DIY: The Militant Embrace of Technology

By Marcin Ramocki

The intent of this expose is to outline the rudimentary theoretical foundations for certain cultural practices involving the subversion of consumer technology. By consumer technology I mean hardware and software produced with an the intent of maximum financial gain. The "Do it Yourself" in the field of fine art is almost a tautology, but it certainly isn't so in the world of consumer electronics and software design. The growing phenomenon of artists involved in active critique of the technosphere (which includes my own art practice), creates a set of interesting questions. The first one is: "why do we feel compelled to mess with electronic devices and call it art?", and the second: "is what we do still a continuation of Modernist principles or an all together different thing; and if so what kind of thing is it?".

I'd like to start this discussion by tracing the history of social critique all the way back to the classical Marxist model. We are going back to the moment in history when the very concept of oppression came to its maturity and entered the political and artistic vocabularies. The Marxist discourse is based on the dialectical conflict between the oppressed class of proletarians and the bourgeois oppressors. The new economy becomes possible thanks to the Industrial Revolution and mass mechanical reproduction of goods. The proletarians are essentially people who sell their unskilled labor for minimum wage and become extensions of the factory machine lines. They lose what Marx believed to be the most fundamental human need: the access to the fruits of their own labor. This disconnect created by the industrial production severs humans from the objects they make, and breeds what Marx calls the "alienation of labor".







Charlie Chaplin, Modern Times

Alienation is the key concept, which allows fuller understanding of our involvement with technology; and the link between technology and the capitalist mode of production. In the traditional Marxist scenario the proletariat sells their labor to the bourgeois, who owns the means of production (factories, machines). As a result, the proletariat becomes frustrated by their existential hardships and the **disconnection from their own labor output**. The bourgeois accumulates

more and more capital and updates their technological base, and thus expands their wealth. The cycle is complete when the commodity produced gets sold to the very same proletarian who assisted in its mechanical reproduction. The surplus is maximized.

This 19th century scenario still holds up today, or should I say all elements are still in place; it is just that their weight and significance has shifted. The second half of the 20th century breeds "white collar" societies, which generate capital through the consumption of commodities produced in developing countries as well as the economics of intellectual property. Our reality is no longer the universe of objects and direct, oppressive force, but rather the realm of signs, symbols, information and its manipulation.

The critical discourse of alienation continues in writings of the French theorist Jean Baudrillard. In his classic 1968 "Simulacrum and Simulation" Baudrillard analyses the path of an object becoming its own representation: a simulacrum. Never mentioned by name, alienation is the force making the successive generation of simulacra less and less perfect. The more alienated we are the further we are removed from the reality principle. In the world where digital models precede living material beings, we are frustrated not necessarily by the disconnect from the fruits of our labor, but more by the circumstances of consumption surrounding us, abundant commodities. The new alienation is **the alienation of consumption and commodity**, which only makes sense, considering that consumption is the "white collar" labor.



Disneyland, free stock photo "American Family" and an example of a useless commodity

Consumers fundamentally don't understand the intention behind the production and existence of the commodity. They don't understand how it's made and where, and what is the actual value of the commodity within their personal frame of reference. The effect is a sense of reality loss, non-referential simulation. It took me several years to come to conclude that the scenario of "Disneyland" (a 3rd generation simulacrum) described by Baudrillard is in fact a complex group therapy device. Disneyland is a place where fake is overdone on purpose, exaggerated, exposed. Nobody pretends that Mickey is a real mouse, opposite: his cartooniness is fully embraced. The "over the top" simulacrum of Disneyland is there to prevent us from realizing that the actual world outside of Disneyland is also completely fabricated, modeled and simulated. We need Disneyland to trick

ourselves into believing in the reality, from which we feel totally alienated, and accept the world of commodities that makes absolutely no sense in our lives. Without this escape mechanism we face the inevitable schizophrenia.

