## Digital Cyclops Aff

### Thesis – Technical Knowledge

#### Hermeneutical production of knowledge and the forecasting of technical futures is not a neutral project – it resymbolizes and overcodes thought itself towards a cybernetic metaphysics

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The rejection of the notion of knowledge as reducible to science and calculation is an attempt to show that there is knowledge such as savoir faire, savoir vivre, and savoir-écouter that are beyond the realm of scientific knowledge. Stiegler seems to have gone a step further in this respect by showing that savoir faire is necessary for savoir vivre, and that therefore the deprivation of savoir faire is a form of proletarianization, which problematizes existence by undermining the means of subsistence. The **shift in the sense of knowledge** in the era of **digital automation** underlines a **delegation of knowledge production and decision making to machines**. Lyotard says that “the question of knowledge is now more than ever a question of government.” 26 The organic totality of the system that is based on recursivity is realized through **different technological schemes** (such as the smart city, the internet of things, etc.), which characterize a **planetary computation**. In chapter 4 we named the new faculty of the machine to anticipate tertiary protention. The preemption of the tertiary protention is possible only because of the computational hermeneutics, which is essentially recursive: It constantly evaluates the past in order to anticipate the future, which in turn determines the present. Human beings are **reintegrated into the temporality of machines**, not only as individuals but also as collectives and communities. This is precisely what is called algorithmic governmentality. 27 It seems to me that in order to intervene into this new temporal structure today, it is necessary (while we have to do it elsewhere) to redefine savoir faire—or, more precisely, savoir technique—in today’s system of knowledge production.

Besides theoretical discourse on the question of recursivity and social systems in the work of Niklas Luhmann and Heinz von Foerster, who also gives another name to recursion—“non-trivial machines” (ironically, Lyotard also calls cybernetic information theory trivial) 28—we have attempted to show that such **discourses are gradually materialized** through the implementation and distribution of smart objects, neuro-networks in urbanism, and the use of smart devices in order to access infrastructures. In this process of the totalization of the technological system, the immediate effect is the process of **desymbolization** through the establishment of **inter-objective relations** and **resymbolization** within the technical system, as Jacques Ellul pointed out in his Le système technicien. 29 When Ellul says that “on the one hand, man’s inherent power of symbolizing is excluded; on the other hand, **all consumption is symbolic**,” 30 he means that symbols that connect humans to nature and allow them to master nature in a nonviolent way **slowly give way to technology**, and finally lead to a resymbolization of the technical system in which symbols are no longer linked to nature but to commodities.

The social system is not separable from the technical system. Indeed the technical system is the support of the social system, not only in terms of communication but also in terms of organization. The social system is not reducible to the technical system, though this reduction is taking place rapidly at the moment. Written two years after Ellul’s Technological System, Lyotard’s The Postmodern Condition also hints at the realization of totalized technical systems when he says that “the growth of power, and its self-legitimation, are now taking the route of data storage and accessibility, and the **operativity of information**.” 31 The realization of this system is for Lyotard the continuation of the concept of development, which is a **metaphysics without finality**: “[W]e are in an Umwelt that is the realization of metaphysics as a general physics under the name of cybernetics.” 32 Lyotard here takes up both Heidegger’s verdict on the status of cybernetics and Luhmann’s systems theory, which is the avatar of a “general physics.” 33 Cybernetics realizes metaphysics, makes metaphysics reality, and **establishes its right over thinking**. 34 What is left for metaphysics is to incorporate the outside as its inside, to exclude itself as the dominant thinking. For systems theorists the task is not to get out of the system but rather how to optimize the system by modulating its performativity and increasing its capacity for resilience based on feedback. 35 Therefore, when modern leftists lament that there is no longer any outside, they become the true metaphysicians. The opposition between engineering and the humanities can be caricatured as an opposition between positivism and hermeneutics, or between efficiency and reflexivity, but such a distinction, as Lyotard already noted while commenting on the Frankfurt School, is not acceptable, 36 for the solution proposed by the latter “is no longer relevant” in postmodern societies, since this opposition ceases to function as a critical apparatus. 37

§40. TECHNOSPHERE OR CHRISTOGENESIS

Instead of seeing cybernetics as a nonphilosophical system, in this work I have been attempting to show that cybernetics is fundamentally a metaphysical project. The passage from nature to logic, from the organized inorganic to the organizing inorganic, is staged as a **conceptual conflict between form and matter**. However, this has not been presented as the triumph of one over the other, since they are not separable. It is only in our archaic epistemology that form and matter are separated, and this conflict is interpreted as a philosophical melodrama. With the organizing inorganic, where are the humans heading with their technologies? For decades we have been talking about an intelligence explosion, superintelligence, the technological singularity, a **foreseeable technological utopia** in which genetic engineering, human enhancement, and immortality are promised. Speculation concerning what comes after the human has been widely discussed. The emergence of x-humanisms, whether this x be post- or trans-, attempts to point to a definite future in which humans can be either saved by a posthuman ethics or by **advanced technologies**. On the one hand, the posthuman gives us an impression of liberation, of freeing ourselves from the older category of the human. On the other hand, this “being liberated” is nothing other than the fact that humans have become obsolete in relation to their own products, as Günther Anders has described in his The Obsolescence of Man. 38 I am very sympathetic with posthuman discourse and with the idea that the humanities must fight against any anthropocentrism for what the Italian theorist Rosi Braidotti calls posthumanities. 39 However, certain forms of posthuman discourse also betray a naive attitude toward technology, seeing it simply as secondary to a “true” and “good” posthuman ontology, as if all oppositions can be neatly resolved by a theoretical canon, whether this be a process philosophy or a relational ontology, while completely ignoring the transformation of machine-organism relations that we have endeavored to illuminate.

