jean-Francois Lyotard's *Libidinal Economy*; Tiqqun's *Cybernetic Hypothesis*; Mark Fisher's 'Capitalist Realism' to 'Acid Communism' and 'Psychic Infrastructure'; "the Internet, a restaurant sold out to the Mob", wholly parasocial relations, DDD (Don Draper is Dead), pirate funnels and viral loops

A Pervasive Global Cognitive Automaton "Contemporary AI systems are now becoming human-competitive at general tasks and we must ask ourselves: Should we let machines flood our information channels with propaganda and untruth? Should we automate away all the jobs, including the fulfilling ones? Should we develop nonhuman minds that might eventually outnumber, outsmart, obsolete and replace us? Should we risk loss of control of our civilization?" – open letter from tech CEOs suggesting an AI moratorium

Charles Stross's "very slow AIs" to today's "imperceptible algorithmic value extraction devices": social, inducement, walled gardens, and yield farms; Trapwire, Predpol, Palantir, and "pernicious feedback loops"; memesis, "thought contagion", media decentralization, and "stochastic terror"; Turing's "Computing Machinery and Intelligence", the Imitation Game, ELIZA, facebotlish, ChatGPT, and AI Frenz

They not like us—feedforward nets, positive feedback, cybernetic capitalism, and post-biological evolution "social media makes people be brands"—Rob Horning

Jimi Hendrix and positive feedback; Felix Guattari, IWC, asignifying semiotics, and "signaletic matter"; "negative" feedback, cybernetics, "governors", and territorialization v. positive feedback, flight, and deterritorialization; feedforward nets and "feedback" (feedforward) in art; Good's *Speculations Concerning the First Ultraintelligent Machine*; Astrobiology, Steven J. Dick, and *Post-biological Evolution*; CCRU, *Machinic Desire v. Postcapitalist Desire/Acid Communism*

Lab Socialblade, Antenna, growbots; Feedforward nets (FNNs), Recurrent nets (RNNs)

Readings: Geoff Shullenberger, *Mimetic Acceleration and Capitalist Hyperintelligence*
Matt Colquhoun, *Acid Communism*
Bruce Clarke, *Feedback Loops*

Additional Reading/Primary Documents: Steven J. Dick, *Cosmic Evolution from Cosmos and Culture*
I.J. Good, *Speculations Concerning the First Ultraintelligent Machine*

5. October 7 *Swarm Dynamics, Young Slime Life* “cells that fire together, wire together”— folk saying

Agent v. Swarm v. Protean Ooze, David Roden and Posthuman Life; Ian Buchanan, Assemblage theory and The Precession of Assemblage; Karen Barad’s Agential Realism; Roberta Breitmore, Lil Miquela, and the Brud; *The Brood*, OOOz, Slime Dynamics; YSL, Young Slime Life, pattern recognition, RICO

Polybius by Sinneslöschen to Nitro Zeus Polybius’s *Histories* v. *laodogmatika*, Arcadia, Polybius’s square, and fire signals; *Polybius* by Sinneslöschen- Psyop, Rumortech, Vaporwar(v)e; TAO, OG (Olympic Games), NZ (Nitro Zeus), and cyberkinetic warfare, DARPA SMISC (Social Media in Strategic Communication) and INCAS (INfluence Campaign Awareness and Sensemaking), GCHQ’s JTRIG

Edge Detector Frank Rosenblatt and the Perceptron, Marvin Minsky and Seymour Papert’s *Perceptrons and linearly separable problems*; Scalars, Vectors, Sets, Training, Sorting, Decision Trees, Leaf nodes, Entropy splits; *Edge Detector* zine, Rudy Rucker, et al; Minsky, Fredkin, HAL 2000, and the Triadex Muse

Lab more Colab, et al.