The last and most recent text I would like to reference is "The Hacker Manifesto" by McKenzie Wark. "The Hacker Manifesto" is a clever update on The Communist Manifesto, in which Wark takes into the account the socioeconomic impact of the concept of **intellectual property**. The late capitalist (21st century) dialectic is no longer that of a proletarian vs. bourgeois. Although that dynamic certainly still plays a huge role in the societies which actually produce goods on a mass scale (China, India, South America), in the post-capitalist US and western Europe economies have shifted towards copyrights, patents, and trademarks.

For Baudrillard in 1968 it was the individual against the digital, simulation System (with a capital "S"). Almost 40 years later McKenzie Wark talks about the new class of hackers, a direct social manifestation of the intellectual property laws. According to Wark hackers are the people capable of forcing the sign/information system to creatively transform. They are the inventors and generators of new value and the necessary pioneers of constantly revolutionizing means of production. The term "hacker" obviously originated in computer engineering circles, but Wark uses the word in much broader sense. Any individual involved in the invention of concepts is a hacker, this would include most contemporary artists, scientists, programmers, and culture jammers. Hackers, as a social class, are in a relation of conflict with "vectoralists", who are essentially the macro-managers of the digital economy, the directors of the military-industrial complex, who project and define the vectors of evolution for future markets.

Par excellence, the hackers are individuals who rise above the proletarian alienation of labor and fully embrace the knowledge and information pertaining to the means of production, their hardware and software. After all, they propel the system with the constant re-invention of rules, signs, ideas and fashions.



Cracked game intro, hacked Xbox, Cory Arcangel's "Mario Clouds"

I believe that what we see happening with the new media art is the expression of the crystallizing interests of this new class: **overcoming the alienation of labor** (circuit bending, game hardware hacks, custom electronics), **overcoming the alienation of commodity** (i.e. repurposing, preparing and retro-engineering) and the political-activist attitude related to their inherent conflict with the vectoralist agenda (i.e. online game performance). The work happening right now comes from the first generation born into a world with personal computers, video games and the internet and on-line media. Their first frame of reference is not the linear narrative of a film but an algorithmic one of a game or a website. There is no more reverence toward technology: there is a need to question it and make sense of it.

Lets examine some of the most prominent strategies of artists involved in the critique of technology.

The clearest and most straightforward are the cases where the artist actually is a hacker in the traditional sense of the word and does break something he or she shouldn't be breaking. So we have **circuit bending**, which is the creative short-circuiting of low voltage, battery-powered electronic devices such as guitar effects, children's toys and small synthesizers to create new musical instruments and art pieces. One of my favorite examples of extreme circuit bending is Paul Slocum's Dot Matrix printer hacked to be a drum machine. I also see a lot of circuit bending that unintentionally produces music, and Joe McKay's cell phone series is a beautiful example.

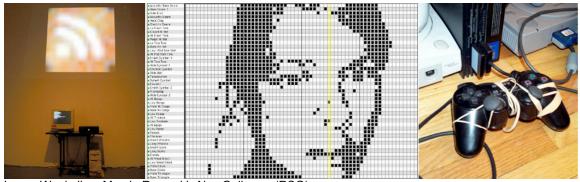
When talking about **classical hacker art** one has to mention the early works by Cory Arcangel and Paul Davis. We have the whole spectrum of subversive activities: cutting open the Nintendo game cartridge, removing the original chip, learning the code to re-program the game (in this case Mario), burning the new chip and placing it in the original cartridge. And then posting the how-to instructions on the internet.



Paul Slocum, Joe McKay, JODI

A little bit less direct strategic interventions include **structural game works**, mainly legal game modifications and machinima made with tools provided by the game developer. A successful modification will reveal the underlying control mechanisms and code characteristics of the game, make the user aware that the game they are playing is code dressed with images and sounds. One of the best examples of re-dressing the code is SOD, a Castle Wolfenstein modification by the Dutch collaborative JODI.

