

# mcd<sup>Ⓞ</sup>

magazine des **cultures digitales**

# #76

January / February 2015

WE GROW **MONEY**  
WE EAT **MONEY**  
WE SHIT **MONEY**



MONETARY ALTERNATIVE / CRYPTO-CURRENCIES / FISCAL DISOBEDIENCE  
VIRTUAL CURRENCIES / TIME BANKS / POST-INTERNET ECONOMY

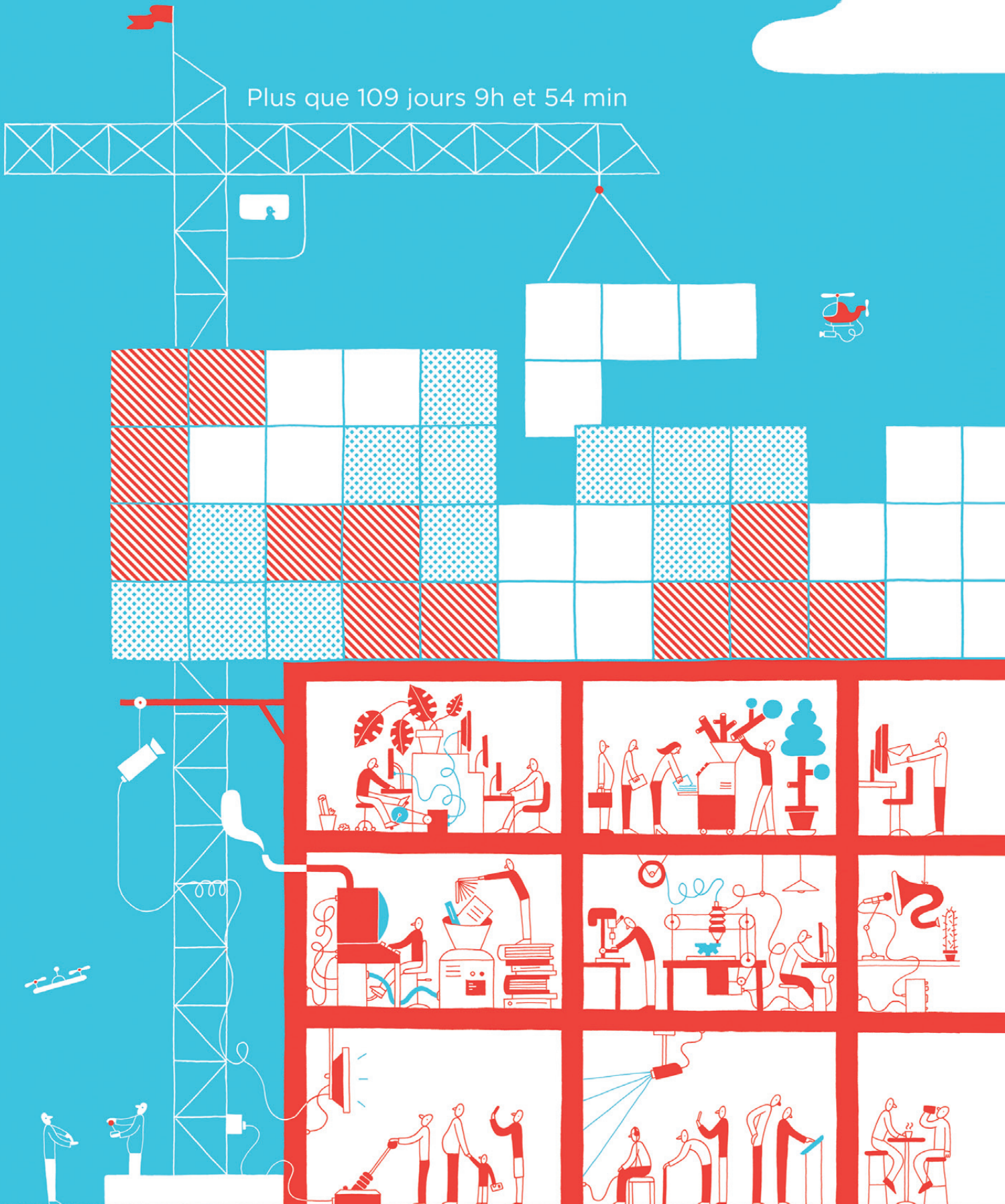
[www.digitalmcd.com](http://www.digitalmcd.com)

DOM: 9.9 € - BEL/LUX: 9.9 € - CH: 14 FS - CAN 14.99 \$ca - D: 10.50 € - N CAL/S: 1250 cfp - POL/S: 1450 cfp

L 14922 - 76 - € - RD



Plus que 109 jours 9h et 54 min





## THE COUNTERFEITERS

■ Our relationship with money is complex, to say the least. . . On this side of the Atlantic, we preserve an almost aristocratic modesty when it comes to talking about our income, whether we are employee or heir.

On the other hand, obeying the laws of attraction / repulsion, money is a powerful source of motivation and inspiration. Like sex (just as an example), there is no taboo regarding its artistic representation and interpretation. And the crisis—assuming that it is indeed a crisis and not a structural element of our economic model—seems to spark artists' imagination.

As we can see from the panorama of initiatives collected by Shu Lea Cheang (guest editor for this issue), along with consulting from Annick Rivoire (poptronics.fr), money is no exception to the “great transformation” brought on by digital technology—dematerialization, networking, transparency, openness, etc.—the exact opposite of the verticality and opacity of financial structures that continue to collapse before our delighted eyes. . .

In the age of electronic transactions, accelerated cash flow and ubiquitous banking platforms, humans seem to be out of the loop of this infernal machine generating 2.0 crashes. In parallel, we are witnessing the emergence of the first virtual currencies. Not to say that this announces a new financial counter-utopia on a human scale.

As some of the contributors point out, we find, on the contrary, greed, speculation, exploitation. . . along with symbols that send us back to the stone age—the analogy between the goldmines and the “mining” of bitcoins is arresting. No doubt, these so-called virtual currencies will not give us the chance to renew with our nostalgic origins of trade and donation, the absolute antithesis of money.

And it is rather troubling to see how the esthetics of both the coins and “fake-bills” distributed by the artistic and political collectives resemble state currencies, recalling the great battle between libertarians and liberals. . . It is reassuring to know that both coastal brothers and night workers regularly tend to their encrypted piggy banks. . .

Nonetheless, the monetary alternatives suggested by artists and activists express dreams of economic emancipation, indicate other possible yet uncertain paths, symbolize the potential of new media technologies, and still force us to rethink current distribution networks. In this time of penury, both material and intellectual, it's already a lot. ■

**LAURENT DIOUF**  
EDITOR IN CHIEF

MCD gives special thanks to Shu Lea Cheang, Annick Rivoire and all the writers and translators who contributed to this issue.

LES ABATTOIRS  
SCÈNE DE MUSIQUES ACTUELLES PRESENTENT :



FESTIVAL

# ELECTRÔ CHOC

DIX

MUSIQUES ELECTRONIQUES & ARTS NUMÉRIQUES

## „PREMIER VOYAGE“

DU 14 AU 28 MARS 2015 - BOURGOIN-JALLIEU 38

CAPI  
L'AGGLO

Rhône-Alpes

isère

Bourgoin-Jallieu

BI-POLE

Famusique

SPE

CAPSA

SO FM  
100.7

Z4VA

...491

mcd

KIBLIND

VIBRATION

INFO  
CONCERT  
.COM

TRAX

NOVA  
L.C. GRAND MIX

Télérama'



ElectroChoc Festival



electrochoc\_festival



@ElectrochocFest



+electrochoc

[www.electrochoc-festival.com](http://www.electrochoc-festival.com)



# ■ CONTENTS ■



Cover:  
Zéro Euro.  
© Michael Aschauer

- 03\_ EDITORIAL
- 05\_ CONTENTS
- 07\_ PREAMBLE
- 08\_ **CRITICAL INTERNET ECONOMIES,  
A PERSONAL CHRONOLOGY**

## **WE GROW MONEY**

- 16\_ AGLIOMANIA : EATING AND TRADING  
MY STINKY ROSES
- 18\_ MONEY, ART AND GIBLING
- 22\_ PERMANENT REVOLUTION IN LEWES  
THOMAS PAINE'S ADOPTIVE TOWN
- 24\_ MONEY DOESN'T SMELL
- 26\_ ARTISTS AS BANKERS, CURRENCY  
AS ART
- 28\_ MINOR USES OF MONEY
- 32\_ ART REWRITES THE HISTORY  
OF MONEY
- 34\_ THE AFRO CIRCULATES HOPE  
FOR AFRICA

## **WE EAT MONEY**

- 38\_ CULTURAL ACTIVISM IN SPAIN  
FACING THE CRISIS
- 42\_ NOTRE-DAME-DES-LANDES:  
OMNIA SUNT COMMUNIA
- 44\_ LESSONS IN FISCAL DISOBEDIENCE  
WITH NÚRIA GÜELL
- 48\_ ART AS BUSINESS / BUSINESS AS ART
- 50\_ TIME BANKS
- 54\_ SURVIVING MONEY
- 56\_ BUREAU D'ÉTUDES
- 58\_ OLGA KISSELEVA
- 60\_ ÉCONOMIE SOLIDAIRE DE L'ART
- 62\_ ALBERTINE MEUNIER

## **WE SHIT MONEY**

- 66\_ SILICON MONEY  
AND THE COMMONS
- 70\_ BANKING ON NETWORKS, OR THE  
RISE OF PLATFORM ECONOMIES
- 72\_ BITCOIN, THE END OF THE TABOO  
ON MONEY
- 78\_ BITCOIN AS THE REFLECTION  
OF THE MATERIAL HUMAN  
COMMUNITY OF THE INTERNET
- 82\_ MOVING BEYOND BITCOIN
- 84\_ ONE YEAR IN BITCOIN
- 88\_ WHY I BUY INTO THE CULT  
OF DOGECOIN
- 92\_ QUANTITATIVE EASING  
(FOR THE STREET)
- 94\_ (W)ORLD CURRENCY EQUATION
- 96\_ (A) P2P MONEY MANIFESTO
- 100\_ ZERO EURO ART
- 102\_ ECONOMY 0
- 104\_ IMAGINE THE FUTURE OF MONEY

## **108\_ WEBOGRAPHY/BIBLIOGRAPHY**

## **112\_ SUBSCRIPTION**

## **114\_ WHO'S/DISTRIBUTION**

# viridis

Un projet de Gaspard et Sandra Bébié-Valérian

[www.art-act.fr/projets](http://www.art-act.fr/projets)



Un jeu-vidéo, une ferme à spiruline, une installation, une expérience collaborative et artistique.



UNION EUROPÉENNE





# CHANGE MONEY!

The economic crisis of our globalized societies has at least one positive consequence—it pushes citizens, artists and activists to tackle the issue of money. Finding alternatives, inventing new forms of exchange and even foregoing currency: *Change money* gives an overview of this collective, electronic and shared reappropriation of money.

■ The first speculative bubble in the history of global finance dates to the 17<sup>th</sup> century; it was called Tulipmania. In Holland, the rate of the tulip bulb rose exponentially to reach its climax in 1637—at that time, one bulb was worth more than a painting by Rembrandt... The origin of this first speculative crisis (of course, both the bulb and the bubble deflated, provoking an economic crisis) should be credited to a form of speculative hysteria.

Money, value, monetary exchange... These concepts have long been excluded from the field of new media, as if the Internet and Net Art were emancipated from these issues, living not on love and fresh water but on silicon and bits, living in a utopia of collective intelligence detached from economic constraints. On one side, the global financial crisis—from U.S. subprimes to sovereign debt in Europe to Chinese speculative economies; on the other side, the emergence of crypted alternative currencies such as bitcoin have shown that globalization is also an “ideal” moment to disconnect cash flow from flow of people and goods. The same algorithms that currently allow our computers to multiply their calculating power contributed to this disconnection in the field of financial markets. Speculative money flows faster than what the economy humanly produces. Without having contemplated, studied, tackled head-on the issue of money, information theorists were trapped once the crisis occurred...

**Change money—We grow money, we eat money, we shit money.** MCD #76 observes and presents a range of proposals, actions, thoughts about money in the Internet age. Yesterday the tulip, a merchandise far removed from the idea of currency, today garlic, joyously and furiously brandished as an exchange value<sup>(1)</sup>... MCD magazine invited us—an American hacktivist artist living in Paris and working everywhere on the Net and around the world, Shu Lea Cheang, and the founder of Poptronics, media for online hacktivist cultures, Annick

Rivoire—to invest its pages. From Greece, Germany, Austria, Argentina, Brazil, Africa, Spain, UK... artists and theorists, journalists and citizen hacktivists have contributed to this panorama of money in the age of decentralized networks. *Change money* was conceived internationally, via network, and in three parts.

**We grow money** studies initiatives of citizen and/or artistic alternative currencies, such as the Lewes pound, local currency of a little English town with a revolutionary past, or the Gibling, trading currency of an Austrian punk collective, or the Afro, the unique virtual currency of the African continent. In a time of crisis, there are many answers: artists create banks, currency, citizens invent alternatives to institutionalized systems, money takes on another value (we spend locally, we grow money...).

**We eat money** proposes a society that ignores money, either because the system has simply collapsed, as was the case in Argentina in the 1990s, or because the communities mistrust it and build alternatives such as the Zone to be defended in Notre-Dame-des-Landes, near Nantes in France, which is very practically attempting to bring down economism by cultivating potatoes and molding flour... In Greece, time banks have invented another form of (non-commercial) exchange, trading knowledge and skills since the debt crisis. In Spain, artist Núria Güell distributes her lessons in fiscal disobedience. In the felted world of contemporary art, Kate Rich does commerce with her *Feral Trade*, which returns “the vacuity excedent of art”. In France, artists take care of themselves, evoking a sort of *Economic solidarity with art* in order to improve their economic situation. One thing is certain, 2015 and the expansion of bitcoin have ended the “money taboo”, as proclaimed by artist and activist Jaromil.

Since the emergence of bitcoin and so-called alternative currencies (no central bank or sovereign state), it's a new deal. As we enter the age of networked banks and the decentralized crypto-currencies of “alt-coins”, *Change money* raises the question of currency's post-Internet future. **We shit money** poses the theoretical, practical, political questions of the moment: should we burn the bitcoin, should we control the expansion of virtual currencies, does the value of virtual transactions make silicon the new gold ounce of the 21<sup>st</sup> century? Are we moving toward a society with no monetary regulation? Are P2P money, crowdfunding, crypto-currencies our economic future? Should we go even further, toward economy zero, euro zero? Now is the time for germinating open source crypto-currencies. ■

SHU LEA CHEANG & ANNICK RIVOIRE

(1) *Agliomania*, project by Shu Lea Cheang, see page 16.

# CRITICAL INTERNET ECONOMIES

## A Personal Chronology

With resource sharing becoming a necessity, the currencies in which this is happening are now on the radar of a growing number of geeks, artists and activists. Let's talk about the aesthetics of post-credit money, writes media theorist Geert Lovink.

- “The personal is political.” This 1970s adagium of the feminist movement rarely gets applied to our financial situation. Money is a private fate. You're doomed if you have and doomed if you haven't. *Making money* (Ole Bjerg, 2014) is a capacity that only the fast boys of Wall Street possess while speculating with other people's savings--the rest of us are busy scraping coins<sup>(1)</sup>. With the recent stagnation of middle class incomes, everyday finance is becoming politicized. Debt is a public affair. After 2008 we can barely say: *Wir haben es nicht gewusst*. Can we finally speak of an emerging 'virtual class' consciousness?<sup>(2)</sup> With resource sharing becoming a necessity, the currencies in which



this is happening are now on the radar of a growing number of geeks, artists and activists. How are you going to make a living? Let's talk about the aesthetics of post-credit money. But before we do this, I want to look at how internet culture and financialization have come together over the past decades and why Silicon Valley has so far stopped us from using tools that redistribute resources.

### **Crisis of the 1980s**

In the midst of the never-ending economic malaise of the 1980s, I went through an existential crisis of sorts. Like others of my generation, I was living off social welfare, making my home in squats, and hitchhiking between Amsterdam and West Berlin while confronted with the neo-liberal backlash of Reagan and Thatcher. Witnessing the sad decline of the autonomous movements and having said farewell to academia after grad school, there were little professional opportunities for us post-hippies pre-yuppies. I felt too much of an independent intellectual to identify with the journalist role model, and in 1987 I decided to label myself 'media theorist', wherever that would take me. I had recently joined the Amsterdam free radio movement and had been interested in media theory ever since I majored in 'mass psychology' at the University of Amsterdam. But how was a 'media theorist' going to make a living?

A good five years later I had still not improved my job situation but quit the dole anyway, by selling essays in the media arts context, giving lectures,

doing some organizing work in the Amsterdam cultural scene (dominated by baby boomers) and working part-time at the Dutch national broadcaster VPRO, earning \$700 (US) a month, barely more than a social security check. The world had tumbled into yet another recession. Regardless, 'new media' started to boom under speculative rubrics such as 'multi-media', 'virtual reality' and 'cyberspace'. Soon after, in early 1993, I obtained internet access. With the help of my hacker friends I uploaded my archive of digital texts, which was already considerable since I had started using a PC in 1987. It was in this context that I had my first discussion about the absence of an 'internet economy'. I was told that content was going to be 'free'. Users had to pay an ISP in order to gain access and would also continue to purchase and upgrade their hardware such as PCs, screens, printers and modems. In the case of software, the situation wasn't as clear-cut. From early on there were shareware and free software vs. corporate proprietary ones; games were another grey zone.

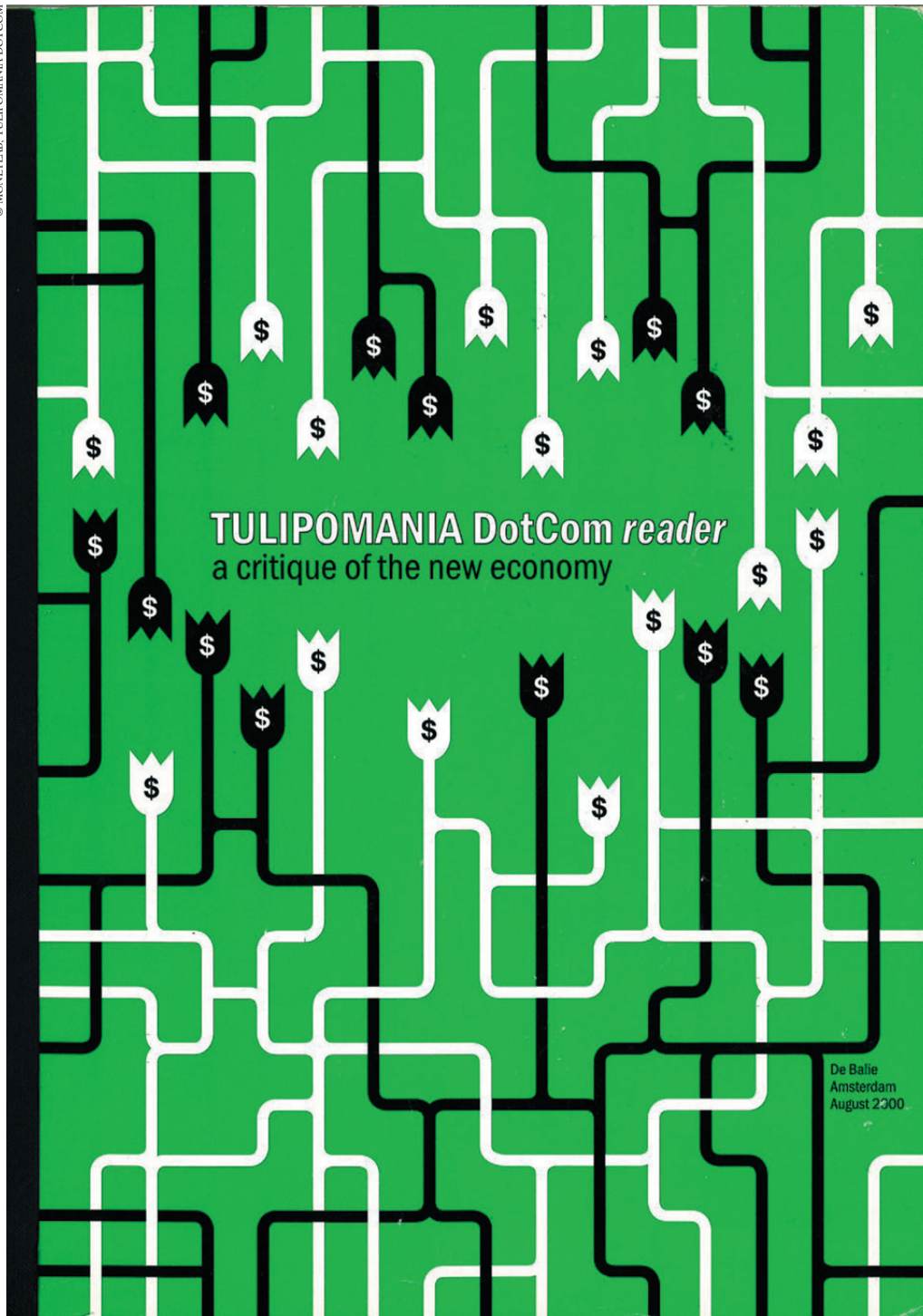
### **1990's: 'text' as first victim**

My geek friends told me: if you're not into old media or academia, try to find an arts grant, but do not expect the internet to provide you with an income. Find some boring day job, and express yourself the way you want to at night. Set cyberspace on fire. That's the destiny of writing and all art forms. Become an entrepreneur and start your own business, learn some coding and become one of us. In 1993 serious money could be made with web design, but then again, that wasn't content and

looked like a hyped-up, temporary opportunity. Writing, be it journalism, fiction, poetry or criticism, would have to be financed through cultural funds or traditional publishers and become de-professionalized, or 'democratized', to put it in more friendly terms. The internet was going to disrupt all businesses, and 'text' was its first victim—a Napster moment *avant la lettre*.

The early nineties is a crucial period in the 'dotcom' saga. Its libertarian spirit was captured well by Richard Barbrook and Andy Cameron in their seminal piece *The Californian Ideology* from 1995<sup>(3)</sup>, but the text failed to analyse a few critical elements, such as the economy of the 'free' and the role of venture capital and the IPO in the business plan. Internet start-ups all follow the same scheme: above all attract a critical mass of users in a short period of time. Market share is more important than a sustainable revenue stream. In this cynical model it was accepted that most start-ups would fail, and their losses would be made up by one or two success stories that would be sold early or brought to the stock market.

It took me years to decipher *Wired* (sold and 'kaltgestellt' in 1998) and then Red Herring and Fast Company to get a deeper understanding of what the economic premises of the dotcom craze were about. There were hardly any books about it, and the critical literature was about zero—and before we knew it the market had collapsed. The multitudes at the time were active in counter globalization movements focussed on the IMF and Latin America, the worthy struggles of yesteryears. >



Tulipomania DotCom.  
Design: Persijn Broerse.

> A classic study on how the internet ruined San Francisco, still worth reading, is Pauline Borsook's *Cyberselfish*, which came out in 2000<sup>(4)</sup>. Then there were the hilarious daily accounts of the

rise and fall of dotcoms published by the Fucked Company website. Our only academic guardian in the dark was Saskia Sassen, who linked global finance with computer networks. Her complex

macro picture, together with Manuel Castells' sociological account of the 'network society', gave solid overviews; however neither dealt directly with the madness of dotcom culture post Netscape's IPO in 1995. From 1997 to 2000 billions of dollars flowed from pension funds, mutual funds, etc. into internet ventures. Only part of these investments ended up as ponzi schemes of fake e-commerce companies, such as pets.com and boo.com. A great deal of the institutional investments disappeared into fiber-optic infrastructure. None had revenue; all was based on future hyper growth schemes, fuelled by outside capital. Tens of thousands of designers, musicians, engineers and social scientists quickly retrained as HTML coders, communications and PR officers and IT consultants—only to find themselves unemployed again a few years later when the bubble burst.

One way to counterbalance the ruthless waves of privatization and the stock market craze was to point to the internet as a public infrastructure. The internet, with its military and academic background, should guarantee 'access for all'. 'We want bandwidth' was the slogan of our one-week long campaign at Catherine David's Documenta X, as part of the Hybrid Workspace project. The same group, coordinated by Waag Society Amsterdam, where I used to work as a part-time fellow in that period, designed a similar Free for What? campaign out of the Kiasma museum in Helsinki, late 1999.

Delays in perception concerned me back then in the 'roaring' nineties, as it does now. Who benefits when we do not

understand Facebook's business model? Which factors turn us from heroic subjects into grumpy consumers who merely click? Even if we try hard, as individuals, and collectively in networks and research groups, why can we only understand the dynamics of contemporary capitalism retrospectively? Is this the real reason why we lack avant-gardes? These days we can only fight the causes of the last recession. It's no different now as we deal years later with the fallout of the 2007-2008 crisis—as basic understanding of derivatives and high-frequency trading starts to spread (thanks to Scott Patterson, Michael Lewis a.o.), as unemployment caused by the Euro crisis remains at unimaginatively high levels, as stagnation becomes permanent and as budget cuts ravaging health care, culture and the economy as a whole remain stagnant, waiting for the next crash.