Transhumanists, on the other hand, take an opposite position and exploit technology to an extreme. They embrace functionalism (seeing the human as composed of functions that can be improved individually) and an interdisciplinary program for human enhancement, including information technology, computer science, cognitive science and neuroscience, neuralcomputer interface research, materials science, artificial intelligence, regenerative medicine and life extension, genetic engineering, and nanotechnology. 40 They emphasize the importance of technology as a means to extropia (as opposed to the “static utopia”), an open-ended perfection of the human species. 41 There is an ambiguity between the terms transhuman and posthuman. For example, transhumanists like Nick Bostrom see the transhuman as a form of the posthuman, which possesses some posthuman capacities transcending the limits of the human (for example, life span, cognition, and emotion). 42 We may recognize that the transhuman sounds like a typical “scientific humanism,” 43 and indeed it is a humanism under the guise of a posthumanism. We want to point out that the posthuman cannot be defined according to a simple divide between a clean posthumanities and an outdated humanism, 44 so the transhuman cannot be seen as an enthusiastic open transhumanism opposing a closed dualist humanism.

However, here we would like to question the notion of humanity before we justify distancing ourselves from it. Carl Schmitt, in his The Concept of the Political, claims that “the concept of humanity is an especially useful ideological instrument of imperialist expansion, and in its ethical-humanitarian form it is a specific vehicle of economic imperialism. Here one is reminded of a somewhat modified expression of Proudhon’s: whoever invokes humanity wants to cheat.” 45 What Schmidt is saying here deserves our attention, since the term humanity itself is problematic and any attempt to define a **new future for humanity** seems to be a form of cheating. Schiller was able to talk about the realization of humanity since Enlightenment humanism was necessary for his epoch, while after more than two hundred years we will have to face a new politics announced as the end of the Enlightenment. 46 This politics concerns not so much human nature as inhumanity. Humanist discourse continues, and it is indicated by a political theology that entails a rather simplistic conception of world history, which we can analyze as a linear progress from premodern → modern → postmodern → apocalypse. This Judeo-Christian eschatology seems to be a dominating discourse in which science and technology will bring forward a system that is more and more favorable for human existence while it will finally confront self-destruction, and what remains is the salvation or the completion of world history as theodicy. It is not without surprise to see that this end of history resonates with the concept of the Homo deus, since by then theodicy will be indicated by transformation of humanity into a kingdom of gods. The author of Homo Deus introduces dataism, a human-algorithm reduction; in the name of “life science,” dataism claims that:

1. Organisms are algorithms, and humans are not individuals—they are “dividuals”; that is, humans are an assemblage of many different algorithms lacking a single inner voice or a single self.

2. The algorithms constituting a human are not free. They are shaped by genes and environmental pressures, and take decisions either deterministically or randomly—but not freely.

3. It follows that an external algorithm could theoretically know me much better than I can ever know myself. . . . Once developed, such an algorithm could replace the voter, the customer, and the beholder. Then the algorithm will know best, the algorithm will always be right, and beauty will be in the calculations of the algorithm. 47

The transhumanist tone, claiming insight from “life science,” has already pointed to the future of humanity, which can be reduced to **artificial intelligences** governed by a superintelligence that knows anything and everything. We can find a similar argument in Teilhard’s concept of the noosphere. The noosphere will finally lead to the realization of a superorganism: the Brain of all brains. Through the systematization and planetarization of tools—especially automation —it will finally lead to the complete liberation of human beings from production —or, in economic terms, mass unemployment. Teilhard doesn’t see this mass unemployment as a danger but rather as the possibility of the realization of humanity. Like Schiller, who was concerned by the determination and domination of reason, Teilhard was also obliged to address the question of freedom. He distinguishes two types of freedom: individual freedom and collective freedom. The realization of the technical system as a superorganism may undermine individual freedom, but it also realizes collective freedom: “One might put it that determinism appears at either end of the process of cosmic evolution, but in antithetically opposed forms: at the lower end it is forced along the line of the most probable for lack of freedom; at the upper end it is an ascent into the improbable through the triumph of freedom.” 48

Teilhard avoids a crucial problem here: What really is “collective freedom,” and how can it justify the sacrifice of individual freedom? Is it not similar to the argument of “collectivism” that we have seen in former communist regimes? And further, what precisely is meant by “convergence”? We have seen in chapter 4 what Simondon calls convergence, which is not the convergence facilitated by transport and communications network, but rather to reattach the figure to the ground. But maybe at the end, for Teilhard, the question of the future of humankind is fundamentally a theological one, as he indicated in a note in the text we cited above titled “The Formation of the Noosphere,” published in Revue des Questions Scientifiques: “The description of the Noosphere and its attendant biology, as here propounded, is no more opposed to the Divine Transcendence, to Grace, to the Incarnation or to the ultimate Parousia, than is the science of paleontology to the Creation, or of embryology to the First Cause. The reverse is true.” 49

What Teilhard said concerning the process of evolution and the realization of the superorganism is now much easier to imagine than when he wrote it in the first half of the twentieth century. Today this image is **reinforced by the fantasy of the technological singularity**, in which the speed of technological development will be indicated by a vertical acceleration. We may say then say that this is a true completion of humanity, since there will no longer be a sharp distinction between the finite and the infinite. In a review of The Phenomenon of Man titled “Cosmologist of the future,” Joseph Needham called Teilhard “the greatest prophet of this age.” 50 He admired Teilhard’s work and regarded the “convergent integration” (a term that was employed by Julian Huxley in his preface to The Phenomenon of Man) of the superorganism or superbrain as the most original point of the book, which could be seen as a “Christogenesis”:

