

World Knowledge Dialogue

Le futur de la culture : Financement et gouvernance à l'ère numérique

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Circulation of Creation & Cultural Globalization

**From Attentional Capitalism
to Cultures of Curiosity**

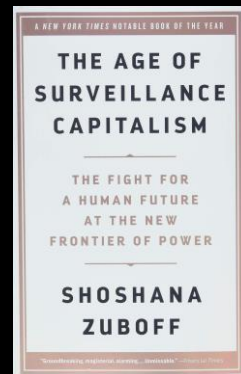
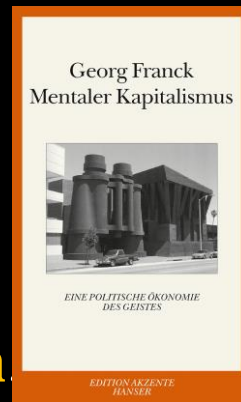
From Attentional Capitalism to Cultures of Curiosity

- 1) Attentional Capitalism**
- 2) Attention + Distraction = Curiosity**
- 3) Can There Be a ‘Curiosity Economy’?**
- 4) AI: Curiosity in Latent Space**
- 5) The Future of Culture**

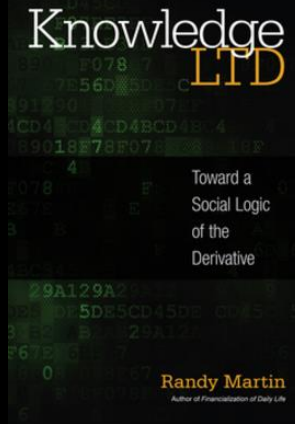
Attentional Capitalism

Attentional Capitalism

1. Our 21st century cultures are intrastructured first and foremost through **the commodification of our attention**.
2. The ubiquitous commodification of attention generates a **captological arms race** that saturates our communications with **saliences** and subordinates informative content to captological potential.
3. Human attention is in large part directed towards (other people's) attention: it is **meta-attentional**.
4. Surveillance capitalism is geared towards the tracking of our attentional moves only insofar as it attempts to monitor and predict our future behavior (in order to sell these **predictions of normality**).



Attentional Capitalism



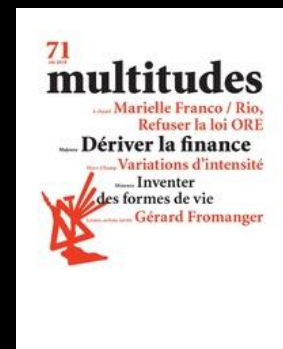
5. The **dynamic structure of capitalism** is based upon adopting “meta” position, which financial derivatives only redouble at a higher level of abstraction.

M – C – M': Money (M) is only invested in the production of Commodities (C) in order to generate a surplus of Money (M') as the result of the commercial process.

C – D – C': Capital (C) is only invested in the heuristic of risk and opportunities in the form of Derivatives (D) in order to generate a surplus of Capital (C') as the result of the financial process.

6. **Surveillance capitalism does to the attention economy what derivatives have been doing to capital.**

CK – A – C'K': Computational Knowledge (CK) is only invested in the monitoring of Attention (A) in order to generate a surplus of Commodifiable Knowledge (C'K') as the result of the surveillance process.

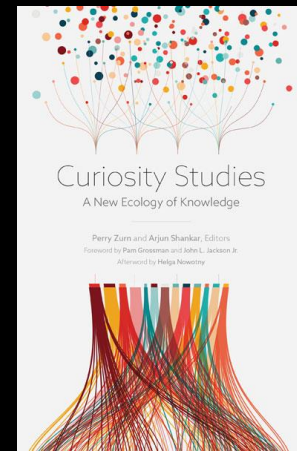


Attention + Distraction = Curiosity

Attention + Distraction = Curiosity

Manichean approaches to **attention**

unquestioned task orientation, ADHD diagnoses,
blaming the distracted, concentrationist biases



Reconsidering the emancipating virtues of **distraction**

(North 2011, Pettman 2016, Aloisi 2020, Zabunyan & Sztulman 2021)

The rise of **curiosity studies** since 2016

(Blumenfeld 1966, Benedict 2001, Inan 2012 & 2016, Mišcevic 2020,
Zurn 2020, 2021, 2022)

Today's challenge: **Reevaluating curiosity from a
psychological (individual) bug to an infrastructural
(collective/ecological) feature**

