

The Public University after Social Media

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My title is meant to signal that social media have arrived on campuses that have already been altered by technological change. Mediated scholarly communication is work, and computation and code are the invisible background of the academic environment. Digital media and their networks are one aspect of the network university, an «emerging new form, and role of the university in the network society, which is based on techno–science» (Angus 64). In the last decade, the web has «transformed into an ephemeral environment that we carry in our pockets» (Lovink 11). Students have real time access to the flow of social networking sites. Universities are promoting themselves on Facebook, Twitter and YouTube. University libraries are calling for participation in the growth of their social media networks. Employee intranets with dashboards to access applications, online systems and social media platforms are being rolled out. At York University, under the headline *YU Link is a new intranet designed for all York employees* it was announced that:

Over the past several years, York employees have been using social media platforms and online tools in their daily lives outside of York University, and they see the benefits these tools provide. It is a logical next step to bring the advantages of these tools to the workplace so employees can make use of them here as well. (May 21, 2013)

But of course, the situation of new media use in education is more complex. In the wireless classrooms without walls, some faculty are experimenting with new platforms and desired features while others are faced with the disruptive effects of mobile digital media. A faculty member may experience satisfaction and dissatisfaction using the same platform. At the same time, in the promotional condition of the university, the rhetoric of “excellence” has been overtaken by “innovation”. The York University

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Academic Innovation Fund, for example, has allocated five million dollars over two years to enable the university to both follow and lead what the president calls the “new normal” of constant technological change. New learning management software like web-based, open source *Personalized Learning Spaces*, defines learning as an activity to be *managed* and exemplifies how external pressures on public universities are converted into internal technological change. While executable languages and data may be instrumental, pedagogy is cultural. Peter Sloterdijk’s observation that all cultures are «based on central distinctions by which the field of human behavioral possibilities is subdivided into polarized classes» (13), leads one to ask, What is the opposite pole of “innovation?” It is not ignorance — the opposite of knowledge — or mediocrity — the opposite of excellence, but the imitation of academic language games. The pole of innovation functions to make the faculty body’s repetitive ritual exercises, caricatured as the “sage on the stage” who “pours ideas into our heads”, a factor «of repulsion or object of avoidance» (13).

There remains the problem of identifying a medium with one type of practice such as pedagogy. Notwithstanding this problem, the assessment of the appropriation of social media for pedagogy is underway and being presented at conferences such as the one held at York University in May 2013. Social media, a part of the post-Fordist information economy, are being repurposed for higher education. For starters, to go beyond the perennial question of effective communication, social media raise questions of communication and information, agency and structure, privacy and surveillance, constraint and creativity. We can take a critical position that emphasizes the former over the latter. Technology is a social process shaped by design and development as well as situations of use. However, when it comes to university-wide media systems, there may be limits to faculty uses and interpretations of technology in local contexts or organizations (Kallinikos 2004). Indeed, the limits of institutionally-supported learning management systems like *Blackboard* or *Moodle* are one reason why educators would experiment with Facebook for teaching. But is Facebook just another online tool to add to our toolkit? Is it merely a means to form attention? Or, as Mark Fisher has suggested, should Facebook be considered an interface that simulates “participation in postmodern media” and expresses “network narcissism?” (Fisher 75).

In what follows, I provide a prism on social media and the questions they raise for university education. My mapping and critique are rooted in the philosophy of technology, and media and technocultural studies. In the first part, I interrogate what “social media” are and the figure of “Prof 2.0” as symptomatic of incremental socio-technical change. At this writing, the futurology of education has zeroed in on Massively Open Online Courses

(MOOCs). In this new act in the drama of technological progress, MOOCs have been framed as the future of higher education. In the context of a public university system in crisis, this digression gives rise to questioning social media. In the second part, I explore the mediating implications of media focusing on the academic form of life, apparatuses and attention. Here I take Sloterdijk, Agamben, Hayles, Stiegler, Terranova, and Nune's work to be indispensable to any discussion of social media and critical attention. I contend there has been a struggle with apparatuses within the print-based university since television. Whether new technology is conducive to enhanced or diminished learning has also been subject to debate since television but I concur with Friesen that debate is hindered by the «metaphors and language of a “technologized” understanding of communication, experience and education» (xiv). I show that media technology and their networks, as a mode of engagement, are inseparable from the space of attention/inattention and the flow of pre-cognitive affects. In the third part, I take a closer look at Stiegler's “pharmacology” of psychotechnologies and philosophy of taking care of youth. In the final part, I examine the case of Facebook as both remedy and poison. The questioning of Facebook challenges the premise that bringing this platform from daily life into higher education would benefit the formation of critical attention without any side effects. I conclude that there is reason to consider alternative platforms. If one function of the university is to assimilate the next generation into literacy, academic discourse and technological citizenship (Longford) — and this requires concentration, re-cognizing complex historical-political reality, interpreting and evaluating technocultural forms of knowledge and expression and meeting academic demands — I would suggest that Facebook may be more of a poison than a remedy for what ails public university education.