[T]ime is also of the essence; there was a time when there were atoms but no molecules, later on there were nucleoprotein molecules but no living cells, later fishes but no mammals, later man but no cooperative commonwealth. What are these propositions? Simply, the view of the universe held by the overwhelming majority of working scientists in our age. Implicit in it is the conviction that social evolution is continuous with biological evolution, and therefore that what materialist theologians have called the kingdom of God on Earth is not a desperate hope but a sure development with all the authority of evolution behind it. 51

However, in the spirit of eschatology one may ask: Is this completion of humanity a revelation or a catastrophic becoming? We are asking this question, as most of the sci-fi movies do, since we are living in an epoch of technological uncertainty and instability. Cybernetics, the accomplishment of metaphysics, is the force unifying “humanity” through globalization and neocolonization. In other words, we can use the vocabulary of Gestalt psychology in claiming that **technology becomes the ground instead of the figure**. The noosphere becomes the most dominating sphere on earth, overriding the biosphere. The system is an indication (or the Absolute in the Hegelian sense) of the evolution of science and humanity, 52 but it doesn’t necessarily take the form that Schiller envisaged in terms of artistic creation. Any future philosophy that ignores the question of system is **fundamentally deficient.**

### Thesis – “No”

#### The aff has asked us to negate it as a valuable enterprise – we say “No”.

Kroker 14 (Arthur Kroker - emeritus professor and adjunct professor of political science at the University of Victoria, “Exits to the Posthuman Future”, Polity Press, Pages 202-204, 2014, MG)

Refusing to secrete itself in those bureaucratic institutions that produce mechanisms of domination (the clinic, the prison, **the school**), cynical ideology thrives by making a continuous spectacle of its presence. It is a line of flight, an intensity that doubles and redoubles its effects. When power becomes image, cynical truth is volatilized by the image repertoire. It knows only media effects. It migrates across different media. It changes state as it seeks points of **maximal intensity for communication** with a humiliated public. It is without history because it leaves no fixed electronic trail. Its truth-value depends precisely on its articulation of perspectives that strengthen movements towards panic insecurity and redemptive violence. While power aligns itself with knowledge, not ideology, **cynical ideology aligns itself with virtual truth**, not power. Privileging sacrificial death over the life of power, cynical ideology represents truth in its last decadent phase as a concept-fiction.

In the age of cynical ideology, everything has **value** only to the extent that it has **“abuse value**.” Heidegger recognized this. Understanding Nietzsche as the essential philosopher of completed nihilism, Heidegger drew the bitter ethical conclusions attendant upon the reduction of being to passive “standing reserve.” For Heidegger, the mood of completed nihilism will be the “malice of strife” that takes pleasure in the greater calculus of abuse value. Today, the theater of abuse value is ubiquitous: **the rage of violence** directed against the old, the poor, the young, the sick, the powerless, the disavowed, the unlivable. Political lying is itself a form of abuse value with the object of abuse being the rupturing of that deep connection between truth-saying and the responsibilities of democratic citizenship. When citizenship itself is made an object of abuse value (by manipulation of vote counts, by public lies, by panic fear), the essential ethical core of democracy is undermined. We're left finally with the **terrorism of the image**, a new form of nihilism suitable for the technological age in which ministrations of redemptive violence during the daylight hours are soothed away by the nighttime jokes of all the talk-show hosts. A moral equivalency of nothingness – organized state terrorism and diffuse media distraction as the basic political logic of a society of completed nihilism. This is not an image of Foucault's world of power. Nor is it Deleuze and Guattari's searing vision of lines of flight and points of intensity – becoming wolf-man, becoming maggot-man, becoming predator, becoming parasite. It is something new, still emergent, still articulating itself, still learning to speak, still growing in strength, still waiting to fully disclose itself – cynical ideology.

Nonetheless, there is much to be learned from Foucault's theory of power in terms of what resists power, what produces that fatal rupture in individual subjectivity that has the effect of overcoming fear and stirring again the passionate desire for freedom. That this is an elemental human desire tracing a larger arc of history across countries, whole continents, until it encompasses global consciousness is indisputable. Everywhere in the past, as in the present and future, power as domination meets its **equal** in the stubborn, always ethically recalcitrant, presence of an **individual subjectivity that says “No,”** and thereby marks **one individual at a time**, one body at a time, one **refusal** at a time the furthest limits of domination. Foucault knew this. It is everywhere in his work from the repressed history of erotic passion that makes of The History of Sexuality an emblematic study of the entwinement of passion and freedom in the politics of the body to the tortured revolt against the body of the king and its ceremonial punishment that introduces Discipline and Punish. Whether in the “grey genealogy of power” or in his eloquent reflections on the history of ~~madness~~ or the troubled histories of medicine, knowledge, and aesthetics, there is always the presence of the **individual act of dissent**, the philosophical heresy, the medical rupture, the lover's forbidden embrace that constitutes, at first in minor note and then, with gathering strength, an irresistible momentum towards generalized discursive change.