Just like a commercial game can me modified, other softwares and hardwares can be **re-purposed** and **prepared** without actually damaging them. In this case the artists finds the way to push the application or the hardware in such way that it defies its own commercial strategy. As an example of re-purposed hardware I picked Lance Wakeling's "Study for the Portrait of Internet (Static)" in which the artist forces an Xbox machine to be a computer running Linux OS and crawling the net. The path of the search is based on associations between images, and as the crawler moves between sites you can see the changing images. My own piece called "Torcito Project", which is a re-purposed old Mac sound application Virtual Drummer, provides an example of re-purposing a piece of software. The application was "mis-used" to become a 1 bit matrix for image creation: each portrait then generates its own soundtrack.



Lance Weakeling, Marcin Ramocki, Alex Galloway (RSG)

"Prepared Playstation" by Alex Galloway is a simple physical manipulation of a game console, where the controls are bound with rubber bands, and the game (in this case Tony Hawk's skateboarding games) is stuck in an awkward sequence, which the game developer didn't intend to be a part of the game. A similar type of work, which steps out of the gaming circle is "Two Projectors, Keystoned" by Cory Arcangel. It is basically two projectors used as light sources, keystoned and partially superimposed. This work is about the projector as medium, its technological limits, spatial geometry and light as a sculptural material; recalling 60's minimal art©

A piece of software (and hardware) could also be subverted by remaking it altogether and therefore taking charge of it conceptually. The category of artist softwares imitating corporate applets is quite large and has been going strong. What we see is mostly **retro-engineering** and **custom electronics**. In addition, there are fake hacker websites, games rewritten from the ground up, alternative browsers and Hollywood movies. I couldn't help but show you this hilarious version of ET by Kara Hearn, which is a meditation on cinematic editing strategies and generation of emotional impact through montage.

This strange piece of circuitry is a custom 4 bit synthetiser build by Jamie Allen and housed in an old cigar box. He chooses to produce the sound generating device form scratch and have the most intimate understanding of the process.

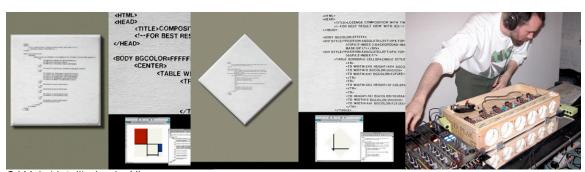


Cory Arcangel, Kara Hearn, Mike Beradino

Much more loosely related to the concept of DIY are the works where the artists makes us realize the existence of certain codes and patterns by conceptual **data visualization**. I particularly like the cases where information becomes materialized and its hidden codes revealed; like in this painting by CJ Yeh, where "Boogey Woogey New York" by Piet Mondrian was transcribed into HTML and than the code was painted onto a board of the same size as the original painting. Another great example is a piece by Mike Beradino called "Mikey Newchurch", where artist's Second Life avatar code is extracted, and then a physical representation of the avatar is printed on a 3d printer.

What relates all the works I just discussed is their rather militant intention and strategy to reveal the aspects of technology which we take for granted. It is that "taking for granted" which turns us into consumers of culture as oppose to active participants. Figuring out what is inside the black box (and why it was made) is becoming the official duty of artistic communities.

Finally, to answer my own questions, we mess with electronics because we identify it as a source of meaning for our generation, a way of re-connecting with our surrounding reality mostly composed of code and technology. The tools used in this struggle will inevitably come from what we learned in college, namely Clement Greenberg and Andy Warhol. But the phenomenon we see goes beyond modernism. It is no longer the need to clarify the medium, or find the best form for its content. The concept of an avant-garde pushing the envelope toward some abstract "New" is slowly but surely yielding to a very specific, tactical approach of returning technological knowledge where it belongs: in human lives.



CJ Yeh (detail), Jamie Allen **Edted by: Charles Beronio**