As the philosopher Martin Heidegger pointed out in his lecture at the University of Freiburg in 1935, even if information is «pruned down to the most indispensable needs, is “close to life”, its possession is not knowledge» (21). The social media paradox is that they afford user-generated contributions without appearing to prohibit replies. Networking and/or scaling up a class through new media “interactivity” may lead to too much information or connectivity and less time for reflection and judgement. Posting and tweeting is possible but «Web 2.0 was not designed to facilitate debate with thousands of contributions» (Lovink 19). Young people's brains may be neuroplastic but they are not responsible for the student debt crisis which has more to do with the role of private banks. Students may have individual preferences for how information should be presented but this is not a basis for higher education policy. Under provincial policy in Ontario, administrators are supporting the growth of eLearning as a means of managing

enrollment pressures. Managerialism has linked technology and technique for greater efficiency and control but efficiency should not be conflated with effectiveness. In this version of the future of higher education, the “responsiveness” of students will be measured by software analytics.

The critical theory of technology has been skeptical of views based on determinist assumptions. Empirical study of early computer-assisted instruction and conferencing highlight how pedagogical models, relations and goals matter; «Network learning can be based on the computer’s relational rather than its representational capacities» (Hamilton & Feenberg). From a phenomenological perspective on relational pedagogy, however, there are still significant differences between the place of the classroom and the space of the screen (Friesen). Talking about taking up social media as another set of “tools” in our tool kit makes a professor’s goals paramount but this obscures what new social media really are. I would wager there are as many, if not more, cases of acquiescence to, rather than adaptation of, technology to faculty needs. The network university has an instrumental orientation to technology and course delivery and the academic form of life is not exogenous to its top-down bureaucratic organization. Too many professors are standing behind managerial plans and priorities while others are only responding to administrative practices as isolated developments (Polster). York University’s new intranet, for example, is being implemented to reduce “clutter” — information relevant to faculty and staff — from the university’s public website so it can «focus on its main function: attracting the best students to York — a goal that is becoming more and more important as competition in postsecondary education increases» (*YFile* 2013). Here we can begin to see how socio-technical change within the network university converges with what Mark Fisher calls “capitalist realism” — a «pervasive *atmosphere*, conditioning not only the production of culture but also the regulation of work and education, and acting as a kind of invisible barrier constraining thought and action» (16).

Before we can address the implications of social media for pedagogy, there is a more basic question concerning this technology. What does the term “social media” refer to? As Madrigal points out, the term “social media” has been inscribed in popular web history on *Wikipedia*. He puts this history into question: First, social networks were invented before 2003–04. Second, even after Web 2.0, most social traffic is invisible to software analytics and this is the “dark social” side of the web. Third, when we use social media, we are «exchanging our personal data in exchange for the ability to publish and archive a record of our sharing» (Madrigal). We will need to acknowledge this tradeoff and much more. Facebook Inc., with 1.11 billion monthly active users (as of May 1, 2013) became a \$4,279 million dollar advertising industry in 2012 but not without raising privacy

and surveillance issues (boyd; Cohen; Fuchs; Stefanick). YouTube now serves one billion unique users every month but it is under ten years old. Presentism obscures continuity and the novelty of social media obscures contestation in media convergence that has technological, industrial, social and textual dimensions (Meikle & Young).

In May 2012, Prof. 2.0 made the cover of *Academic Matters* and the contents are instructive. Media have always been extensions of our scholarly practices. But “2.0” implicates professors in the commercial logic and language of software upgrades. In this issue, we learn that today’s students expect a “2.0 learning environment” (Miah) while some mid-career and older faculty are experiencing “upgrade anxiety” (Klassen). At the same time, other senior faculty are “semi-retired”, teaching courses on contracts that used to be taught by PhD students and recent graduates. Recent PhDs and contingent faculty worry about becoming professors as tenure-track jobs are downgraded to part-time, temporary, or both. Tenuous-track faculty employment means that satisfactory performance has been delinked from the progress-through-the-ranks system. Technological change in tandem with stratification, marketization, and managerialism make it important to ask what is happening to the path of becoming a professor (Fullick). All faculty must contend with media change but we must be careful about inscribing a linear progression with more features, fewer bugs, and further obsolescence.