#### 2000: Bubble burst

Ever since initiatives such as the net-time mailinglist took off (in 1995), collective efforts have been made to develop a 'political economy of the internet', drawing from cultural, political and economic perspectives from both inside and outside academia. In February 2000, right after the victory over the millennium bug and the announcement of AOL and Time Warner's merger, the dotcom bubble burst. A belated attempt to analyse the 'New Economy' and bring together critical voices from both sides of the Atlantic was the tulipomania.com event (Amsterdam/Frankfurt, June 2000), held right after the NASDAQ crashed (mid April 2000). The histories of the first stock

market craze in the early 17<sup>th</sup> century, the South Sea bubble and the crash of 1929 are well known. And now it happened again right under our own eyes, even in our own sector, causing so much destruction.

#### 2000-2010: This Is Not an Economy

Projects like tulipomania.com directed us to look at the larger picture of global finance: Wall Street, sovereign (hedge) funds and high speed trading. Why was it impossible to imagine sustainable sources of income for the non-technical workers who were so directly involved? Why did new media exclude artists and content producers and only reward a handful of entrepreneurs and technicians? With perhaps the exception of a few years of the boom, nothing changed much over a decade. This Is Not an Economy. In fact, soon after the explosion of the 'dot-bombs', armies of web designers and project managers lost their jobs and returned to their hometowns and their old professions. In fact, the poverty of the 'precariat' was about to get worse. In the meanwhile, I had to make the move to academia after two decades of working as a free-floating theorist, getting a PhD in Melbourne based on my work on critical internet culture. What new media critics like myself experienced in 1990s soon spread to neighbouring professions such as theatre, publishing and film criticism as well as investigative journalism, photography and independent radio, all joining the impoverished 'creative class': cool but poor. With state subsidies withdrawing, the remaining paid jobs shifted to advertisement and PR.

After finding a research job back in Amsterdam, I was able to kick off the Institute of Network Cultures in 2004—a career move that many of my fellow critics and artists were forced to make. The first big event of my newly established research unit at the polytech Hogeschool van Amsterdam (HvA) was *Decade of Webdesign* (January 2005), an event that looked at the shifting economics of this young profession, followed by *MyCreativity* (November 2006), which discussed the misery of the 'creative industries' policies that had recently reached Europe from the UK and Australia. Due to the rise of blogs and 'template culture' in the immediate aftermath of the dotcom crash, it was no longer necessary to build a website from scratch. The prices of web design had plummeted. The geek inventors of the blog software had, once again, failed to build a monetary plan into their systems, and soon the hobbyists of 'participatory culture' fell prey to the same old 'free culture' logic, this time led by visionaries such as Henry Jenkins, who was opposed to professionalizing internet writing and instead praised the democratic nature of 'Web 2.0' that became so easily exploitable by emerging intermediaries such as Google, Amazon, Apple and e-Bay. A handful of bloggers were eventually able to make a living from the syndication of their content, combined with web banners and micro-revenues through click rates to Amazon and Google's AdSense and AdWords. Eventually an even smaller number of bloggers ended up being taken over by the old media industries, with the Huffington Post remaining one of the more interesting >



> cases: its co-bloggers went to court against its founder, who had cashed in hundreds of millions of dollars from the sales of her meta blog to AOL, refusing to share the profit with the content co-producers who had built up her reputation all along.

The following period, in which 'Web 2.0' consolidated into 'social media', has been characterized by the victory of the 'winner takes all' logic of venture capital-backed dotcoms. The internet economy turned out not to be a 'free market' but a breeding ground for monopolies, with libertarian cartels policing the Silicon Valley Consensus. The real estate and financial services driving the 2007-2008 crash did not affect the internet economy. Rapid growth continued, this time fueled by new users in Asia, Africa and the rise of smart phones and tablets. The internet economy, originally based on IT and the media industries, started feeding into other economic sectors, from retail and services to health care, logistics and agriculture. The 'Vergesellschaftlichung', as this process is called so neatly in German, turned the internet into a general processing machine, based on largely unknown protocols (guarded by US-dominated industrial bodies) that reproduce the ideology of the free. No single individual or profession, no matter how traditional, can escape its influence, primarily because IT is becoming so small and invisible (yet another obstacle to making the monetary aspects of data flows more visible—and disputable). In response to this 'totalizing' (Hegelian aka Orwellian) development, we have seen the rise of 'internet criticism' dominated by US authors (and

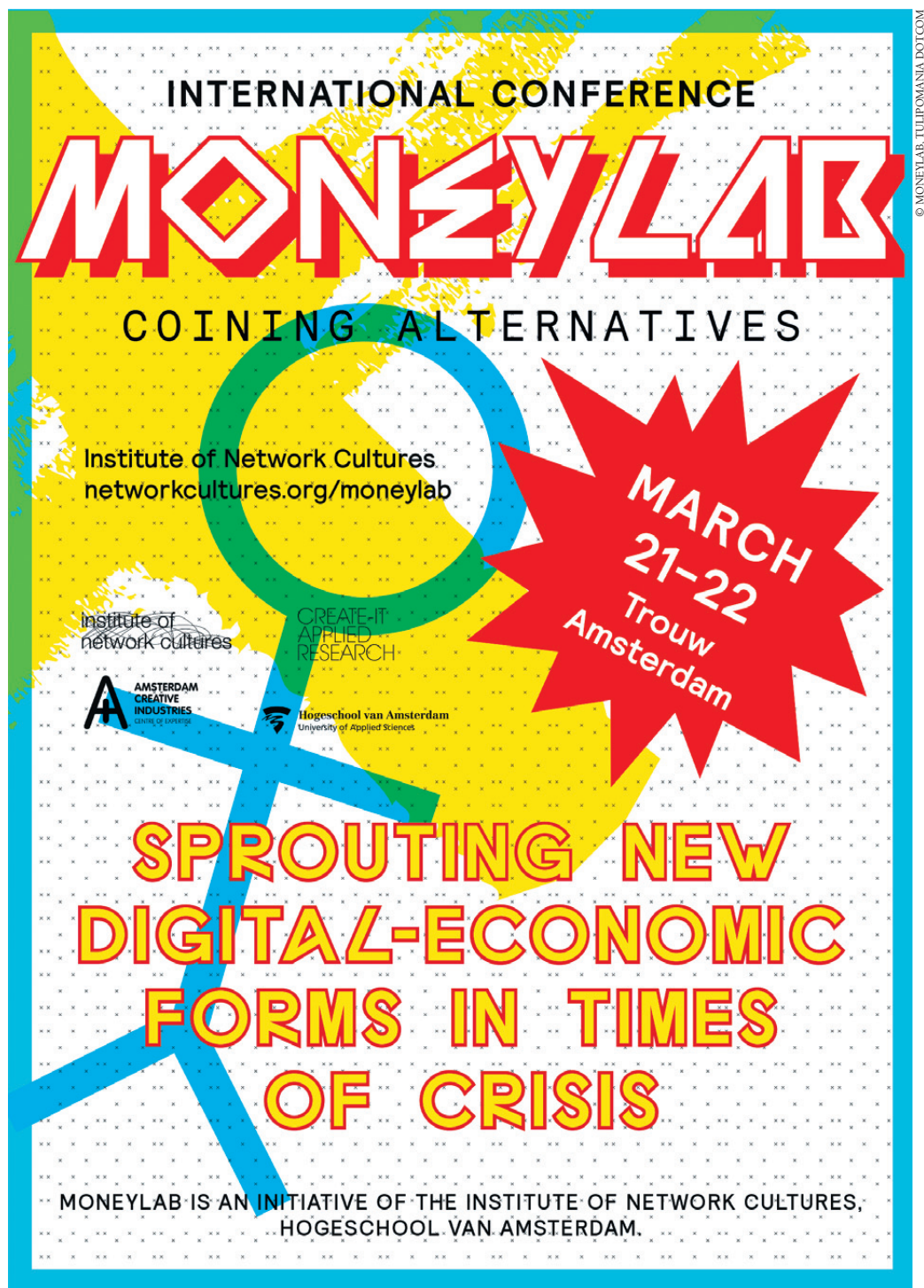
fulfilling an old desire of nettime's back in 1995), and a growing awareness of internet-related aspects in general debates (from the Decline of Attention and so-called 'Arab Spring' to Morozov's techno-solutionism). This criticism encompasses the 'parasitic' privacy strategies of Facebook, Twitter and Google. In response, public awareness that 'if you are not paying, you are the product' has grown. However, this cynical knowledge, spread amongst the online masses, did not result in alternative practices. At least, not until bitcoin and other cyber currencies came on the scene...

In the early nineties I envisioned internet-enabled readers reading online or downloading my essays for a small fee, using a built-in peer-to-peer micro-payment system, designed according to the distributed nature of the computer network. If data could flow in a decentralized matter, then why couldn't small digital payments be attached to them? A variation on the direct payment method could be a subscription model or a card with small amounts on it. A group of hackers and crypto-experts in Amsterdam were working on this very idea. I visited a number of presentations by an American called David Chaum, the founder of Digi-Cash who was at the time based at UvA Computer Science (CWI) in the east of Amsterdam, one of the early internet nodes in Europe. In 1993 I produced a one-hour radio show with Chaum in which he explained his struggle against the US credit card companies, banks, the patents involved and the importance of anonymous, encrypted data for future online payment systems.

### 2013: MoneyLab and the age of monetary experimentation

It is precisely this set of ideas that started to reappear again when bitcoin hit the surface in the immediate aftermath of the global financial crisis in early 2009, though this is not the place to discuss bitcoin. In 2013 the Institute of Network Cultures kicked off a research network initiative in this field, entitled *MoneyLab*<sup>(9)</sup>. The idea was, as always, to create multi-disciplinary dialogues between activists, artists, researchers, geeks and designers about creating peer-to-peer internet revenue models for the arts that combat exploitation and work towards a more equalitarian (re)distribution of the wealth that is being created online. A system that allows those who do the actual work to generate a decent income and that is no longer concentrated in the hands of founders and early movers.

One thing is clear: the time of merely complaining about one's precarity is over. This is the age of monetary experimentation. The premise of *MoneyLab*, this issue of *MCD* and many other initiatives investigate the multiplicity of complementary revenue models that do not have to function as overnight alternatives for the hegemonic payment systems. Starting off with local exchange trading systems, we can then move on to possibilities and traps of crowdfunding (before the artwork has been produced), to bitcoin and other crypto-currencies (payment systems after the artwork has been finished), to live payments in special currencies designed for online games. Please join the debates about their architectures and do not leave the geeks alone. Let's start collec-



© MONEYLAB, TULLIPOMANIA DOTCOM

tives, cooperatives and other forms of autonomous organization in order to counter the neo-liberal role model of the 'entrepreneur'.

The rainbow of alternatives can only thrive within a larger context that fights for a global redistribution of resources. It is not enough to 'resist the virtual life'. The aim should be to disconnect Silicon Valley from capitalist logic. A first step could be the ban of venture capital and its deadly 'hypergrowth' obsession. So far the Googles of this world have only made the rich richer. Next stop, after the encouraging San Francisco protests against the Google's private commuter buses, is Occupy Mountain View. Give cyberspace back to the 99%. ■

**Geert Lovink**

(1) *Making Money, The Philosophy of Crisis Capitalism*, Ole Bjerg, Verso, London, 2014.

(2) See the classic text of Arthur Kroker and Michael Weinstein, *Data Trash, Theory of the Virtual Class* (New York, St. Martins Press, 1994) that suffered, like

so many studies of its time, from a speculative overestimation of a 'politics of the body' related to 'virtual reality' and a relative neglect of the network capacities of internet and mobile phones, because the internet didn't fit into French theory's categories of the time. (3) *Cyberselfish: A Critical Romp through the the World of High-tech*, Paulina Borsook, Little, Brown & Company, 2000.

(4) See <http://www.imaginaryfutures.net/2007/04/17/the-californian-ideology-2/>

<http://www.imaginaryfutures.net/2007/04/17/the-californian-ideology-2/>

(5) See <http://www.networkcultures.org/moneylab>

<http://www.networkcultures.org/moneylab>. The MoneyLab reader appears in March 2015 and can be downloaded there.

**Moneylab.**  
Design: studio VosBrenner.

**Geert Lovink** is a media theorist, internet critic and author of *Zero Comments* (2007) and *Networks Without a Cause* (2012). Since 2004 he is the founding director of the Institute of Network Cultures at the Amsterdam University of Applied Sciences (HvA). <http://networkcultures.org>





WE GROW  
MONEY

# AGLIOMANIA

## eating and trading my stinky roses

In 2002, Cheang launched *Garlic=Rich Air* with a fictional “after the crash” scenario in which organic garlic was ordained as new social currency, serving as *credito* for a global shared network. The garlic banknotes, the G currency, were custom-designed, modified for each city/country where the project was exhibited. From 2002 to 2010, *Garlic=Rich Air* revised as *AglíoMania* travelled through New York, Venice, Naples, Novi Sad and Bristol, mocking the real-life trading system and with this fake but surreal alternative system.

### ■ Checking in on the timeline

Year 2001 marked the Argentina peso crisis and the popularization of “Los clubes de trueque”, a micro-monetary system that employs an internal paper money, *Crédito*, against the defunct macro-peso economy. Year 2001 marked the major collapse of dot.com bubble. The boom of internet-based companies during the years 1997-2000 suffered major setbacks. Year 2001 marked the harvest of 10,000 garlic, multiplied from the initial 10 planted in

1991, for my farmer friend Tovey Halleck in upstate New York. Year 2001, I travelled high and low plugging into the rich air that offers free open wireless network access. January 1, 2002, euro coins and banknotes entered circulation.

\* Garlic is the golden bulb, the stinking rose. \*

**In 2002, I launched *Garlic=Rich Air*<sup>(1)</sup> with Creative Time in New York City.** “Creative Time presents *Garlic=Rich Air* the second and third phases of *St(r)reaming the Fields*, a field harvesting and public network project conceived by Shu Lea Cheang with funding provided by the “Challenge to the Field” award from Lyn Blumenthal Memorial Fund for Independent Media.

“In a fictional ‘after the crash’ scenario, organic garlic has been recently ordained as new social currency, serving as ‘credito’ for a global shared network. In the first phase of this project, Cheang organized the harvesting of 10,000 garlic plants, cultivated by organic farmer Tovey Halleck in upstate New York, by generations of old and new media artists this summer. These organic cloves, which took

10 years to multiply, constitutes the garlic standard in this artist initiated economy.” [Press release, 2002]

### **Garlic Credito Trueque Club**

Starting September 1<sup>st</sup>, the *Garlic Credito* trading system was launched online where market denominators include digital bytes, bandwidth, domains, URLs, network, system and software. This second phase of the project invited public audience to join the *Garlic Credito Trueque Club* by signing up for online trading with the digital commons. Members accrue garlic credito by investing digital images, programming code scripts and other virtual items for trade. In this participatory economy, the value of the *credito* is created by the *Trueque Club* community.

### **Get Garlic-Go Wireless**

Wireless network nodes as Mobile Urban Farm Stands.

Once the valuation of the garlic credit has been established, the third phase of the project focuses on enacting a virtual to physical commodities exchange through New York City’s wi-fi network. “On September 27, 28, 29, 2002 a designer truck equipped with loads of garlic and wireless technology serves as a mobile urban farm stand. The truck utilizes selected New York City wireless network nodes for online and onsite street trading activities. Members of online *Credito Trueque Club* can exchange virtual garlic with edible organic garlic at the designated truck posts. Passersby are welcome to participate in garlic trading with their own offers.” [Creative Time press release, 2002]

**In 2003, *Garlic=Rich Air*<sup>(2)</sup>, reloaded in year 2030, was presented at the 50<sup>th</sup> Venice Biennial and in *ARTPORT* at the Whitney Museum of American Art, NYC.** “*Garlic=Rich Air*, dated 2030, anticipates a post-capitalist society where the global economy and currencies collapsed, network media crashed. The work envisions organic garlic as the new social currency—bought, sold, and traded to establish a new and free media trading system. *Garlic=Rich Air* sets forth a monetary relationship between URL information and virtual garlic. Visitors are invited to participate

Garlic Truck.  
Design:  
Mieke Gerritzen





Aglio Credito: Italia, Serbia, UK.  
Design: Fabio Lapiana

online and submit various URLs in return for virtual garlic, 'G'. At the close of the G-Mart, virtual 'G' is cashed in for real farm-grown organic garlic; a commodity that is desired and wholly revered in the year 2030." [Creative Time press release, 2003]

#### After the Crash: Final Liquidation Sale

Join the G-mart (Garlic Mart) online where the commodity is network media and the currency is Garlic, "G", G as credito. Sell your dot.com, dot.net, dot.org, dot.us, dot.tk, dot.info, dot.TV... If it is still worth anything, earn "G" with it.

#### Rules of the Game were established for G-trading.

- (1) Upon SIGN ON, you are awarded 10,000 G as GARLIC CREDITO.
- (2) SUBMIT websites (URLs) as SYMBOLS for the trading floor.
- (3) SET value, shares and price per share for your submission.
- (4) THE Gmart FLUCTUATION is determined by clickstream data.
- (5) Keep a personal PORTFOLIO for Gmart tracking.
- (6) The personal GAIN & LOSE of G is calculated as per trading activity occurs.
- (7) ALL Gmart tradings are VIRTUAL.
- (8) ALL symbols are COMMODITY COMMONS.

(9) G volume TOTAL determines the exchange rate of G and GARLIC.

(10) END GAME: redeem GARLIC with your G total.

**By year 2008**, commissioned by Palazzo delle Arti for its *L'Impresa dell'Arte* exhibition in Napoli, I launched *AglioMania.com*<sup>(3)</sup>.

"AglioMania refers to TulipMania that took place in the early 17<sup>th</sup> century Netherland. During this time, tulip bulbs were traded for enormous prices and eventually crashed, thus the term bubble economy. AglioMania intends to recreate the same maniac trading phenomena with aglio produced in Italy during the 6 weeks of Enterprise of Art exhibition at Palazzo delle Arti Napoli.

Bulbs of aglio framed as art objects enter the bidding market. A trading system with garlic credito is established for the public to bid, own and trade the desirable aglio bulbs. AglioMania takes the public on a rollercoaster enterprise ride by engaging the public in market frenzy of an illusionary boom. Ultimately, the get rich aglio schemes are smashed when farmers march into the Palazzo delle Art with trucks of aglio. For the closing of the show, a popular uprising liberates the aglio and invites the town people to feast on AglioMania." [Concept notes, 2008]

Invited to participate in the Wealth of Nations exhibition, AglioMania went on to tour Novi Sad (Serbia, 2009) and Spike Island (UK, 2010). For these two shows, Serbia's 1000 dinar bill and the one pound note from Bank of England's wartime emergency release were modified as garlic credito. One fabulous garlic bulb was designated as the object of pursuit to mobilize bidding frenzy. A la Joseph Beuys Kunst = Kapital, AglioMania proposes Friends = Kapital, mocking the social network's circle of friends. The garlic credito are earned by signing on your friends to join the bidding scheme. More friends, more money, more power to bid. The highest bidder finally gets the desired garlic bulb on display in the gallery. ■

#### Shu Lea Cheang

- (1) <http://garlic02.worldofprojects.info>
- (2) <http://garlic03.worldofprojects.info>
- (3) <http://agliomania.com>

<http://creativetime.org/projects/garlicrich-air/>

Shu Lea Cheang is an artist, filmmaker, networker. Currently situated in post-netcrash BioNet zone, she takes on viral love, bio-hack in her current cycle of work. <http://mauvaiscontact.info>



# MONEY, ART AND GIBLING

Born in 2012 in Austria, the Gibling is a community currency distributed by Punkaustria. The Gibling, which belongs to *all those who invest or to individual businesses, artists, all cultural actors and partners interested in autonomous structures*, used in fifty partner institutions, located in a cultural and urban context in Vienna, Linz and Graz. In addition to its real existence as a trading currency, the Gibling is increasingly transforming into art.

## ■ Community Currency

The Gibling as such is more than a community currency—it is both an experiment and an open system. From a historical and ideological perspective, it refers to regional currencies in times of crisis, linking the value of money to a value of goods and services independent from speculation and their role is to strengthen the local economy. As can be read on the Internet about the Gibling: *Partners benefit from a small community because usually many Giblings are circulating*. By operating this connection, the Gibling was not only meant to operate at a regional level, but to

apply to a supra-regional community and to strengthen arts and culture in a broader context.

Fundamentally, the Gibling is based on a real flow of goods and services, however, according to Franz Xaver (its inventor and one of the managers of Punkaustria), it is *a social experiment and not an economic vision*. In any case, as a community currency, the Gibling is an invitation to a dynamic process of participation. Using the Gibling as payment works—and now makes sense, particularly for small amounts. In practice this goes as fol-

lows: on the basis of a 1:1 exchange rate with the Euro, the community currency can be exchanged at Punkaustria and circulated in the different partner institutions, where it is linked to various discounts.

In the same way, the Gibling can be, or rather should be, re-exchanged from time to time, in Euros or in updated Giblings at the time of exchange—as the banknotes are entirely redesigned every year and the old notes destroyed by Punkaustria. In other words, when they are re-exchanged, which is allowed within



Gibling 2014.  
Design:  
Deborah Sengl.







Gibling 2013.  
Design:  
Leo Schatzl.

> a few years, Giblings gradually suffer a loss of value expressed as a percentage that falls to zero after five years. The limitation is not in the amount of money but in the value over time. This upgrading should enable the money to remain in circulation, to ensure it is not stored or otherwise accumulated. In short it is impossible to build on it but it primarily remains a trading currency. To keep Giblings in circulation, however, Punkaustria and its users need to remain relatively active, exchange and re-exchange their currencies several times, locally or by mail—which nicely reflects the path taken by the money and its connections to the universal system.

#### Monetary Objects

I myself am an occasional user of the Gibling. In stores that affix the *We accept Gibling* slogan on their door, I have recently come to accept with pleasure that the change I am being given is in Gibling (which, because of the efforts that it represents in terms of accounting, is not possible everywhere), I then spend it elsewhere. Apart from that, most of the time I have some of its notes in my wallet and will keep some as col-

lectibles, almost as monetary objects reinvented every year. As I have witnessed, other people collect them too, which suggests that the Gibling has a value as an object in itself.

Indeed, the Gibling system should not only be considered as a social experiment and/or a circulation of currency. This is about stating that art itself is transformed into money, because artists are being commissioned to design the bank notes. The first print of the Gibling was designed by Linzoise Oona Valarie. Leo Schatzl designed the second series, which, at a closer look, beautifully evokes formlessness. Viennese artist Deborah Sengl has been hired for the third and most recent print in 2014/2015—after all, this aesthetic process means that the Gibling is gradually turning into a work of art.

#### Experience of the Art Market

I've also found this statement by reading through the homepage of the website dedicated to the Gibling. There again, what is mentioned is “work” by artists or “work to exchange”. To my mind, this is a lovely quality and characteristic of the Gibling that it can not be bought and sold

against Euro as a work of art, but, so to speak, it enters the daily circulation of goods and services: the currency becomes a work of art, the work of art becomes a currency and can thus become cash at any time. In addition, the 500 Gibling notes of the last two editions are also available as art prints. In the same way as 1, 2 and 5 Giblings cuts, they feature all the optical insignia characteristic of money.

The Gibling is thus not only a work of art, it is also in itself a symbolic, aesthetic, ambiguous and complex statement towards the art world: is the Gibling equally a subversive statement towards the speculative aspect art and money have in common? In any case, once the deadline for trading expired banknotes is met, Punkaustria knows how many Giblings of the current print still exist and can therefore set a new number of prints afterwards. The Gibling could also be an experience of the art market, whose mechanisms it sometimes seems to mimic. The amount of Giblings currently in circulation according to figures available in August 2014 (which includes the first two runs and the artistic prints of 500 notes) totaled 16,000.



Let us return to the sensitive issue of speculation. What the art market is doing, doubling or quadrupling values virtually from scratch, is habitually done by the capitalist system with money: this is how banks and stock exchanges managed, by using loans and actions, to create money from nothing, from trust, allocating them a value that, shall we say, is based on a more or less founded belief in the existing economic productivity.

### **Givecoin: Yes, let's fuck the money**

Incidentally, at the beginning of the year Punkaustria got into encrypted currencies and created the Givecoin, despite its original intent to be part of the real economy. Like the famous Bitcoin, encrypted currencies are digital community currencies and a parallel currency system, which is no longer solely based on computing power, participation and speculation—they no longer trade with nothing, or rather, with the most sensitive point of the capitalist system, the pure and quasi-religious belief in money, or its abstraction, detached from real economy.

