Expanding Consciousness or Cognition?

Digital Media, Transcendental Sensibility and the Problem of 'Protention'

“Perhaps if the future existed, concretely and individually, as something that could be discerned by a better brain, the past would not be so seductive: its demands would be balanced by those of the future” (Nabokov, *Transparent Things*).

How we humans experience time

How and why time is the “content” of experience

What role media plays in our experience of time

How shift to digital technics broadens and diversifies temporal scope of mediation, and thus of experience

KEY QUESTIONS

Digital revolution = revolution in the temporal infrastructure of lifeworld

Expansive impact of computation on life: financial markets, socialization processes, scientific research, self-expression, etc.

Digital technics involves operation of microtemporal processses that evade experiential grasp

At once a challenge to and an opportunity for human as a form of life essentially coupled to environment

DIGITAL TECHNICS

Paul Virilio speaks of the “urbanization of real time which is, at the end of the day, the urbanization of the actual body of the city dweller, this *citizen-terminal* soon to be decked out to the eyeballs with interactive prostheses based on the pathological model of the ‘spastic,’ wired to control his domestic environment without having physically to stir.” For Virilio, this presents a “catastrophic figure of an individual who has lost the capacity for immediate intervention along with natural motricity and who abandons himself … to the capabilities of captors, sensors and other remote control scanners that turn him into a being controlled by the machine….”

APOCALYPTIC RECEPTION

I concur with Virilio's argument that computation has materially transformed life

Our dependence on computers entails the encounter of processes belonging to vastly divergent timeframes

Humans synthesize intentionally-unified temporal experiences on the basis of a diverse sensory manifold

Computers perform algorithms by executing discrete microtemporal cycles

DIVERGENCE

Opportunity to rethink the correlation of humanity and machinism

We must invest in the tension between human experience and computation as a source for creativity of sensation

Embrace the technical difference of the digital – microtemporality of computation – as source of temporal heterogeneity

Opens new sensorial domain: contact with material fluxes that are radically alterior to human consciousness and its timeframe(s)

OPPORTUNITY

Foregrounds temporal dimensions of human life that are *beneath* consciousness: neural and bodily temporalizations

Correlates with technical distribution of cognition (Hutchins, Thrift, Clark): human cognitive activity can no longer be located exclusively or primarily *in the brain*

Cognition occurs through systems that couple humans and sociotechnical scaffolds

TEMPORAL SHIFT

Humans and machines become functionally coordinated at timeframes that are *beneath* consciousness and thus "outside" of human experience understood as phenomenological experience

Operation of cognitive system remains opaque to consciousness: consciousness no longer "master" of cognition (something similar can be said for the role of neural processes in onboard cognition)

SYSTEM

Supplementation model: focuses on how technology *supplements* the human, and in particular, human memory

Distribution Model: focuses on how technology draws human cognitive activity out of its autopoietic closure in order to involve it in technically-distributed cognitive systems

2 MODELS

Longstanding history in Western philosophical thinking: Plato on writing; Derrida, “retentional finitude”

Technics can be identified with media: its function is to provide external material support for thought and experience

SUPPLEMENTATION MODEL

Focus on writing too narrow and too abstract

Media differentiation in the 19th century

Differentiates the transcendental field: experience is conditioned by a plethora of technical mediations spanning diverse timescales

STIEGLER: TECHNICAL SPECIFICITY

Technical recording allows us to experience the exact same “temporal object” more than once

Gives insight into the archaeology of memory: we can realize that what differentiates new experiences is the selective impact of past experience on new experience

My second hearing or viewing of a media object is necessarily influenced by my memory of my first hearing or viewing

SPECIFICITY OF RECORDING

"…the structure of consciousness is … thoroughly cinematographic, if one considers the 'cinematographic' in general as that which operates by the editing of temporal objects. …in all recollection of a past temporal object, there necessarily is a process of revision of the rushes, editing, … slowing down, speeding up, etc. … Since this selection firstly affects primary retention itself [that is, the production of new experience], we can say now that consciousness is always … the editing of primary, secondary, and tertiary memories by themselves" (Stiegler, "The Time of Cinema")

CONSCIOUSNESS *IS* CINEMATOGRAPHIC

Cinematic temporal objects of various sorts (films, TV shows, live broadcasts, etc.) furnish objectifications of the temporal flux of consciousness that allow it to grasp its own passing