According to the established Canadian media, using social media for teaching may already have been superseded by the next big thing. On May 1, 2013, CBC’s *The National* reported that the “educational revolution” is being led by MOOCs. In an ecstatic tone, we were told that «[t]hey’re affecting the way teachers teach and the way students learn. That’s because MOOCs can fill a classroom with a billion brains». A year earlier, Carson and Schmidt wrote that «[s]calable education on the web is increasingly possible, largely through the use of commodity software that is easy to use and available freely or at low cost to anyone» (20). The absence of any problematization of these networked courses is remarkable. The technology for scaling up one professor’s class from 50 to 50,000 students has given impetus to for-profit and not-for-profit companies like Coursera, Udacity, and Khan Academy that are hunting for the next Google. These companies are internetworked with universities, the non-profit world, and venture capital. Anyone can sign up but certificates are offered to those who complete a course. This may add to the spiral of credentialism. The remediation of the lecture may only be an exciting opportunity for professors who have tenure which protects their academic freedom. MOOCs afford online access to articles, plus posting, video responses, tweets, tags, peer-to-peer relationships and user-generated learning objects but they will be assessed by learning analytics and crowd

sourcing of peer review. Some professors see MOOCs as the textbooks of the future but professors who are recording a MOOC lecture are advised to keep segments short, about ten minutes, and TV-friendly. Nonetheless, Carson and Schmidt predict that «learning will be more persistent, with content, peer relationships, and metrics extending well beyond the construct of a “course” and spanning across notions of institutions» (22). If this is the shape of the coming “digital campus”, higher education will be further reduced to information encoding and decoding. As Anderson notes, drawing on Gary Small’s book *I-Brain*, “interactivity” — used to differentiate “old” from “new” media — also means continuous partial attention. The myth of interactivity occludes student ability to do university-level work, deep thinking and any theory of good and bad academic habits.

Like other faculty, I may be inspired to adopt new technologies in my work as a professor in the age of digital reproduction. Like many faculty, I believe knowledge should be open and I have used open-access journal systems as an editor and author. I am aware that research findings are being published in online journals *E-Learning and Digital Media* four times a year. I am for reinvention, mutability and movement as long as it does not compromise academic values, rigor, standards, integrity and the structure of a course as a path. I can imagine students as collaborators, creators and curators of online course content. But if a course is one path, and the Internet is many pathways, how does this redefine a “course”? This question is circumvented when proponents of e-Learning posit a binary relationship between traditional, linear practices and interactive, non-linear teaching. As a co-editor of a special issue of *TOPIA: Canadian Journal of Cultural Studies* on “Out of the Ruins, the University to Come”, I am skeptical of the CBC’s zeal for the technologically-driven “educational revolution” (Hanke & Hearn). And I am disquieted by talk of increasing productivity and measureable student outcomes. This may be good for teaching technoscience, like the first two MOOC courses offered by Stanford University in Artificial Intelligence and Machine Learning, but what about the humanities and humanities-oriented social sciences? My concern is that the twin pressures of keeping pace with technological change that promises freedom and flexibility — but is based on a policy of planned obsolescence — and government policy couched in the egalitarian rhetoric of access but based on austerity will push the public university to implement more ITC solutions to half-understood problems.

As other scholars have already explored, digital reproduction presents new possibilities for new practices of scholarly communication (Borgman), open access research and scholarship (Hall) and multiliteracies (Cole & Pullen). There has also been experimentation with digital technologies, modes of interaction and models of pedagogy (Sholz). We should not

forget that there is a history of alternative media and critical pedagogy in education. Technological design and development matters but so does the philosophy of practice and becoming (Semetsky). In contrast to the print-based curriculum, «[I]nternet learning can take the user into uncharted realms of lifestyle options and virtual-sensuous experiences» (Cole). When knowledge work is mediated by software and interfaces, there is even more reason to become “ethical hackers” of academic knowledge work in this post-industrial times (Liu).