With the motto *Yes, let's fuck the money*, Punkaustria now has its own encrypted currency, the Givecoin, positioned at least systemically from the Bitcoin: this is still an experimental approach and we also hope, as regards encrypted currencies, to build on an open system of discursive widening. Obviously, encrypted currencies are also a parallel system, but due to their speculative workings, they go completely against a regional currency, which, in its practical use as a purchase vouchers scheme, must not or does not wish to perform commercial operations where money would start to build on itself.

### **Between a social experiment and the 'coin' abstraction**

What is Gibbling in the end? For me, all things considered, it is an open framework of monetary reference, which certainly refers to some historical refer-

ences, but singularly navigated between vouchers schemes, money, social experiment, art and abstraction of the 'coin'. The Gibbling is an offer working at many levels, an experimental device and as such a critical stance in itself. In the spirit of the classic crossover between initiative work and artistic practice, it stands both as an offer and a protest. With its practical initiative of acting, participating and producing thought channels, it also belongs to a stance many artists relate to: *protest as the first new art form of the 21<sup>st</sup> century*<sup>(1)</sup>, though without falling into the dispute mechanisms devoid of any critical impact.

It could be argued that it does not really manage to choose what it wants to be. However, its strength lies in the very lack of definition. To emphasize this, I borrowed some basic concepts and ideas from Bruno Latour<sup>(2)</sup> according to whom, things are now mixed constructions—the more matters were rationally separated above the surface, the more they form hybrids and collectives below the surface, from largely ignored facts in motion and *matters of concern*. As both a tangible and an intangible entity, money is well suited to the redesigning of a hybrid history of ideas, practical and factual values and its own 'tale of importance'. Seen in this light, the Gibbling can effectively aggregate these many aspects and improve thanks to a disparate collection of ideas and facts with no primary use.

It is both practical and symbolic, it constitutes a materiality of its own, it emanates from the regional monetary system previously cited by Silvio Gesell — not to follow this idea and its quite questionable applications, but to near an accumulation of extra things, a second system of alternative socio-participation, an autonomous posture, a third art system expressing an aesthetic and symbolic resistance, and a fourth encrypted currency system which is almost as far from the regional currencies than small Gibblings cuts from the

art edition of 500 notes. To this end, the money is turning into something else, which may be a characteristic shifting narrative, a quasi-art object<sup>(3)</sup>, i.e. a protest and art collective as depicted by Latour, or even a new story of the ideas of the gift or the expenditure<sup>(4)</sup>.

It seems that a strong intention is at the root of the Gibbling, it defines nothing as yet completed but opposes, adds, remains open and evolving. Such an initiative is popular in times of crisis, as it offers a new perspective, updates mechanisms and also carries some strange media offshoots: indeed, the Gibbling was publicized during the Cyprus crisis on the national TV channel ORF. When Cypriots were no longer able to withdraw cash from ATMs in 2013, the local subsidiary of Punkaustria suddenly became a popular speaker, alongside the Austrian National Bank, on issues related to alternatives to money. Rather absurd. Meanwhile, with the Gibbling you could invest in a drink at the Café Strom in the Linzer Stattwerkstatt, its birthplace and home of Punkaustria. This obviously is still possible, whereas matters and urgencies can change very quickly. ■

**Tanja Brandmayr**

(1) Quote by Peter Weibel.

(2) Bruno Latour, *Nous n'avons jamais été modernes. Essai d'anthropologie symétrique* (La Découverte, 1991).

(3) The term of "quasi-art object" is a semantic reaction inspired by Latour's concept of "quasi-object".

(4) Translator's note: The word "Gibbling" is formed from the root *Gib*, which evokes both the verbs *geben* (to give) and *ausgeben* (to spend).

Tanja Brandmayr works as a freelancer in the fields of art and culture in Linz, Austria.

[www.brandjung.servus.at](http://www.brandjung.servus.at)  
[www.punkaustria.at](http://www.punkaustria.at)  
[www.stwst.at](http://www.stwst.at)

# PERMANENT REVOLUTION IN LEWES

## Thomas Paine's adoptive town

Thomas Paine, who is credited with helping to spark the French and American revolutions, is burning a hole in my pocket. Instead of the Queen's face on British banknotes, I have Thomas Paine on my Lewes Pounds. His face is all over Lewes—this is where he was living at the start of his radical political career in the eighteenth century.

■ Lewes has always been a revolutionary place. The first limits were put on the powers of an English king after the Battle of Lewes in 1264, when the barons forced Henry III to accept a parliament of nobles. When Bloody Queen Mary martyred 17 Protestants here in 1557 they became a potent anti-establishment symbol that still resonates today. Every year, on the 5<sup>th</sup> of November, Lewes' Bonfire Boys and Girls commemorate the 1557 martyrs (and celebrate the foiling of a 1605 Catholic plot to blow up the English Parliament) by burning effigies of the Pope and the government of the day. Lewes' Bonfire celebrations are so fiery that they can be seen from NASA's satellites!

Thomas Paine wrote his first political work in Lewes – a treatise about the condition of his co-workers in the excise service—and went on to write *Common Sense*, the pamphlet which fanned the flames of revolution in America, and *Rights of Man*, which, in 1792, earned him a seat in the French revolutionary Parliament.

There was a Lewes Pound in Paine's time. In fact our town had had its own currency between 1789 and 1895 as it pushed back against the outside world. The current Lewes Pound is part of a modern-day revolution, trying to relocalise economics and take back control of our lives from global capitalism.

### Local currency for local businesses

I use the Lewes Pound for most of my day to day purchases – at the two food markets, in the three alternative food shops, in the cheese shop and the two bakeries, in about half the cafes and pubs, at my hair dresser and the pet food shop, in the hotel my parents stay in, at two shops where I buy clothes, at the CD shop, in my favourite restaurant. You can't buy a daily newspaper with it for some reason but, if you're motivated, you can do pretty much everything else.

I pay for my Lewes Pounds in sterling by direct debit from my bank account and then pick up them up once a month at a food shop near my home. If I need



Lewes Pound (recto/verso).  
Graphic design: Hudoq Digital Media,  
in partnership with Giant Arc Design.

more Lewes Pounds, there about five shops in Lewes that dispense them, the equivalent of “cash machines”.

The aim of a local currency is twofold: to celebrate the local community and to enhance local economies. Supermarkets, who provide fewer and worse paid jobs than local shops, extract 95% of the money spent in them. It goes into their tills and straight out of our town. The Lewes Pound can't be spent anywhere else so it has to circulate locally, thereby facilitating and enhancing exchange between local businesses.

#### Part of the folklore

The Lewes pound has become part of the folklore of Lewes—like Thomas Paine

and the annual Bonfire celebrations. In my opinion this focus on the folkloric has obscured the economic arguments, that local currencies can create extra local economic activity. The businesses who refuse to accept Lewes Pounds, and there are still quite a few of them, either do not understand the economic arguments or say they cannot buy anything with them in Lewes. This is a problem—most shops are not supplied by local businesses in our globalised economic system.

I also have to be clear that I am one of a very small group of people who religiously use the Lewes Pound—most people are happy to see it exists but prefer to stick

with their pounds sterling, which work in London and Brighton. In some shops I am the only customer who uses Lewes Pounds! But these are experimental days. The main thing is to show how a local currency can work. If, or maybe when, the financial system collapses under the weight of its own contradictions, Lewes will be ready. As I said before, we are a revolutionary lot in Lewes! ■

**Alexis Rowell**

Alexis Rowell is a Transitioner and eco activist. He is currently a member of Transition Town Lewes in East Sussex and act as managing Editor of *Transition Free Press*.  
[www.thelewespond.org](http://www.thelewespond.org)

# MONEY DOESN'T SMELL

In 1993, a trendy neighborhood of newly reunited ex-East Berlin gave rise to Knochen Bank and its currency, the *knochengeld* (“bone money”). The highly mediatized artistic experiment lasted only seven weeks, but was one of the first to introduce an ultra-local alternative currency that challenged the role of money in society.

■ Nils Chlupka walks across his cobblestoned courtyard in a village situated in the far east of Brandenburg. He is surrounded by barns and an old farm, old motorcycles are parked here and there, tomato plants are growing peacefully. Chlupka's hair is gray and short, his shirtsleeves are rolled up, he wears faded jeans, he has a heavy Berlin accent. Is this the image of a banker? Not quite. But we're no closer when we try to imagine him in a suit and tie. And yet, this man was indeed a banker in the past, even the director of a bank. That was 21 years ago. Nils Chlupka was the head of Knochenbank (“bone bank”). It existed for exactly seven weeks.

As the director of Knochenbank, from November 10 to December 29, 1993, he administered the alternative payment method “*knochengeld*” (“bone money”), which circulated in the Prenzlauer Berg district of Berlin. 5,400 “Knochen” bills, designed by 54 artists, circulated among about 30 bars, galleries and shops in the neighborhood bordered by Oderberger Straße and Marienburger Straße. It was an authentic method of payment, exchangeable for Deutsche Mark (DM).

This extraordinary artistic action was extremely successful. The currency was welcomed with open arms, as people bought out the bank's almost entire stock of the bills. All expenses related to manufacturing the bills were reimbursed, all the artists received “real” DM, it was covered by all the media, even the “real” world of finance and the museums were interested in the action, which in this form could only exist in this very special place.

#### At the right place at the right time

Berlin-Prenzlauer Berg in the 1990s was characterized by the dilapidated charm of non-renovated apartment buildings in East Berlin, with spectacular apartments that costed almost nothing. It was the perfect breeding ground for young creatives. Some were already there, others came from all over the world. People met in illegal and legal bars, people opened bars, small shops, experimented in galleries. An atmosphere of renewal prevailed in an environment that was still marked by the failed system, which in turn inspired the cultural circles that flourished there.

Nils Chlupka was the founder and owner of «Kommandantur». It was one of the first bars that opened its doors in 1991 at the foot of the water tower located at the corner of Knaackstraße and Rykestraße. Chlupka grew up in former East Germany, and had just lived through his first currency change from the Ost-Mark to the Deutsche Mark. He was interested in the value and importance of money; he made his own bills for his own bar.

Wolfgang Krause, an artist from Dresden, founded the “o zwei” gallery on Oderberger Straße in 1991. He exhibited photos and paintings, and like almost everyone in the neighborhood, was prepared to make unconventional encounters. And so he invited Bert Papenfuß, who was interested in the value of money, to the gallery. The fourth person to join this alliance was C.H. Adam, a Swiss man “*who had already used money for artistic purposes in his native country,*” according to Chlupka.

What brought the four together was money, but not in the sense of vile Mammon, the biblical deity of material wealth or greed. They were interested in the role money plays in society. They gathered around the collective Ioë Bsaftot: “*It's slang for 'fake papers,'*” Chlupka explains; and they developed the concept of “*knochengeld*”.

The term “*knochengeld*” refers to an idea of Diogenes, who believed that money should smell bad and go bad, as that would prevent it from being stashed. The artists also referred to the financial theorist Silvio Gesell (1862-1930), inventor of “*melting money*”. He also wanted people to use money as a means of exchange and not be able to hoard it. He advanced that money



is perishable—that its value “melts” over time. This type of liquid cash with a negative interest rate would be spent fast, which would boost the economy.

**5,400 bills numbered by hand and signed**

The founders of the collective based in Prenzlauer Berg had a solid network. They were quickly able to convince 30 owners of shops and galleries to help introduce the gestating alternative currency. Within one week, they found 54 artists to design the Knochen. The Knochen were made with various materials, conveyed all sorts of messages, and the graphic design of each one was different. Their only common factor was their size and their value. Each creation was printed in 100 copies. Each one of the 5,400 bills was numbered by hand and signed. Their validity was certified by an official stamp of the Ioë Bsaftoff collective.

One bill was worth 20 Knochen, which corresponded to 20 DM. As it was designed to be spent, each week it lost one Knochen of its total value, i.e. one DM. So the Knochen that had not been spent ended up being worth nothing. In the collection points of the participating bars and galleries, each bill was stamped to certify that it had been circulated. Those who had not spent their Knochen could acquire tickets that were pasted onto the bills in order to renew their value.

“We even asked the central bank of Land if what we were doing was legal,” says Chlupka. “We learned that in fact it wasn’t legal, but that we could do it anyway, given that Knochen referred back to DM.” Besides, it was an artistic action for a limited time only.

**A gallery transformed into a bank**

The “o zwei” gallery became the bank. Bills could be withdrawn in exchange for Deutsche Mark or exchanged for DM by the bar and gallery owners. From the start, the artistic action was a total success. “Art collectors and bourgeois came and almost tore the bundles out of our hands,” recalls Chlupka. Each bundle contained a sample of each 20 Knochen bill.

One bundle costed 1,050 DM. Those who could not afford it but who were “chasing” a particular Knochen spent the bills they acquired individually and bought new ones until they stumbled—or not—on the desired bill. There was no guarantee. But that didn’t matter, because “people spent their money in the neighborhood anyway, where they could pay for their beer with Knochen instead of DM, it didn’t cost anything more,” the director of the bank explains.

And so began the effective circulation of money. The alternative currency boosted and stimulated business. After seven weeks, it was over. During the auction organized for the closure, the German Museum of History and financial institutes such as the Deutsche Bank were buyers, recalls Chlupka: “Knochen became more and more expensive as art objects.”

On his farm in the countryside, he contemplates a few Knochengeld bills 21 years later. In Prenzlauer Berg, he can no longer use them to pay, as this money has no value there. Such is not the case in the art world, where their negative value has been replaced by a positive that is determined by the art market. One bundle that Chlupka followed on eBay reached the sum of 5,000 euros—and that was two years ago. Blessed is the one who has collected Knochen. For Knochengeld doesn’t smell either. ■

**Stephanie Reisinger**

Stephanie Reisinger is a German journalist. Her themes are Scandinavia with focus on family policy and war Children and Local, she worked as a reporter in Berlin and Brandenburg.



Various Knochengeld bills designed by Andrea Pichl, Dietmar Kirves, Klaus Staek, Nils Chlupka, Olaf Nicolai, Sarah Marrs and W.A. Scheffler.

PHOTO © R.R. / COURTESY: NILS CHLUPKA'S COLLECTION(ARCHIVE)

# ARTISTS AS BANKERS, CURRENCY AS ART

Alternative currencies can be developed as emergency responses to an economy crisis and lack of enough “official” currency, or as proactive initiatives to foster local and underserved economies, but can also be created as a work of art, to provoke thought about the subject and bring beauty to money, which is normally seen as merely practical or even dirty.

■ Devin Balkind, a nonprofit technologist at Sarapis.org, proposes that museums should issue their own currency, backed by their invaluable collections of artworks. He says museums are one of the wealthiest civic institutions in any city, often in stark contrast to the poverty of its citizens, and they

should be granted the same privilege as a bank to issue loans and engage in fractional-reserve banking.

While this hasn't happened yet, some artists have already created banks and issue their own currency. One of them is the Art

Reserve Bank, based in the Netherlands, a country with a long tradition of markets and exchange.

Created by Ron Peperkamp in 2012, the Art Reserve bank has a mint and issues coins that are in themselves a work of art. The coins are quite large, enough to provide a sizable canvas. Commissioned artists create designs that are minted on unique one-hundred coin editions roughly every week and can be bought by the general public.

Besides investing in a work of art, anybody who buys a coin also becomes a member of the cooperative bank and can vote and discuss its financial and artistic future plans at the yearly board meetings. In addition, the coins are a monetary investment, and earn a yearly return of 10 percent. The bank invests the funds from coin sales in the art project itself, but keeps a reserve in its vault to pay the dividends to the members who choose to return their coins and cash in their investment.

There is of course always a risk of a “bank run”, in which case the experiment will end. It's unlikely that the Dutch government will be willing to bail the bank out with public funds. Luckily, according to Peperkamp, the great majority of coin owners are quite happy with holding on to their works of art, and very few so far have exchanged the coins back for the money. In any case, the reserves the art bank keeps are greater than what “normal” banks do these days, plus the electronic money issued by the latter has no intrinsic artistic value.

#### A visually attractive investment

The Art Reserve Bank provides the following disclaimer for coin buyers: “*The coin is not legal tender so it cannot be used to pay your taxes. Officially it cannot be used to pay for anything. Also the coin does not work as a voucher for cultural activities or to purchase art or something. In fact you cannot do anything with it.*”

*But with the coin, you obviously have something in possession that you may enjoy: as a unique work of art, as an interesting story, as proof of participation in a remarkable experi-*

Kunst Reserve Bank.  
Coins designed by Ted Noten.



PHOTO © R.R.





ment or just as a visually attractive investment. But more importantly the coin has a stable value and can literally serve as a reserve currency in case things go wrong with the euro or the dollar or any currency whatsoever within the current monetary system. Furthermore, as a possessor of the coin, you are also co-owner of the bank and you can take part in setting the artistic and financial course of the project. If all that is not enough, you can always return your coin and change it back to euros.”

For those who are interested, the coins can be purchased online at [www.kunstreserve-bank.nl](http://www.kunstreserve-bank.nl) or at one of their branches. For now there are branches in the Netherlands, Germany, Sweden and Austria, but in fact any member can choose to open a local branch, and is provided upon request with a kit including all materials needed.

#### Money Tree

Another artist from the Netherlands also created his own bank, but issues beautiful paper notes instead of coins. Dadara is the artist behind the *Exchangibition Bank* art project<sup>(1)</sup>. The bank has an itinerant exchange boot where people can change euros or dollars for the bank's special currency. The designs are all painted by hand by Dadara himself, and then reproduced on the paper notes, which come in unique denominations, like infinite, or zero. There is also a note with the value of “love”, and one worth “one like”, this one inspired by social media and its view of popularity as a currency.

The project goes further and invites people to take their euros, dollars or other national currencies and transform the notes into art by adding drawings and other enhancements, then hang them on a “Transformoney Tree” they exhibit at different venues, including the Burning Man Festival, a money-free experimental temporary community in the Nevada desert.

According to the imprint on the note with value of 2.0 (a reference to software version jargon), “even long after money will be gone, nature will still be there and we will still be able to pick things of real value from trees.”

#### Time is Money

A third example of art bank is the *Time/Bank*, a project by Julieta Aranda and Anton Vidokle. Despite having issued some very beautiful paper notes, most of its currency is in electronic form, and the transactions are done online using an open source software. The project started as a way of artists to exchange time and skills between themselves, and evolved to an art project in itself, having been exhibited at different venues like the Kassel Documenta and the Creative Accounting exhibition at UTS Gallery in Sydney.

In a time bank, money is created by mutual credit between the participants. Anybody can open an account, offer services in exchange for time/bank “hours”, or buy a service they need with their credit of

time/bank hours. In this case, their account will show a negative value (all accounts start with zero balance) but that's not reason for panic, because it does not mean any interest owed, fees or other punishment.

The artists state that “through *Time/Bank*, we hope to create an immaterial currency and a parallel micro-economy for the cultural community, one that is not geographically bound, and that will create a sense of worth for many of the exchanges that already take place within our field—particularly those that do not produce commodities and often escape the structures that validate only certain forms of exchange as significant or profitable.”

Some of the skills currently on offer are: music composition, general helpfulness, pet walking, listening and reflecting, cake baking. If you want to learn more, the project can be found at <http://www.e-flux.com/timebank> ■

Lenara Verle

(1) Dadara's projects (including his new *Hourtopia—One Hour of Infinity* about time, money and art) can be found at <http://www.artasmoney.com>

Lenara Verle researches media art, collaboration and alternative currencies. She is a lecturer at Unisinos University in Brazil. [www.lenara.com](http://www.lenara.com)

The Art Reserve Bank provides this disclaimer for coin buyers: “The coin is not legal tender so it cannot be used to pay your taxes. Officially it cannot be used to pay for anything.”

# MINOR USES OF MONEY

Money conditions and characterizes our daily lives, but what do we use it for? Or more exactly, what *other* possible uses of money are there?

■ Economic theory defines currency—the primary symbol of money—as a convention without intrinsic value used as a unit for counting, storing value and mediating exchanges. Circulating money has become the most evident characteristic of this mediation, constituting a unique circuit that establishes fluid, floating, occasionally perverse, connections within our societies.

Making use of this circuit is an old popular tradition in Latin America. According to conventional wisdom, degrading currency in any way should be considered illegal. However, it is not uncommon to find banknotes with inscribed words, individual or collective wishes, declarations of love or hate, not to mention the infamous chain-messages, carriers of healing or luck, which request that the chain not be broken, lest the recipient be forever damned to the fires of hell.

Recently, following a proliferation of banknotes marked with political instructions, the Central Bank of Mexico issued a statement warning that any banknote marked with instructions automatically loses its value: *The Central Bank deems without value all banknotes containing words, phrases, both*

*handwritten and printed, or inscribed by any other indelible means, designed to disseminate political, religious or commercial messages to the public.*

Strangely, the official statement makes one exception: drawings, scribbles or alterations have no effect on the banknote's value. Beyond this paradox, is it plausible that what hides behind the Mexican bank's statement is the fear of ideas being disseminated all too efficiently? This would make explicit a political dimension previously absent from economic theories concerning the mediation of exchanges—networks, channels, unexpected territories that money can create in ways that are dispersed and difficult to track.

In 1970, Brazilian artist Cildo Meireles tackled this issue with a work that has since become exemplary. He describes it as follows: *Insertions in Ideological Circuits emerged from the necessity to create a system for circulating and exchanging information independently of any kind of centralized control.*

In the context of this artwork, which spanned five years from 1970 to 1975, Meireles developed the project *Cédula*. This action began after the death under

questionable circumstances of the journalist Vladimir Herzog<sup>(1)</sup>. Inspired by popular tradition, he stamped the currently valid banknotes with the question: *Quem matou Herzog?* (Who killed Herzog?). The notes continued to circulate with this inscription. Others followed, such as *Yankees go home* and *Which is the place of the work of art?* stamped on the back of a dollar bill.

As the second action in the *Insertions* series, the *Coca Cola project* followed the same concept of intervening in an existing circuit. This time, the artist inscribed various “slogans” or even instructions to make DIY Molotov cocktails in Coca-Cola bottles (glass bottles that are recycled and redistributed).

In both cases, it is less about hijacking a circuit than using it, infiltrating established circuits to highlight their political dimensions and exploit them. In the context of a dictatorship, where voices are silenced, money and bottles become media that curiously guarantee the “free” circulation of speech—anonymous speech not destined for anyone in particular, but that is addressed to all and can be read by everyone.

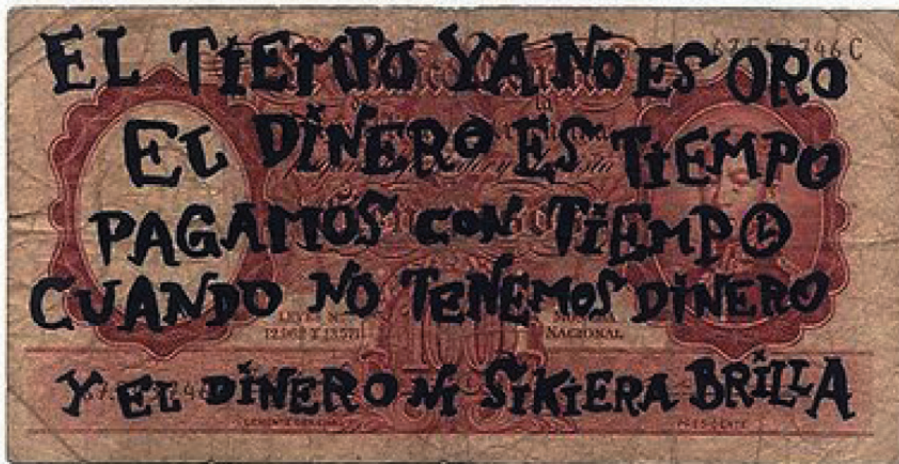
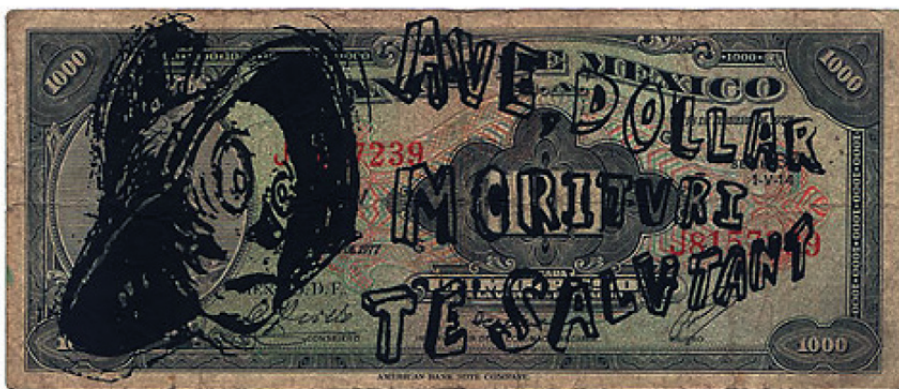
More than 30 years after Meireles' *Insertions*, Guatemalan artist Stefan Benchoam performed a two-year artwork that he called *Re-insertions in Ideological Circuits*.