Technical mediation of the Husserlian temporal object: if the melody allows for the experience of “thick now” (impression together with retention and protention), cinematic temporal object submits this experience to control by an external, technical institution and temporality

CINEMA-CONSCIOUSNESS HOMOLOGY

Point is not just that consciousness can be modeled on a temporal object like the melody, but rather that time-consciousness in the media age *is unavoidably structured through and by means of* cinematic temporal objects

Films, TV shows, etc. furnish the *content* of consciousness: the content with which consciousness temporalizes

We envision the future and produce new experiences by selectively processing an archive of past experiences comprised largely of recorded "tertiary" memories

Result is a massive standardization of experience: because of our reliance on archive of recorded memories manufactured by Hollywood, popular culture, and advertising, we lack resources to produce meaningful symbols, singular experiences and open-ended expectations for the future

CONCLUSIONS

…that media correlates rigidly and exclusively with consciousness

Media just is the extension of consciousness, and nothing other than this

Stiegler helps us grasp key role of temporal homology: in order to supplement consciousness, media *must operate* at the timescale of consciousness

Result: massive restriction of media's operation, and its impact on experience, to experiential timeframe of human consciousness

BASIC ASSUMPTION…

This restriction is benign so long as technical basis of media is temporally homologous with human experience

Film, phonography: store precisely what can be apprehended by human consciousness in a form that facilitates this apprehension

Experience is captured technically in the same form as it is disseminated sensorily

PRE-COMPUTATIONAL MEDIA

Media that are built upon digital technics

Involves degree of complexity not present in earlier media

Functional distinction between two levels: technical level and presentational level, computation and screen (Manovich)

SPECIFICITY OF DIGITAL MEDIA

For the first time in media history, technical level can be disjoined from presentational level and invested as site for artistic production

With advent of “digital media,” technics sheds its subordination to media understood as surrogate for consciousness

Technics as agent for media effects that do something other than expand operation of consciousness

EMANCIPATION OF TECHNICS

How do we account for the sensory dimension that is accessed and thus opened up by the disjunction of technics from media?

Can and how can we experience temporalities that lie beneath the phenomenological threshold of perception?

Transcendental sensibility (Deleuze): sensibility that is not available empirically, through consciousness

Designates sensation's source in microsensibility that occurs prior to and independently of felt sensation

KEY QUESTION(S)

Whereas cinema artifactualizes the selectional process of time-consciousness, digital media operates on a non-selectional memory (database)

Offers a logic of temporalization fundamentaly different from the synthesizing process of phenomenological time-consciousness

Digital *media* puts us into recursive coupling with digital *technics*

Mediates *between* the mictotemporal scale of computation and macroscale of human time-consciousness

DIGITAL MEDIA VS. CINEMA

Mediates human experience in durable, repeatable and transmittable form

AND mediates the infrastructure of computation: the technical conditions that make experience, and its mediation (in the first sense), possible

Hence mediates the technical basis of media

ADDITIONAL ROLE OF MEDIATION

Emphasis on connectivity and many-to-many relation facilitated by internet

Explosion of user-generated content has refocused the function of computational media from storage to production, from archiving of individual experience to generation of collective presencing (connectivity)

What is mediated is not past experience so much as technical capacity to connect on massive, many-to-many scale

Transmission of media mediates the situation of the user in the regime of networked computation

WEB 2.0 AND TRANSCENDENTAL TECHNICITY

Key role of the disjunction between technics and media in Web 2.0: can be deployed to open new experiential possibilities that exploit the transcendental technicity of computational media

Networked transmission of media is built on top of a technical infrastructure that remains structurally dissociated from the content of that media and that operates at temporal scale far finer than human perception

Key question: how can we tap this disjunction as productive source for new kinds of experiences?

DISJUNCTION VIA NETWORKING

Unlike Web 2.0 industry, artistic engagements with social networking need not suppress the disjunction between media output and technical basis

Whereas Web 2.0 companies offer new functionality (connectivity) by transmitting familiar media in ways that avoid drawing attention to transcendental technicity, artists can directly engage this latter and the sensibilities it opens

ROLE OF ART

MARIO KLINGEMANN

Argument: within phenomenology, protention is symmetrical to retention, and in fact dependent on retention/memory: we 'protend' anticipated experiences (future contents) on the basis of expectations from past experience

Ultimately this means that we can only envisage a future that can be expected, given what our past experience has been: problem of where the new comes from

THE PROBLEM OF 'PROTENTION'

"…the function [of the culture industries and industries of programs] is to fabricate … collective secondary protentions that have been submitted to the interests of capital, at the risk of rendering totally inaccessible all consistent projections, that is to say, all protention of what, precisely because that does not yet exist, consists and confers on the existent its singularity" (*Mécréance et discrédit*).