We need to dig deeper into the mediating implications of all media. Let us begin with historical observation and philosophy. In *The Art of Philosophy: Wisdom as a Practice*, the philosopher Peter Sloterdijk characterizes the academic form of life as a “repetitive form of life”. It is this ongoing process that ensures «epistemic characteristics and discursive routines» (12). Of utmost importance are the «reading and writing practices by persons who do theory» (12). It was the European culture of writing and the mode of looking conditioned by reading that shaped mental attitudes. While the classical book-world analogy was weakened by Renaissance painting, and later, by globes and maps, this analogy «has completely disintegrated in the age of monitor screens and keyboards» (54). Nowadays, we are not only readers paging through books but also surfers of the Internet with mouse and keyboard and tapping or touching the surface of touchscreens. Our relational encounter with students is embedded in technological networks.

We can develop a media studies motif by making a detour through apparatus theory. For the philosopher Giorgio Agamben, language is the oldest apparatus. He expands Foucault’s concept of apparatuses — prisons, madhouses, factories and schools — to include pens, writing, computers and cellphones. He argues that in between substances and apparatuses are processes of subjectification and de-subjectification. In his view, rather than leading to a new subject, we are captured by apparatuses. Furthermore, the problem of apparatuses is not reducible to their “correct use”. In this sense, the search for “best practices” of social media for teaching may lead us to neglect how we are becoming the product of these apparatuses.

One of the big challenges for getting students to engage with academic discourse in any discipline is attention. Katherine Hayles defines cognition as both extended and embodied. She posits a generational shift in cognitive styles marked by the contrast between deep attention and hyperattention. This shift is correlated with an increase in the desire to be stimulated by media. The problem is that deep attention has been a norm inside the university but students are tending towards hyperattention, a style that seeks high stimulation and has a low threshold for boredom. Reading and playing video games both reconfigure activity patterns in the brain as represented by functional MRIs. However, the use of “interactive” web

browsers, video games, augmented reality and social media are believed to satisfy the desire to be stimulated enough to offset boredom. Hayles contextualizes this generational shift in attention in relation to the brain's cultural evolution. For her, digital media and contemporary technogenesis constitute an "adaptive system" but she still considers her *ink-on-paper book*, and the *reading* strategies it performs, to be an intervention into technogenesis.

In order to delve even deeper into what it means to pay attention, we need to turn away from neuroscience and towards media philosophy. As the philosopher Bernard Stiegler theorizes, attention is not just mental, as in a capacity for concentration; it is both psychic and social. These two faces constitute a «kind of *interface* for what Simondon called psychic and collective individuation» (1). For Stiegler, education is attention forming, and hyperattention presents a challenge to educators. The key is knowing how to pay attention, which is part of the cultural heritage and memory. In his philosophy of care, education is a process of transindividuation rather than individualized, student-centered learning. On the one hand, without forming student's attention in a classroom, we cannot formulate a student habitus. On the other hand, these forms of attention are conditioned by material techniques, such as writing. Stiegler poses a key question: do digital technologies form or deform attention? If language is the primordial attentional form, do network digital media give rise to new forms of attention? More specifically, would the use of social media widen or narrow the gap between deep and hyperattention?

To complicate matters, Tiziana Terranova has analyzed how attention has also been mobilized in economic discourse where a reversal has taken place: the abundance of information leads to a poverty of attention. For some commentators, drawing on the new neuroplastic potential of the brain, it is a short step from networked media interactivity to the notion that new media rewire individual attention and memory. Hence:

The economic/informational plastic brain is thus caught in a double bind: on the one hand, in order to participate in the attention economy, it must enter a technological assemblage of attention; on the other hand, becoming part of this assemblage implies a dramatic cognitive loss that is translated into a subjectivity more adept at carrying out routine tasks but less capable of reasoning, reflecting and intimacy... (6)

Both economic discourse and brain science are too centered on the individual. To offset this, Terranova then argues that the «economy of attention is, then, also the economy of socialization of ideas, affects and percepts, and hence an economy of social production and cooperation» (8).