Foucault may have been the master of discourse analysis, the theorist who brought into the light of day the alliance of regulations, prohibitions, modes of thought, public rhetoric that, taken together, comes to be known as the discourse of power, the discourse of the intelligible body, the discourse of sexuality, the discourse of punishment. But for all that, the seduction of Foucault's thought, that which has made of his philosophical life a haunting marker denoting a larger shift in cultural sensibility, was the simple fact that, while Foucault's theory of power may have described its historical machinations in grisly, meticulous detail, the lasting legacy of his thought is that his theory of power is also its own undoing. For no sooner does Foucault remind us that power is a network, that it **circulates**, that it operates as a “relation of force,” that it actually produces subjectivity, then his theory of power seems to shudder to a halt, to maintain its stability only on the basis of a violent internal repression. Ironically, if Foucault could argue time and again that resistance to power is one of the fundamental conditions for the preservation of power, that **power feeds on its oppositions**, that is only to say that everywhere in Foucault's thought there is acute awareness of that which lies outside and at one remove from the reach of power: that which is **prohibited, excluded, disavowed, rendered unknowable**, perhaps even unlivable, by the discourse of power.

Many commentators on Foucault have grasped the fundamental truth of his insights concerning the doubled nature of power. For example, Judith Butler's The Psychic Life of Power represents a sustained meditation on the dialectic of **affirmations** and prohibitions marking the discourse of power. Wendy Brown's States of Injury does much the same, this time though tracing the doubled dialectic of power as it works its way through the contemporary psycho-geography of political ressentiment. In chapter and verse, Butler and Brown are faithful to Foucault's teachings concerning power, namely that the regimes of intelligibility required by power always mark the unmarkable, specifically that which must be made unknowable, unlivable, unsustainable so that power can exist. Indeed, more than a historical record of the outlawed sexualities, the forbidden genders, the transgressionary crossings that mark the limits of power, the theoretical reflections of theorists such as Butler and Brown have the added measure of following the trace of Nietzsche in Foucault.

### AT: Framework

#### Dead Information DA – their model is reminiscent of the digital superhighway, a new technological frontier where communication and meaning are maximized to create dead information that is used to pave the highway with our flesh, giving us the choice to succumb to the system and adapt, or we’re toast

Weinstein and Kroker 94(Arthur Kroker - emeritus professor and adjunct professor of political science at the University of Victoria, Michael Weinstein – Professor of Political Philsophy at Purdue University, “Data Trash: The Theory of the Virtual Class”, New World Perspectives, Pages 6-8, 15 September 1994, MG)

The virtual class has driven to global power along the digital superhighway. Representing perfectly the expansionary interests of the recombinant commodity-form, the virtual class has seized the **imagination** of contemporary culture by conceiving a **techno-utopian** high-speed cybernetic grid for travelling across the electronic frontier. In this mythology of the **new technological frontier**, contemporary society is either equipped for fast travel down the main arterial lanes of the information highway, or it simply ceases to exist as a functioning member of technotopia. As the CEO’s and the specialist consultants of the virtual class triumphantly proclaim: **“Adapt or you’re toast.”**

We now live in the age of dead information, dead (electronic) space, and dead (cybernetic) rhetoric. Dead information? That’s our **cooptation as servomechanisms of the cybernetic grid** (the digital superhighway) that swallows bodies, and even whole societies, into the dynamic momentum of its telematic logic. Always working on the basis of the illusion of **enhanced interactivity**, the digital superhighway is really about the full immersion of the flesh into its virtual double. As dead (electronic) space, the digital superhighway is a big real estate venture in cybernetic form, where competing claims to intellectual property rights in an array of multi-media technologies of communication are at stake. No longer capitalism under the doubled sign of consumer and production models, the digital superhighway represents the disappearance of capitalism into **colonized virtual space**, and dead (cybernetic) rhetoric? That’s the Internet’s subordination to the predatory business interests of a virtual class, which might pay virtual lip service to the growth of electronic communities on a global basis, but which is devoted in actuality to shutting down the anarchy of the Net in favor of **virtualized (commercial) exchange**. Like a mirror image, the digital superhighway always means its opposite: **not an open telematic autoroute** for fast circulation across the electronic galaxy, but an **immensely seductive harvesting machine** for delivering bodies, culture, and labor to virtualization. **The information highway is paved with (our) flesh**. So consequently, the theory of the virtual class: cultural accomodation to technotopia is its goal, political consolidation (around the aims of the virtual class) its method, multi-media nervous systems its relay, and (our) disappearance into pure virtualities its ecstatic destiny.

That there is an inherent political contradiction between the attempt by the virtual class to liquidate the sprawling web of the Internet in favor of the smooth telematic vision of the digital superhighway is apparent. The information highway is the antithesis of the Net, in much the same way as the virtual class must destroy the public dimension of the Internet for its own survival. The informational technology of the Internet as a new force of virtual production provides the social conditions necessary for instituting fundamentally new relations of electronic creation. Spontaneously and certainly against the long-range interests of the virtual class, the Internet has been swamped by demands for meaning. Newly screen-radiated scholars dream up visions of a Virtual University, the population of Amsterdam goes on-line as Digital City, environmentalists become web weavers as they form a global Green cybernetic informational grid, and a new generation of fiction writers develops forms of telematic writing that mirror the crystalline structures and multi-phasal connections of hypertext.

But, of course, for the virtual class, **content slows the speed of virtualized exchange**, and meaning becomes the **antagonistic contradiction of data**. Accordingly, demands for meaning must be immediately denied as just another road-kill along the virtual highway. As such, the virtual class exercises its intense obsessive-compulsive drive to subordinate society to the telematic mythology of the digital superhighway. The democratic possibilities of the Internet, with its immanent appeal to new forms of global communication, might have been the seduction-strategy appropriate for the construction of the digital superhighway, but now that the cybernetic, grid is firmly in control, the virtual class must move to liquidate the Internet. It is an old scenario, repeated this time in virtual form. Marx understood this first: every technology releases opposing possibilities towards **emancipation and domination**. Like its early bourgeois predecessors at the birth of capitalism, the virtual class christens the birth of technotopia by suppressing the potentially emancipatory relations of production released by the Internet in favor of the traditionally predatory force of production signified by the digital superhighway. Data is the **anti-virus** of meaning-telematic information refuses to be slowed down by the drag-weight of content. And the virtual class seeks to exterminate the social possibilities of the Internet. These are the first lessons of the theory of the virtual class.

