

Goldfarmer Goldfarmer: Time and the Deadbeat Escapements of Writing

This presentation operates in a historical-dialectical mode, suggesting two complementary senses of each of four terms before returning to the complicated figure of the worker-as-goldfarmer.

WORKER

TIME

LABOR

CAPITAL

WORKER

1. WORKER

Two workers: first, the **goldfarmer**. According to a 2011 World Bank study, goldfarming -- **the exchanges of virtual goods and services produced in multiplayer online role-playing games** -- has grown

from a **\$1.5 billion market value in 2003 to 8.5 billion in 2007 to \$12.6 billion in 2009 to \$21.2 billion in 2012.** Lehdonvirta and Ernkvist trace a typical transaction by which an American gamer uses PayPal to purchase **\$100 worth of gold in World of Warcraft (with the price of gold fluctuating according to online currency markets).** From that purchase, Paypal takes a **\$2 transaction fee,** a large Chinese online gold retailer takes a **\$30 cut and posts the job on a Chinese-language buy site,** where a small **Chinese gaming studio (many of which are in ChangSha or Beijing) takes its own \$45 cut and pays a game laborer \$23** to produce the gold. These game laborers typically work over **60 hours per week and make an average of \$2.70 per hour,** although that number fluctuates with productivity. Worker pay on average constitutes **32% of the operational cost structure of online gaming studios,** whereas profit -- after deducting for technological infrastructure, physical infrastructure, and administrative and overhead costs -- is a substantial **17%.** In a 2008 study, Richard Heeks traces a teleological evolution of capitalist development, from

subsistence production to barter to monetisation to petty commodity production and then to wage labor, extended via offshoring and automation, supplemented by brokers and exchanges. This is an economy. Heeks estimates average online pay to be slightly better than low-end or manual labor jobs, 12 hours per day, 6 or 7 days per week.

Turn the clock back 150 years, to work on the American transcontinental railroad. Chinese railroad workers were first hired in 1865; by 1867, only 1/10th of the workers were Irish; the rest Chinese. According to Albert Richardson, **“Irish laborers received thirty dollars per month... and board; Chinese, thirty-one dollars, boarding themselves.**

After a little experience the latter were quite as efficient and far less troublesome.” **Leland Stanford noted that “More prudent and economical, they are contented with less wages.”** The Chinese workers’ strike in 1867 for higher pay and less restrictive hours -- 12 hours a day, 6 days a week -- was resolved by the American overseers refusing to deliver food, resulting in starvation and the breaking of the strike.

In August 1853, the expansion of the railroads during the industrial revolution led to the first major train wreck in the United States, when thirteen people were killed in a head-on collision between two trains because the two engineers had different times set on their watches. Because high noon occurs in Boston about three minutes before it does in Worcester, Boston's clocks were set about three minutes ahead of those in Worcester. The first public time service was based on clock beats telegraphed from the Harvard College Observatory. (CITE) People, goods, and information all began to move faster than the speed of 1 mile per hour that had typified human experience up to that point, but with telegraphs, information's increase in velocity was substantially larger than that of economic goods.

2. TIME

Time has two natures: **one as discrete commodity and measure, and one as continuous analog experience.** Seconds, hours, and

minutes do not exist in nature: they are human-invented measures. I'm going to show you **a video of a *Deadbeat Escapement* from a 19th-century Seth Thomas clock mechanism.**

The pendulum's continuous lateral motion rocks the verge back and forth with the entrance and exit pallets causing and regulating the turn of the escape wheel. In the words of **Lewis Mumford, "The clock, not the steam-engine, is the key-machine of the modern industrial age.**

[...] The clock [...] is a piece of power-machinery whose 'product' is seconds and minutes [...]." The clock is digital, in the most basic sense of the term: it's discontinuous. Its 1s and 0s are the escapement's advance/don't advance. The **digital exists in discontinuous quanta of information**, rather than in the continuous and infinite gradations of the analog. The defining characteristic of the digital is that it has gaps: it's finite especially as we employ it to reproduce analog phenomena. It's lossy and therefore efficient. The fact that the digital has gaps (between its ones and zeroes, its ticks and tocks), is what makes it both malleable and reproducible.

In **1873**, the *Seth Thomas Company* built the *railroad clock* that now sits at the heart of Grand Central Terminal in New York City. *SLIDE* At **12 noon on November 18 1883**, standard railway time was adopted across the United States. In the 19th century, we were digital, and we are still analog in our rare clockless experiences today. Even natural phenomena that bear some resemblance to the digital in their apparent discontinuity — the rhythmic radiation beat of a pulsar from light years away, the pulse of a heart in which we might want to hear something like the ones and zeroes or ons and offs of the digital — come from continuous analog motion, not from discrete digital alternation. And yet we should also keep in mind that **the processes in every computer chip are driven by an oscillator clock putting out 1s and 0s**. This point—the tension between time as continuous analog experiential difficulty and time as discrete digital reproducibility—seems to me a central implication

Dowling, Carolyn. “Word Processing and the Ongoing

Difficulty of Writing.” Computers and Composition 11.3 (1994), 227-235.

of Carolyn Dowling’s 1994 article on “Word Processing and the Ongoing Difficulty of Writing.” The labor of composing gets no easier, even as it becomes more efficient.