From a technocultural studies standpoint, I would argue that the classroom without walls has been a site of struggle between living, embodied, situated pedagogy and apparatuses that capture the attention of “adultescents” since television became a mass medium. From the 1960s to 1980s, the conflict of technocultures was between education and “mass media” or “mass entertainment”. In the 1990s, and the emergence of the World Wide Web, it was between face-to-face interaction versus online learning platforms. Today, it is between education and wireless connectivity to social media. After the construction of the wireless campus, 3G networks and Web 2.0, academic technoculture entered a new phase. Mobile “smart phones” and applications are ready-to students’ hands. Individualized personal networks, sociality, conviviality and non-studious leisure time are just a keystroke or touchscreen away. Some faculty may be reinvigorated by “blended learning” course design and delivery while others may wish for a new classroom technology — a WiFi jammer — to disconnect students from their personal networks and cross talk so they can fully attend to, and reflect upon, what is being said, presented, screened or streamed by the professor. In spite of the chorus of voices for student-centered learning, the quality of the professor remains the most important factor in students’ academic success. Unfortunately, continuous improvement in lecturing can be offset by continuous partial attention. And while some psychological-consumer oriented educational research has frames blended learning as offering many advantages with few drawbacks, the single biggest obstacle to student’s academic development and performance is paid work and accumulating debt.

In *Lowering Higher Education: The Rise of Corporate Universities and the Fall of Liberal Education*, Côté and Allahar have responded to such developments by pointing out that technologies are «tools, not outcome; they are means, not ends» (153). From their sociological perspective, the “blended learning” model is nothing new and research on computers and research on computers and education has also produced evidence of technology-diminished learning. In addition to finding that the research is full of mixed and inconsistent results, they conclude technologies «will not save the day in eradicating student disengagement» (Côté and Allahar 174). Furthermore, they say that the problem of student disengagement masks problems of underfunding and mission drift away from liberal arts to applied education.

In response to the student population explosion, student “engagement” in relation to teaching and learning has become an academic planning priority. But “engagement” collapses a gamut of engagement and a host of issues in addition to attention: space, time, materiality, transmission and subjectivity that need to be analyzed. In the U.S. setting, Mark Nunes, in *Cybersapces of Everyday Life*, has analyzed the topography of the “virtual

classroom” as an «articulation of “spaces of distraction”» (149). With the networked production of space, he describes two overlapping zones. There is the zone of the networked professor’s one-to-many dissemination inside the class and there is the zone of the student-computer interface that is open to the outside of the class. In the wireless classroom, the latter zone overflows the former. The internet restructures teacher-student spatial relations and redefines the “best student” as a «distracted student whose dispositional practices engage both modes of attention, who can “toggle” between two modes of corporeal and cognitive orientation» (Nunes 154). Computer-mediated communication, he concludes, «always holds the potential of enacting networks that distort the conceptual structuring of the class» (Nunes 154). More recently, a Canadian study of “laptop multitasking” found not only that surfing the Internet lowers students’ abilities to comprehend lectures but also affects the performance of those sitting next to them (Sana, Weston & Cepeda). In the amphitheatrical structure of the lecture room, where the lecture is a traditional form of talk, and the ability to sit and listen is essential, peer-to-peer imitation may not be congruent with disciplinary objects or an instructor’s learning objectives.

The network university continues to be assembled. In 2012, Information Technology at York University completed work on «a mobile friendly web site that included a mobile version of the student portal». This indicates how far the networking of the university is subsumed within what Wise calls the “Clickable World”. In this world, «Attention is cognitive, habitual, and machinic, undergirded by affect which can never be fully channeled» (Wise 170). We may have the goal of attracting student attention but mobile devices enable and encourage perpetual communication that structures attention/inattention. In the wireless university without walls, a point-and-click disposition is taken for granted. Experience and the environment have been reduced to the space of information flows. “Smart” phones make mobile communication and mediated presence matter even more. In response to the proliferation of devices, professors are either resorting to banning laptops, or restricting the use of laptops for class-related purposes. In the “virality” of the network age, what is passed on is not only information but affects — not only fear, panic, terror and fright but also hope, belief, joy, and love (Sampson 5). Whether network virality induces students to imitate the love of wisdom or is conducive to exploiting precarious professors’ love of teaching will depend on social invention and the politics of technology.

To take a closer look at the relation between apparatuses and attention, I shall now turn to Bernard Stiegler’s *Taking Care of Youth and the Generations* because it is indispensable to any discussion of social media in education. His major argument concerns how the process for assimilating youth into academic discipline has become precarious at the level of codes and modes

of communication, their associated literacies, and political and libidinal economy. He contends that schools and universities are «in ruins because we have failed to properly pose the question of the associated milieus and the risks of dissociation induced by the changes in the techniques and technologies of memorization, information, communication, and relationship». (Stiegler 177).

