

## **USING DIGITAL ART TO MAKE THE TENSIONS BETWEEN CAPITAL AND COMMONS TRANSPARENT**

*Innovation in shaping knowledge of Internet business practices as a form of cultural knowledge*

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**Abstract.** This paper examines a digital art performance by Ubermorgen.com called Google Will Eat Itself (GWEI.org) as an example of the tensions between Capital and the public commons. Using notions of transparency and knowledge as a form of innovation rooted in Nonaka's Knowledge Management theory, it examines the ways in which knowledge about how Google uses the Internet is made explicit through the art performance. Finally, it discusses the implications for transparency in Internet business through both the act of GWEI expanding audiences for understanding Internet based revenue generation models and using artifacts rooted cultural contexts in order to challenge the assumptions inherent in the current configuration of Capital and the public commons. It ends with calling into question the role of Google as a form of "Cultureware," dependent on the public commons, yet profiting from it in the realm of the Capital.

### **1. Introduction**

How does the Internet work in terms of economics? Amazon, Google, and E-bay are all highly valued companies and they not only use the Internet for business, but in some ways can be seen as constituting the Internet because of their prominence in setting new cultural norms for Internet use across the globe. These companies are widely known and used, yet the way in which they are valued and make money is not necessarily transparent, but based on an emergent understanding of numbers of page views and hits. The mechanisms that assign value to these organizations are difficult to access because these three companies work at the intersection of capitalism and the information commons.

Ubermorgen.com is a collective of digital artists who consider themselves as using Internet business as their medium for art, producing interventions from within the mechanisms that are used to assign value to Internet transactions—thereby disrupting the system. Ubermorgen.com was founded by Hans Bernhard, who was also a founder of the artist group etoy, which started what was arguably the most expensive art performance in history in the late 1990s—the etoy war. A critical response to the commercialization of the Internet, the etoy war was a response by an artists group to a business that convinced a court to order that they needed to shut down their website because the URL (etoy.com) was too similar to the business URL (etoys.com). The artists had the domain etoy.com about 2 years before the company etoys.com was formed. However, the company brought etoy to court because their customers would mistype their URL and end up at the artists' site, which was not intended for general audiences. The customers would then complain to etoys.com that they found profanity or other inappropriate material on their website. After the artist group etoy.com refused to sell to the corporation etoys.com, the interaction between the commons (represented by the nonprofit artists group etoy) and the capital (represented by the corporation etoys.com) become problematic. Because of the complaints, etoys.com took the artist group to court and won an injunction against their use of their own URL even though they had owned it since before etoys.com was incorporated. To fight this domination of Capital over Commons, etoy began an art performance piece called the etoy war. This art performance is described on the etoy site (<http://www.etoys.com/projects/toywar/>):

the TOYWAR.com NET.ART.PRODUCT was designed in november 1999 to prevent the destruction of the etoy.ART-BRAND and to research the potential of an elaborate, effective but playful resistance system against the old fashioned corporate bulldozing power used by eToys Inc. (one of the biggest e-commerce companies in the world / incorporated 1996) who attempted unsuccessfully to take over the etoy.com art brand

Given the situation in which a corporation was able to actually shut down a domain which pre-existed their incorporation date, the artist group responded with an art performance they called the etoy war, which ran from 1999-2000, and ended up forcing etoys.com to declare bankruptcy. The etoy war performance is described in etoy.com as:

TOYWAR.com did not follow common political strategies: TOYWAR.com successfully mobilized the net-community (among them hundreds of journalists), involved the enemy in a insane TOYNAM situation (preventing overview by fighting on too many layers with the help of 1799 soldiers) and turned eToys' aggressions against themselves (martial arts for the net) until art finally neutralized the naive power of money. by playing a game on the web, in the court room and on the NASDAQ the etoy.CORPORATION and supporters forced eToys to step back from their aggressive intention.