#### The resolution acts as the latest computer industry, attempting to get debaters to “sell” and “hype” their emergent technology ideas of a new techno-utopian world in an act that secretes ideological bindings and eats debaters alive – the only thing that’ll ever come out of the topic is training on how to be a good little data dump robot for late-stage capitalism

Weinstein and Kroker 94(Arthur Kroker - emeritus professor and adjunct professor of political science at the University of Victoria, Michael Weinstein – Professor of Political Philsophy at Purdue University, “Data Trash: The Theory of the Virtual Class”, New World Perspectives, Pages 14-19, 15 September 1994, MG)

“Public policy” is what goes on **to get the flesh to adjust to the Net**. The greater project is **beyond policy**, transcendent to it-that is the project of wiring bodies to the Net. That everyone will be wired to the information-highway machine is an historical inevitability that puts politics in its place as a local clean-up activity around the Net. This is technotopianism in its purest and most cynical form. Compare it to that other computer entrepreneur, the retro-fascist Ross Perot, who uses the wealth he has gained from the information industry to finance his appeal to a nationalistic policy. The technotopian has no such leanings, but with vicious naivete depends on liberal-fascist allies in government to protect the Net. Gates has identified himself with Technology, the greater power, the one that will finally be decisive. Through the **silent seduction** of the operating-system.

The Virtual Class and Capitalism

The computer industry is in an intensive phase of “**creative destruction**,” the term coined by Schumpeter and used by the neo- Darwinian macho apologists for capitalism to refer to the economic killing fields produced by rapid technological change. The Net is being brought into actuality through the offices of ruthless capitalist competition, in which vast empires fall and rise within a single decade (Big Blue/Microsoft). Under the disciplinary liberal night watchman’s protection of “private” property-rights, capitalist freebooters destroy one another as they race to be the ones who actualize the Net, just like the railroads of the nineteenth-century racing across the continent. This means that the virtual class retains a strict capitalist determination and that its representative social type must be a capitalist, someone who is installing the highway to win a financial competition, if nothing else. If one is not so minded in today’s computer industry they **will be eaten alive**. You will only be able to get personal kicks and pursue your (ressentiment-laden) idealistic views of computer democracy in this industry **if you sell**. So you **hype your ideas** and your **ideals become hype-that is the twisted psychology of the virtual class**: not hyped ideology, but something of, by, and for the Net: ideological hype.

There are pure capitalists in the cyber industry and there are capitalists who are also visionary computer specialists. The latter, in a spirit of vicious naivete, generate the ideological hype, a messianic element, that the former take up cynically. It’s the old story of the good cop and the bad cop. How come the good cop tolerates the bad cop? So much for the computer democracy of cyber possessive-individualists. The economic base of the virtual class is the entire communications industry-everywhere it reaches. As a whole, this industry **processes ideological hype for capitalist ends**. It is most significantly constituted by cynicism, not viciously naive vision. Yet, though a small group in numerical proportion to the whole virtual class, the visionaries are essential to cyber-capitalism because they provide the ideological mediation to seduce the flesh into the Net. In this sense the cynical capitalists and the well-provided techies are merely drones, clearing the way for the Pied Piper’s parade.

A **frontier mentality rules the drive into cyber-space**. It is one of the supreme ironies that a primitive form of capitalism, a retro-capitalism, is actualizing virtuality. The visionary cyber-capitalist is a hybrid monster of social Darwinism and techno-populist individualism. It is just such an imminently reversible figure that can provide the switching mechanism back and forth between cyber-space and the collapsing space of (crashed) perception.

The most complete representative of the virtual class is the **visionary capitalist** who is constituted by all of its contradictions and who, therefore, **secretes its ideological hype**. The rest of the class tends to split the contradictions: the visionless-cynical-business capitalists and the perhaps visionary, perhaps skill-oriented, perhaps indifferent technointelligentsia ofcognitive scientists, engineers, computer scientists, videogame developers, and all the other communication specialists, ranged in hierarchies, but all dependent for their economic support on the drive to virtualization. Whatever contradictions there are within the virtual class-that is, the contradictions stemming from the confrontation of bourgeois and proletarian-the class as a whole supports the drive into cyber-space through the wired world. This is the way it works in post latecapitalism, where the communication complex is **repeating the pattern of class collaborationism** that marked the old military-industrial complex. The drive into the Net is one of those great capitalist techno- projects that depends upon a concert of interests to sustain it, as it sucks social energy into itself. The phenomenon of a collaborationist complex harboring a retro-Darwinian competition is something new, but is stabilized, in the final analysis, by a broad consensus among the capitalist components of the virtual class that the liberal-fascist state structure is deserving of support. Indeed, in the U.S.A. in the 1990s the state is the greatest producer of the ideological hype of the “information highway.” The virtual class has its administration in the White House. The concerted drive into cyber-space proceeds, all in the name of economic development and a utopian imaginary of possessive individualists.