For Stiegler, psychotechniques of attention reconfigure both the path by which the psyche becomes transindividual and *philia* – the relationship between generations. Positing a “tertiary” level of retentions where “hypomnēmata”, or attention–capture psychotechnologies, allow for «attention formation through its social accumulation (i.e. education)» (Stiegler 18). In his neo–Platonist “pharmacology” of writing and the mind, psychotechnologies like the book are both “remedy” and “poison”. However, he argues that there is a discontinuity between the media of reason and maturity — the book and the apparatus of writing — and the audio–visual, “programming industries” as psychotechnical apparatus of control. The “fundamental problem”, he claims, «and the crippling limit of this attention–control apparatus, is that it destroys attention itself, along with the ability to concentrate on an object of attention, which is a social faculty; the construction of such objects is in fact the construction of society itself, as civil space founded on [cultural] knowledge including social graces, expertise, and critical thinking (i.e., contemplation)» (Stiegler 13). Here we could cite the example of how the “smart phone”, which is used for back–channel messaging and instantly gratifying info–tainment, destroys the mental space of the lecture or seminar room.

In Stiegler’s mind, a “battle for intelligence” has been going on since Plato’s academy. For him, teaching involves forming attention by capturing it. He claims there has been a “generational mutation” in cognition that is registered by the growth of what Hayles calls “hyperattention”. Whereas Hayles sees numerical media as having potential to bridge deep and hyperattention, Stiegler emphasizes that “synaptogenetic processes” differ depending on the media environment. Contrary to Hayles, the “depth” of attention is not just a matter of duration but of the «length of the circuit of transindividuation» (Stiegler 80).

Stiegler’s rethinking of the subject follows Simondon’s theory of individuation. Knowledge is individuating, but in cognitive capitalism, knowledge and memory are exteriorized by electronic and digital devices, which are cognitive and cultural mnemotechnologies. He emphasizes the role of grammatization within an evolutionary model of the history of technogenesis and cultural memory. By his account, since the 19th century, grammatization has gone beyond the *logos* (i.e. discourse) to become a process of materialization that overcomes and determines all other social processes.

Grammatization is the materialization of discourses. In this media philosophy, social networking and contributive networks, which come after audio–visual and numerical grammatization, are approached as *pharmaka* within a symbolic milieu. In an associated symbolic milieu, subjects and socio–technical systems co–individuate. In disassociated milieus, the psychic individual is disconnected from collective individuation — the subject may be individualized and still be disindividuated. Social media favors individualized circulation over transindividual continuity in the collective organization of knowledge.

From there, he argues that distributed (hyper)attention «creates a new milieu, and thus a new context for deep attention» (Stiegler 81). This context, in turn, is «heavily grammatized, and in nonliterary — or not literary — forms» activated by the programming industries. From “mass media” to mobile apps, concentrated attention to “letters” by disciplinary criteria has become undisciplined, first by audiovisual objects, then, after numeric technology, by new programming industries. It is in this context that the “text” supporting deep attention «has become a new kind of contextuality: a contextuality that is itself thoroughly grammatized, as a result of which deep attention’s support is called upon to enter new relations with structured transindividuation well beyond the classroom, before and after schoolwork, and for all generations» (Stiegler 83). In his judgement, «newly grammatized symbolic media are a network of *pharmaka* that have become extremely toxic and whose toxicity is systematically exploited by the merchants of the time of brain–time divested of consciousness» (85). At the same time, new media are also «the only first–aid kit that can possibly confront this care–less–ness». (85).

For Stiegler then, education should be understood as system of care where a battle for intelligence is going on *within* materialized rationality. He does not oppose grammatization. But he does disagree with Foucault’s analysis of writing of the self and schools on two points. First, writing as a technology of attention is pharmacological, and «can *just as easily* construct an apparatus of disindividuation *through* individualization» (Stiegler 116). Second, in regard to the role of the teacher, “discipline” is «integration into transindividuation, builds circuits *regulated by concepts, not normatives*, forming a rational, intergenerational we, as mature attention accessible to the majority of students — through mandatory public education». (Stiegler 117).

Public university education is not mandatory but the notion of symbolic associated milieus and the risks of dissociation induced by changes in psychotechniques leads to the question of what a university classroom milieu should be. A «regulated, and ideally associated milieu» is one in which the construction of the object is a co–individuation of the object, the subject

studying the object, and the educator accompanying the subject who provides access to the object according to disciplinary rules of explication and argumentation.