On May 10, 2009, the lawyer Rodrigo Rosenberg was assassinated in the city of Guatemala while he was riding his





Christian Vitery, *Implacable*.



Christian Vitery, *Sin aire, sin tierra, sin agua, sin patria*.

bicycle. Not long afterward, the emergence of a video he recorded himself before his death triggered a political scandal. Rosenberg accused the president currently in office of his eventual death. Hence, from 2009 to 2011, Stefan Benchoam stamped quetzals<sup>(2)</sup> with the question: *¿Quién mató a Rosenberg?* (Who killed Rosenberg?). The young artist affirms reappropriating Meireles' work, not only in the action but also in its title. While creating an artistic filiation, Benchoam voluntarily introduced his work into the art world. Argentinian artists also reappropriated Meireles' work, but unlike Benchoam, they did not reintroduce it into the art world.

Julio Jorge Lopez, former disappeared prisoner from Argentina's last military dictatorship (1976-1983), who survived his imprisonment, was one of the key witnesses to be summoned during the reopened<sup>(3)</sup> trials against the military and torturers responsible for this dictatorship. On September 18, 2006, the sentence concerning the primary accused<sup>(4)</sup> was about to be read. That day, Julio Lopez, who had testified during the trial, disappeared. Despite more than 10 years of democratic government, the repressive system is not quite neutralized. After his first clandestine detention between October 1977 and June 1979, this bricklayer became, at 77, the first disappeared in democracy. Since that day, there has been no information, no trace, no change that could give the slightest hint about his second disappearance. >





Cildo Meireles, *Cedule, "Quem matou Herzog?"*, 1970-1975.

➤ At first, this provoked a strong reaction in Argentinian society, with considerable media repercussions, but with time it eventually faded out of the media. Artists and activists reacted in different ways to what they call the third disappearance of Julio Lopez, i.e. his disappearance from the media. In 2008, a group of activists from a neighborhood association in Buenos Aires learned of Cildo Meireles' work and took inspiration from it to make stamps with the question: *¿Dónde está Julio Lopez?* (Where is Julio Lopez?). Besides stamping banknotes and re-circulating them, they expanded the action with a double operation. First, they *socialized* the stamp by distributing it to people or organizations that wanted to use it; second, they organized public or semi-public stamping sessions. What interested the collective is to have a simple and cheap tool that is easy to share and that can be used in both private and public circles.

This simple, cheap tool is also portable and can anonymously multiply messages. This aspect in particular interested the artist Christian Vitery. In Ecuador, the valid currency since

2000 is the U.S. dollar. The dollar came to replace sugar, which had been the national currency since 1884. In 2009, Vitery began stamping empty dialogue bubbles attributed to the faces pictured on the banknotes, such as Washington, leaving it to whoever received the note to write whatever they wanted. The following year, during the bicentennial celebrations of Equadorian

independence, in order to highlight the paradox of still using this currency, Vitery stamped banknotes with the words *Recuerdo del Bicentenario* (Bicentennial souvenir) or *Implacable*. From then on, he multiplied the messages. Some related to Ecuador's recent history, such as *Sin aire, sin tierra, sin agua, sin patria* (No air, no soil, no water, no country), in reference to the problem of oil extraction in the Amazon. Other stamped messages indicated dates: *Hoy es 2 de agosto 1990* (Today is August 2, 1990) or *Hoy es 4 de marzo 1945* (Today is March 4, 1945). These dates refer to U.S. attacks on different countries in the world. In 2013, Vitery launched a new message stamped on dollar bills—*Made in China*—to evoke the economic and political agreements between the Equadorian government and China. Vitery got into the habit of carrying with him various stamps that he could take out and use according to the occasion. In some way, all of these messages taken as a whole could constitute a profane chronology of the political history of his time, which the artist reports before restoring it to public space.

These are curious uses of money in different insertions; money provides a medium for collective memory and



Stefan Benchoam, *Re-insertions in Ideological Circuits, "¿ Quién mató a Rosenberg ?"*.



the distribution circuit that memory uses to stay alive. However, insertion can also be understood in terms of contamination.

In Canada, “numismatic artist” Mathieu Beauséjour also uses banknotes and exploits their circulation. For his first work, he temporarily removed from circulation the Canadian dollar bills he received to write down the serial number of each banknote in a register, then re-circulated them with the expression *survival virus* stamped on the back. For Beauséjour, the backside of the bill is a space dedicated to art, where other artists have made their mark by drawing icons of the country’s culture and history. For him, banknotes synthesize symbols of power, and art is part of it. Over the years, Beauséjour made more and more, increasingly complex interventions on banknotes, even destroying some. With his first actions, which he called *semiotic terrorism*, the artist explored the possibilities of contaminating a given circuit.

For artist Ral Veroni, *Money represents everyday life. It is both more ephemeral and more stable than our acts and passions.* Veroni attempted to exploit this paradox of being both ephemeral and stable. In 1994, he began to draw on banknotes. Marked by a period of hyperinflation in Argentina in the late 1980s, as well as a succession of changes in currency, he drew on banknotes that were out of circulation. This work, evocatively titled *Lucha por la Vida* (Struggle for Life), recalls the experiment of devaluating currency. Later in Europe, Veroni’s *Teatrillo Europeo de Entidades* (European Theater of Entities) consisted of drawing on banknotes that passed through his hands at a rate of one per day. To do so, he followed a well-defined protocol: he started by drawing on a 50-euro bill, which he spent. With the change he received, he intervened on a 20-euro bill, which he then spent to receive a 10-euro bill, which he drew on and spent to receive a 5-euro bill, which he then spent before

repeating the cycle with another 50-euro bill. More than 300 such banknotes were thus circulated.

These pieces of rectangular paper, which we carry in our pockets or wallets, do not stay with us long, and apparently the shorter they remain with us the better. In a capitalist world, the circulation of money is the sign of a prosperous society. This is what is called liquidity. Paradoxically, the more money circulates, the more transactions there are, the broader the instituted circuit. As we have seen with these various practices, the circuit that money institutes can be thought of as a mobile network, without a fixed identity, which continuously configures and reconfigures itself. It is a network where minor uses of money can proliferate... at least until the ubiquity of virtual money ends up realizing the dream of a totally dematerialized economy. ■

Mabel Tapia



Mathieu Beauséjour, *Virus de survie* (Survival Virus).



PHOTO © E.R.

This text is excerpted from *Optical Sound* n°1, September 2013, paper and tablet journal: <http://www.optical-sound.com> <http://www.artbookmagazine.com/fr/book/233-optical-sound-un>

- (1) Vladimir Herzog (journalist and writer) was assassinated in 1975 by the Brazilian military dictatorship (1964-1985). However, it was only in 2012 that Herzog’s death certificate was officially modified by the Brazilian tribunal at the request of the National Commission of Truth, which investigates crimes committed by the Brazilian government between 1946 and 1988. Up until that moment, his death was officially a suicide.
- (2) Valid currency in Guatemala.
- (3) Thirty years after the last coup, the two amnesty laws—Final Point (1986) and Duty of Obedience (1987)—were annulled and declared unconstitutional in 2005.
- (4) Miguel Etchecolatz, Police Chief of the province of Buenos Aires under the dictatorship, head of operations and responsible for 21 clandestine detention centers.

Mabel Tapia is an independent researcher. She is preparing her Doctor’s thesis at École des Hautes Etudes en Sciences Sociales (EHESS), co-supervised by the University of Buenos Aires (UBA).



# ART REWRITES THE HISTORY OF MONEY

The artist's currency has no use for archaic monetary systems, financial deregulation or distorted construction value. It's a new form of political subversion, as proven by initiatives in South America that are reinventing the rules for spreading culture.

■ Instead of complaining about oppression and lack of money, activists have been creating alternative currencies and financial circuits that propose a new approach to capital. Bitcoin stands out among these alternatives as a currency that is not issued by a Central Bank and exists only on the internet, where it can be accumulated as digital files. It may seem lighthearted, like Monopoly money, but bitcoin is currently listed at over €400 at today's official exchange rate<sup>(1)</sup>. Bitcoin is not the only existing modern currency alternative, nor is this

area of activity merely the domain of hackers and financial market experts.

Without worrying about encryption or investment grants, artists are creating imaginary currencies, as well as their own banks and systems that propose alternatives to macroeconomic models. Through a wide range of critical initiatives, they seek to establish new rules for the circulation of culture, using their own money to mimic value creation processes and as a device for political subversion.

#### Alternative currency as a collaborative methodology

One of the first collaborative currency experiments was conducted in Brazil, back in 2005. This was the now famous and controversial *Cubo Card*, issued by Circuito Fora do Eixo. It was a brave attempt aiming to be a parallel currency developed by cultural producers and artists to fund artistic and cultural production.

Without sufficient funds to finance the demand of music bands in Cuiabá (capital of Mato Grosso do Sul, in Brazil's Midwest region), the cooperative enterprise *Cubo* decided to create its own currency—the *Cubo Card*—which it used to pay bands and in

exchange for other services (press releases, website, rehearsal time in the studio etc). "We started distributing *Cubo Cards* very enthusiastically, particularly as all those who witnessed the experiment we were conducting wanted to be part of it, recognizing its value. By producing *Cards*, *Cards* and more *Cards*, we got to the end of the year and found that a large number of people were requesting their services at once. We had a subprime product!" says one of its creators, Pablo Capilé.

This kind of initiative, regardless of its success or failure, is especially important from a methodological point of view, shifting the debate on the cultural market towards reflection on market culture. However, the most promising attempts in this field may have been by artists who, rather than attempting to create new market formats, have been able to reinvent them, expanding the boundaries of economic thought and practice. By comparing their values and mocking symbols of efficiency, they highlight the authority of their organizational parameters, like the Argentine artist and curator Gustavo Romano in *Time Notes*, an ongoing project since 2010.

#### An imaginary currency as a critical device

It is commonly said that time is money, but in the case of Romano's project, this saying is law. He created a database which allows you to catch up, borrow time and query the database about wasted time. In one year he set up offices for this banking network in Singapore, Berlin, Buenos Aires, São Paulo, Madrid and numerous other cities.

The project is an offshoot of a more extensive survey by the artist, the nomad global issue discussion lab known as *Psychoeconomy*. Romano exhibited this work at the World Bank building in Washington, where he presented his thesis. The final report on the experience can be read in the e-book *Mis 10 Dias como Consultor del Banco Mundial*, available for download at <http://www.timenoteshouse.org>.

Romano's subtle irony with regards to the financial market has its equivalent in the smaller world of art. After all, very few industries seem to enjoy paying to be criticized as much as art collectors. At least that's what the work of Brazilian artist Lourival Quinquinha appears to show. He highlights the creation of monetary values in art in several of his projects and dedicates himself to what he calls financial art.

Two of his recent installations explain this relationship: an enormous asterisk consisting of rods made up of five-cent Brazilian Real coins—the lowest-denomination Brazil-

Argentine artist Gustavo Romano.



PHOTO © GUSTAVO ROMANO



*Time Notes*, an ongoing project since 2010 by Gustavo Romano, has been exhibited at the World Bank building in Washington.

coin in circulation—had to go for millions at ArtRio, the Rio de Janeiro art fair, in September 2014. This work was first shown at Cuquinha's solo show at the Modern Art Museum of Rio de Janeiro, in June 2014.

In 2013, the same art fair showed Cuquinha's *Conversion x Machina Bolha Bank* (2013), a work that satirized procedures that give art pieces an investment status, placing the financial and art markets on equal footing. In order to achieve this, the artist created a machine based on a banknote vacuum, in which investments in the work were deposited. This investment entitled one to purchase shares guaranteed to multiply tenfold in value if the work was sold.

Each investor also received a wooden plaque signed by Cuquinha, which acted as a share redemption document. The more shares were sold, the more the value of the work went up. Launched in September 2013 at the ArtRio fair, the installation was initially valued at €15,000, a price calculated by multiplying the cost of producing the work (€1,500) by ten. From there, two links between the work and the show were possible. The installation could either be purchased in full for its original price, or those interested in profiting from the sale could purchase shares that were both pieces of the bubble bank and bets on its future sale.

Shares were priced between €17 and €1,000 and represented a refined metaphor for financial market bubbles. The more shares you bought, the more the price of the work went up. Each amount invested in the money vacuum was automatically

multiplied by ten, thereby increasing the value of the work. By the end of the Art Fair, the work was worth €80,000.

#### Money circulation as a political subversion device

Not all artists who deal with money in their works do so to reflect directly on market issues. One of the most important works in the history of Brazilian art, *Inserções em Circuitos Ideológicos*, by Cildo Meireles, is evidence of this. Created in 1970, during the cruelest period of the Brazilian military dictatorship (1964-1985), Meireles used it to re-appropriate everyday objects, symbolically modifying them and re-launching them on the market, an example being Coca Cola bottles featuring the printed phrase *Yankees go home*.

Of all the *Inserções*, none is more relevant to our discussion than that which had the question “*Quem matou Herzog?*” (“*Who Killed Herzog?*”) stamped on Brazilian one cruzeiro notes, the lowest currency value at the time (1970's). Meireles replicated a ritual that was common in Brazil, particularly among the low income population, which consisted of writing wishes, messages, prayers and promises on banknotes that circulated endlessly. He adopted this Brazilian ritual to question the death of an important political journalist, Vladimir Herzog, who was murdered under torture by the Military Police and whose death was attributed to suicide, showing a forged photograph.

This work recently returned with the question “*Onde está o Amarildo?*” (“*Where is Amarildo?*”) stamped on the current lowest-denomination Brazilian banknote, the two real note.

A construction worker who disappeared on July 14, 2013, after being stopped by the Polícia Pacificadora (Police Pacification Unit) at the Rocinha slum in Rio de Janeiro, Amarildo's "disappearance" reintroduces the question at the heart of the work *Inserções em Circuitos Ideológicos*: where is the public sphere in Brazil? Who is entitled to it? Which classes are granted the freedom to come and go in Brazil's public space? ■

Giselle Beiguelman

This article revisits and updates the ideas presented in “A arte de fabricar dinheiro” (“The Art of Producing Money”) and “Daquilo que não se vende” (“That Which is not Sold”), published in the journal *SELECT*, editions 1 and 14.

Exhibition by Brazilian artist Lourival Cuquinha.

(1) August 8, 2014.



© LOURIVAL CUQUINHA

Giselle Beiguelman is an artist and professor at the College of Architecture and Urbanism at the University of São Paulo, where she coordinates the Design course. <http://www.desvirtual.com>



# "THE AFRO CIRCULATES HOPE FOR AFRICA"

Since 2002, Mansour Ciss Kanakassy from Senegal and Baruch Gottlieb from Canada have been nurturing a concrete artistic utopia: the Afro, a unique currency for the African continent. Materialized on bills featuring Léopold Sédar Senghor and promoting an economic pan-Africanism, it shares a common goal with the Déberlinisation laboratory, which criticizes the African borders established by Berlin at the end of the 19<sup>th</sup> century. From Berlin, the two artists answered our questions (by e-mail).

Afro, 2<sup>nd</sup> series, 2006. Baruch Gottlieb and Mansour Ciss.

■ **Could you explain the context in which you founded the Déberlinisation laboratory?**

The mostly arbitrary borders that were established at the Berlin Conference, or Congo Conference, in 1884-1885 are more or less still in place. To this day, they prevent exchange among Africans, whether it's on an intellectual, financial or creative level. As a laboratory, we want to troubleshoot this situation, so: "Déberlinisation"!

**For Déberlinisation, you designed and developed an "imaginary" currency as a symbol of pan-Africanism called the Afro. Why imaginary?**

It's imaginary in that current conditions are not favorable for Africans to achieve economic sovereignty. African economies are always under the control of European banks, especially French banks for the former French colonies. The Afro is an impossible

Afro, 2<sup>nd</sup> series (verso), 2004. Baruch Gottlieb and Mansour Ciss.



dream, at least for now. However, in its concrete form, it gives people an immediate and tangible feeling of another possible world. The hope that it brings persists, despite the harsh realities that Africa faces.

**Was creating a common currency for all of Africa well received in Africa?**

In general, Africans find that the Afro would be a good idea. The majority of Africans hope to one day manage their own potentials and natural resources.

**How are artists actively involved in a new form of economic development?**

By inventing new territories of thought. As Achille Mbembe says: "Deep down, such a thought should be a mixture of utopia and pragmatism. It should be, by necessity, a thought of what is to come, of emergence and uprising. But this uprising should go well beyond our heritage of anticolonialist and anti-imperialist battles, whose limits, in the context of globalization and in view of what has happened since our independences, are now obvious."





Afro, 1<sup>st</sup> series, 2002. Baruch Gottlieb and Mansour Ciss.

**What are the Afro's recent developments? I read online that an Afro distributor was installed in Berlin?**

We created M-AFRO, an electronic currency that could be exchanged via cell phone, but so far we haven't had the chance to launch it. We currently lack the financing to make ATMs to distribute bills.

**Have you contacted any central African banks in order to move from utopia to the concrete project of a pan-African currency?**

Central African banks are under the absolute authority of the French Treasury. This prevents us from creating a truly autonomous African economy.

**In an interview on Afrik.com<sup>(1)</sup>, you talked about an African village where the Afro was circulated by the "Central Bank of the United States of Africa". Could you tell us more about this experiment?**

It was an African village conceived in 2003

in Vienna, Austria, by a Sudanese architect, along with the curator David Nejo. We experimented with an Afro payment system there.

**How do you relate the Afro to the emergence of virtual online currencies such as bitcoin, which challenge the conventional role of central banks and more generally the dominance of international finance?**

Without a social movement to accompany them, new instruments for exchanging value would have no beneficial effects.

**Do you think that the Afro prefigures a more general form of artist emancipation (beyond Africa) from globalization, economics, finance?**

The Afro represents a chimera, the chimera that appeared everywhere in Africa during the independences of the 1960s, and that represented a breath of hope for many in the northern hemisphere. It's evident that the world will never be at peace without a peaceful Africa. To a certain extent, we can imag-

ine that Africa's more egalitarian participation in world affairs could help us all.

The Afro, as the fantasy of a unique African currency that is implemented and wisely administrated, could simply aid the prosperity and potential of average Africans, and allow countries in the North to have more mature relationships with these communities. ■

Interview by **Annick Rivoire**

(1) [www.afrik.com/article7317.html](http://www.afrik.com/article7317.html)

**Mansour Ciss**, recipient of the Léopold Sédar Senghor grant for artistic excellence, exhibits widely in Africa and in Europe. He is the founder of the Villa Gottfried / Sénégal. [www.mansourciss.de](http://www.mansourciss.de)

**Baruch Gottlieb** is a member of the Deberlinisation laboratory, the Berlin collective Telekommunisten and the Arts & Economics Group. He is a lecturer at the Institute of Time-Based Media, University of Art in Berlin. <http://g4t.info>



WE EAT  
MONEY



# NOW THAT WE STAND

## Cultural activism in Spain facing the crisis

If the crisis in Spain has shaken up an economy resting on debt and real estate speculation, it has also opened a new political momentum already identified, more than 30 years after the death of Franco, as a second democratic transition. In this climate of urgency and spontaneity, social movements and artistic activism combine and merge.

■ Barcelona, summer of 2004. A group of artists from the Conservas theater company hopped on *pateras*—very precarious boats used by African migrants to cross the sea towards the coasts of Europe—to storm the site of the Universal Forum of Cultures, north of the city. Their aim was to denounce the gray areas of this huge cultural happening supposed to aggregate, over several months, artistic events inspired by sustainable development, peace and diversity. With its giant facilities and megalomaniac budget—including funding,



Las Agencias, *Dinero Gratis*.

supported by banks and real estate currently facing judicial enquiries—the

Forum is one of the first symbols of the coming disaster. But it also indicates a peak in citizen mobilization around which a few agitated groups of artists began to question the speculative drift of the Spanish economy.

One of these group is Las Agencias, founded in 2001 during a symposium organized by the Barcelona Museum of Contemporary Art (MACBA). Leonidas Martin, a member of the collective, remembers: *After the anti-globalization wave in Seattle, political art became trendy.*



PHOTO © V. DE VIVIENDA

Panels against crisis.

Macba contacted the *Fiambrrera Obrera* [activist group from Madrid] who in turn invited other groups and a working week between social movements, artists, graphic designers was set up... entitled *Direct Action as One of the Fine Arts*. This was a great success. It received support from the museum to develop projects that were not called 'projects', but tools because they were not meant to be exhibited but to articulate tangible struggles.

Among these tools were the series of posters and stickers "Dinero Gratis" (free money), a guerrilla action against communication campaigns which, in the midst of the financial turmoil, led by the easy access to credit, announced the gratuity of means of payment, pushing the dominant discourse in Spain at that time a little further, i.e. "go into debt, it's free". But at the same time, Martin continues, the World Bank and the

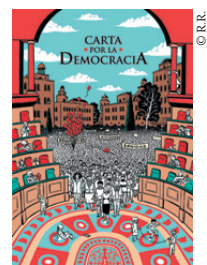
IMF, who had planned to meet in Barcelona, had to cancel their schedule because of popular protests in which our actions had become quite visible. Therefore, under political pressure, the Museum cut off its support.

Nevermind. Without resources but strengthened by their success, Las Agencias continued to develop its very inventive direct action tools. Among them, the artistic subtraction tactics *YoMango* (literally "I steal", in reference to Mango, the Spanish ready-to-wear chain) in shops and supermarkets. When the crisis broke out, the group's work started to build momentum... *When we started our operations, we had to explain what financial speculation, public debt or the World Bank were. But today in Spain everyone knows. As a consequence our actions have also been transformed.*

Nowadays, as the *Colectivo Enmedio*, the group directly acts in locations where the consequences of the crisis are being felt on a daily basis: the *Inem* offices (Spanish job centres) or the local branches of *Bankia*, a bank ruined by political corruption and bailed out in 2012 with over 22,000 million € from the state budget.

**Sí se puede. Pero no quieren**

But their most visible tool is probably the *PAH* (*Plataforma de Afectados por la Hipoteca*) communication campaign, a platform which supports victims of mortgage loans. It has become a symbol of hope and solidarity for all of Spanish society and received the European Citizen Award from the European Parliament in 2013. Organized in local assemblies, the *PAH* stops evictions (since the beginning of its activity, it has stopped more than a thousand) rehous-



© R.R.

Movimiento por la Democracia. Carta por la democracia.





Protest in front of a BBVA branch.

es families and organizes *escraches* actions, a form of protest that originated in Argentina, which consists of focused demonstrations in front of policymakers' homes. The PAH's *escraches* are led by the slogan *Sí se puede. Pero no quieren* (Yes, it can be done. But they don't want to) as a response to the speech accompanying the austerity measures of the government, which argued that it could not stop privatizing health services, reducing social rights or supporting the banks with public money.

Associated to the PAH's actions, the motto nevertheless comes from the 15M movement (a generic name given to all the initiatives related to the popular spir-

it of 15 May 2011, when the Plaza del Sol occupation began in Madrid and lasted for over a month) demonstrating one of the characteristic features of all these protests: the circulating and permanent re-appropriation of gestures and formulas, regardless of the author or the diffused collective origin. As with Las Agencias, the history of the PAH goes back to Spain before the crisis. In particular, V de Vivienda, a movement for the right to housing which, in 2006, warned against the insane rise in property prices and the increasing precarisation of an entire generation excluded from the right to decent housing. Its leader, Ada Colau, recently submitted an electoral list named *Guanyem Barcelona* (Let's win Barcelona), a citi-

zen coalition created for the mayoral elections of 2015 (the same formula exists in Madrid under the name *Ganemos Madrid*).

Conservas, the theater company that assailed the Forum of Cultures in 2004, has also gone through the changing political landscape and been focusing for the past ten years on the rights and freedoms related to the Internet around the X.net network. Its members organize the free culture festival The Oxcars and the international gathering FCF (Free Culture Forum). In 2014 the Partido X, an offshoot of the network, concurred in the European elections, the top of its list being Hervé Falciani the systems engineer who presented courts



with several names of account holders in Switzerland (including numerous Spanish business leaders), taken from the database of HSBC, where he worked. Simona Levi, founder of X.net, reminds us that the group *has a body of thought and tactical experience that comes from digital culture and guerrilla communication*, allowing them to juggle multiple identities in quite a natural way.

In the musical field too these new forms of organization are being felt. Thus the Fundación Robo (the verb *robar* means “to steal”), a “collective musical project” that brings together musicians, singers and writers, including some pretty famous ones, interested in popular songs and anonymous forms of cul-

tural transmission. They cover old workers’ songs or famous anarchist protest songs and write others lyrics that tell, in the first person, today’s battles and hopes. *We are numerous*, one of them says, *there are thousands of us on each square, in every neighborhood. But now that we are standing, we should not forget what we are risking this time around.* A hint to the expectations raised by this second transition that one would like to be more representative than the one from the late 1970s; or at least more suited to the current political and economic challenges.