As a result, the etoys corporation filed for bankruptcy on March 7, 2001. Etoys.com was eventually sold for 3.5 million dollars—significantly lower than the 8.65 billion that etoys.com was valued at the height of its' stock price. (Wishart & Bochsler, 2003). Thus, the etoy war can be understood as arguably the most expensive

performance art in history. Representing the commons, the etoy soldiers became the governing force of etoy. In examining this case, the question then becomes one of “where was the reality, anyway?” Etoy, an artist group which issues stock as a form of artistic practice, yet has no product as such, and performs the “art of being a corporation”, was able to effectively destroy the value of “real” company which traded on the Nasdaq stock index. Thus, in the contest between the capital and the commons, it could be declared that after the etoy war, the score was 0-1.

The manner in which etoy deploys the features of corporations is a use of the corporation as a medium for artistic performance, like a sculptor uses clay. The features of this medium are manifested in the etoy website through self identification—declaring etoy a corporation, giving people who work for it stock options as compensation, describing “products” which are, in the spirit of Rene Magritte’s 1928 drawing of a pipe labeled “Ceci n’est pas une pipe,” merely symbols of products. In other words, etoy uses pictures and diagrams of products which are not really able to substitute for a product in itself.

Ubermorgen’s playful interaction in using e-business systems as a sculpture medium continues to question the realities of e-business and make the mechanisms behind them transparent. Their work includes the EMRZ trilogy ([http://ubermorgen.com/EKMRZ\\_Triology](http://ubermorgen.com/EKMRZ_Triology)) which takes a critical look at Google, Amazon and E-bay. Of the trilogy, this paper will focus on the 2005-2006 piece aimed at Google, called “Google will eat itself.” ([www.gwei.org](http://www.gwei.org)). This performance can be understood as an innovation based approach to knowledge in the sense that Nonaka et al (2000) explained through their SECI model—a model in which knowledge is converted from tacit to explicit through a process which moves from Socialization to Externalization to Combination to Internalization.

To examine the digital art performance, Google Will Eat Itself (GWEI.org), this paper will combine a discussion of underlying assumptions affecting our understanding of transparency with the SECI model (Nonaka et al 2000).

## **2. A Discussion of Underlying Assumptions Affecting Our Understanding of Transparency**

What is transparency? It is a meme that has entered our consciousness in the Internet age, often used but rarely examined from a theoretical perspective. Intuitively, it is often conflated with the concepts of availability and openness. However, if we see openness as the opposite of privatization, as in the context of the open source software movement, it implies much more than availability. It also implies the presence of what Kelty calls “a recursive public” independent from the traditional power system and characterized by both the agency and the knowledge to create alternatives. (Kelty 2008, p.10) Transparency differs from openness in Kelty’s definition of openness because it refers mainly to availability or access to information, which is distinct from the presence of a recursive public. So, if we move from the intuitive notion that transparency is openness to a more reflected definition, what are the key aspects of transparency that make it a useful concept which we can operationalize in research design?

Looking to definitions from other disciplines, we can begin to theorize transparency from a more reflected perspective by looking at the connection between transparency and knowledge. From the practice of computer programming, transparency refers to self knowledge of the overall system being programmed—privileging the system to the individual programmer—so the system knows the location of the components, but the person doing the coding does not. (Zomoya 1996: 315) Thus, from an engineering perspective, transparency is not an individual phenomenon, but a system wide feature that allows for “loose coupling” or ease of replacing any given part that fails. Transparency is about what the programmer doesn’t know to ensure that the system can know the location of different components.

Outside of the programming world, in the domain of communication, the term transparency has taken on an opposite meaning by implying open communication that is held accountable by outside audiences. This accountability is different from Kelty’s recursive audience because it implies knowledge and expectations communicated by an audience rather than the audience possessing the agency to produce alternatives—which is central to Kelty’s notion of openness. Internet technology supports the underlying assumption that wide spread information is the key to transparency, rather than the computer systems function-focused notion which limits information availability in order to avoid disruptive assumptions and ensure the functionality of the system. Thus, the dimension of audience for transparency can be seen as having two sides—selection of audiences for optimum functionality of the system, or broadening of audience for optimum communication.