Consider another complication of how we engage with time: according to **Section 20 of United States Code Part 600.2 concerning Institutional Eligibility Under the Higher Education Act of 1965, “a credit hour is an amount of work. . . that reasonably represents not less than. . . One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester. . . of credit.”** Our system of credit hours began around 1910 as a work-based requirement for teacher pensions and became federal law as a pedagogical requirement for student economic aid. Experience versus commodity: in the words of Marx, **"Moments are**

the elements of profit." Capitalists want to control every moment, and homogenizing time -- ignoring its dual nature and characterizing it as simple linear process -- reduces it to dominable, mutable, manageable space, and turns it into an aspect of a synchronous flat ecology.

As Marx shows, **machinery both raises productivity of labor, and as a repository of capital, operates as a means of lengthening the working day.** The extension of the working day is abetted by technological efficiency.

3. LABOR

According to Marx, labor has two natures: **labor power (the contracted, time-metered commodity) and labor input (the experiential activity).** In his words, **"In the labour process. . . , man's activity, via the instruments of labour, effects an alteration in the object of labour. . . The process is extinguished in the product. . . Labour has become bound up in**

its object.” There is a clear dialectical relationship between activity and objectification or what Donald Murray and Carolyn Dowling might characterize as process and product. Economist Yanis Varoufakis departs slightly from Marx in noting that humans are highly resistant to behaving in ways that are quantifiable into a well-defined mathematical relationship between economic inputs and economic outputs. Human labor *always* possesses a *qualitative* element, even when, in Marx's words, "During the 15 hours of the factory day, capital dragged in the worker now for 30 minutes, now for an hour, and then pushed him out again, to drag him into the factory and thrust him out afresh, hounding him hither and thither, in scattered shreds of time, without ever letting go until the full 10 hours of work was done." The point here is that **in capitalist production, labor power as the digitized commodity is fused to machines and so becomes an aspect of the circuits of capital.** The digital allows that fusion to be managed. If the new inputs of the economic process -- instead of **land, labor, and capital** -- are **digital devices, digital labor, and intellectual or immaterial capital**, digital labor aggregates into intellectual capital and thereby into

new digital devices via software applications and operating systems.

PAUSE *And so there are multiple overlapping circuits of appropriation of value in our digital economies' **cycle of production, distribution, use, and re-production**, both metered as commodity and experienced as activity.*

4. CAPITAL

Capital has at least two natures, as well: **first as a technological object in which the value of labor is embedded or frozen, and second as what Marx characterized as the capitalist's process of increasing surplus value** in which the capitalist uses his profits-as-money to purchase the laborer's time-metered labor-as-commodity in order to extract surplus-value-as-money-and-profit and thereby increase his capital. The challenge here is that the machine functions within the process, and the process reproduces and extends the machine, to the point where -- as Alex Galloway points out in *The Interface Effect* -- “inside software the

‘cultural’ and the ‘industrial’ are coterminous” and the digital and the analog overlap (Galloway 59). The material world is fundamentally analog, but human work with symbols is fundamentally digital, because it sorts and recombines discontinuous things, thereby **fusing labor to capital**. And yet in this circumstance there are still parties -- we might call them "capitalists" -- who use digital, metered time to control the length of the working day, who use performance evaluations (grades?) to control the intensity of the working day, and who control the technological capital used in the working day: even if the worker makes gains in one area, the capitalist adjusts in another. This is, again, an extension of Carolyn Dowling’s insight.

5. WORKERS

Marx concludes Volume 1 of Capital with a discussion of how **colonialism and its effects *work* to spread Western capitalism's frontiers of domination**, with particular attention to 19th-century North America. There seem to me to be important parallels between *how*

19th-century colonial importation of Chinese railroad workers loosened labor's collective ability to negotiate the terms of the working day and *how* the 21st-century colonial extension of goldfarming into China served the interests of the West. Those parallels include spreading the capitalistic frontiers of domination, and those parallels *also* have important implications for the ways some advocates in higher education are urging a move away from the digitized, metered, and commodified credit-hour back toward outcomes statements and the pre-capitalist manufacturing habits of piecework. Again, though, I don't think it's an either-or proposition. In fact, as Alexander Galloway argues, “**We are the gold farmers**”: “In the age of postfordist capitalism it is. . . impossible to differentiate cleanly between nonproductive leisure activity existing within the sphere of play and productive activity existing within the sphere of the workplace” (135). This holds particularly true for teaching and learning and scholarship, when “postfordist workplaces. . . have ballooned outward into daily life to such a high degree that labor is performed via phone in the car, on email walking down the street, or at home after putting the children to bed” (135). The orientalized figure of

the Chinese worker on the railroads, praised by the railroad barons for his industriousness at \$31 per month, stands in for all workers in the industrial revolution, just as the orientalized figure of the exploited Chinese goldfarmer stands in for all of us interpellated into new postfordist time-based work frames wherein the factory floor described by Marx becomes all-encompassing. We are all goldfarmers because we're all digitizing our time, and **in digitizing our time, we are self-exploiting**: if moments are profits, we are entering the time-based capitalist transaction as laborers rather than capitalists. Time may have two dialectical natures, as may labor and capital, but as workers we seem directed by the digital toward a unitary and non-dialectical subjected role.