Readings: Karen Barad, from *Meeting the Universe Halfway, Quantum Physics and the Entanglement of Matter and Meaning*

Eric Bonabeau et al, from *Swarm intelligence from natural to artificial systems*

Ben Woodard, from *Slime Dynamics*

Additional Reading/Primary Documents: Minsky and Papert, from *Perceptrons*

October 14 NO CLASS, INDIGENOUS PEOPLE’S DAY

6. October 21 *Eliminative Materialism and Neurophilosophy* Patricia and Paul Churchland, Sellars, Chalmers, et al; p-zombies, sentience, sapience, geist; Hegel, Brandom, Negarestani, Kanzi, et al; Donald Hoffman’s *Interface Theory of Perception* and its discontents

Addictionmaxxing – Hypocognition v. Hypercognition distraction, hypocognition, amplifiers and suppressors, attention capture, addiction maximizers, parasocial relations; Natasha Dow Schüll’s *Addiction by Design, Machine Gambling in Las Vegas*; SFSE, ambient intel, information gathering, communication modeling, elicitation, preloading, pretexting, human buffer overflow, microexpressions, persuasion, framing, manipulation, mitigation

A Zero-One Universe–Digital Philosophy, Digital Physics, Quantum Philosophy Edward Fredkin, Stephen Wolfram, Rudy Rucker, David Deutsch, et al.

Lab Colab, Python, Tensorflow

Readings: Paul M. Churchland, from *Eliminative Materialism and the propositional attitudes*
Donald Hoffman, *The Interface Theory of Perception*

Additional Reading/Primary Documents: Edward Fredkin, *Finite Nature, A New Cosmogony*

Stephen Wolfram, from *A New Kind of Science*

Natasha Dow Schüll, from *Addiction by Design, Machine Gambling in Las Vegas*

7. October 28 *Bossware v. Chickenized Reverse Centaurs* "If you look at the monopolistic firm as an example of a maximum system, you can connect up its structural relations with those that prevail for an entropy- maximizing thermodynamic system...absolute temperature and entropy have to each other the same conjugate or dual relation that the wage rate has to labor or the land rent has to acres of land." — Samuelson

Chickenized reverse centaurs: Para, Tuyal, et al. v. *Bossware*: extractive data labor: Cloudflower, Amazon Mechanical Turk, chatfarms, labelfarms

Minmax, Maxout, Supermax Analogy, Power, and Computation Minmax algos, Maxout Nets, NYCIS and phonetic algorithms, COINTELPRO, MK68, Supermax, carceral counterinsurgency and neutralization, architecture as algo

The Anasazi model Sugarscape, MaiseScape, 'Life with the Artificial Anasazi,' problematics of analogy

Lab multi-dimensional data, t-SNE, word clouds

Readings: Cory Doctorow, *Revenge of the Chickenized Reverse-Centaurs*

Jared Diamond, *Life with the Artificial Anasazi*

Additional Reading/Primary Documents: Ian J. Goodfellow, et al. *Maxout Networks*

8. November 4 *Police and Thieves—Generative Adversarial Nets* "The generative model can be thought of as analogous to a team of counterfeiters, trying to produce fake currency and use it without detection, while the discriminative model is analogous to the police, trying to detect the counterfeit currency. Competition in this game drives both teams to improve their methods until the counterfeits are indistinguishable from the genuine articles." —Ian J. Goodfellow, et al.

GANs, StyleGAN, etc. to Diffusion Models

Reciprocal Panopticism, One-way mirrors, Walled Gardens, Hidden Layers, Arcana Imperii, Secretum, Mysterium; Capture; *hidden layers*: in neural nets, walled gardens, kg, raya, encrypted comms; social, chans; *reciprocal panopticism*: Reddit-karma and sage, 4chan-degraded threads, 8kun-Q and tripcodes; *one-way mirrors*: DARPA's Lifelog to Meta Portal, FB, IG; M15/BTSS's EXTENDING and Weeping Angel; IARPA/Raytheon's M3S; *social, political, and economic hidden layers*: criminogenic banks BCCI to In-Q-tel; Bel, OWL, et al; Facebook/Meta Captology, BJ Fogg's *Persuasive Computing*, and capture

Bare Metal Cloud Control; Gradient Descent Eclipsium, Bare Metal, and Cloud Control; GD algos: Linear and Polynomial Regression, Logistic Regression, k- Nearest Neighbors, Support Vector Machines, Decision Trees, Random Forests, Ensemble methods

Lab StyleGAN, other GANs, Colab, more with Diffusion models

Readings: Ian J. Goodfellow, et al., *Generative Adversarial Nets*

Additional Reading/Primary Documents: BJ Fogg, from *Persuasive technology, using computers to change what we think and do*