The Hyper-Texted Body or Nietzsche Gets a Modem

But why be nostalgic? The old body type was always OK, but the wired body with its micro-flesh, multi-media channeled ports, cybernetic fingers, and bubbling neuro-brain finely interfaced to the “standard operating-system” of the Internet is infinitely better. Not really the wired body of sci-fi with its mutant designer look, or body flesh with its ghostly reminders of nineteenth-century philosophy, but the hyper-texted body as both: a wired nervous system embedded in living (dedicated) flesh.

The hyper-texted body with its dedicated flesh? That is **our telematic future**, and it’s not necessarily so bleak. Technology has always been our sheltering environment: not second-order nature, but primal nature for the twenty-first-century body. In the end, the virtual class is very oldfashioned. It clings to an antiquated historical form-capitalism-and, on its behalf, wants to shut down the creative possibilities of the Internet. Dedicated flesh rebels against the virtual class. It does not want to be interfaced to the Net through modems and external software black boxes, but actually wants to be an Internet. The virtual class wants to **appropriate emergent technologies** for purposes of authoritarian political control over cyberspace. It wants to drag technotopia back to the age of the primitive politics of predatory capitalism. But dedicated (geek) flesh wants something very different. Unlike the (typically European) rejection of technotopia in favor of a newly emergent nostalgia movement under the sign of “Back to Vinyl” in digital sound or “Back to. Pencils” in literature, dedicated flesh wants to **deeply instantiate the age of technotopia**. Operating by means of the aesthetic strategy of over- identification with the feared and desired object, the hyper-texted body insists that ours is already the era of post-capitalism, and even posttechnology. Taking the will to virtuality seriously, it **demands its telematic rights** to be a functioning interfaced body: to be a multi-media thinker, to patch BUS ports on its cyber-flesh as it navigates the gravity well of the Internet, to create aesthetic visions equal to the pure virtualities found everywhere on the now superceded digital superhighway, and to become data to such a point of **violent implosion that the body finally breaks free** of the confining myth of “wired culture” and goes wireless.

The wireless body? That is the floating body, drifting around in the debris of technotopia: encrypted flesh in a sea of data. The perfect evolutionary successor to twentieth-century flesh, the wireless body fuses the speed ofvirtualized exchange into its cellular structure. DNA-coated data is inserted directly **through spinal taps into dedicated flesh** for better navigation through the treacherous shoals of the electronic galaxy. Not a body without memory or feelings, but the opposite. The wireless body is the battleground of the major political and ethical conflicts of latetwentieth- and early-twenty-first-century experience.

Perhaps the wireless body will be just a **blank data dump**, a floating petrie-dish where all the brilliant residues of technotopia are **mixed together** in newly recombinant forms. In this case, the wireless body would be an indefinitely reprogrammable chip: micro-soft flesh where the “standard operating-system” of the new electronic age comes off the top of the TV set, flips inside the body organic, and is soft-wired to a waiting vat of remaindered flesh.

But the wireless body could be, and already is, something very different. Not the body as an organic grid for passively sampling all the drifting bytes of recombinant culture, but the wireless body as a **highly-charged theoretical and political site**: a moving field of aesthetic contestation for remapping the galactic empire of technotopia. Data flesh can speak so confidently of the possibility of multi-media democracy, of sex without secretions, and ofintegrated (cyber-) relationships because it has already burst through to the other side of technotopia: to that point of brilliant dissolution where the Net comes alive, and begins to speak the language of wireless bodies in a wireless world.

There are already many wireless bodies on the Internet: Many data travellers on the virtual road have managed under the weight of the predatory capitalism of the virtual class and the even weightier humanist prejudices against geek flesh, to make of the Internet a charmed site for fusing the particle waves of all the passing data into a new body type: hyper-texted bodies circulating as “web weavers” in electronic space.

Refusing to be remaindered as flesh dumped by the virtual class, the hyper-texted body **bends virtuality to its own purposes**. Here, the will to virtuality ceases to be one-dimensional, becoming a doubled process, grisly yet creative, spatial yet memoried, in full violent play as the hypertexted body. Always ~~schizoid~~ yet fully integrated, the hyper-texted body swallows its modem, cuts its wired connections to the information highway, and becomes its own system-operating software, combining and remutating the surrounding data storm into new virtualities. And why not? Human flesh no longer exists, except as an incept of the wireless world. Refuse, then, nostalgia for the surpassed past ofremaindered flesh, and hyper-text your way to the (World Wide) Webbed body: the body that actually dances on its own data organs, sees with multi-media graphical interface screens, makes new best tele-friends on the MOO, writes electronic poetry on the disappearing edges of video, sound, and text integrators, and insists on going beyond the tedious world of binary divisions to the new cyber-mathematics of FITS. The hyper-texted body, then, is the precursor of a new world of multi-media politics, **fractalized economics, incept personalities, and (cybernetically) interfaced relationships**. After all, why should the virtual class monopolize digital reality? It only wants to suppress the creative possibilities ofvirtualization, privileging instead the tendencies of technotopia towards new and more vicious forms of cyber-authoritarianism. The virtual class only wants to subordinate digital reality to the will to capitalism. The hyper-texted body responds to the challenge of virtualization by making itself a monstrous double: pure virtuality/pure flesh. Consequently, our telematic future: the wireless body on the Net as a sequenced chip microprogrammed by the virtual class for purposes of (its) maximal profitability, or the wireless body as the leading-edge of critical subjectivity in the twenty-first century. If the virtual class is the post-historical successor to the early bourgeoisie of primitive capitalism, then the hyper-texted body is the Internet equivalent of the Paris Commune: anarchistic, utopian,, and in full revolt against the suppression of the general (tele-)human possibilities of the Net in favor of the specific (monetary) interests of the virtual class. Always already the past to the future of the hyper-texted body, the virtual class is the particular interest that must be overcome by the hyper-texted body of data trash if the Net is to be gatewayed by soft ethics