A second dimension of transparency can be understood as transparency in cultural contexts. If we understand culture from a semiotic perspective (Radford 1998), a focus on how culture reflects and affects both resources and processes related to meaning-making offers a knowledge-based perspective for both understanding and operationalizing cultural contexts. As cultural contexts are social and include resources such as technology, knowledge, and production practices, an approach from a socio-technical perspective can be fruitful for understanding transparency in cultural contexts. Knowledge can be understood not only as a cultural resource, in addition, ways of knowing can be understood as a form of cultural practice. When we approach transparency as a socio-technical construct, we connect technologies that make information widely available with socio-cultural acts of knowing.

From this socio-technical perspective, our approach to knowledge informs our understanding of the social side of transparency. Knowledge has been theorized in terms of identity (Wenger 1999), innovation (Nonaka 1995, Nonaka et al. 2000), and in terms of decision-making processes (Choo 1998). Although these three perspectives are not comprehensive, when examined together, they offer a multi-dimensional perspective for understanding the social aspects of transparency and point to features of cultural contexts. Transparency can be understood as culturally embedded because it reflects the available means of knowing and expectations for accounting for choices and actions in a given cultural context.

### 3. The Audience Dimension of Transparency in GWEI

In using the corporation as a medium for “digital sculpture,” Ubermorgen offers sections of their website which demonstrate mechanisms used to value Internet based business aimed at the tension between audiences knowing and not knowing. In Zamoya’s metaphor of the programmer as not knowing the location of data in order to ensure the functionality of the system, she questions the relationship between knowledge in the public commons and the functioning of the Capital system of business on the Internet. In parallel, Ubermorgen.com uses GWEI to question Capital models of Internet business from a Commons perspective. Is it the lack of knowledge about how value and money is created through Internet mechanisms in the Commons which allows the Capital side of Internet business to function? And does the enlargement of the audience from only a Capital or business audience to include a Commons audience jeopardize the Internet business system functionality?

Through revealing the mechanisms of funding related to Google, Ubermorgen.com tries to make the Capital system of funding transparent to the Commons. This is done by creating a system that creatively uses a feature of Google called AdSense. AdSense generates capital through counting the number of hits for ads from a given website. Ubermorgen.com has to date used AdSense in an unintended manner to generate hits through “bots”, which are then paid out by Google. In turn, Ubermorgen uses the capital generated by the performance to buy shares of Google stock. To date, they have generated over 405,000 US dollars worth of revenue, which has been used to purchase 819 shares. On the GWEI site, they keep track of the stock prices, the current value of their shares, and the number of years it will take at their current rate of earning to own Google—in this case, 202,345,117 years until the GWEI project fully owns Google (<http://www.gwei.org/pages/google/googleshare.php>, accessed March 31, 2012). The system used to generate this real revenue stream is documented in their diagram of the GWEI process, shown in Figure 1.

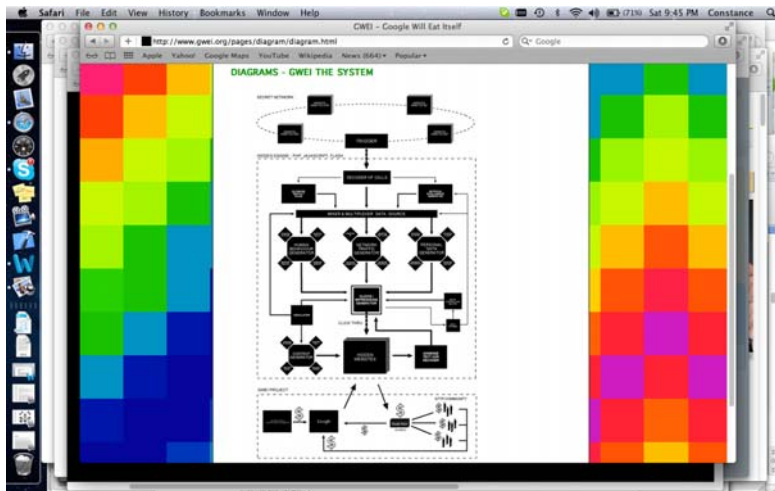


Figure 1. GWEI model for generating revenue to buy Google shares (<http://www.gwei.org/pages/diagram/diagram.html>).