Attention + Distraction = Curiosity

Many definitions of curiosity

Berlyn (1960): curiosity as *optimal arousal*

Loewenstein (1994): curiosity as *information gap*

Chater & Loewenstein (2016): curiosity as *a drive for sense-making*

Kashdan & al. (2017): the *five-dimensional curiosity scale* :

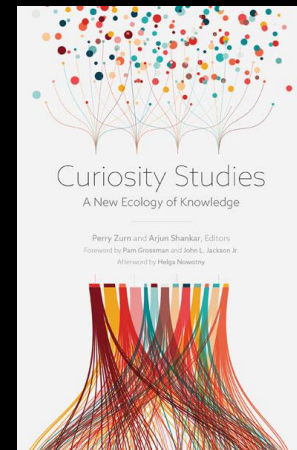
Joyous Exploration

Social Curiosity

Deprivation Sensitivity

Thrill Seeking

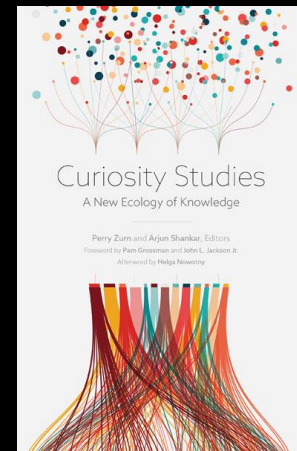
Stress Tolerance



Attention + Distraction = Curiosity

Attention

Curiosity



Unequivocally good

Condemned by moralists

Gender neutral (or associated with men)

Strongly associated with women
(Eve, Pandora, Bluebeard, etc.)

Exogenous (subjected to *'push'*)

Endogenous (inner drive to *'pull'*)

Subjected to authority

Attracted to the forbidden, unruly

Directional & figural focus (*'known unknowns'*, *monopragmosunè*)

Background & 360° (*'unknown unknowns'*, *polypragmosunè*)

Structural separation between the subject and the object of attention

Dynamic feedback between curious objects and curious subjects

Can There Be a 'Curiosity Economy'?

Can There Be a ‘Curiosity Economy’?

Curiosity Economy

Zachary Wojtowicz & George Loewenstein 2020: “Curiosity and the Economics of Attention” : curiosity as *an opportunity-cost theory of attention-directing motivational states* :

curiosity exists to direct attention in a way that does not itself require the expenditure of attention. It partially relieves serial, deliberative cognitive faculties from the burden of calculating the relative value of redirecting attention by offloading this task to parallel, associative faculties. These automatic evaluations — formed associatively on the basis of sensory cues — are then re-incorporated into deliberative decision-making as hedonic modifications to the attractiveness of maintaining or redirecting attention.

=> Curiosity operates as a more-than-stochastic short-circuiting of attention

Can There Be a ‘Curiosity Economy’?

- A. **Our ‘attention economy’ already is a ‘curiosity economy’** (advertisement campaigns, teasers, etc.).
- B. **The commodification of our attention** (=what my perception is currently geared to sense) by ‘surveillance capitalism’ is different from **the commodification of curiosity** (=my inner drive to **overflow/outflank** (*déborder/dérivée*) the already-known).
- C. **Curiosity is a moving force of epistemic derivation:**
For every known object of attention (O), curiosity pushes me towards another (yet unknown) object of possible attention (O’)
Curious things trigger the desire to *déborder/dérivée* (“outbank”) the preexisting objectal categories
- D. **Financial derivatives could be seen as a ‘curiosity economy’** (if arbitrage and speed trading are more-than-Brownian)

Can There Be a 'Curiosity Economy'?

Curiosity as a more-than-stochastic short-circuiting of attention

=> The (Capitalist) Curiosity Economy of Financial Derivatives

CA – KU – C'A': Curious Attention (CA) is only invested in Known Unknowns (KU) in order to profit from temporary value differentials in our Common Attention (C'A') (with performative self-fulfilling side-effects)

=> A (Post-Extractivist) Curiosity Ecology

CA – UU – UE: Curious Attention (CA) is invested in search of Unknown Unknowns (UU) in order to notice and identify Unsuspected (positive or negative) Externalities (UE) measured according to their use-value

Curiosity in Latent Space

Curiosity in Latent Space

Automating Artificial Curiosity

Pierre-Yves Oudeyer, Frédéric Kaplan & Verena V. Hafner,
“Intrinsic Motivation Systems for Autonomous Mental
Development” (2007)

present the mechanism of Intelligent Adaptive Curiosity, an intrinsic motivation system which pushes a robot towards situations in which it maximizes its learning progress. This drive makes the robot focus on situations which are neither too predictable nor too unpredictable, thus permitting autonomous mental development.