With this philosophy in mind, we can examine Facebook's integration into the scene of pedagogy. It is worth recalling that Facebook was designed and developed as a means for Harvard students to gain access to social capital. On the one hand, Facebook is now established as a normal part of the socialization of youth and their technological unconscious. Early research on the student experience of Facebook in the UK has revealed that first-year undergraduates thought it was important for social but not for formal teaching purposes; over time, only a minority extended their Facebook use for discussing academic work (Madge *et. al.* 2009). Another study that analyzed Facebook wall activity concluded that «rather than necessarily enhancing or eroding students' "frontstage" engagement with their formal studies, Facebook use must be seen as being situated within the "identity politics" of being a student» (Selwyn 2009).

In Canada, however, the use of social media for teaching purposes is still at the experimental stage. Drawing on Stiegler's philosophy, we could open up another line of questioning. Could Facebook be made into an object of deep attention in a flow of critical consciousness?

Consider this scene based on one professor's published account of a first-year, elective, introductory media studies course with 200 students in a School of Liberal Arts in Ontario.

In response to empirical research that has shown heavy media multi-taskers perform worse on task-switching ability, his teaching is an «effort to constrain students' multitasking behavior by providing instruction as to when and how to use the site». His approach to media learning is «open, social, and connected». Instead of raising one's hand to speak, a student may participate by joining the Facebook group, and posting to the group wall as well as discussion lists which are monitored by teaching assistants. He demonstrates, manages, and models an online identity for students in order to reinforce "responsible" use. The student retains access to content and their Facebook identity after they leave the university. Some students use the course Facebook group to stay connected with classmates. In this praxis, Facebook is understood as a "common language" and explained as a "commercial enterprise". The only resistance comes from students who prefer that Facebook remain nonacademic and older students who are more capable of speaking and writing.

The professor's good intention is to make the best use of Facebook features to focus student attention and spread ideas. Facebook means connection, as inscribed in the quantity and quality of student communication on the site. While Facebook use is more explicit, it is embedded

in other curricular materials and contextualized. Taking the professor at his own word, what are transmitted are shared significations that develop understanding and cultivate «a love of learning based on connectivity, engagement, creativity, curiosity, and collaboration». Facebook is a semi-open, semi-public space. Without having access to what students posted, we can imagine postings that are relevant to the course, their academic work and digital lifestyles, and perhaps even why some students have to withdraw from the course or the university altogether. This suggests Facebook, despite its own private, commercial interests, may be a remedy that is conducive to becoming a student. As a “hypomensic *pharmakon*”, the very platform that diverts and destroys attention is used to reform student’s attention.

However, Facebook also has a poisonous dimension. The remediation of Facebook by projection onto lecture theatre screens collapses inside academic and outside nonacademic experience. Attention is mainly visual. It is a practice of looking that enables users to watch others. It is not just a question of the learning object but the subject who studies the object who is mobile, communicates, and observes the educator. What are being modeled is both digital media literacy and a point-and-click disposition in a clickable world where surveillance is ordinary; the former may be conscious learning while the latter is unconscious learning. If rationality is not just an attitude towards communication, but also observation, then the professor has forgotten Marshall McLuhan’s idea that the “medium” — the printed book, the telephone — structures awareness and perception regardless of content. Facebook may be integrated into the professor–student relationship but it submits disciplinary objects and curricular elements of attention to the “yardstick” and “touchstone” of Facebook. Students see and hear how the professor manages his own, unique Facebook identity. Students learn how to perform different online selves according to different settings, options and changing privacy settings. In this practice of digital literacy, the engineering of its functionality is put into the service of the semiotics of online identity. Even though identity points in two directions — towards the self and the other — Facebook identity, as many researchers have noted, is a technique of the self. This professor’s account of using Facebook in the classroom has nothing to say about consciousness and the relation of technics and mind, networked subjectivity and affect. To see through this tool’s “thingness” and beyond a user’s functional, epistemic subjectivity, we need a better grasp of what digital media and their networks are. Here Galloway’s (2012) concept of “interface effects” could be introduced. Interfaces are not things but processes that «bring about transformation in material states» and «are themselves the effects of other things, and thus tell the story of the larger forces that engender them» (Galloway vii).

What about critical attention and rational debate? As a professor of media studies, I can certainly see the merits of using social media to teach *about* social media. Users can respond by commenting or by pressing the thumbs-up “like” button. However, Facebook Inc. has banned the word “dislike” to prevent developers from developing a “dislike” application or button. The expression of “opinion” is enabled but the principle of communicative rationality is invitiated when logging into the Facebook developer’s page to create a new application. If a developer enters the word “dislike” in the action field, they get the message “This name uses one or more blocked words”. Beyond blocking words, Facebook rules connectivity on the visible level of user guidelines and “real name” policy, as well as on the hidden level of code, information sharing with third parties, detection engines and its Edgerank algorithm, which determines the order of updates.