9. November 11 *Hopeium, a hell of a drug: CIPHERPUNKS TO FINTECH TO DEFI/CEFI* Caesar cipher to Enigma and Turing's bombs, Colossus; MILCRYP, Lambros D. Callimahos, and the Zandian Problem; phreaks, hackers, and goldbugs; David Chaum's "*Blind Signatures for Untraceable Payments*", DigiCash, Tim May's "*Crypto Anarchist Manifesto*," Hashcash, BitGold, Stephenson's *Cryptonomicon*, AZX, MT.GOX, Satoshi Nakamoto, et al., Blockchain; Golumbia's *Software as Rightwing Extremism*; bitcoinmaxxis, moldbugs, stablecoins, altcoins, shitcoins, Doge and the birth of the memecoin, LFG!, FUD; quants, HFT, and dark pools; fintech, the flash crash, ultrafast black swans, and nonhuman temporalities, emergent phenomena and HFT; Mercer: NLP to RenTech to Cambridge Analytica, Breitbart, et al; defi to cefi: Hodlrs, Robinhood, wallstreetbets, and Gamestop; reflexive ponzis: Grayscale, et al, yield farms: Celsius, 3AC, Terra/Luna, washtrading the Jenga tower custard pie clown car; defi, crypto, and Nash equilibria, zero sum minus, 0- or "greater fool" theory

No Cap – On (Surplus) Value In Art Seth Siegelaub's *Artist's Reserved Rights Transfer and Sale Agreement*, Diedrich Diederichsen's *On (Surplus) Value In Art*; NFTs, surplus value, and art, "second-order use value", surplus extraction, "digital scarcity"

What's the Deal with Birds? v. Birds aren't real–predatory journal v. internet hoax "Birds are very strange. Some people are like "whoa they're flying around and stuff, what's the deal with that?" This sentiment is shared by people across socioeconomic backgrounds. Figuring out what the deal is with birds is of the utmost scientific importance." — Daniel T. Baldessarre, *What's the Deal with Birds?*, *Scientific Journal of Research and Reviews*

Predation, Publish/Perish, and predatory journals; Hoaxing, Yuppies to Yes Men to Birds aren't real

Lab ETH?

Reading: Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*
Diedrich Diederichsen, from *On (Surplus) Value In Art*
Daniel T. Baldessarre, *What's the deal with birds?*

Additional Reading/Primary Documents: Lambros Callimahos, *MILCRYP Military Cryptanalytics pt. 3*
David Golumbia, from *Bitcoin, Software as Rightwing Extremism*
Robert Mercer et al., *A Maximum Likelihood Approach to Continuous Speech Recognition*

10. November 18 *Metaruins* XR SF, *Neuromancer's* Cyberspace, *Snow Crash's* Metaverse, *Ready Player One's* Oasis, Meta's Metaverse, Meta Portal, Building 8, et al. David Chalmers' *Reality+*

With Sublinear Regret "Abstraction reflected the economic mechanization of consciousness" – Meyer Shapiro "Art is a lie that helps us see the truth." – Picasso

Lifelong Reinforcement Learning, Sublinear regret; Mimetic Violence, the Lotka-Volterra ecosystem model, Hooke's Law, Kermack-McKendrick epidemic equations; Levelism: Kant's 'antinomies of pure reason', Levelism: epistemological, ontological, methodological

Art as Abstract Machine “Any piece of flotsam or jetsam within our grasp should be considered as a precipitate of our desire.” – Andre Breton

Deleuze and Guattari’s abstract machines, *Art as Abstract Machine*, Levelism in art

Lab XR, VR, AR

Readings: Stephen Zepke, *Art as Abstract Machine*

Additional Reading/Primary Documents: Luciano Floridi, *The Method of Levels of Abstraction*

11. November 25 Lulzsec to Nulzsec digital activism, left and right, CCC, Legion of Doom, cDc/Hacktivism, Back Orifice, Lulzsec, AnonOps, Anontools, LOIC (Low Orbit Ion Cannon); IRA, CNP, “the family”, et al; Anonymous, chans, and “occult memetics”, Pepe, Kek, et al., /pol, to Q, Q as ARG; right “metapolitics”; left/right can’t meme; “narrative laundering”

Interlocks, Cognitive Hierarchies, Rhizomatics “(Heterarchy is) an emergent organizational form with distinctive network properties ... and multiple organizing principles.” – Stark