In effect, Stiegler blames capital for a problem that is *endemic* to phenomenology: impossibility for the "closed-system" of consciousness to produce anything unexpected

STIEGLER ON PROTENTION

This precise issue motivated Husserl to revisit the problem of protention

Limitations of time-consciousness analysis: remains abstract and needs account of how consciousness is affected by impressions coming from outside consciousness (*Analyses Concerning Passive Synthesis*)

Effectively, this underscores the limitations of time-consciousness: can't constitute time (as Husserl initially believed); rather, consciousness comes into being by being affected by time

Protention as *Triebsintentionalität*: what is anticipated is that something will happen, not what will happen (event not content)

LATER HUSSERL

Concept of “verzeitigen” (*de-presencing*)

Underlying idea that human time-consciousness depends on worldly temporalizations (which, importantly, can include bodily and neural temporalizations)

Protention becomes something like openness to that which comes to consciousness from the outside and which, crucially, need not be temporally homologous with it

EUGEN FINK

Replace transcendental ego with notion of transversal intentionalities: these are effectively a myriad consciousnesses of that correspond quite simply to the flux of experiences

"It is typical of Husserl … that he *never resorted* to any synthetic power of the I. It is consciousness that unifies itself, concretely, by an interplay of 'transversal' consciousnesses that are real, concrete retentions of past consciousnesses" (Sartre, *Transcendence of the Ego*).

SARTRE

“solves” the two problems of Sartre’s concept transversal intentionality: 1) *pour soi* as founding principle; 2) absence of protentional vector of transversality

Transversality liberated from ego and associated with the experience of machinic processes: “all the machinic systems, no matter which domain they belong to – technical, biological, semiotic, logical , abstract – are the support … of protosubjective processes” (*Cartographies Schizoanalytiques*).

FÉLIX GUATTARI

“Today, it is the machine which is passing under the control of subjectivity, not of a reterritorialized human subjectivity, but of a machinic subjectivity of a new sort” (Guattari)

Openness to time of computation: “With the temporality opened up by micro-processors, enormous quantities of givens and of problems can be treated in the space of miniscule times, such that new machinic subjectivities do not cease to operate in advance of the challenges and the stakes with which they are confronted.”

TRANVERSALITY AS DISTRIBUTED COGNITION

More flexible and heterogeneous range of timescales than consciousness

Overlap at microtemporal scales with computational time?

Independence of neural processes from higher-order emergences (consciousness): versus the project to “naturalize” phenomenology

“The neuronal and the mental resist each other and themselves, and it is because of this that they can be linked to one another, precisely because – *contra* Damasio – they do not speak the same language” (Catherine Malabou, *What Whould We do With Our Brain?*)

Parallels the independence of transversal intentionalities from the transcendental ego

NEUROSCIENCE

William Connolly, *Neuropolitics*: “But what happens if we set the half-second delay not in a supersensible domain but in the corporealization of culture and cultural inscriptions of corporeal processes? What I many messages flowing between multiple brain regions of differential capacities in the same person are two small and fast to be identified by consciousness but are, nonetheless, amenable to some degree to culural inscription, experimental research, and technical intervention.”

TAPS MICROTEMPORAL DOMAIN OF CULTURE

"The guiding question… should thus be formulated: *What should we do so that consciousess of the brain does not purely and simply coincide with the spirit of capitalism?* We will formulate the following thesis: today, the true sense of plasticity is nidden, and we tend constantly to substitute for it its mistaken cognate, *flexibility*. … what flexibility lacks is the resource of giving form, the power to create, to invent or even to erase an impression, the power to style. Flexibility is plasticity minus its genius. Humans make their own brains, and they do not know that they do so. Our brain is a work, and we do not know it. Our brain is plastic, and we do not know it. The reason for this is that most of the time flexibility superimposes itself on plasticity…" (Malabou).

PLASTICITY NOT FLEXIBILITY