
Panels: M.16 Digital Transformation and democratic regeneration

**MEDIA EDUCATION, COMPLEXITY, AND DISPOSITIF: HOW
ALGORITHMIC GOVERNMENTALITY SHAPES USER
EXPERIENCE THROUGH DARK DESIGNS, GAMIFICATION
AND DISTRACTION**

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INTRODUCTION

- Hypercomplex Society (Dominici, 2016).
 - “The world we must deal with politically is beyond our reach, beyond our field of vision, beyond our thoughts. It must be explored, reported, imagined. Man is not an Aristotelian god capable of contemplating the whole of existence at a single glance” (Lippmann, 1961, p. 29)
 - Today Vallor (2016): Acute Technosocial Opacity and Technological Convergence;
 - Synergy of 'NBIC' Technologies.Hans Jonas and Technosocial Ethics...
 - New Problems of Collective Moral Action
 - Included technosocial practices of the Internet: cybercrime, Big Data analytics, cyberwarfare, etc.
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ALGORITHMIC GOVERNMENTALITY, OPACITY AND FLUIDITY

- Algorithmic governmentality (Rouvroy, 2016; 2022; Rouvroy & Berns, 2013)
 - Strategic «art of government»: data, human experiences, and the same evaluation.
 - Datafication of "infra-individual fragments" of experience.
 - "Supra-individual" reworking that bypasses the individual.
 - No meaningful consensus or negotiation.
 - Surveillance capitalism (Zuboff, 2019) and Pasquale (2015), Srnicek (2017), Bratton (2016) e Van Dijck et al. (2018), etc.
 - Planetary assembly (cables, data and cloud centers, satellites, etc.).
 - Autonomous-driven network (ADN) driven by AI (Boutocentent et al. 2025; Ogenyi, Ugwu & Ugwu; 2025)
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- Macro-system with a Black Box, even for insiders (Lo, 2024; Mann et al., 2023).
 - Shift in perspective...Ecosystems marked by black boxes, opaqueness, retroactive, recursive, nonlinear, or paradoxical effects (Morin, 1988).
 - Fluid world, in which socio-cultural and institutional spheres have lost their identity, function and legitimacy (Bauman, 2011; Polieri, 2002).
 - Young people risk losing the profound meaning of existence and critical subjectivity
 - Replacement with an uncritical life and subjected to «screens» (Valiaho, 2014)
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BEYOND TECHNICAL LITERACY

- Media Education beyond technical literacy and critical thinking, whose position was already historically occupied by formal and informal logic (Stojanov, 2022). A Media Education that embrace a radical and truly transformative humanistic dimension.
 - Recalling Fromm (1978), complex and systemic thinking (Morin, 1988), slowness (Maffei, 2014; Zavalloni, 2008), and an ethics of care.
 - Established paradigms, such as Critical Media Literacy or AI & Algorithmic Literacy and sub-paradigms a digital pedagogy based on the triad is lacking.
 - Fake news, disinformation, polarization: Structural system anomalies (the "tip of the iceberg"), not individual behaviors.
 - True digital critique: Requires analyzing "neuropower" and the "device of the mind" (Gatti, 2019) beyond mere algorithms.
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- In this sense, Gatti (2019, p. 122) writes:

By the term 'device' I would like to include the set of procedures, circuits, and cycles of perception-action-reasoning that operate along the central nervous system (intraneural) but are mutually dependent and correlated with changes in the body and the natural, historical, and cultural environment (extraneural). [...]. In a certain sense, the mind's device is always a metadvice : it arranges our neural architecture so that, within certain limits [...], it continuously integrates and modifies its dispositions.

THE MECHANICS OF DIGITAL CAPTURE

- The "Fluency-Error binomial"
 - Systems capture time and attention, fostering functional distraction (Williams, 2018)
 - Or potential global dopamine collapse that impairs human motivation and long-term focus (Termann, 2025).
 - Beyond algorithms:
 - Modern recommendation systems leverage user experience to extend past the screen and actively influence real-world contexts (Konstan & Riedl, 2012).
 - *Dark patterns, dark nudges, digital sludge, and gamification* manipulate emotions to trigger compulsive, dysfunctional behaviors (Chou, 2016; Isola & Esposito, 2025; Kitkowska, 2025; Luguri & Strahilevitz, 2021; Mathur, Kshirsagar & Mayer, 2021).
 - Hypotesis: A circularity between frustration, distraction, and overuse.
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THE POWER OF THE DISPOSITIF

- The Heterogeneous Meta-Device: Algorithms, UI/UX, and addictive design merge to form a phenomenological ecosystem of unexpected dark patterns (Dow Schull, 2012; Lovink, 2019).
 - Micro-interactions like deceptive cookie banners, tricky pop-ups, and cramped interface elements force continuous user errors.
 - Systemic Optimization: Increased cognitive fatigue and doubled time spent paradoxically feed data collection and system self-optimization.
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TOWARDS A SLOW MEDIA EDUCATION

- Blurred boundary between human gestures and algorithmic error generates complex emergent behaviors within a «wild digital arena».
 - Demands second-order, complex thinking to decode opaque technosocial trajectories.
 - Reclaim of simplicity and independence from attention-economy consumption ("every man is richer in proportion to the number of things he can leave alone" (Thoreau, 1959, p. 71).
 - Freirean-Frommian humanistic approach using an ethics of care to overcome *doomscrolling*, isolation, and digital overuse through solidarity.
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THANK YOU!

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