Mark Lombardi, Interlocks, *A Cognitive Hierarchy Model Of Games*, heterarchy, rhizomatics; information hierarchies: data silos; info silos: Aaron Swartz’s *Guerilla Open Access Manifesto*, JSTOR, and academic journals; Substack, Patreon, dark/walled servers, aaaaarg, et al; Slashdot, Hacker News, Stack Overflow, et al; compartmentalization, fusion centers, and desiloing

Fog Reveal v. Chaff, Pegasus v. Predator obfuscation, false tells, MAI (making analysis inefficient), babble tapes, Operation Vula, quote stuffing, hydras, Vortex, “Bayesian flooding” and “unselling”, FaceCloak; exploits and asymmetry; Fog Reveal, ECHELON, warrantless mass surveillance, fusion centers, et al; Fogging, Flooding, and Surfacing, Amplification, Inhibition, Wiping; *Pegasus vs. Predator*, Cytex, Intellexa, NSO Group, and mercenary spyware

Lab Your Project / LOIC, HOICRS, chaff

Readings: Patricia Goldstone, *Interlock–Art, Conspiracy, and the Shadow Worlds of Mark Lombardi*
Finn Brunton, Helen Nissenbaum, from *Obfuscation, a User's Guide for Privacy and Protest*
Hugh Davies, *The Gamification of Conspiracy, QAnon as ARG*

Additional Reading/Primary Documents: Carole L. Crumley, *Heterarchy*
Colin F. Camerer, Teck-Hua Ho, et al., *A Cognitive Hierarchy Model Of Games*
GNET Report, *Fogging And Flooding, Countering Extremist MisDisinformation After Terror Attacks*
Citizen Lab, *Pegasus vs. Predator Dissident's Infected iPhone Reveals Cytrox Mercenary Spyware*

12. December 2 Assymetrical Likewar Psyop to Mindwar to Likewar; hybrid war, asymmetry, and 4GW, Equation Group v. Shadow Brokers: DANDERSPIRITZ, EWOKFRENZY, ETERNALBLUE ransomware: AIDS TROJAN, CRYPTOLOCKER, WANNACRY; exfiltration doxware; TrapWire/Stratfor leak; Clearview AI, Mainstreet One/People First; Memetic Warfare, Meta, X, social credit, affective computing, and pseudoPSI; *Autoassymetry*: the Inversion and the Brud, bots, ezsniiper to Hayha, Wrath, cook groups, and bypasses; celeb followbots: Peakerr, Cheap Panel, followbrokers, et al.

Rewiring Social Structure Vogt's *Rituals of Reversal as a Means of Rewiring Social Structure*;
Rewiring— always already happening: social media and social structure; Algorithmic Austerity v.
Profundity, *Red Plenty*, and Cybersyn; VSAs to Algorithmic value capture devices: a reprise; Dator and
Candy's Possibility vs. Probability Space

Beclownment of Nightmares "Do you really think SF Capital allows monkey flake to make decisions it
classifies as important?" – CCRU

Hype-vorticism, beclownment, lulz, decentering, nonstandard philosophy, *On Social Sadism*

Lab Your project

Readings: Mark Fisher, *SF Capital*
Geoff Shullenberger, *Mimesis, Violence, and Facebook*, Peter Thiel's *French Connection*
Evon Z. Vogt, *Rituals of Reversal as a Means of Rewiring Social Structure*

Additional Reading/Primary Documents: China Mieville, *On Social Sadism*

13. December 9 Parasites Lost "I must Create a System, or be enslav'd by another Mans / I will not
Reason and Compare; my business is to Create" – William Blake

Parasites Lost; David Roden, *Posthuman Life and Subtractive-Catastrophic Xenophilia*; Demontology;
Accelerando's Lobster AIs, MIT's Norman, Zero HP Lovecraft's *Minotaur*, Cthulu AI; Claire
Colebrook's *In Praise of the Flat Earth and counterethics*, *Zoe v. Bios*; ethical AI, game theory, and
defection; Isabel Millar, *The Psychoanalysis of Artificial Intelligence*

A thorough rugging exit scams, rugging, The Big Ruggpull

Readings: David Roden, *Subtractive-Catastrophic Xenophilia*
Isabel Millar, from *The Psychoanalysis of Artificial Intelligence*

Additional Reading/Primary Documents: Claire Colebrook, *A Globe of One's Own, In Praise of the Flat
Earth*
Zero HP Lovecraft, *The Gig Economy*

Present your Project