In Figure 1, the diagram shows the how clicks are used to generate money and buy Google shares for the GTTP (Google To The People) community who jointly own the Google shares bought by the project. This diagram is intended to reveal the mechanisms for generating money through AdSense as just as far from reality as their project, which will own Google in a little more than 202 million years. Thus, Figure 1 can be seen as both an act of transparency in terms of revealing the previously hidden mechanisms of Internet funding, and an attempt to “educate the programmer” so that the programmer can make assumptions that begin interrupt the system of a Capital dominated Internet.

#### **4. The Cultural Dimensions of Transparency in GWEI**

Although the cultural dimensions of transparency are distinguished from the audience dimension of transparency, the intent is not to suggest a separation between audience and culture, but rather to investigate how our understanding of transparency shifts with our focus. In the audience dimensions of transparency, the focus is on examining who has access to knowledge. In the cultural dimensions of transparency, the focus shifts to how resources for knowing and meaning-making are deployed. If we understand culture from a semiotic perspective (Radford 1998), a focus on how culture reflects and affects both resources and processes related to meaning-making offers a knowledge-based perspective for both understanding and operationalizing cultural contexts. As cultural contexts are social and include resources such as technology, knowledge, and production practices, an approach from a socio-technical perspective can be fruitful for understanding transparency in cultural contexts. Knowledge can be understood not only as a cultural resource, in addition, ways of knowing can be understood as a form of cultural practice. When we approach transparency as a socio-technical construct, we connect technologies that make information widely available with socio-cultural acts of knowing.

When we shift our understanding to transparency from a knowledge perspective via Nonaka’s SECI Model (1995, 2000), the diagram for Google Will Eat Itself in Figure 1 can be understood as encompassing both Externalization and Combination. Externalization demonstrates how Google generates and pays out money for clicks for a public commons audience. Combining this knowledge describing how Google works with the knowledge of how the public commons works becomes a means to attempt to move Google ownership from private capital ownership to the public commons.

In revealing the secret life of Google, Ubermorgen.com uses artifacts to link to knowledge of financial systems in European and American cultural contexts. In the section of the GWEI site labeled “Banking”, they show a page from their online banking system with UBS Bank in Switzerland which gives current Google Stock value. In addition, they have another section of the site where letters from Google shutting down 3 of their AdSense accounts are published, along with a legal “cease and desist” letter informing Ubermorgen that GWEI is illegal, and they need to shut down their secret AdSense accounts or face legal consequences. They also include photos of the cheques sent by Google to demonstrate the real side of this unreal model that through “the ignorance of the programmer” allows them to continue functioning in a way that extracts money from Google to shift the ownership of Google itself from the

Capital to the Commons through their legal organization, GTTP or Google to the People.

In addition to cheques and legal correspondence, Ubermorgen also plays with other cultural concepts that are currently key pieces of European Culture, such as Co2 production and the cost of running Internet sites. For example, in Figure 2, a screen shot from a link on the site Google Will Eat Itself (GWEI.org), you can see the “error” screen that quantifies the amount of CO<sub>2</sub> used to produce an error, and gives you a place to click to neutralize your own personal effect on the earth, and return it to balance. This screen questions the role of the Internet in producing CO<sub>2</sub>, as well as the role of a click, bringing up the questions —can a click really either create or erase 3.432 tons of CO<sub>2</sub>? And what can a click really do anyway? On clicking the red “HERE”, the user is returned to the GWEI website.