The awareness of living an exceptional historical moment is, indeed, at the heart of these artistic events, combined with the social projects they accompa-

ny. Reinforced by popular support, they challenge the institutional agreements and even the language of politics inherited from the great national pacts, they upset the balance of power in the cultural field, raising the question of generational succession and they especially give shape to a new social vision, voicing and grasping the narratives of our times with all their complexity. ■

Maria Ptqk

Maria Ptqk is curator and researcher. She is working on the intersections between artistic and scientific practices, social communication, gender studies and cultural policies. <http://mariaptqk.net>

Ganemos Madrid, *La democracia empieza en lo cercano.*



PHOTO © P.R.

# NOTRE-DAME-DES-LANDES

# OMNIA SUNT COMMUNIA (\*)

The airport project at Notre-Dame-des-Landes, near Nantes, France, has created a riot though an entire population who, since 2009 had set up a ZAD, a “Zone to Defend”, a “Final Autonomy Zone” or a “Dematerialised Antagonist Zone”... i.e. a space where dreams of communisation and sharing are being nurtured. To become self-sufficient, new sharing modes are experienced so as to eventually get rid of monetary transactions.

the 1970s in order to build an airport. In 2009, after repeated calls to occupy and defend the area, the site became *the largest squat in Europe*. The ZAD was born, a space hidden behind its thousand names: *Zone to Defend, Final Autonomy Zone, Dematerialised Antagonist Zone, Anti Depression Zone...* A lively territory all built from ragtag, mirroring Hakim Bey's theories and his over-publicised TAZ pattern.

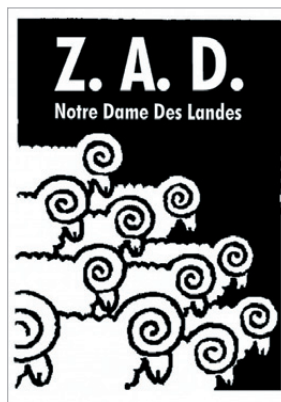
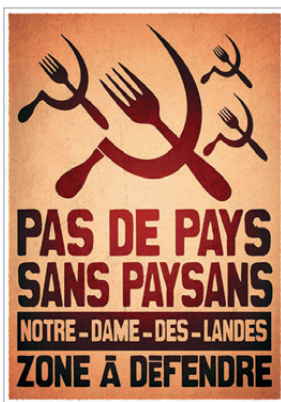
Saint-Jean-du-Tertre is the ultimate conquest of opponents, a place initially meant to be destroyed—like so many others in the area—but that immediate, combative and flawless determination has saved from a premeditated nightly police assault, stopped *in extremis* last April. A group of four people settled there notably with the idea of reactivating forgotten buildings in order to accommodate a dry agricultural workshop and turn it into a place for storing and drying grain. To keep the seeds and control the cultivation and harvesting: in the ZAD, all stages of grain processing from wheat to flour up to the baking of bread are now possible in an autonomous way.

■ The mill is installed in the sheds adjoining the farmhouse of Saint-Jean-du-Tertre. The large silos are awaiting to gorge their cylindrical rumen. From the trailer, the grain pours like rain, accompanied, through a large cloud of dust, by shovelfuls destined for a Denis D50 separator-sorter. Nearby, agricultural machines from another time are resting, showing off their exoskeleton. One must see the strange play of hinges beginning to move and deploy the metal ten-

dons of the machine to fully understand how it used to mimic, in the past, the gestures of man and how corporeality was the first thing that felt the harsh nurturing relationship between the land and the farmer. No chip nor circuit boards, just a series of mechanical movements laid bare under our gaze.

The scene takes place in Notre-Dame-des-Landes, near Nantes, where 2,000 hectares of farmland have been sanctuarised since

ZAD placards and tracts.







Barricade in Notre-Dame-des-Landes.



Vigilant tractors near Nantes.

PHOTOS © ALAIN LE CABRIT (À LA MÉMOIRE DE L'AMI JEFF)

### Agriculture, a war weapon

“ *Our weapons are illegal occupation and wild crops, mapping and collective farm machinery, hoes and smoke, the ‘patator’ and the nettle manure, barricades and sheds, fuel and Bordo Mix, shabby old tractors and bike carts* ”

a leaflet from Zadistan

Faced with the diktat of brutal dispossession the dreams of communisation and sharing are getting stronger. The aim of a certain form of self-sufficiency even seems to have been met. Rather than negotiate the grain milling, flour is being sold to the baker and bread to the consumer, new modes of sharing are being encouraged with the prospect of getting rid of the monetary transaction. For this purpose, it is impossible to separate the question of what is being produced and how it is being distributed. Here, potatoes or onion crops provide an opportunity for broad collective projects for which a wide call is being made from the site [zad.nadir.org](http://zad.nadir.org).

Then, everyone leaves with a string bag. This is meant to reduce the intermediaries and avoid the development of surplus value, to escape the ideology of the economy by deserting wage labor, freeing operators and market logic. Potatoes are still being sold though—at a freely regulated price—because they also help to purchase new seeds and equipment. But the harvest directly feeds the Zone as well as the ongoing struggles across France: 5 tons are thus about to be distributed in Calais to support struggling migrants.

Another part feeds the Maison de la Grève (house of strike) in Rennes. As shown by the various ongoing fights in the Testet area or at the Mille Vaches Farm, the ZAD appears as a stronghold—victorious and contagious—for its capacity to refuel, its offensive use of agricultural tools, its ability to block the flow and develop its own weapons to confront the capitalist state.

### Undoing economism

Faced with the prospect of the cancellation of the AGO/Vinci project, the goal is not to let productivist farmers regain control and above all to question the private ownership of land to instead favor their collective use. The idea would be to constitute a 250,800 hectares common land reserve on the ZAD. Today, groups are multiplying and freely federating as this social and food experiment is already finding new extensions.

Therefore, one thinks of a flexible planning to capture the common needs of the entire ZAD so as to set up a rota on the different plots without obliterating the spirit of invention. Yet, this not about thinking in a performance optimization perspective: *Well, this year, we missed a few tons of potatoes; production must increase, but only to match the needs, without entering a process of accumulation.*

Recently a SCI (civil real estate company) has even been created by forty associates, bringing together ten legal entities and individuals involved in the struggle, to raise funds for the collective purchase of land in the near perimeter of the ZAD with, obviously, the ongoing purpose to

block Vinci’s expansionist streaks. Some view these initiatives as a restored form of the old Commons, which in pre-capitalist times, allowed the survival of the poor and on which the old solidarities and common rights such as the “common land” and gleaning were based.

Behind the enclosure movement born in England and which, from the early sixteenth century, had questioned the spirit of village’s mutual assistance, Marx was able to stigmatize one of the key steps in the advent of the proto-industrialization and capitalism. To grasp the folds of time and thus restore the traditional relations that used to unite the community to agricultural production means undoing economism through critical deeds. Unlike the enclosures, which in the late eighteenth century opened the roads to a flow of de-sedentarised labor to be exploited at will, thus enclosing the world in the narrow vision of economism, the barricades of the ZAD are now closing the roads, but opening the way. ■

**Alain Le Cabrit**

(\*) *Omnia sunt communia* (all things are held in common) is a quote attributed to Thomas Müntzer, leader of the peasants war in Germany in the 16<sup>th</sup> century and protagonist of the radical reform.

Alain Le Cabrit lives in Nantes. Surveyor involved with collusion in all the struggles he writes the column *Chroniques du Zadistan* (Zadistan’s Chronicles) on the [poptronics.fr](http://poptronics.fr) website.



# LESSONS IN FISCAL DISOBEDIENCE WITH NÚRIA GÜELL

Núria Güell is an artist who urges us to disobey the rules, who teaches us how to expropriate money from the banks and offers consultancies on how to avoid paying taxes that violate our conscience. Somehow, it never feels wrong nor simplistic.

■ What makes her work particularly thought-provoking and relevant to our times of crisis and uncertainty is that while ‘socially engaged’ artists slash activists abound but never venture much out of the comfortable walls of art institutions, Güell doesn’t stop at the mere denunciation of social injustice and unethical practices. Instead, she goes as far as to reverse-engineer the mechanisms behind them in order to develop strategies and alternative models that will foster the public’s critical understanding and independent action.

In 2009, the artist wanted to understand the ongoing recession and started studying monetary politics. The result of her research is the manual *How to Expropriate Money from the Banks*<sup>(1)</sup>. The guide is packed with instructions, legal information and analytical texts that anyone can download for free and apply to their own life. She later teamed up with Enric Duran<sup>(2)</sup> to give high school students lessons about the current financial system. That’s the kind of knowledge we are all in dire need of. Yet, the concept of money and what it entails is not part of any school curriculum (at least any that I know of).

More recently, Güell launched the *Inverted Rescue Office*, an information desk offering free advice to citizens who have been victims of the austerity measures implemented by the Spanish State as part of its financial rescue plan.

Núria Güell graduated from the University of Barcelona with a degree in Fine Art and continued her studies under Tania Bruguera at the Behaviour Art School in Havana, Cuba. She has won several awards in Spain and her work has been exhibited in biennials, museums and galleries across the world. I managed to drag her out of her internet-free trip to Cuba to talk about fiscal disobedience.

**I’m amazed by all the information provided for the project “Displaced Legal Application #1: Fractional Reserve”<sup>(3)</sup>: videos, conference, a detailed PDF on “How to expropriate money from the banks”, etc. Are there lessons in this project that**



Alegaciones Desplazadas.  
ADN Galería, Barcelona, 2012.

### citizens can apply easily to their everyday lives?

Núria Güell: Yes! This was the objective of the work which, in addition to functioning as a potential exercise for thinking, also functions as a resource for citizens to use. I want all my projects to propose a strategy that can be replicated. Sometimes it is implicit through the process of the work but in this case, being a manual, the idea that this is a resource for citizens is more explicit. There is a chapter entitled *Step by Step*, which details all the steps necessary for any citizen to expropriate banks. And if anyone has any questions, they can always write us, they won't be the first to do so and we will be happy to advise them<sup>(4)</sup>.

**I actually learned a lot while watching the videos on the project page. I learned things that should be basic: what is money, how does a bank**

**generate money, etc. So I would say that your work has had an impact on my own life. But more generally, what do you think is the role of an artist working on socially-engaged projects? Can they really have an influence on the issues they are denouncing?**

I believe that we are at a critical moment, both historically and socio-politically, and that the role of the artist and the art should thus measure up to the situation, without being condescending. That's why I want my projects to work on two levels: within the art context but also outside of it, since the transformation through art projects into something real interests me far more than the mere representation. My goal is that they function not only as resources for citizens but also as potential devices for thinking through the conceptual density. I'm not interested in representing

political ideas but in offering opportunities for thinking and resources through the action, that can truly counter political systems (albeit on a micro level) or generate a counter-weight.

The roles of art and the artist can be many, but for me, at this time of urgency, I think that political art is the one that holds a discursive struggle that manages to subvert the hegemonic discourse that subjects and oppresses us. Hence my interest in projects that have a life outside the art context, as I want to reach other segments of the population and not only the elite who visits art institutions.

The concept of operativity is important to me when working on projects that have a social dimension. And by that I do not mean operativity in the art project itself but an operativity that tran-

**How to expropriate money from the banks**

Displaced Legal Application #1:  
Fractional Reserve

*How to Expropriate Money from the banks.*  
Núria Güell.

**Ventajas de la constitución de sociedades en un paraíso fiscal:**

- No hay impuestos para las sociedades ni para las personas físicas.
- No hay impuestos sobre los beneficios y dividendos.
- No hay obligación contable, auditorías ni presentación de cuentas anuales.
- No hay impuesto de sucesiones.
- No hay capital mínimo.
- No hay IVA en las transacciones efectuadas.
- No hay impuesto sobre actividades económicas.
- No hay cotización social.
- No hay pagos de seguridad social en el país de constitución.
- No hay restricciones para el flujo de capitales.
- Anonimato garantizado.
- Secreto bancario.
- Protección patrimonial contra demandas judiciales, embargos y litigios posibles.
- La sociedad en el paraíso fiscal y su cuenta bancaria pueden operar en todo el mundo.



Arte Político Degenrado.

> sends art and the project and that it is effective for people who engaged with the work.

Yes, I think you can exert a real influence or transformation through art. I know of people who are expropriating banks by following the manual, my Cuban husband got his nationality by marrying me as a result of an art project<sup>(5)</sup> (and we're getting divorced!) and Maria<sup>(6)</sup>, a political refugee from Kosovo who has been living illegally in Sweden for 9 years because the government has denied her asylum twice, will receive a work permit in a month thanks to a contract we did through a museum that hired her to play hide and seek with the visitors of the Göteborg biennial.

**One of your latest works, “Inverted Rescue Office”, offers free consultations for Spanish citizens who would like to regain some of the money that the banks and adminis-**

**trations defrauded during the government's rescue policies of 2012. Can you give a few examples of how this money could be brought back into the hands of the people?**

Most of the strategies that we offered were based on fiscal disobedience as a mechanism to boost citizens' empowerment, allowing them to recover by themselves the money that the government has stolen from the people through the alleged "crisis". As they say in Spain "this is not a crisis, this is a racket" and the discourse of austerity has been used to privatize services, plundering the resources that used to be public. You can see that quite clearly in the General Budget of the State which severely reduces the amounts for health, education and culture (an ideal strategy to justify privatization later) and increases heading benefiting the oligarchy, such as the debt payment for example. One of the resources that we offered was to apply fiscal disobedience

to the Spanish State when filling in your tax return. This consists in not paying to the State the items that you do not regard as legitimate and do not want your taxes to fund. For example, the 24.73% that goes to pay the odious debt (which would sum up military defense, the monarchy, the purchase of repressive equipment, the church, etc.). The procedure involves filling in your tax return but only paying to the State the items you consider legitimate. You can then give the remaining money (the 24.73%) to public initiatives that actually contribute to the common such as free schools, housing cooperatives, self-managed health, etc. And then you attach to your tax return the proof of expenses corresponding to the money you were supposed to pay to the State but without violating your conscience.

Other strategies included insubordination mechanisms to VAT, cross renting so that the bank can not evict the fam-

¿Cómo podemos expropiar dinero a las entidades bancarias?

Aplicación Legal Desplazada #1: Reserva Fraccionaria

Aplicación Legal Desplazada #1: Reserva Fraccionaria. Núria Güell.



ilies who can not pay their debts to the bank. I also added resources that I created for previous projects such as the manual *How to expropriate money from the banks*.

**I'm also very interested in the concept of civil disobedience that underpins many of your projects and this one in particular. Why should citizens learn to be more disobedient nowadays? Does that involve breaking the law in any way?**

As the philosopher Marina Garcés says, we live in a common world, in which, whether we like it or not, we are always involved. Given this, I believe that we have a responsibility to the reality that we share, it's even a commitment for the social subjects that we are. The law in Spain has been instrumentalized to the effect that it has stripped society from its founding power, in accordance with a social contract that was imposed, which obviously becomes an exercise in submission, in debt to the sovereign. But what makes us human is the sense of responsibility. And although there may be consequences, we all have the possibility, without the need of a permission from anyone, to refuse to comply with laws that violate our consciences, our bodies and our dignity. That it is what this is all about, it's about responsibilities, about making ourselves responsible. For me this is civil disobedience, it's an act of self-responsibility, of refusing to delegate.

As we all know only the slaves obey, the others consent. Of course we can not ask our oppressors to grant us freedom, it is not just naive, it is antithetic. Therefore, when justice is hijacked by tyrants, the answer is disobedience. Disobeying means not being complicit and this is why I think it is important to approach the civil disobedience as it is now one of the few informal mechanisms of civ-

il participation in a context of decision-making that lacks participatory channels. Although they deny it, we know that civil disobedience is a *sine qua non* condition of democracy. As the philosopher Habermas said, this form of dissidence is an indicator that democracy is reaching maturity. There are no supreme obligations. The citizen, surpassing his silent and submissive condition, takes back his role as an examiner of the regulations and continuously questions political, legal and judicial decisions. In short, I think that disobeying is a duty nowadays, because when we obey the law, we disobey justice. The problem of our society is not disobedience, it is civil obedience.

**Does the fact that you are an artist help your projects? Because on the one hand, being an artist gives you certain liberties and ensures that you will reach a certain type of audience. On the other hand, the fact that you are 'labelled' as an artist might make you seem less serious, some people might dismiss some of your work because they are actually 'only' art projects.**

Right. This is another feature of art that I use for projects: Autonomy. As we all know, throughout history, art has attempted to break free from the powers—religion, monarchy and politics—that wanted to use it for their own purposes. But as you say, this achieved autonomy makes art a more permissive space with the consequence that some people, as soon as they learn that it is an artistic project, refuse to consider it as a possible force that can have transformative effects on reality. What interests me is to instrumentalize this autonomy in favor of achieving the objectives of the projects. I call it using art as umbrella, in the sense of a 'space of protection'. And I use it strategically to work out certain “alegalities” which

work for me as a significant resource. Somehow, I think there is also a less conscious desire to test the boundaries of art, if there's any such thing.

For now, apart from a death threat, I never had any problems, although I am aware that there is a legal risk in all my projects, and perhaps at some point the protection that art gives us won't be enough anymore.

**Do you see many parallels between financial activity and the art business?**

Yes, I see parallels with the art business. In both cases what matters is profitability, and by that I mean the creation of value out of a potential value, a key strategy in the inflation that both banking and speculation in the art business are based on. The objective in both cases is to generate maximum profit, often without regard to cultural, social and / or human values. ■

Interview by Régine Debatty

- (1) How to expropriate money from the banks [http://mon3y.us/nuria\\_guell.html](http://mon3y.us/nuria_guell.html)
- (2) Enric Duran is an activist who, in 2008, embezzled from the banks €498,000, which he then used to finance projects that offered socially conscious alternatives to capitalism.
- (3) <http://www.nuriaguell.net/projects/12.html>
- (4) *Humanitarian Aid*: <http://www.nuriaguell.net/projects/10.html>
- (5) *Humanitarian Aid*: <http://www.nuriaguell.net/projects/10.html>
- (6) *Too Much Melanin*: <http://www.nuriaguell.net/projects/31.html>



*Cómo expropiar a los bancos / Com expropiar als bancs.* Catalan Castilian bilingual manual, Nuria Guell (dir.).

Régine Debatty is the founder of the blog [we-make-money-not-art.com](http://we-make-money-not-art.com). As a curator and critic, she lectures internationally about the way artists, hackers and designers use science and technology as a critical medium for discussion. <http://we-make-money-not-art.com>

# ART AS BUSINESS / BUSINESS AS ART

As an artist and trader I have been mingling art & business since the turn of the century, when I started “Feral Trade”, a small business trading groceries internationally, leveraging my extended social networks to source the producers and using the surplus hot air of the art world as a freight resource.

■ *Feral Trade* was conceived as a material investigation into the life of the commodity, with a side interest in my own subsistence should the drip feed of public arts funding go belly up. I started out with coffee (the second most traded world commodity after oil) and followed up with some of the leading grocery staples of all time including cola, salt, antidepressants, sweets, olive oil and tea: fundamentals if not in terms of sheer survival then at a more essential level the stuff of life. Goods circulate in the spare baggage space of other artists, curators, friends, parents and passing acquaintances, a drifting net of self-determined freight handlers at least as reliable as DHL.

All my suppliers and all of my customers being either friends or their friends/relations/colleagues etc, has enabled *Feral Trade* to enter into private homes as far away as Japan, as well as into the food chain of art museums and other institutions, through the staff office supplies.

#### Barter taxes

On the payment side *Feral Trade* has always been relatively currency-agnostic, happy to accept £, \$, €, CHF, CNY,

MXN, AUD, XAG, BTC, or alternately other goods and services in trade. Although there is nothing so special about barter. If I offer to pay my bike mechanic in 500g coffee beans, being not extraterrestrials we both can calculate he is getting about £9, his foregone expense of buying the coffee by other means and/or my relinquished sterling income. The coffee bag adds weight to the

transaction, but without being radically de-indexed from the world of legitimate commodities (IE. stolen, faked, given out for free, mismeasured, defamed, misdelivered, etc). Barter does not in itself disrupt the price relation in a meaningful way. Her Majesty's Customs & Excise gets this completely and taxes barter exactly like cash sales.

What I find more interesting is the war on substitution. Coffee on the one hand makes a fair stand-in for money, being relatively available, durable, portable and reliable. It is easily divisible/grindable, and like many asset classes considered fungible, which is to say completely substitutable for similar assets. (For example describing a specific grade of commodity as 'number 2. yellow corn' means that all yellow corn regardless of origin if designated number 2. will be considered to be the same). Fungibility is also one of the key properties of money, whether cowry shells or the euro.

Meanwhile and strange for a society which everywhere insists on comparison, evaluation and quantification, 'bean counter' is a pejorative term: a disparaging putdown for accountants, referring to the idiocy of micro-calculation. This view is not supported by the reverence in which grand numerical institutions like the stock market, price signal and the Big Four accounting firms are actually held.

With *Feral Trade* the goods are extranumerical, travelling way beyond their anchor in the price. I am delivering this coffee from this farmer on this occasion via this route: a heroic linear production, hand to hand.

The farmer is lone-wolf not certified co-operative, the beans are not evenly sized—a prerequisite for high-end arabica drinkers—but being parts of plants the beans naturally beg to differ. Deliveries are single instance shipments, travelling sometimes in loops, tracked and stamped with their full and sprawling financial biographies.

Contrast this with Fair Trade, which, while largely obscuring the money relation except for the one you take to the till, still runs on the finance lesson inscribed on the pack. Almost inevitably this features a happy farmer testifying as if at gunpoint that he uses the money for his children's education. The farmer is the deal clincher, the model global market citizen. By restoring singularity, contingency, doubt and sheer effort to the transaction, *Feral Trade* aims to derail this assumption.

#### Home Economics

A founding understanding for *Feral Trade* is that social networks do not scale. Its business model accordingly plans for non-growth, with the added bonuses of non-employees (self included), payroll, overtime, tea breaks, vans, uniforms, warehouses or specialised protocols (excluding internet ones), leaving an almost bare social interface between trader, senders, couriers and receivers. A practically overheadless operation, the 'work' of the network is continuous with daily life, particularly mine. Business as autobiography.

It's not about providing a global service to bring desired items to an individual consumer, it's about the coordination of social



PHOTO © KATE RICH

Finca El Volador.  
Café / Feral Trade.





Finca  
El Volador.  
Café /  
Feral Trade.

movement and intent. Can I shift 40 boxes of Iranian sweets from Iran to UK to distribute them pre-Xmas? These went fridge-to-fridge: the couriers were me, an Iranian art student I met at a party, a Russian professor friend and an IT engineer from Hewlett Packard I never even met, along with various onlookers and companions.

Where *Feral Trade* has interfaced with outside agencies is where the edges of the model become visible. In 2010 I was proud to be raided by Trading Standards, the UK enforcement body formerly known as Weights & Measures. Trading Standards investigates commercial entities that trade outside the law, they have more powers than the police and for example can enter your home without a warrant. They spent hours swarming the *Feral Trade* courier website and then cornered me for an interview. After two hours intensive conversation finding no consumer

to protect—that this was peer-to-peer transactions in the social economy just like most people do when they bring gifts back from holidays for friends and family, just on a more extended/obsessive scale—Trading Standards made inquiries to Her Majesty's Custom and Excise on the legality of converting personally imported food products to (quasi) commercial use. Three weeks later they reported back, they were “unable to get a straight answer”. A nugget of state-funded research *Feral Trade* took as open endorsement to continue, operating as if from a tiny island of regulatory indefiniteness maybe several pixels wide, where the relationship between commercial and personal is blurred to the point that the law gets a headache. Optimal pirate territory.

As for art, this business is amongst other things a recast of the art world as productive carrier for other materials. You can

think about it in terms of the excesses, the many art air miles flown by art practitioners and visitors as compulsive or destructive behaviour built into the territory. But when an artist being freighted out to whatever conference or biennial offers to carry a grocery parcel, it's a permaculture crack at that system.

And finally as a store of value, my goods depot is my bank but if somehow the currency fails I can always eat/drink it. ■

**Kate Rich**

*Kate Rich* has run *Feral Trade*, a grocery business and underground freight network since 2003 and is currently retraining herself as an economist.  
[www.feraltrade.org](http://www.feraltrade.org)



# TIME BANKS

## A root to wider societal change in crisis-hit Greece

In recent years, alternative spaces have developed in Greece as a result of the negative effects of Memorandums which, since 2010, have resulted in the rise in unemployment (around 27% in 2013) and reduced revenue (about 30%). New forms of collective action have emerged like "movements of places" that have made significant changes to the political culture and collective identity. The "movement of Syntagma Square" has given birth to the first Time Bank, renamed Athens Time Bank and became a model.

■ The 'squares movement' was catalytic to make people understand their power to create here-and-now a better world to live in without the intervention of any political party or the state. At the time of writing many efforts are made to establish time banks all around

Greece. Many municipalities have set up time banks, as a 'cheaper' form of welfare policy, using funds made available by the EU Structural Funds. This article covers the four main grass-roots time banks in Greece (located in Athens) that have already existed for

some years: the Athens Time Bank, Mesopotamia Time Bank, Exarcheia Time Bank and Time Bank Cholargou-Papagou.