Curiosity in Latent Space

Automating Artificial Curiosity

Rachit Dubey & Thomas L Griffiths, “Understanding exploration in humans and machines by formalizing the function of curiosity” (2020)

Recent work in machine learning has demonstrated the benefits of providing artificial agents with a sense of curiosity — a form of intrinsic reward that supports exploration.

Curiosity in Latent Space

AI : Statistical induction processed by Large Language Models (ChatGTP) operates by exploring a computational “**latent space**”: a mathematical structure assigning the probability for a word/pixel to be followed/neighbored by another word/pixel

This latent space results from **centuries of curious investigations** by (Western dominated) mankind

By being a statistical average, however, **current IA tends to downplay eccentric curiosities** as it tends to align them with the majoritarian mean

Curiosity in Latent Space

What we need are **non-instrumental experimentations** of the curiosities contained in the latent space (Grégory Chatonsky)

The power of automated curiosity ought to be *played* with, in order to **overflow/outbank the mean** towards which current AI drives us

The current extractive attention economy sells AI as an automated (cheap) and authoritative (reliable) **consultancy**: this attitude is the main danger in AI

AI needs to be reframed and retooled as **a generator of unimaginable/unthinkable unknowns** (curious things).

The Future of Culture

The Future of Culture

The current ecocide results from **a culture of incuriosity**

- developed over four centuries by the colonial Western ethno-class
- currently fueled by the commodification of our attentions
- potentially reconducted by the promotion of AI as consultancy

Our future rests on our capacity to **trans*ition**

- from fossil fuels to cleaner energies (an illusion?)
- from financial capitalism to post-extractivist forms of reproduction
- from one genre/praxis of being human (*homo oeconomicus*) to another form of genre/praxis of being human (a cultural mutation)



The Future of Culture

In **financial derivatives**, the power of curiosity is perverted by obsolete property rights: *the LTD firm* as an agent of limited liability pooling strictly individual interests geared by individual profit

In current forms of **AI**, the power of curiosity is appropriated/ alienated to make us converge towards incurious means

=> The **future of culture** rests on our capacity to nurture infrastructures allowing curiosity to overflow/outflank (*déborder/dérivée*) the ecocidal constraints of the current world system (with its attention economy and computational consultancies)

The Future of Culture

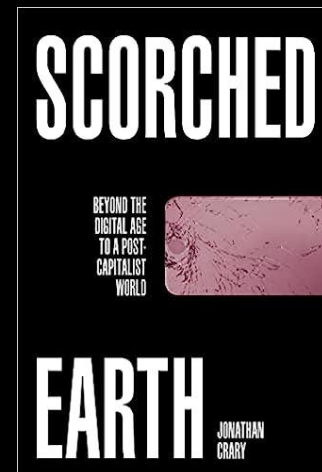
The future of culture depends on the development of **cultures of curiosity:**

- => Placing the culture of curiosity at the core of our educational systems
- => Restructuring our media systems in order to foster curious investigations from all participants in social life
- => Redesigning our interfacing with the Internet on the basis of epistemic curiosity (rather than affective exploitation) **(web3 ?)**

The Future of Culture

Five geriatric questions to the morning speakers

- 1) do web3 economics (blockchains, NFTs, DAOs) allow us to ***by-pass the commodification of attention?***
- 2) do they allow ***use-value*** (pleasure-value? emancipation-value?) to be ***in the driver's seat***, instead of the passenger seat of financial profit
- 3) under what conditions can web3 derivatives outbank the “meta-” structure of capitalism (M-C-M’), in order to ***connect supply to needs*** without the (ecocidal) detour by ‘greed’?
- 4) what types of ***blockchains as engines of curiosity*** can be conceived to overcome the current apparatuses of capture of attentional capitalism?
- 5) how can blockchains accomplish such miracles ***without ‘scorching’ our planet*** to provide the necessary amounts of computational power?



From Attentional Capitalism to Cultures of Curiosity

Thanks for you attention...

... for your curiosity ...

... and your distractions

This reflection has been elaborated in collaboration with **Enrico Campo**, in preparation of a co-edited Routledge collective book on *Attention, Distraction and Curiosity*.

The first section of this presentation has been published as « Attentional World-Making, Meta-Attentional Derivatives, and Hyperstitional Ambivalence » in Warren Neidich, *An Activist Neuro-Aesthetics Reader*, Berlin, Archive Books, 2022, p. 370-387.