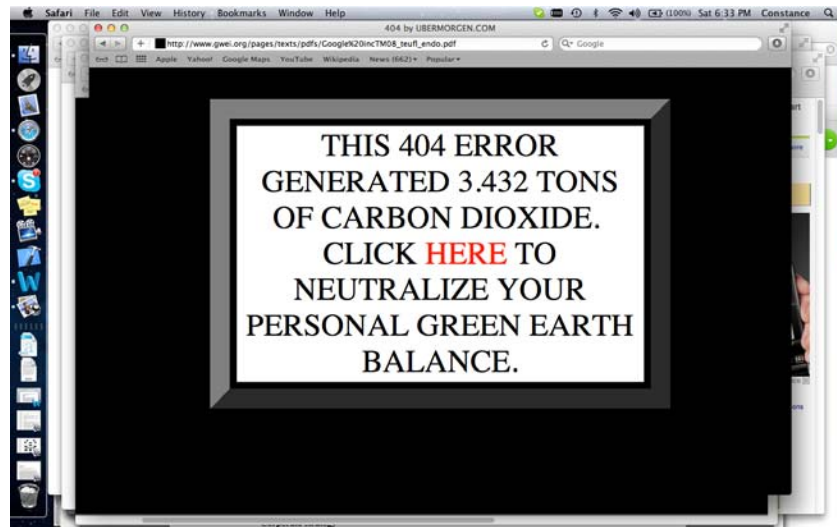


Figure 2. The “user error” screen  
[http://www.gwei.org/pages/texts/pdfs/Google%20incTM08\\_teufl\\_endo.pdf](http://www.gwei.org/pages/texts/pdfs/Google%20incTM08_teufl_endo.pdf)

This “user error” draws on resources of current European and global cultural contexts by directly linking the Internet to the production of Carbon Dioxide, and offering the audience a chance to “redeem” themselves through a mere click to neutralize their personal balance. This tongue in cheek reference to the “power of a click” reminds the users that the values attached to a click are still up for negotiation between the Capital and the public commons. This screen also makes a reference to the final words presented by Grischinka Teufl (2008), an Ubermorgen member in the document that this link was supposed to reference:

Selling out the delusion of net-mediated countercultures forces the emergence of deadlocked scenarios – hopefully leading to a model transforming the subjected gatekeepers of romanticism into troubleshooters of critical counterparts, fomenting the realm of an open source intelligence, developing cultureware which is leading

to the desired state of free sharing within a cooperation-model designed for the next step of knowledge-evolution without burning the potentials for coming generations. This is impossible without creating new socio-global standards for the system of informationalism. To rewrite the programs of consumerism we have to become polylogic smartjects knowing about our weakness for subservience and from time to time train ourself to switch off the machines, formating the harddrive and restart our system by re-inventing our-self before re-inventing the world.

Here, Teufel is calling for a shift in cultural context from the bottom up by changing the standards for how we deal with information and through reflection, moving from subjects who produce for Google to profit, to “Smartjects”— who can not only shape the culture contexts in which they live, but work together to develop “cultureware” which underlies the processes of knowing. These “smartjects” can be seen as a desired end result and innovation that Ubermorgen would like to emerge from the Internalization of the mechanisms used by both Google as an example of the Capital and GTTP (Google to the People) as an example of the Commons when they intersect in the digital art performance “Google will Eat Itself.”

## 5. Conclusion

The digital art performance by Ubermorgen.com called Google Will Eat Itself offers an example for understanding the role of transparency in knowing and acting at the tension between Capital and the public commons in Internet contexts. The piece itself can be seen as a innovation that uses dimensions of transparency in terms of both audience and cultural context to make information explicit and use the project to help viewers build knowledge about how business models and assigned value on the Internet works. It also highlights the role of both *knowing* and *not knowing* in allowing the system which supports Google and other Internet based business to continue to use the Commons as a basis for building Capital. Through the act of highlighting knowledge and non-knowledge and bring some of that knowledge from the Capital into the Commons, Ubermorgen.com challenges the system and opens up the opportunity for change through highlighting the differences between Google itself and GTTP or Google to the People, a commons organization created to interrupt and question the assumptions involved in Capitalizing on the Internet.