### 2011, Birth of Athens Time Bank

Athens Time Bank<sup>(1)</sup> was created in May 2011 and has about 3000 registered members. Mesopotamia Time bank<sup>(2)</sup> was created in 2011 by the homonymous urban social movement which was set up in 2003 to deal mainly with issues in relation to public spaces, environment and culture. With around 120 members today, the number of exchanges reaches about 90 per month. Exarcheia Time Bank<sup>(3)</sup>, with around 150 members today, was created in 2012 mainly by the local Initiative of the Residents that deals with several social and cultural issues (including xenophobia, criminality, etc.) Finally, Time Bank Cholargou-Papagou<sup>(4)</sup> was created in December 2012 due to the initiative of the local Citizens' Network and has around 40 registered members.

### Operation

Operation of the time banks is based on exchanging services valued equally based on the time they need to be provided irrespective of the type of the serv-



Advertisement for Athens Time Bank.  
It was created in May 2011 and has about 3,000 registered members.

ice. The Mesopotamia Time Bank is an exception in the sense that they consider equal any type of service to any other irrespectively of the time needed as long as it is agreed by the recipient and provider of the services.

Usually time banks apply an upper limit in the number of time credits an individual can charge or be credited for. This is done to create a sort of balance in the services one receives and provides and to encourage individuals to ask for, apart from giving assistance. However, Mesopotamia Time Bank is again an exception as the initiators believe that freedom in exchanges leads to more transactions. This was also later applied in the Athens Time Bank.

#### Decision-making processes

Decision-making processes are characterised by the principles of direct democracy, openness and transparency. The main decision-making bodies are the general assemblies. Decision-making might be based on majority voting (in Athens Time Bank 60% is needed) or complete consensus (Mesopotamia and Exarcheia Time banks) or both depending on difficulty to reach consensus (Time Bank Cholargou-Papagou).

Day-to-day decisions and execution of tasks is the responsibility of the so-called management or coordination teams that meet usually every week or once a month and are open to anyone interested. Attention is paid that membership in the management teams changes regularly so that all members have a chance to take part if interested.

#### Provided services

Some time banks have developed certain 'specialties'. In the Athens Time Bank emphasis is given to foreign language lessons and translation as well as health-related treatment like massage or psychotherapy, but also computer-related services including graphical arts. In Mesopotamia 40% of the services offered refer to education and training covering 23 different topics, many of which correspond to high school curricula. In Exarcheia Time Bank among various services, lessons are provided by unemployed teachers in various topics. The time bank members also organise bazaars where products can directly be exchanged. The bank also collaborates with two collective kitchens operating in the area where members may have their meals and the kitchens are credited with time credits that they can then redeem from the bank in the form of various services.

#### Participation

Although there is no data about the characteristics of the members, it can be asserted that women are more than men, while the initiators are usually individuals of a high educational level. Young people under 25 years of age are not usually found among time bank members as they may still be covering their needs living with their parents.

An important issue about participation is the share of active members in relation to those registered. Only a small share of the registered members is active in the time banks by making exchanges and/or participating in the meetings and assemblies. This is partly because many people think they do not have something to offer or feel awkward in making money-less transactions. Others lack experience in direct democracy procedures, and may thus be reluctant to take part or just not have the time needed.

#### Objectives

The main rationale for the emergence of the time banks in Greece was the need to deal with the negative consequences brought by the Memorandums and the consequent austerity measures. ➤

Under this framework, the specific aim of the Athens Time Bank is to ensure that the work of any individual benefits their fellow human beings and not the market or anyone's profit. The aim of the Mesopotamia Time Bank is to satisfy the local needs based on local resources, activate citizens and educate them to participate and act in a collective mode. Similarly, the main aim of Exarcheia Time Bank is to help disadvantaged groups by facilitating mutual assistance and support at the local level. Given the difficult conditions in the neighbourhood (due to delinquent behaviour and drug handing) the aims of this time bank also extend to improving quality of life by decreasing criminality and violence. Time Bank Cholgargou-Papagou aims at covering local needs through money-less provision of services, and enhancing creativity and capacity building for the benefit of all based on reciprocity, equality and non-discrimination.

### Results and aspirations

The impacts of the time banks lie more in the social and political spheres than the wider economy as the number of transactions is still quite low to make a noticeable difference. Overall, impacts relate to building social capital, increasing the self-esteem of the members who may be lonely or disadvantaged groups, as well as educating and training people to act collectively based on principles of direct democracy, solidarity, reciprocity and equality and how to put these principles in everyday practice. Change of day-to-day practices underlined by these values is what can bring wider social change in the long-run.

All the time banks aspire to continue to exist and become important reference points for people who do not have other means of covering their needs but also contribute overall to re-framing how people understand they can cover their needs with alternative means to the market economy. Operating in a collective and solidary mode is what is needed to build trust and self-confidence in a fearless route toward wider societal change.

### Epilogue

Time banks in Greece are proof of existence of alternative spaces of socio-economic transactions based on values such as direct democracy, trust, equality and reciprocity, thus establishing a new sense of local community and promoting an alternative view and practice

in the valuing of work. Members of the Greek time banks have a realistic view about the current relationship between time banks and the market economy. They realise that their current scale and size is insufficient to bring radical change. However, their aspiration to scale up and change the way people think and live their lives points to a certain wish to bring wider social transformation. ■

Karolos Losif Kavoulakos, Giorgos Gritzas & Effie Amanatidou

- (1) <http://www.time-exchange.gr> last accessed 31 May 2014.
- (2) <http://trapezaxronoumesopotamia.blogspot.gr> last accessed 31 May 2014.
- (3) <http://exarchia.pblogs.gr> last accessed 31 May 2014.
- (4) <http://trapezaxronou.weebly.com> last accessed 31 May 2014.

Karolos Losif Kavoulakos is Lecturer at School of Political Science at Aristotle University of Thessaloniki in Greece. [www.polsci.auth.gr/index.php?lang=en&rm=118&mn=128&stid=56](http://www.polsci.auth.gr/index.php?lang=en&rm=118&mn=128&stid=56)

Giorgos Gritzas is Assistant Professor School of Spatial Planning and Development at Aristotle University of Thessaloniki. <http://users.auth.gr/ggritzas/en/index.htm>

Effie Amanatidou is Researcher at Manchester Institute of Innovation Research at University of Manchester. [www.mbs.ac.uk/research/people/profiles/effie.amanatidou](http://www.mbs.ac.uk/research/people/profiles/effie.amanatidou)





optical sound  
revue  
label  
édition limitée

www.  
optical-sound  
.com

# FÊTE DE L'ANIM'

11<sup>e</sup> ÉDITION

TOURCOING  
LILLE  
ROUBAIX

ARTS NUMÉRIQUES

27-29 MARS 2015

FILMS D'ANIMATION

Projections, expositions, rencontres, performances... 200 professionnels et étudiants d'écoles supérieures présents !

- **Invité d'honneur : Michel Ocelot**
- **Masterclasses de grands noms de l'animation internationale**
- **Longs métrages**  
Best-of de l'année et avant-premières
- **Écoles d'animation européennes**  
La jeune création à l'honneur !  
Projections et challenges créatifs : atelier mapping, Marathon de l'anim' et Grafik Battle
- **Brunch Visual Design**  
Rencontres avec des studios et artistes internationaux du design animé
- **C'est animé près de chez vous**  
Noranim et Les Films du Nord
- **Village des Enfants**  
Activités pédagogiques et ludiques, un espace découverte pour toute la famille
- **Soirées Électro-animées**  
Musique électronique, Vjing et mapping, en mode Silent Party

+33 (0)3 20 53 24 84  
[WWW.FETE-ANIM.COM](http://WWW.FETE-ANIM.COM)  
F FETEANIM

RENCONTRES AUDIOVISUELLES

Lille Métropole

RÉGION NORD-PAS DE CALAIS

ville de lille

mcd

Animeland

VILLE DE LYON

RhôneAlpes

GRAND LYON METROPOLE CREATIVE

## Mirage Festival 3<sup>e</sup> édition

Art, Innovation et Cultures Numériques

25 Février – 01 Mars 2015

Lyon

Installations, Musique, Performances, Workshops, Rencontres Pros. [www.miragefestival.com](http://www.miragefestival.com)

VILLE DE LYON

RhôneAlpes

GRAND LYON METROPOLE CREATIVE

# SURVIVING MONEY

Survivalists are preparing for the apocalypse, but how do they imagine the world afterwards? With monetary transactions or just trade? With or without money?

■ The survivalist movement appeared in the United States in the 1970s as an anguished response to the oil crisis, to the spread of just-in-time Toyotism (an organization method of industrial production that consists of minimizing stocks and works-in-progress), to the rise of unemployment and the MAD (Mutual Assured Destruction) of the nuclear cold war. That generation's survivalism was basically conservative, Charles Bronson-type vigilante.

## Conspiracy

So when the shit hits the fan, the guy will barricade himself in his DAB (durable autonomous base) in the countryside, where he has stored food for the next two years, ready to shoot any intruders who might rob him of his precious resources with an AK47. The bunkered-down survivalists had an annoying tendency to be paranoid, to believe and communicate all conspiracy theories, to think that the red or muslim peril would invade their cherished land, that economic collapse is inevitable, or that a great ecological or technological catastrophe will reduce humanity to ashes, as perfectly demonstrated in Canadian Dominic Gagnon's documentary *RIP in Pieces America* (2009).

## Napoleons

Everything is game for survival in the barbaric world of Mad Max. Survivalist websites advise to invest in "reliable values" such as gold and silver, to buy recognized silver coins (such as old French Francs), ounces of gold ingots or Napoleons, to keep around 1,000 or 2,000 euros in cash, or more, in small denominations, in order to continue

buying once disaster strikes, as the banks under fire keep feeding the system without telling anyone. The survivalist trusts no one, so don't expect to see him get involved in an economic solidarity project or trading system. He posts YouTube videos portraying himself channeling rather disturbing oracles and doesn't hesitate to offer tips for ultimate survival, but after the catastrophe, it will be every man for himself.

## Preppers

No doubt to distinguish itself from this type of warrior, neosurvivalism has since surfaced. Today the movement is multifaceted, transgenerational and has inspired new appellations, such as "preppers"—those who simply feel the need to reassure themselves by preparing for the worst, and who adopted this term to distance themselves from all sectarian, extremist and/or ultra-individualist connotations associated with survivalism, especially in the U.S.

Prepper networks have emerged in North America, and more and more people are joining the movement in France. This neosurvivalism advocates survival in any way possible, be it in urban, semi-urban or rural areas: growing one's own food, being autonomous, doing it yourself. This also means becoming more and more involved with your neighbors, your neighborhood, working together and understanding that we're all in the same boat. Preppers believe that the best way of making progress is by helping each other. Even if preppers and survivalists adopt the same survival practices, *"preparation for the worst is more of a lifestyle, a daily attitude rather than a means of survival"*, says the No Panic website<sup>(1)</sup>.

## Autonomist

The prepper type stocks up and advocates for mutual cooperation, but is actually fairly well integrated into our current capitalist society. Rather, the will to break from capitalism is covered by "autonomist" and "resilient" survivalists. By autonomist we mean a survivalist who self-manages while leading a partially or completely autonomous lifestyle. Nothing stops him from collaborating with other people or having business relationships. However, his visceral desire for individual autonomy makes him avoid commercial relationships on which he could eventually become dependent.

The autonomist likes to lead a lifestyle that is as money-free as possible. For him, money's only purpose is to transport his savings over time in a currency that will still be valuable, once his basic survival needs are met. First, he devotes himself to learning (if he hasn't already) a trade that he can practice in rural areas in an anemic economy. He will install his deluxe countryside DAB with phytoremediation, composting toilets, small hydropower, wood stove, backyard, subsistence farming, etc. Some autonomists aren't against firearms either, as they need to hunt and eventually protect themselves.

## Social resilient

The autonomist can live in a commune. Most of the time he is willing to organize his social life differently, and from now on, he is not waiting for calamity to strike to "change life". This makes him a "social resilient" with a strong ecological conscience. Resilience is the term used to describe the capacity of an ecosystem, species or individual to resume normal activity or development after a disturbance. In survivalist logic, resilience means considering that the catastrophe has already occurred and that we must act accordingly so that nature can reclaim its rights.

The autonomist and resilient survivalist positions himself within a larger sociology of human and non-human beings, posing agricultural, educational, architectural and cultural systems as possible melting pots of a post-capitalist society. He decreases, and in terms of money and commercial exchanges, the social resilient advocates the return to a local currency to replace the abstraction of a global one. He implements systems for trade, services exchange and free zones, seeking a society that forgoes land ownership.

## Anti-monetarist

This "leftist" survivalism can also position itself as "anti-monetarist". Deep down, these survivalists do not wish for great chaos, as is often the case of survivalist prophecies. The "post-monetarists" wish to play down the adage that historically, "great changes" come after chaos. He considers that we should henceforth imagine a society without money and show that it is possible.







# BUREAU D'ÉTUDES

## A currency should be affected by the environment in which it lives

Bureau d'études is a French artist duo formed in the late 1990s by Léonore Bonaccini and Xavier Fourt best known for their creative mapping of global governance. The duo defines itself as a conceptual group, having collaborated with a number of artistic, militant and resilient individuals and collectives. Since 2009 they have been involved in a complete project to rehabilitate a rural wasteland in the Allier department of central France, with an organic grocery store, biodynamically cultivated farmland, a school, theater, organization for producing cultural events and a farmhouse. These days, they're thinking about money.

■ **When did you start tackling the issue of exchanging goods?**

Our first approach to the issue was a discussion on the status of the artist organized in 1998 with Syndicat Potentiel, a group of artists and/or unemployed peo-

ple in Strasbourg. We came up with the free zone in response to the question of artists working for free, intervening in the symbolic and subsidized economy, without being paid themselves. Artists work for free in this economy, but unlike the unemployed, for example, they don't receive any benefits.

■ **What artistic form did it take afterwards?**

There were two big moments. The first was when we created a free zone in 1999 in an art center in Alsace, and then in an art gallery on Rue des Taillandiers in Paris. During that time we passed around an urban questionnaire to learn how free work was perceived and how

it could be developed in urban space. We organized drives to collect goods that were redistributed in the store, requalifications and confections of donated objects, a free borrowing program for clothes with more value. The project received good media coverage, which attracted a lot more people, and afterward several more little temporary free zones were installed here and there. The second moment was when we curated the *Losses and Profits* exhibition at the French Cneai (National Center for Printed Art in Chatou) in 2000. The general idea was to ask artists to propose certain kinds of exchange, such as a donation, a loan, an exchange, a theft... A protocol invited the artists to suggest a procedure for the transaction. This procedure was applied in four zones: selling zone, free zone, exchange zone, borrowing zone. People had to bring goods, expressions, in order to enter the artists' space for exchange.

■ **These past years you also took a new direction by settling in a rural wasteland in Allier. What motivated this project? Is it inspired by a desire for resilience?**

The modern art museum, or its commercial form, the art gallery, are the counterparts of the laboratory and the department store. Fetishism for artworks imitates fetishism for merchandise, and cultural experiments in the white cube imitate scientific experiments in vitro. However, there exist other artistic practices besides those



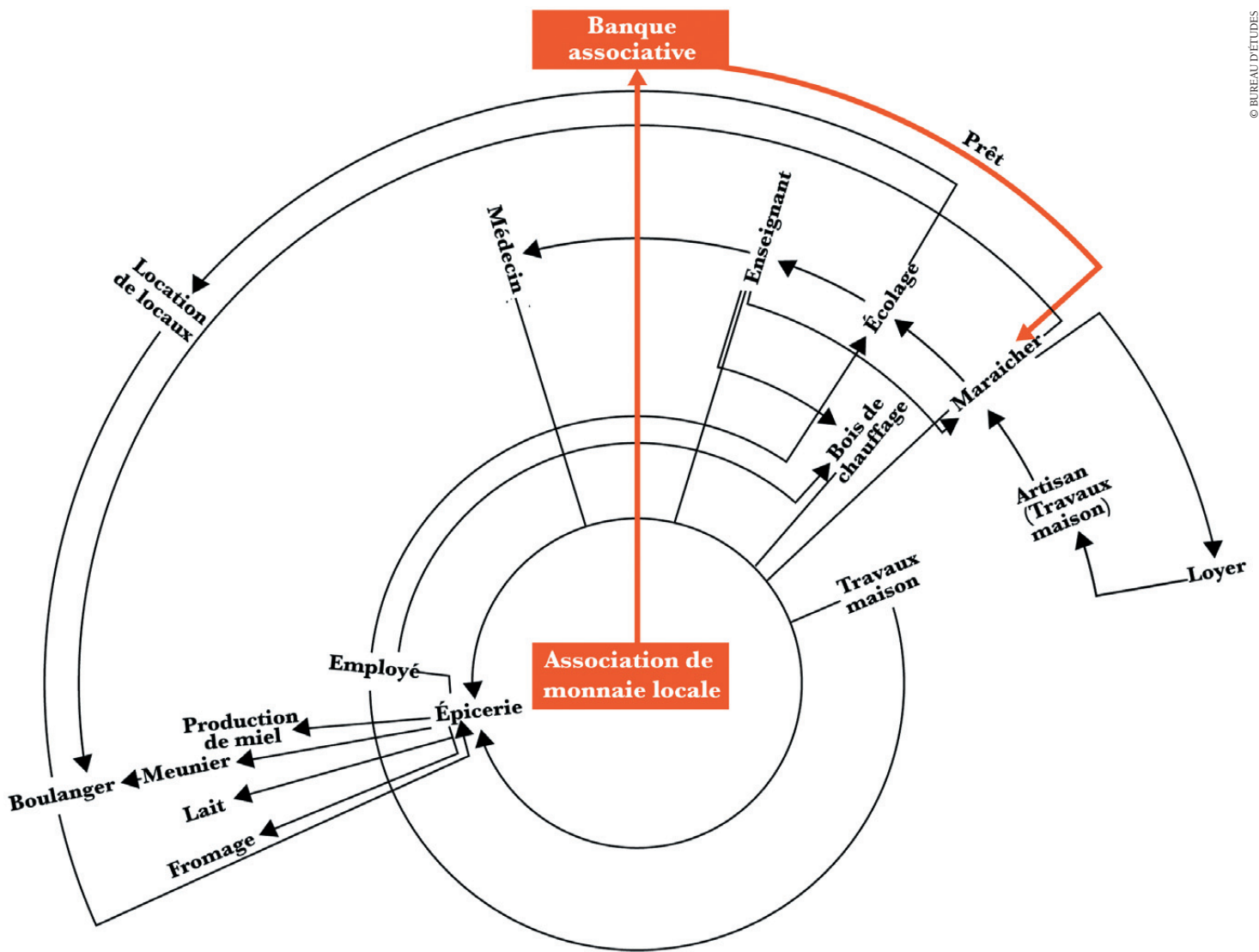


Diagram to show the flows between local producers as part of a local currency experiment, by Bureau d'études.

represented in this museum-department store-laboratory triangle. These practices form a different space from the abstract space of late capitalism. They sculpt localities based on mutual relationships that connect the places and the people who live there, selecting the relationships that they want to cultivate around the globe, and by doing so, contribute to what could be defined as cultural resilience. For the past five years in Allier, we have devoted ourselves to mapping in action this space and this cultural resilience. This local experiment allows us to articulate fundamental experiences of human existence (life, death, sleep...) around fundamental social structures (property, currency, commons...) through which they are expressed.

**How do you approach the question of money?**

We are currently working on implementing a monetary network that is not abstract or unconscious, like the euro or the dollar, but rather that emerges from the social, productive and commercial networks of a territory. Such a network—which is indeed mapping in action—must make us conscious of the relationships that weave and form the social life of a territory, that reinforce it and give it credit.

The euro currency shows no trace of the territory in which it circulates and remains as abstract as the chemical elements of the periodic table. We believe that a currency should be affected by the environment in which it lives, just as minerals are in reality. Similarly, local

accounting cannot be locked into a double-entry accounting system, it must be marked by the locality that it reflects. And we would like this other currency, this other relationship to property or objects, to be considered as sculptural acts that have replaced ready-mades, dead forms abundantly received by the distribution channels of integrated world capitalism, this Zone that we stalk through. ■

Interview by **Ewen Chardonnet**

**Bureau d'études** is Paris-based Léonore Bonaccini and Xavier Fourt who have been producing cartographies of contemporary political, social and economic systems. <http://bureaudetudes.org>

## OLGA KISSELEVA

# "MONEY DISTORTS OUR PERCEPTION OF THE WORLD"



**Troll Mirror** in the exhibition **L'Argent** at Le Plateau (FRAC Ile-de-France) in Paris, curators Caroline Bourgeois and Elisabeth Levovici, in 2008.

### ■ **Troll Mirror (2008)**

*I grew up in a world where money had no importance. In the communist ideology, everybody earned the same amount. The highest salary, that of a minister, was 300 rubles, an engineer earned 150, a fresh graduate 70—a quarter of the minister's wages. And however much money you had, there wasn't much you could buy—housing, education, health coverage were all*

Olga Kisseleva was born in the ex-Soviet Union, grew up during the effervescence of the perestroika and lives in Paris in the age of globalization. In her video and interactive installations, she often portrays the world subjugated to the value of money. She comments on three of her projects, among the most representative of her commitment to a certain economy of art, or rather, a certain art of economy.

*taken care of by the government, and the choices offered by the Soviet economy were so minimal that you just didn't care. Money was not interesting. It came about during the Perestroika, along with differences in lifestyles and behaviors, when some with alternative moral qualities turned out to be richer than others. Many Soviets have a problem with this notion. In response, I made Troll Mirror, a mirror with a money symbol in the center. I started with the dollar, then the yen, currently I'm doing the yuan. It's a distorting funfair mirror, as money distorts our perception of the world. I come from Saint Petersburg, and in Andersen's tale Queen of Snow, the first story that my grandmother read to me, a troll showed the mirror to people so that they*

*would see the world as the trolls did—ugly. One day, the heavy mirror shattered into a thousand pieces. The shards entered people's hearts and made them mean. Then I understood why it made people insensible—they became addicted to money. Troll Mirror is an interpretation of the post-Soviet collective conscience, after this period when nobody was chasing money, when we were free from money.*

### ■ **Conquistadors, 2007**

*I started this global project with Russia, because it was in Russia that the effects of multinationals were discovered during the perestroika. In 1983, everything still belonged to the Russian government. Little by little, the territory began to be occupied by various multinationals, which set-*





*Conquistadors* at Documenta 12 Magazines, in Kassel, Germany, 2007.

tled in and appropriated the space. Today, or at least in 2007, when we finished the project with the researchers at the Sorbonne's Economics Center, thousands of logos filled the entire space. The Russian version of *Conquistadors* is not a real-time program, unlike *Arctic Conquistadors*, which is linked to the ONG Barents Observer<sup>(1)</sup> database, and so constantly updated. I had also worked on France, for the *Douce France* exhibition at the Maubuisson Abbey in 2007, in a non-dynamic version. We can see that France always belongs to the same CAC40 and its 100 top companies. The size of the logos corresponds to the weight of the company (its presence in the French economy is measured by both its listing on the stock market and the gross domestic product that the company brings to the economy), but their position is not geographically accurate, as 80% of headquarters are located in the Paris region! In Russia, on the oth-

er hand, the same company can have several logos, a headquarters and multiple subsidiaries.

**(In)visible, 2000-2014**

They have the same energy, the same postures, carrying unreadable flags and slogans. This series of 70 photos taken on four continents in about 20 countries gives the impression that they are from the same demonstration. There are two versions of this project: one photographic (2000-2014) and the other video (2005-2008). In both cases, nothing indicates the event's geolocation. The image becomes black and white, so we don't see the colors of the flags, all the slogans are pixelized like in the official language of censorship. So we get the impression that they are all protesting the same thing— Putin, occupation of Palestine, World Cup in Brazil...

(In)visible shows protestors who oppose the new "sharing" of the world, operated by multinationals, which have replaced the



*(In)visible* exhibition at CAPC Museum, Bordeaux, France, 2006.

sharing of the world between capitalist and communist empires. Today, capitalist multinationals rule the world, with basically the same logos, just as powerful in France as in Russia or in the Arctic. Behind the political events, wars, social unrests of the moment are always the economic networks, with multinationals that provoke these events in order to push people and governments to follow their own interest. Regarding events in Ukraine, we see the few rivaling logos that are above the situation... ■

Interview by **Annick Rivoire**

(1) <http://barentsobserver.com/en>

Olga Kisseleva works mainly in installation, science and media art, focusing on exact sciences, genetic biology, geophysics, and political and social sciences. <http://kisseleva.org>

# ÉCONOMIE SOLIDAIRE DE L'ART

## Solidarity-based art economy

In early summer 2014, French artists launched a Facebook discussion group on “solidarity-based art economy”, to improve the economic situation of visual artists in France. By January, the page had gathered more than 4,000 members (artists, critics and journalists, curators, professionals, nonprofit organisations...). Since then, a website has taken over to structure and present the proposals. The project’s manifesto is published below.