Students, independently of any professor, can form their own study groups on Facebook rather than in a library study room. In 2008, the Chris Avenir case showed this can blur the line between studying together and cheating. He was a first-year computer engineering student at Ryerson University charged with 147 counts of academic conduct for administering an online chemistry study group where he and 146 others shared information about homework questions. But what was missing from the news media’s story of academic misconduct was how all of the activities of a Facebook study group are commodified through the valorization of surveillance. Facebook is not merely an improved, more convenient place to study. Rather, the place of the study room is reconfigured into a spatialized network of academic/nonacademic interconnections: the more you study on this site, the more you share information and help fellow students learn, the more you create user data for advertising or third-party application developers, and the more you add economic value to Facebook. Students may willingly participate for educational value and even demonstrate their engagement with the course and desire to learn. The free labour and study time of students is “crowdsourced” without anyone applying for a job, without being paid for their work, and without any feelings of exploitation. Even before this student graduated to become part of the mobile, flexible, post-Fordist workforce, he and his classmates’ power to create social groups is being put to work in the knowledge-based economy.

Facebook groups are only one of 2000 edutainment applications on the site. In this sense, Facebook is a cyber-Trojan horse filled with third-party software developer’s applications to launch and use. A professor with the right programming skills could develop a plug-in application for educational purposes but it would be subject to Facebook’s approval process. Given the connection between social networking sites and surveillance, any professor that connects a course to this social networking company should

conduct a survey in order to calculate a “surveillance knowledge index” that would reveal the degree of student knowledge about social media sites in a surveillance society (Fuchs 176–177).

Moreover, Facebook’s hyperindividualization of students should not be conflated with individuation. Numerous media studies have shown how cultural expression is commodified and the self is branded. Students describe the course as “innovative” and “interesting” but we must put Facebook into question. Is this an adaptation to psychopower or an adoption of co-individuation? How is user agency distributed across humans and nonhumans (eg. servers) to form non-inhuman beings? If the university is an institution of thought, what about consciousness, and the relation between attention and cognition in this classroom? Does posting on Facebook represent a residual Kantian literacy that links reason and maturity? Or does Facebook exemplify the hypersolicitation of attention without concentration?

Facebook may have potential for education within a spectrum of possibilities for pedagogy but that potential is limited, in the first instance, because it is proprietary software that tracks its users to increase revenues. Even if an open-source, distributed social network was adopted, open source code is still an interface that raises question of how it shapes media systems of storage and transmission of knowledge (Galloway 9). Another way to go beyond the open-closed dimension of software is to draw once again on Agamben’s apparatus theory. «At the root of each apparatus», he writes, «lies an all-too-human desire for happiness. The capture and subjectification of this desire in a separate sphere constitutes the specific power of the apparatus» (17). So why not let students in a university lecture room connect to all the digital devices they can carry and reproduce the “being with” technology of the most peer-to-peer networked generation in history? Despite its pecuniary interest, perhaps Facebook could transmit positive effects that make for joyful pedagogical encounters between noncommodified souls?

For a better understanding rooted in historical-political reality, we can turn to Fisher’s uptake of the Žižekian theory of ideology to grasp the element of unconscious fantasy in the use of Facebook to enhance interactivity and overcome student passivity. On the one hand, professors act as if they do not know they are facing students «stranded between their old role as subjects of disciplinary institutions and their new status as consumers of services» (Fisher 22). On the other hand, professors «are caught between being facilitator-entertainers and disciplinarian-authoritarians» (Fisher 26). Media technology has changed and we want to help our students to read difficult books but the fundamentals of learning — to put into question, the ability to inquire, the capacity to think about thinking — are just as difficult to teach and learn as before. As we have seen, in Stiegler’s critical

theory, electronic psychotechnologies since television are qualitatively different. If Facebook is more of a poison than a remedy, it is not clear that taking some of the poison will lead to growth except in courses where professors are using Facebook to *with and about social media*. Based on his approach, we can read social media like Facebook as a Trojan horse in the battle for intelligence between the programming industries and programming institutions that short-circuit collective memory and disaffect youth. Faculty may be well advised to abstain and consider alternative platforms built by and for educators, such as the cloud-based peer-to-peer licensed application at www.CGScholar.com designed by literacy researchers based on a publishing metaphor of knowledge creation and sharing.

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