### Debate Shapes Subjectivity

#### The way we play the game of debate matters – the choice of arguments, the languages we use, and the connections we make inside the space all implicates debaters as subjects

August 21 (Vincent August PhD - postdoctoral researcher in political and social theory at the Department of Social Sciences. He has been a visiting researcher at UC Berkeley, “Network concepts in social theory: Foucault and cybernetics”, European Journal of Social Theory, 17 February 2021, <https://journals.sagepub.com/doi/full/10.1177/1368431021991046>, MG)

Cyberneticians believed that this ‘old’ world view increasingly fails to grasp the growing complexity of the world. Therefore, they called for a new way of thinking, a ‘new world view’ (e.g. Ackoff, 1979, p. 96). The polemic call for a new mind-set that follows from the narrative of rising complexity survives in Foucault’s writings (e.g. Foucault, 1994, IV, p. 108) and in nowadays rhetoric of network theory and network governance (e.g. Eggers, 2008, p. 28; Raworth, 2017). To overcome the ‘old’, ‘insufficient’ models, early cybernetician W. Ross Ashby (1956, p. 1) already proclaimed a revolutionary shift towards an operational epistemology that disposes of the ontology inherent in humanism and mechanics by switching the attention from what to how and from essence to doing: ‘Cybernetics [ ... ] does not ask “**what is this thing?” but “what does it do**?”’ (original emphasis).

For developing this operational approach, cyberneticians invented a range of concepts that are abstract enough to deal with any assembly of elements and to model how these elements may connect to do something (Beer, 1959, 1967, pp. 9–10). Presenting ‘connectivity’ as the core idea of cybernetics, Stafford Beer once advanced five models of connectivity in a single paragraph – machines, systems, networks, diagram and electric circuits:

A machine is a system, a set of points joined together by certain specified relationships. Therefore we may set up as its model a simple network. [ ...] The lines by which these dots are connected reveal the possible modes in which the system can operate. [ ...] A schematic diagram [ ...] can obviously be drawn [ ...]. This diagram will bear a marked resemblance to any representation of an electric circuit. (Beer, 1967, p. 95, original emphasis)

Beer’s explanation illustrates that cybernetics defined a set of models to conceptualize **connectivity**, in which **one model is used to explain another model**, creating a paradigm to describe reality: an assembly of elements is like a system, is like a network, is like a diagram and so on. In that manner, the apparatus of cybernetics encompasses graphical models (flow charts, diagrams, esp. circuit diagrams), material models (machines and computers), conceptual models (network, system) and mathematical models (matrices).1 Finally, and despite their critique of rational choice theory, cyberneticians adopted the **model of games, strategy and tactics**, because it enabled them to describe connectivity and complexity from the perspective of actors without conceptualizing them in humanistic terms (Dupuy, 2000, pp. 61–62).

As the adoption of game-theoretical metaphors illustrates, the different models have their own strengths and weaknesses. While the concept of a system is very abstract, allowing for an application to any arbitrary assembly of elements, networks and diagrams are much more intelligible in describing the idea of connectivity. Because of that, they also help to understand two general epistemological premises of cybernetic modelling. First, there is a multiplicity of **interdependent relationships that condition each other**. The opportunities of an element a to connect with another element b are **influenced by the connections among the elements c, d and e,** as well as the chosen ‘**strategy’ of element a will influence the opportunities of the elements c, d and e**. Secondly, the complexity is even higher as there is also a relationship between actualized and potential connections. The diagram, for instance, demonstrates that some connecting lines between the elements are active in each moment, whereas others are inactive but could have been chosen or might be chosen at a different point in time. What we can observe, therefore, is neither the essence of a thing nor the identity of a person, but only **one possibility actualized at given moment.**

Here lies a radical consequence of shifting the attention from essence to doing, which was finally explicated by second-order cybernetics: Systems or networks only exist in doing, in processing, in reproducing their elements and their relations in real-time (e.g. Maturana & Varela, 1980). Exploring these processes of ordering, cybernetics adopted the concepts of emergence and evolution. ‘Emergence’ means that some pattern appears as the elements in a network **relate to each other**. This emergent order and its possibilities are not intended; they are simply an effect of simultaneous coordination in the network. Yet, as the **relations reproduce themselves in response to changes in the network and in its environment**, the pattern of the network transforms – which is called ‘evolution’. In contrast to stable identities that develop coherently over time, emergence and evolution are erratic, unintentional and irreducible to former formations. Second-order cybernetics thus undermined modern theories of identity and linear history alike.

A new concept of ‘governance’: Circularity, self-regulation, diversity

In line with their categorical rejection of Newtonian mechanics and ontological philosophy, cybernetics also came to refuse linear-causal and mechanistic concepts of steering, in particular hierarchical forms of organization, command-and-control approaches and central planning. Cybernetics thought of those models of regulation as ‘primitive’ and ‘naı¨ve’ (Beer, 1967, p. 21), because they are based on a reductionist idea of causality and imply that systems can be steered intentionally and hierarchically. While this critique targeted the models of modern science (not political decision-making), some cyberneticians argued that the ‘old’ rationality also yields insufficient concepts of government and power. According to Beer (1967, p. 21), for instance, those concepts still dominate post-war societies and simply identify control with coercion. In either case, cyberneticians believed that in refusing such simplistic models cybernetics would offer a new, more accurate understanding of control.