■ At the origin and the core of an economy of art that gives rise to an intense activity, most visual artists and some independent artistic professions are paradoxically working in very precarious conditions. The logic of

excellence that duly governs the art world neither justifies the free work of its operators, nor the exponential shifts between the production of the artworks and the distribution of their resulting worth.

The *Économie solidaire de l'art* group<sup>(1)</sup> was set up to discuss and suggest means to significantly improve the situation, for independent artists as much as for professionals of the field, by involving all those directly concerned in the public and private sectors. In parallel with the thinking processes and movements led around the French “intermittent” status (for performing and entertainment workers), that generally questions the conditions of part-time employment, particularly in the cultural field, visual artists have for their part never opened a large-scale debate over the remuneration and conditions of their practice.

We now believe it is possible to overcome individualism and isolation that often pre-

vail in these professions, so as to invent new solidarity systems to support contemporary art. The debate is now open. This group invites the widest possible range of artists and art professionals to get involved in view of the working gatherings to come.

### Aims and inspirations

The aim of these proposals is both ethical and economic. They are designed to support professional visual artists (from all mediums except performing arts) and independent art professionals (curators, critics, freelance graphic designers...), both categories being the weakest ones in the current system.

The project also draws on existing examples. In Canada, the CARFAC-RAAV charter has been guaranteeing the minimum remuneration for artists for any type of work since 1968<sup>(2)</sup>. The British label *Paying Artists*<sup>(3)</sup> and the American project *Wage For Work*<sup>(4)</sup> also fight in this direction.

As far as France is concerned, we can refer to the *Observation participative et partagée des arts visuels en Pays de la Loire* (participatory and shared study of the visual arts in the Pays de la Loire area)<sup>(5)</sup>, published as part of the Regional Consultative Conference on Culture in 2013, which addresses the same issues. Studies already undertaken by organizations such as the Cipac or FRAAP could also contribute to this project. Finally (though in different contexts), the support logic implemented by the CNC (French National Cinema Center) for and the CNL (French National Book Center) contributed decisively to the economic development of the film and book industries.

### A project in three parts

1. **Creation of a minimum remuneration charter** for any artistic operation in France ensuring that performance rights are respected when volunteering is not initiated by the artists themselves. We also aim to guarantee artists a percentage for each sale and resale in galleries, as well as an increased percentage of the resale right for living artists.

2. **Implementation of artists’ representatives** in each grant commissions, in equal numbers as funders and art professionals (critics, gallery owners, curators...) when it is not already the case.

3. **Creation of a support fund.** A compulsory percentage, reduced but steady, of all artistic productions and operations in France would be devoted to the development of contemporary art productions, artists’ workshops, to support the most vulnerable artists and professionals and to consolidate pensions.

By *operations* we mean: creations, productions, private sales in galleries and auction houses, fairs, productions, ticket sales, muse-



© PIERRE R.R.



Graphic design for *Économie solidaire de l'art* website by Pierre Belouïn.

ums, images sales, reproductions of works from private and public image banks, etc. The income of the artists themselves would contribute as part of a solidarity mechanism. We would consider eligible for this scheme all those whose main activity is making art (affiliates and members of the Maison des Artistes, Social Security and Agessa) and are not employees, as well as teaching artists, preferably if they are individual contractors.

**Means**

The financial design of these systems should incorporate a notion of variability that would allow a gradual implementation. A support fund would particularly support independent artists and professionals whose ratio income/expenses is below a certain threshold, the subsidy gradually decreasing. The subsidy would be proportional to the income of the fund so that the system should

never be in debt. A percentage would be allocated to the supplementary pension fund in order to revalue this aspect.

The implementation of such a system would require the creation of a representative professional body (or its affiliation to an existing structure), responsible for circulating, persuading and negotiating with the various private and public operators of the art economy in France. The incentive to contribute to the support funds could possibly include tax exemption and a foundation, exactly as sponsorship operates.

**Prospects**

We propose to set up a public meeting that will give voice to the practitioners and/or experts in these fields (artists, bodies, organisations, economists, researchers, journalists, etc.), invited to contribute to the project.

At the time of writing, the project of a pub-

lic gathering of the *Économie solidaire de l'art* group at La Gaité Lyrique, for the launch of the current issue of MCD, is well underway... The proceedings of this meeting are to be published. Next objective will be the creation of a nonprofit organisation, or the affiliation to an existing organisation. ■

**Économie solidaire de l'art**

[www.facebook.com/groups/economiesolidairedelart](http://www.facebook.com/groups/economiesolidairedelart)  
[www.economiesolidairedelart.net](http://www.economiesolidairedelart.net)  
[contact@economiesolidairedelart.net](mailto:contact@economiesolidairedelart.net)

- (1) Founded by Pierre Belouïn, Carole Douillard, Thierry Fournier and Nicolas Ledoux.
- (2) The Canadian charter CARCC (French): <http://www.carcc.ca/documents/PDFfre.pdf>
- (3) Paying Artists (UK): <http://www.payingartists.org.uk>
- (4) Wage For Work (USA): <http://www.wageforwork.com>
- (5) CRCC Pays de la Loire study (French): <http://bit.ly/1rT0OHR>



## ALBERTINE MEUNIER

# KEEP IT MOVING, THERE'S EVERYTHING TO SEE AND NOTHING TO SELL

With her ironic pieces, French artist Albertine Meunier forces us to see things from a different angle, introducing a grain of sand into the well-oiled gears of our digital world, beginning with Google. Within the results of the ubiquitous search engine, she re-categorized Marcel Duchamp's ready-mades as belonging to the Net Art period (*The Innards of L.H.O.*, 2013-2014)—a very dadaist update, which she explains below.

■ Since July 27, 2013, Albertine Meunier has been hacking Google with a “Ready Made Hack”, *The Innards of L.H.O.* Anyone who searches one of Marcel Duchamp's artworks will find that it belongs to the “Net Art” period. Duchamp may be the father of contemporary art, but he never lived to see the Internet! Thanks to this semantic hack of Google's Knowledge Graph, Duchamp's best-known works—*Fountain* (the infamous urinal), *Bicycle Wheel*, *Nude Descending a Staircase*, *Bottle Rack*—are all time-stamped as Net Art... without a word of protest so far from the online giant.

### How do you explain why Google hasn't done anything to stop your Ready Made Hack on Duchamp for the past year now?

I appear very openly on the history list of changes, so they must know! It has also been in the media—I promoted *The Innards of L.H.O.* during FIAC, the contemporary art show in Paris in 2013, before summer I launched a crowdfunding campaign to publish a book documenting this performance,



*Mona LHO*, Albertine Meunier.  
Ready made: Mona Lisa ashtray & cigarette holder, arduino, arduino ethernet shield and arduinix.  
Arduino development and box: Tobias Muthesius.  
AMCI script adaptation: Jérôme Alexandre.

PHOTO © R.R. which has just been released and is visible all over the place. Maybe Google is leaving it as a Duchamp-style transformation? (laughs) A number of people said to me: “Why did you do it on Duchamp? Nobody's interested in him. But if you did it on a politician, everyone would be talking about it.” That's exactly my point, that Google is more interested in LOL culture than in art, or at least in this symbol of 20<sup>th</sup> century art that is Duchamp.

### Does confronting Google with Duchamp-style art amount to demonstrating that the all-powerful giant isn't all that?

Google claims to carry all of human knowledge, but it isn't vigilant! It opened a cultural institute in France for its good conscience, but it doesn't know the first thing about art! My little hack shows its patent ignorance, while highlighting its pretentious ambitions. But when you're pretentious, you need to live up to the situation! I also wanted to show that things in the digital world are not necessarily as they seem, assumed and acceptable, impossible to criticize.



PHOTO © R.R.

*Les Dessous de L.H.O.*, Albertine Meunier. Book published in a series of 404 copies. Three special editions have been certified "L.H.O.O.Q is Net Art!".

You can consider the Knowledge Graph from a critical viewpoint and overthrow the search engine's authority figure.

**Especially if the authority figure "devalues" Duchamp's importance.**

**Is it also a criticism of the art market?**

In 2009, I took an interest in the art market, with *Mona LHO*, an Internet-connected ready-made par excellence. I found a nice ashtray and cigarette holder with a picture of the Mona Lisa, I connected it to the AMCI (Art Market Confidence Index), which ranges from de -40 to +40. This value is displayed on the base of *Mona LHO*, to show that you can take any object and connect it (like Duchamp) to make a connected ready-made. It's also a wink at this value that is supposed to indicate a healthy market, placed in the ashtray.

**Is it a criticism of speculation in art?**

I've always seen the index as a positive value, never negative. Isn't it strange that this index never dips below zero?

**Is the hidden message "Don't get attached to mercantile contingencies"?**

It's good to buy artworks, but buying on

the art market is useless! I buy stuff as a collector because I like art, but market speculation kills art—the rating has no meaning, it's even counter-productive for people who want to collect, as it distances you from the art. Many pieces become inaccessible, especially among contemporary artists. Personally, I don't buy art to invest my money...

**Is it a criticism of money?**

Yes, of the speculative aspect of money! Because this object that I found at a flea market in Montrouge is a ready-made Mona Lisa, I didn't do anything to the object itself. So is it art? To me it's much more than a Russian doll, a bouncing object. It's one of the objects that I don't want to sell!

**Why?**

To me, it has no value, or rather, it's priceless! For me, its value is so high that I will keep it until I die. As I don't live off the sale of my artworks [Albertine is an R&D engineer in a big company], I don't need to sell them. So I came up with another system, confiding them to people, like my life assets. I entrust them to people who will commit to taking care of them.

**So you exclude yourself from the market?**

In terms of speculation, yes. An artist's true freedom is being independent of the market, not having to produce only things that will sell. The current gallery model is obsolete. It used to be that a gallery would take an artist under its wing and take care of his or her production, and the artist would enjoy a sort of universal income. Today it's hard to maintain a certain amount of freedom, as the artworks need to be somewhere, not in boxes!

**And the people to whom you choose to confide your artistic life assets are cherry-picked by you?**

Yes, isn't it a luxury? (laughs) The point is that it circulates. No matter if it sells or not! ■

Interview by **Annick Rivoire**

Albertine Meunier has been practicing so-called digital art since 1998 and uses the Internet as raw material. She defines herself as a Net artist, which is not necessarily her artistic net worth. [www.albertinemeunier.net](http://www.albertinemeunier.net)





■  
WE SHIT  
MONEY  
■

# SILICON MONEY AND THE COMMONS

The value of virtual transactions rose from \$819 billion in 2001 to a quadrillion dollars today. This exponential growth can be compared to the success of bitcoin.

It's a good example of the potential of social cooperation, which generates money from the Commons and integrates the power of finance with its ability to mobilize, distribute and multiply wealth, thus upgrading quality of life and the power of social intelligence.

- Since money's value is no longer stored in gold, and more recently moored in silicon, the second-most common element on earth, it has multiplied exponentially. This shift from gold to silicon, of course, does not involve two equivalent substances. Gold used to be stored in fortified vaults to guarantee the value of currency. Silicon is worked to make the substrate which enables the construction of increasingly faster, ubiquitous and connected logical machines. While gold strove to make the value of money stable (with disastrous consequences when it became

too much and hence less valuable), silicon allows for its indefinite multiplication.

#### **The exponential growth of monetisation**

In her overview of the operation of contemporary finance delivered at the Money Lab Conference in Amsterdam in 2014, Saskia Sassen described finance as a 'capability' and the 'steam engine of our epoch, its power'. As she recounted, the value of silicon-based, virtual transactions between 2001 and 2014 has gone from 819 billion in 2001 to 62.2 trillion in 2008 and now to a quadrillion dollars. An accelerated and multidirectional transactivity enabled by digital technologies thus accounts for the exponential growth of monetisation.

A material asset like a 'little house' is turned into an asset-backed security and incorporated into financial instruments whose complexities can only



Avalon, an ASIC farm to extract bitcoins.  
[www.canaan-creative.com](http://www.canaan-creative.com)

be managed through the math of physicists. As a capability, finance creates a *virtual mode of money*, that does not simply reflect the value of the underlining asset, but the calculations, opinions and judgments of institutions and networks of humans and machines. As in the sovereign debt crises, the risks of these operations fall back on the owners of the material asset (homeowners, ordinary citizens), as the number of foreclosures and expulsions, but also cuts and privatisation of public and social services have also steeply risen.

The accumulation of value and power that finance has generated is thus at the moment a power waged against society—like an army which uses debt as a bridge to conquer a territory. The short brutal history of the exponential rise of silicon-based money in the first decades of the 21<sup>st</sup> century,

she concluded, sees the predatory powers of finance employed in a new bout of very material land grabbing (both urban and rural, both the city centres of the global cities and land in Africa) which is going to change the DNA of society as such.

#### **Bare activity**

For post-workerist Marxists and other contemporary critics of the economy, the emergence of finance also indicates capitalism's answer to the entrance of a new heterogeneous composition of living labor into production. Capitalism does not accumulate surplus value simply by underpaying labor, but it draws value from the whole of society—from ordinary social activities such as talking, commenting, liking, listening, reading, expressing an opinion, cooking, making music or art, wearing fashion, taking photos, recording videos, walking, partying etc.

Rather than reducing virtual money to a simulation which refers only to the imitative processes of the stock market, post-workerist authors believe that it expresses the mode of capture of a new quality of something that we might not even define as work any more, but as a kind of bare activity: whether it is described as the communicative and linguistic powers of labor (Paolo Virno, Antonio Negri, Christian Marazzi) or the pre-cognitive and pre-linguistic powers of the virtual subjective force of memory (Maurizio Lazarato, Brian Massumi), this is a power that does not exhaust itself in its material products, but which first of all produces new modes of existence and figures of the self.

The value of the little house transformed into an asset-backed security is thus to be indexed not primarily to the material substance of the house, >





Icarus, bitcoin mining. [www.openmobilefree.net](http://www.openmobilefree.net).

▷ but to the emotional, intellectual and affective labor that architects, builders and owners put into it; to the beauty of its surrounding urban architecture including its parks, hospitals, museums, schools and university; to the density and liveliness of its social life, its cafés, restaurants and markets; and to the aesthetic qualities of its cultural forms, that is its music, its food, its art, its fashion. The activity which created the value of the little house works with the ecological limits of the finite or scarce nature of material resources, but it is powered by the expansive drive of the desire for social life. It meets the

scarcity and limits of nature with new ways of doing things, new ways of enjoying and caring for the world and for others, and new ways of voluntarily acting in common.

As Maurizio Lazzarato put it, social cooperation is not about the distribution of scarce resources but about the continuous re-invention and re-enchantment of the world. It does not proceed through the harmonization of an invisible hand, but through the interplay of sympathies and antipathies, likes and dislikes, mutual or asymmetrical captures modulat-

ing the incessant circulation of the pre-individual currents of affects, beliefs and desires that underlie social life.

#### **The fall of the marginal cost of everything**

Unlike what Jeremy Rifkin thinks, capital, on the other hand, is not a complex system bound to rationally accept its own demise by virtue of the fall of the marginal cost of everything. As a social relation based in domination, its answer to the falling rate of profit is to reinject scarcity and control where there is potential abundance and freedom. It destroys by means of war,



bubbles and cuts to essential services, the wealth that it has generated so that it can restart its cycle of accumulation somewhere else. Most of us must work and accept the price that the market thinks our capacities, our skills and our competences (our human capital) are *individually* worth: as communicative, social and cooperative capacities are as common as silicon, then they are considered to be worth very little overall.

The little money that is commonly used to pay work with is money already captured in advance, it is already allocated: it goes to pay rent, mortgage, bills, food, credit cards, loans, taxes, interests, insurances and whatever the global market thinks you should be able to consume. Wage money is the measure of your powerlessness to connect to the 'engine of power' that is to shape the future of society as such—to change its DNA as Sassen put it.

### Hegemony of silicon money

The virtual currency movement has had the merit to show that in the current hegemony of silicon money, money is something that can be designed. The design of a currency which does not behave like an invading army in relation to social life probably passes through currencies such as bitcoin, but it cannot stop there. There are valuable components of the bitcoin protocol that a money of the commons (Andrea Fumagalli) could usefully adopt (such as the blockchain ledger), but the mechanisms of money creation enacted by the bitcoin protocols seem inadequate to the task.

The invention and success of bitcoins are examples of the powers of social cooperation, but its design does not promote it. A bitcoin is still generated through *work*, that is the work of mining bitcoins, even as this work is

mostly performed by the computational power of logic and silicon-based machines. A bitcoin's value is still determined by *utility*, that is its capacity to be spent in order to purchase something and hence satisfy an individual need. The two mechanisms of money-creation produce an eminently hoardable and unstable currency as the work of mining bitcoins gets harder (thus producing scarcity) while at the same time its utility-value is dependent on market pricing and the utility it finds in bitcoin as a store of value or medium of exchange.

A money of the commons should be directly generated by social cooperation, partaking of the powers of finance as a capability to mobilize, distribute and multiply wealth in order to nurture the social common—that is the quality of social life and the powers of social intelligence. It would have its own logic of financ-

ing and investment mobilized this time to create new institutions of *commonfare* (Carlo Vercellone)—networks of institutions composing new democratic, participatory welfare systems concerned with education, research, health, housing and the provision of a basic income. A money of the common should thus be both a goal and a presupposition for an economy where something as common and ordinary as social existence is the source of everything that makes life worth living. ■

Tiziana Terranova

Tiziana Terranova teaches and researches digital and network cultures in Naples, Italy. She's the author of *Network Culture* (Pluto Press, 2004) and a member of the free university network Euronemade.

Gold miners in Korea, early 20<sup>th</sup> century.



PHOTO © CC-THE PASSING OF KOREA

# BANKING ON NETWORKS

## Or, The Rise of Platform Economies

The transformations currently underway are impossible to miss and yet difficult to characterize. Crowdfunding, e-wallets, recommendation systems, cryptocurrencies, mobile money services, SMS-bank account transfers... What are these things? If we wanted to critique them, what would our resources be? Which legacies do we draw from in order to engage with these media-economic hybrids?

■ As a sobering corrective to cyber-hallucinations of the 1990s, the last decade or so of media theory has been caught up on software and hardware. This mix of formalism and materialism has given us a nifty toolbox of concepts and brought a basic awareness of the sciences of computation to the practice and study of media. Given the list above, is this still enough?

Recently in the UK, the PAYM system was rolled out. All of the big banks (Barclays, Lloyds, Santander, TSB, HSBC, Bank of Scotland, NatWest) are involved in this new payment system, which enables 'you to pay your friends and family using just their mobile number'. The ongoing monetization of social relations requires friction-free exchange and the banks are doing their best to keep up.

While banks are busy trying to recede (even further) into media, media companies are trying to reinvent themselves as banks. In the 'developing' world, some Mobile Network Operators (think Vodafone or Digicel) have actually secured a banking license or

have partnered with banks. Google, Amazon, Samsung and Apple are all experimenting with e-wallets. Google has plans to add a '\$' icon to its Gmail toolbar, making possible a new form of 'monetary attachment'. Facebook recently applied for 'electronic money institution' status in Ireland. Like it or not, the (social) network is becoming a bank—with added features.

### The network is becoming a bank

What does it mean to say the network is becoming a bank? What do banks do? Among other things, they manage and facilitate relations of credit and debt; play a part in the creation of new money and thus in the expansion of the economy; reinvest and redistribute funds; regulate (customers) and are themselves regulated; and provide basic financial services (bank accounts, access to credit cards, etc). How well they have served their function is secondary to the consideration that these 'services' are now being offered by a range of players within the networked milieu. Relations of credit and debt, money creation, investment and distribu-

tion, regulation and other basic services are all now being offered by 'natively digital' players—ones that know how to exploit network dynamics.

On top of the traditional banking-market nexus, therefore, a new mode of organizing credit and debt across populations is unfolding. Within this new mode, the nature of the relation to the old varies from harmonious to 'disruptive' and everything in between. And while there are a range of 'products' and 'services' on offer, the becoming-bank of the network will be characterized first and foremost by front-end economization of platforms. Witness the rise of 'platform economies'.

### The rise of platform economies

A platform economy aims at complete mediation of one's everyday economic practices. Banking and finance become immanent to the platform, as does the market and all of its devices (i.e. marketing, advertising, recommendation, reviews, etc). In other words, the platform becomes the *conditions of economic possibility*. Your Klout score and your credit rating are rolled into one. Friends become lenders, investors, or debtors. The status update is extended to your wallet. A good way to think about a platform economy is to recall the earlier 'virtual economies' of *WoW* or *Second Life*, and then drop the 'virtual'. Platform economies are private, conditional and are built on top of a pre-existing user-base. They rely on these pre-existing social ties as the source of their competitive advantage. They are bounded, but their limits have nothing to do with 'virtuality'. Rather, their boundaries are the limits of their users





bitcoin believer.

(are you on Facebook?), their financial instruments, and the agreements forged with pre-existing companies beyond the platform. Your Google wallet prefers you drinking Starbucks coffee and flying British Airways. A platform economy is always seeking to reach beyond and fold any and all activity back into itself, much like Facebook re-colonised, centralised and privatised the web through the invention of the 'Like' button. Through 'preferred relationships' and the technology of 'geo-fencing', platforms will cast a filter over the traditional economy.

The major platform companies (Google, Facebook, Apple, Amazon, Twitter, Sam)

will aim for comprehensiveness, with sites such as Kickstarter or IndieGogo focusing on more specialized services in the tradition of venture funding. Entities like bitcoin must be understood as counter-platforms, offering a different—but not necessarily desirable or even superior—vision of economy. Each platform facilitates economic activity, but also inscribes specific modes or versions of the economy. In the age of start-ups and permanent innovation, experiments are beginning to take a *logistical* form. It is now the economy itself, its character, devices, modes of valuing, distributing and so forth, that are subject to experimentation. Thus far the

results have been modest. The market form is pervasive and persuasive. Most experiments are still driven by the desire to improve or perfect market relations. There is, however, nothing necessary about this situation. ■

**Nathaniel Tkacz**

Nathaniel Tkacz is Assistant Professor in CIM at The University of Warwick (GB). He is a co-founder of the MoneyLab at networkcultures.org. His most recent book is *Wikipedia and The Politics of Openness* (University of Chicago Press, 2014).

# BITCOIN

## the end of the Taboo on Money

Jaromil's lengthy thesis on bitcoin is a technoetic inquiry that "takes into consideration the biopolitical dynamics that govern the bitcoin community as well specific characteristics of its technical realization, aiming to provide insights on the future of this technology as well a post-humanist interpretation of its emergence." The author gave us permission to publish an excerpt from his original article<sup>(1)</sup>.

“

*At the core... is the idea that people should design for themselves their own houses, streets and communities. This idea... comes simply from the observation that most of the wonderful places of the world were not made by architects but by the people.*”

Christopher Alexander

- When talking about bitcoin, of its inherent qualities of networked creation of value, we can't ignore the fact that this technology relies on community dynamics to the point one could state that bitcoin makes it possible for *money to become a common* and no longer a top-down convention imposed by a sovereign and its liturgy of power.

But then we are faced by a crucial question about bitcoin: what for? who ben-

efits from it? Or, in other words, if the community aspect of Bitcoin is crucial (as in: distributing the computation needed for its authentication, sharing a common currency, a common history of transactions, a common way to quantify wealth) what do the communities use bitcoin for?

The earliest communities that adopted bitcoin, aside from the hacker community that never really used it much as a currency to exchange goods, are perfect scapegoats for those who want to turn bitcoin down. In fact, anyone willing to take a moralistic approach and prohibit the innovation that we are talking about doesn't even need to approach itching concepts such as state sovereignty. It is very easy for witch-hunters to emphasize the fact that drugs were bought and sold with

bitcoins, that gamblers love bitcoins and that some website claims to accept bitcoin payments for assassination missions. [...]