GWEI was also examined as a form of innovation following Nonaka’s SECI model, which focuses on how knowledge is converted from tacit to explicit. This model was seen in two dimensions of transparency apparent in GWEI—the dimension of audience and the dimension of cultural context. These dimensions can be understood as part of the knowledge conversion process since they show how knowledge is converted from tacit to explicit when new audiences are engaged, as well as when cultural resources are re-employed in ways that cause viewers to question their assumptions. The key innovation in GWEI was the use of Google’s own mechanisms for generating money to shift part of the ownership of Google itself from the Capital to the Commons.

The implications of GWEI include a need to question our assumptions about the Internet and its’ role as what Teufel called “Cultureware.” In addition, GWEI calls us to



question the interaction between the Capital and Commons—should the Commons be generating money for the Capital? Or should the current business models be slowly converted to Commons? Given that people in the Commons publish, sell and consume themselves – through services provided by Google as a form of “cultureware,” Google Will Eat Itself offers us transparency in understanding the underlying mechanisms which generate Internet revenue. In doing so, it calls us to move ourselves from 1) subjects used by Google to generate their revenue to 2) Teufel’s “smartjects” who both engage in and are able to benefit from the process of producing “cultureware.”

## References

- Choo, C. W. (1998). *The Knowing Organization: How Organizations Use Information to Construct Meaning, Create Knowledge, and Make Decisions*, Oxford University Press.
- Etoy.com (1999-2000). Toywar 1999. Available online: <http://www.eto.com/projects/toywar/>. Accessed March 20, 2012.
- Kelty, Christopher M. (2008). *Two Bits: The Cultural Significance of Free Software*. Duke University Press. Available online: <http://twobits.net/pub/Kelty-TwoBits.pdf>
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge Creating Company: How Japanese Companies create the dynamics of innovation*. New York: Oxford University Press.
- Nonaka, I., Toyama, R. & Konno, N. (2000). SECI, *ba* and Leadership: A Unified Model of Knowledge Creation. *Long Range Planning* 33: 5-34.
- Radford, Luis (1998). On culture and mind: a post-Vygotskian semiotic perspective with an example from Greek mathematical thought. Paper presented at the 23rd Annual Meeting of the Semiotic Society of America, Victoria College, University of Toronto, October 15-18, 1998. Available online: [http://colloquium.laurentian.ca/NR/rdonlyres/BD6DEEF4-9267-4C9F-913A-8E7C8CFCF418/0/On\\_culture\\_mind2.pdf](http://colloquium.laurentian.ca/NR/rdonlyres/BD6DEEF4-9267-4C9F-913A-8E7C8CFCF418/0/On_culture_mind2.pdf).
- Teufel, G. (2008). Google INC. vs. Wisdomized Clouds. Paper prepared for Transmediale 2008. Available online: [http://www.gwei.org/pdfs/Google%20incTM08\\_teufel\\_endo.pdf](http://www.gwei.org/pdfs/Google%20incTM08_teufel_endo.pdf). Accessed March 30, 2012.
- Ubermorgen.Com (2005-2006). *Google Will Eat Itself*. Digital art performance. available <http://www.gwei.org>. accessed March 15, 2012.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.
- Wishart, A. & Bochsler, R. (2003). *Leaving Reality Behind: etoy vs eToys.com and other battles to control cyberspace*. New York: HarperCollins Publishers.
- Zomoya, A. Y. (1996). *Parallel and Distributed Computing Handbook*. USA: McGraw-Hill, pp. 315-318.