The cybernetic concept of control (or regulation) entertains two fundamental shifts. On the one hand, it maintains that regulation is a universal and ubiquitous phenomenon. While there are no systems (and no societies) without regulation, regulation rarely takes the form of coercion or linear causality. This is because complex systems are ‘highly differentiated’, which prevents them from being easily steered from a control centre. Rather, the interdependent elements in a network **regulate themselves via mutual influence**. Each element in a system is shaped by connecting processes and, at the same time, it shapes those processes by **redirecting the flow of communication**. In other words, cybernetics argued that regulation is but the name for the circular processes of communication and coordination (Beer, 1959).

To model circularity, early cyberneticians introduced the term ‘feedback’ (Rosenblueth et al., 1943). It described that a system uses its output as its input. Early cybernetics started from observing systems that minimize the difference of its actual output to a specified goal (negative feedback). This focus on quasi-teleological or purposive mechanisms of goal-attainment, however, soon was criticized. First, Ashby argued that complex ‘homeostatic’ systems would randomly seek their own viable patterns, rather than to orient towards a given goal (Kline, 2015, pp. 52–53). Then, second-order cybernetics developed this thought even further by arguing that input and output are not even objective terms. Instead, what counts as input is determined by the processes inside the system: ‘an organism does not **receive “information” as something transmitted to it, rather, as a circularly organised system it interprets perturbations as being** **informative’** (Scott, 2004, p. 1369).

This conceptual clarification radicalized cybernetics’ idea of control as self-organization. First-order approaches already argued that the elements of the networks regulate themselves by their own ‘**language’** (Beer, 1959, p. 5) or ‘codes’ (Ashby, 1956, p. 140). To generate resonance inside a system, you **must connect to those codes rather than to exercise command**. But second-order cybernetics was even more rigid. According to them, the environment of a system is only ‘noise’ until the systems selects on which turbulences in the stream of noise it is going to act (Clarke, 2009; von Foerster, 1984). Because there are so many connections and co-dependencies in a network (and in a network of networks), systems are completely self-organized. Complexity and selforganization go hand in hand.

It is obvious by now that these ‘governance’ concepts are descriptive and normative. The descriptive aspect is that (according to cybernetics) complex systems have internal processes that are highly differentiated and flexible, which allows them to deal with massive amounts of complexity and contingency in their environment. This observation is famously stated by Ashby’s ‘law of requisite variety’ (1956, pp. 202–213). It is, however, easily turned into a normative statement: If you do not want to undermine highly complex systems, command-and-control approaches are the wrong way to go. Complex systems depend on diversity, flexibility and self-regulation, because they allow them to innovate, experiment and ‘design’ new answers in response to a highly volatile environment. Here, cybernetics has an **inherent link to aesthetics and style** (Ackoff, 1979, p. 101), as those answers are **not ‘the one best way’** (as searched for by rational choice approaches) but **only one ‘viable’ way** found through the creativity that is unlocked by diversity and self-regulation. Cybernetics, thus, offered a theory of difference that undermined concepts of ontological identity, economic rationality and political integration.

### Treeness Poem

I once knew an artist

actually a Princess

who loved “**treeness**”

**but not trees**,

**flowerness**

but not **flowers**,

**greenness**

but not grass,

**humanity**

**but not people**

She had all the money in the world

She was the **Princess of the digital woods**

One day she awoke

and decided she wanted to make

the art of “treeness”

the sounds of treeness

the **codes** of treeness

the interfaces of treeness

the soft images of treeness

So she gathered in her new age electronic court

all the most famous artists in the kingdom

the best **composers and designers and programmers**.

When they were assembled there,

the Princess came down from her wired throne

and said: “**GIVE ME TREENESS**”

So the artists went back to their studios

and began to have **visions of treeness**.

In early spring,

just as the leaves were budding

on the trees

they returned to the electronic court of the Princess

with **wires** and multi-media **graphical interfaces**,

MIDI processors, digital scans, recombinant images,

**hard disks, ram, device-drivers**,

and 3D accelerators, just **oozing with treeness**

And the Princess said:

‘This is good. You have discovered with my guidance

**true treeness**.

But we must take our true treeness

to the oldest tree in the woods

the wise old oak tree”.

And so they did

They **hard-wired the old oak tree**.

Soon,

sounds and images and texts of true treeness

became the digital sap of the old oak tree.

But what **sounded good** at the digital court

sounded **horrid** in the woods

kitschy and silly

whimpy, foolish, and sorry

Because

between true treeness and the trees

between soft(ware) oak and hard oak

between dry codes and the organic tree

between the Princess and her fabulous dreams

there was oak wetware - an interface problem:

For no one asked the oak tree

if it **liked** digital codes for sap

computer networks for branches

pixel leaves

a recombinant memory of seasonal changes or,

What is the the sound of a falling oak in a digital forest

if no microminions are around?

The Princess was angry

looking up at the old oak tree, she screamed:

‘**WHERE IS MY TREENESS?”**

“You can’t buy treeness with money, my Princess,”

said the old oak tree.

“**To find true treeness, you must look to the trees**!”

**Kroker** and Kroker **96** (Arthur Kroker - emeritus professor and adjunct professor of political science at the University of Victoria, Marilouise Kroker - feminist scholar, publisher, editor, writer, theorist, and performance artist, “Hacking the Future: Stories for the Flesh Eating 90s”, New Worlds Perspectives Montreal, Pages 26-28, 1996, MG)

#### Welcome to the electronic court of the Princess fellow programmers and artists! We have been asked to envision and provide “treeness” in the form of our thoughts, desires, and subjectivities to the “Princess” A.K.A. the resolution. Now, it’s up to you, will you infect the world with digital sap and pixel leaves? Or will you look to the trees!