### **Bitcoin has a role in history**

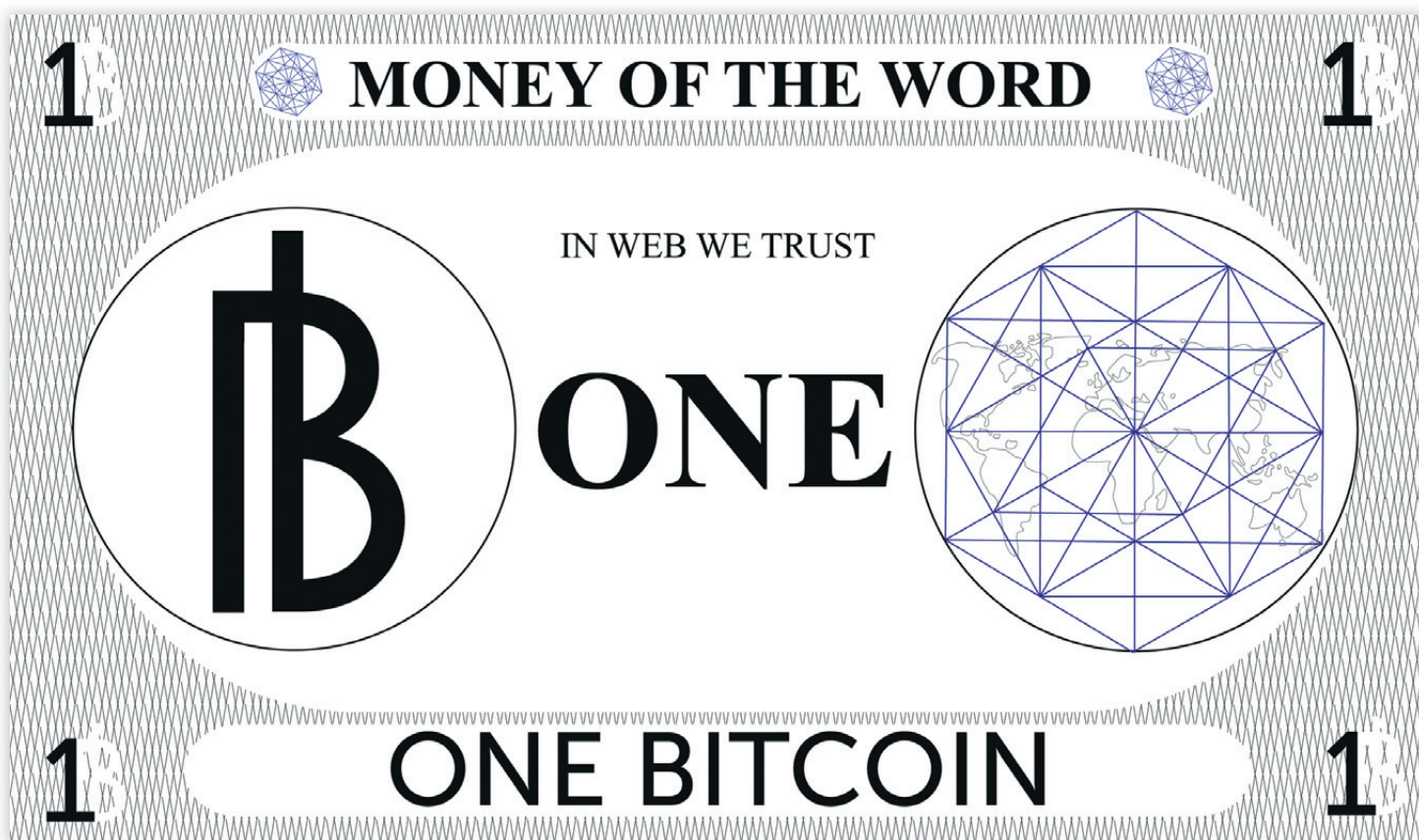
Being involved in the community that has grown around bitcoin I can see that the community is comprised primarily of young idealists rebelling against the status-quo, especially when it consists of a centralized administration prone to corruption. It is clear to many how unjust monopolies are often dominating various contexts, curbing the possibilities of innovation that are in the hands of younger generations. The liberation of the medium of value exchange is an act we refer to as "breaking the Taboo on Money". Bitcoin has a role in history: its epos coalesces in com- ➤



Graphic study  
for virtual currency.



© RAPHAËLE DE QUATREBARRÈS









© RAPHAËLE DE QUATREBARBES

Raphaële de Quatrebarbes, who studied fine arts in Nancy, developed her research around alternative currencies:

*“The graphics of my currency are based on the different places where I’ve lived: Paris, Normandy, Nice, Nancy. I imagined patterns to represent these places by associating them with a color. The flag of the Republic of Raqa synthesizes these stages of life using colors and the width of the stripes.”*

By now it should be clear that such a process of subjectivation as the one we are describing is not the simple emergence of a new innovative technology, it goes well beyond. The enormous popularization of bitcoin is proof that the dimensions of this process of subjectivation are multiple and cannot be comprehended by adopting a single narrative, and even less so by using the categories of economic analysis.

The popularity of bitcoin as of today is enormous and still growing: this is a result of the biopolitical progression and

its inscription inside a particular context, it is not a quality of bitcoin alone. Bitcoin is rooted in the protest movements that accompanied the financial crisis through 2009 until now, namely the Occupy movement. While there can be reason to conceal this fact for those who hail the unconditioned and instrumental success of bitcoin, it is important to account this historically in order to understand what might happen in the future. [...]

**The branching of bitcoin**

Being popular also means to be branched, forked, replicated, cloned,

recombined and ultimately appropriated by the people: a popular icon will feed the mind of popular culture without consuming itself, but confusing its authenticity in the existence of new popular instances. This is already happening to bitcoin with very interesting consequences. Considering that its popularity is mostly among the hacker (or, should we say, young cyborgs?) community, the branching of bitcoin is giving birth to many valid technical implementations, that are both capable of functioning on large scale, and explore novel approaches to currency and networking. [...]







Artist **Raphaële de Quatrebarbes** explored graphical representations of alternative currencies, “which are flourishing in the wake of the monetary crisis that our world is undergoing, and which, for some, are powerful factors of exchange”.

➤ With my own pet project in the bitcoin galaxy, called *Freecoin15*, I’ve started documenting the phenomenon of forking bitcoin since its early days and advocated within the community for the “configurability of the genesis code” and in general to leverage the possibilities of customisation for the technology underlying bitcoin. It is my belief that, while bitcoin represents a unique political rupture with the old establishment governing money, it is not the ultimate solution to it.

The need for digital currencies based on triple-signed receipts cannot be simply satisfied by bitcoin. Nevertheless, strengthened by the popularity and all consequences we have explored here, bitcoin might stand on the longer term as a fixed reference

for future implementations: it is realistic to predict that its value will only grow in future. [...]

Now that money seems to be either dead or dying, it is the time to dare this dissection. It might be the case that, by trespassing this taboo, we will find out ways to change things on a larger scale, especially considering the long due line of innovation in the field of accountancy that has still to be applied.

Ultimately, there are proofs to the rupture I’m pointing out here, in the wake of many new currencies born after bitcoin: with all irony and irreverence intended. The gates were left open by the mystery man: Satoshi the fool, Satoshi the saint, trespassed the line in front of everyone. There is no

longer a taboo on money. Bitcoin is not really about the loss of power of a few governments, but about the possibility for many more people to experiment with the building of new constituencies. ■

**Denis Roio** aka **Jaromil**

(1) The whole article can be downloaded in PDF format at: [https://files.dyne.org/readers/Bitcoin\\_end\\_of\\_taboo\\_on\\_money.pdf](https://files.dyne.org/readers/Bitcoin_end_of_taboo_on_money.pdf)

**Jaromil** is an activist, hacker and artist. Since the year 2000 he dedicates his efforts to build [Dyne.org](https://www.dyne.org), a non-profit software house and digital community of critical makers and nomadic developers. <https://jaromil.dyne.org>



## LES MONNAIES ALTERNATIVES

La création de monnaies alternatives fleurissent face à la crise monétaire que notre monde traverse et sont, pour certaines, de puissants facteurs d'échanges. Mais peut-on les considérer comme une véritable monnaie? Qui sont-elles?

### Le Bitcoin

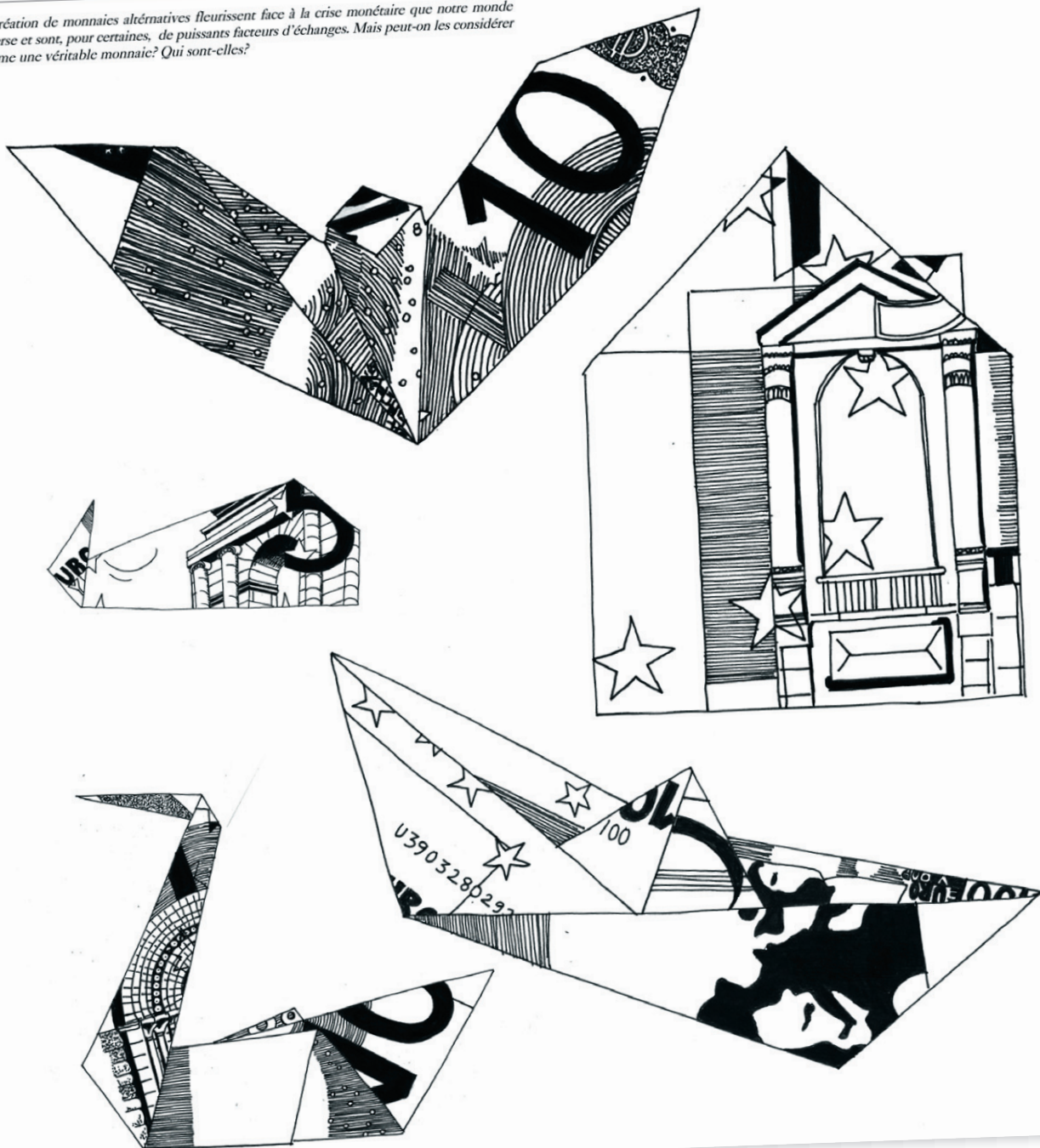
Page 2

Une monnaie alternative qui se développe sur le web et commence à se démocratiser. Une création étonnante d'une monnaie d'échange et convertible, autonome et transparente.

### Ma monnaie

Page 4

Comment construire l'identité d'une monnaie? À quoi ressemblerait la mienne? Étude et réalisation de ma propre monnaie.



# BITCOIN

## AS THE REFLECTION OF THE MATERIAL HUMAN COMMUNITY OF THE INTERNET

Upon closer inspection, bitcoin reveals itself to be asking all the right revolutionary questions. The first one being: what is the relationship of currency to value, and currency to technology?

■ Bitcoin is the real currency of an imaginary community: the community of the Internet. Although bitcoin itself came into existence years earlier, the moment where bitcoin was propelled onto the historical stage was when Wikileaks found that its donations from Paypal and Visa were being blockaded on dubious legal grounds by the United States. Given the imperial hegemony of

the United States, only a money *without a state* could save Wikileaks. Yet hitherto all currencies were printed using a state-controlled presses. This is precisely what bitcoin offered: a currency where the production of currency was decentralized in a peer-to-peer network shared via the Internet. Inflation is kept under control by a single decentralized ledge of all transac-

tions, the blockchain. As a currency without borders, bitcoin appeared to Internet activists as manna from the Internet—a currency fit for the new revolutionary generation.

### Is there a bitcoin community?

Yet if the power of bitcoin derives from the community, who is this community? Only actually existing bitcoin users? All Internet users? Since only 40% of the world even has Internet access, perhaps the community of bitcoin is the hypothetical community of all those who *could* have Internet access—the community of humanity itself? This brings us back in a full historical circle to a long-forgotten term, *Gemeinwesen*, the material humanity community: “Since the essence of man is the true community of man, men,

# HOW CAN I GET BITCOINS?



(CC) COINTELEGRAPH

by activating their own essence create this human community (*Gemeinwesen*),” writes Karl Marx<sup>(1)</sup>.

This selfsame revolutionary imagination is shared by some bitcoin advocates; in their free association and activity, humans can reach our full potential—our *species-being*—unfettered by the chains of the modern nation-state and capitalism. However, there is an irreducible conflict between Marx and bitcoin, as bitcoin—and most Internet activists—demand for the state to be abolished without demanding the end of capitalism. For Marx, under capitalism humans “*exist solely as reified for one another, something which is finally developed solely in the money relation,*

*where their community (Gemeinwesen) appears as an external and therefore accidental thing opposite them*”<sup>(2)</sup>. The universal human community under capitalism is the global market where we only know each other through currency-based exchange—which for Marx, unlike Hayek, is a perversion.

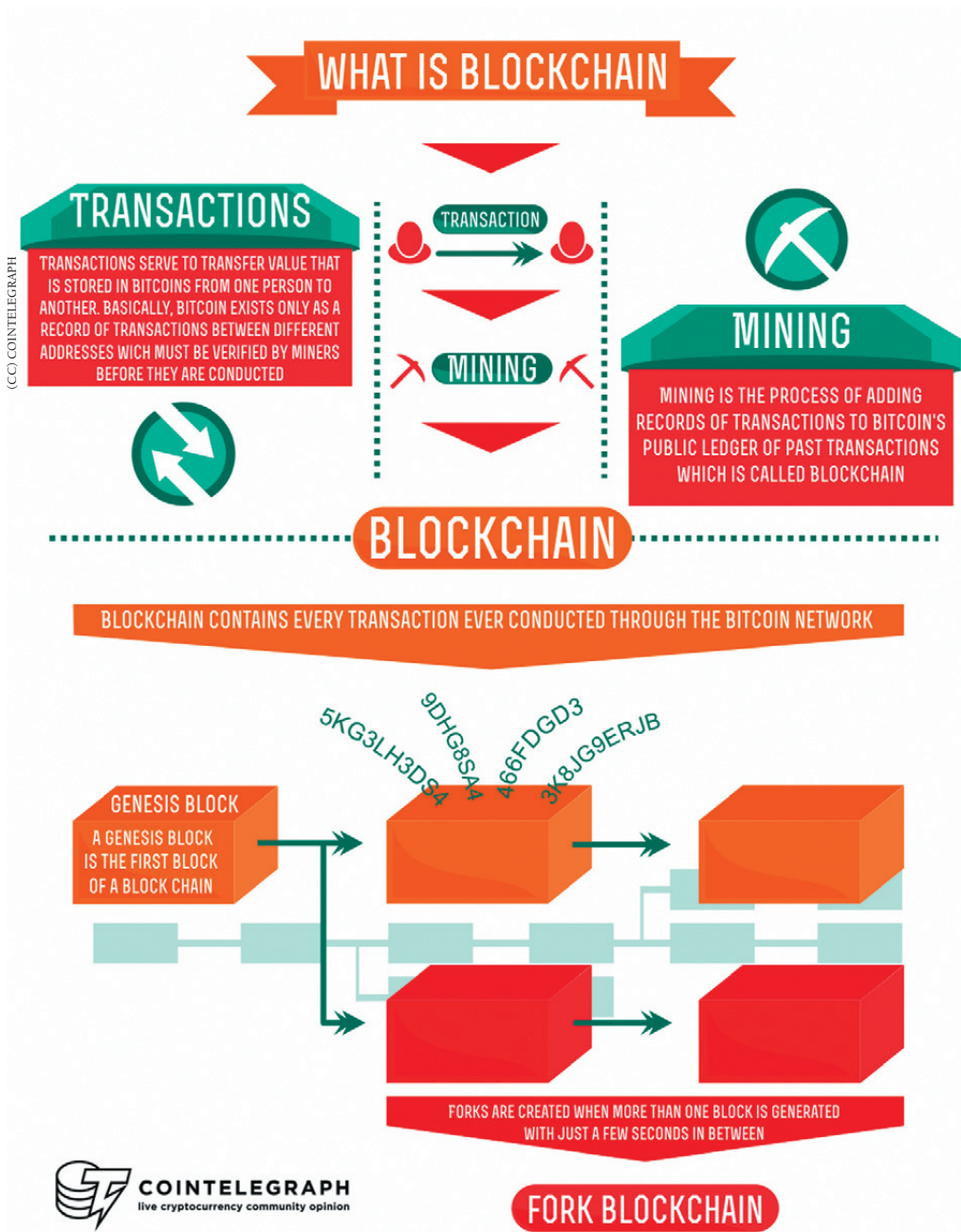
#### Is bitcoin a mere currency?

Is bitcoin *merely* the idea of the universal community of the Internet, presented back in an estranged form as a mere currency? While the concept of a national currency produced by a central bank is undermined by bitcoin, the concept of *abstract value* which is represented by *any* currency is never questioned. It is precisely this lack of ques-

tioning of abstract value that leads bitcoin to be a haven of free-market zealots with their quixotic, physiocratic attempt to return value to some mythical origin like the gold standard. Bitcoin serves as the new gold of the Net, suitably produced by a new kind of act called in Bitcoin “*mining.*”

While gold is limited by its rarity and finite supply, the value of bitcoin is set in terms of the amount of computing power available in the world at any given time. The crucial *magical* transformation of computational processing power into abstract value is given by running the cryptographic hash function over and over again to create new blocks in the blockchain. >





tive market for hedge funds. Given that bitcoin is literally unhinged from any material world except the size of its user community and processing power, bitcoin is the ideal commodity for speculative capitalism since its value can not readily be predicted, detached as it is from any “use value.”

This is also the saving grace of bitcoin, for bitcoin is *also* an engineering project and may be forked into a million digital currencies for a million communities: from the serious (failed) attempt to replace domain names (such as <http://www.example.org>) with NameCoin to the absurd dogecoin for the community of Shiba-meme enthusiasts. Upon closer inspection, bitcoin reveals itself to be asking all the right revolutionary questions. The first question is what is the relationship of currency to value, and currency to technology? Due to the ontological transformations engendered by the rise of the Internet, the ontological categories posed—and worse, naturalized—by economics must be pulled through the lens of the Internet and thought anew.

**How can decentralization work?**

Bitcoin also answers a question that is of use to potential revolutionaries from Tahrir to #Occupy. How can decentralization work in a community where there is the possibility that people will try to cheat? The ingenious engineering solution of bitcoin to prevent people from simply “inventing bitcoin” could be applied to many more sensible problems than that of pure fiscal speculation. In detail, bitcoin features a distributed ledger (the blockchain), where each bitcoin user *becomes the bank*, just as Indymedia asked people a generation ago to *be the media* at the turn of the millennium.

The blockchain is decentralized since each bitcoin user has a copy of the entire ledger. Without relying on a cen-

➤ This hash function is the great unrevealed mystery of bitcoin, and a refutation of Marx's theory of value, for there is no real use-value lying hidden beneath the exchange value of bitcoin due to the senseless cryptographic proof-of-work that defines the blockchain. The fetishistic nature of bitcoin reveals itself in all the arbitrary numbers embedded in its design, such as the arcane formula used to calculate transaction fees—not to mention the fact that the total amount of bitcoin is limited to 21 million, as well as the curious language that has developed around

its users: ATH (*All-time-high*), *To the Moon!* The only difference between medieval theology and bitcoin is that today a mystified algorithm reigns in place of God.

Although bitcoin's ability to be used as a currency to exchange commodities is merely a side effect of its production of cryptographically verifiable currency—global capitalism is already busy recuperating bitcoin; the primary use of bitcoin is not to purchase illegal items via sites such as Silk Road, but is to avoid currency controls as well as a specula-



© R.R.

tral authority like a bank, a community-wide voting algorithm then determines by majority consensus of who is assigned what particular bitcoins, and this continual voting prevents its members from lying about who has transferred which bitcoin to who—as well as the owners of new bitcoins produced by mining! The “proof-of-work” of cryptographic hashing could be replaced by almost anything, by any measure of things that has to be verified in a decentralized manner.

There is much that can be said for the utility of some form of decentralized accounting that does not rely on a central authority. It is precisely this kind of practical engineering that needs to return to the all-too-useless posturing that disguises itself as revolutionary thought today, lest future revolutions end in failure.

In one of his last works, Amadeo Bordiga forcefully reminds us that the goal of the revolutionary party has never been the expansion of a centralized state such as the Soviet Union into all aspects of life as done by Stalin, whom Bordiga was

the last to spit upon and survive<sup>(3)</sup>. The historical task of the party is to transmit the invariant idea that communism is the realization of material human community: “*The revolutionary militant is... one who sees and mingles himself in the whole of the millenary space that binds the ancestral, tribal man, fighter against wild beasts, with the member of the future community, fraternal in the joyous social harmony.*” (Bordiga, 1965)

**Can the Internet be a material human community?**

Today we find that the vision of a world free of domination and exploitation still speaks to today's young revolutionaries, even though communism as an idea is wholly discredited. The vision of a world in which each can realize their own full potential through decentralized networks of association no longer

speaks through the voice of the party, but through the myriad youth who are meeting each other over the Internet. Inheritors of a broken capitalism, they find themselves speaking the same strange language: Of dignity, of revolution, but also of lulz-cats and Bitcoin. Can the Internet be a material human community? Any programmer would know the right answer. The material human community does not exist. It must be built. ■

**Harry Halpin**

(1) Marx, Karl (1992). *Early Writings*. New York: Penguin. pp. 265-6.  
 (2) Marx, Karl (1980). *Ökonomische Manuskripte und Schriften, 1858–1861*. Vol. 2 of *Gesamtausgabe* 2. Berlin: Akademie Verlag, p. 53.  
 (3) Bordiga, Amadeo (1965). *Considerations on the party's organic activity when the general situation is historically unfavourable*: <https://www.marxists.org/archive/bordiga/works/1965/consider.htm>



(CC) COINTELEGRAPH

Harry Halpin is a research scientist at MIT and visiting researcher at IRI/Centre Pompidou. He was convinced by Ben Laurie that bitcoins were a scam but now understands greed overpowers reason.



# MOVING BEYOND BITCOIN

Is it time to forget about bitcoin's promises? We asked Michel Bauwens of the P2P Foundation if the ideal of a non sovereign currency is still in the air. We invited the Belgian theorician to react to Alex Payne's take on bitcoin: "I've enjoyed the thought experiment of bitcoin as much as the next nerd, but it's time to dispense with the opportunism and adolescent fantasies of a crypto-powered stateless future and return to the work of building technology and social services that meaningfully and accountably improve our collective quality of life," writes the former programmer at Twitter, writer and occasional angel investor<sup>(1)</sup>.

■ Bitcoin is a complex phenomenon, and it is a landmark development, even a technological singularity, for good or ill. At the P2P Foundation, we also have complicated feelings about it.

### The Positive Aspects of Bitcoin

Let us first summarize why bitcoin is indeed such a singularity.

#### Bitcoin is the first globally scaleable, social-sovereign, post-Westphalian currency

This is not trivial. Before the Treaty of Westphalia, local currencies were the norm, many with negative interest rates, and they bolstered local independence, but the scaling effects of the printing press, which led to a Europe-wide religious civil war, made necessary a re-organization of the political space around the emerging nation-states. These nation-states outlawed local currencies, destroyed local autonomy, and also relied on sovereign currency to establish

their power. While local currencies have a periodic resurgence in times of crisis, none of the complementary currencies scaled. Local currencies can therefore never be the expression of global commons power, i.e. the power of global virtual communities. Bitcoin has no intrinsic value, it is a hyper-fiat currency, i.e. it only exists because of the trust and political will of the international libertarian hacker segments of the population, in the particular algorithm.

#### Bitcoin is a weapon of last resort for activist communities

The mainstream monetary and payment sys-

tem is at the service of a particular world order, and can be mobilized against opposition to it, as became very clear around the Wikileaks affair, where banks, VISA and Paypal collaborated with various authorities to block the fundraising for Wikileaks. In such times, access to alternatives like bitcoin is vital for activist groups, it becomes their lifeline to funding outside of the control of the central authorities.

#### The potential of the bitcoin ledger as a tool for human self-organization

Apart from being a currency, the underlying universal ledger technology of bitcoin has potential to usher in a new era of more easy self-organisation, by enabling the possibility of smart contracts and software-driven distributed autonomous organisation, as expressed by initiatives like Ethereum, Common Accord, and the crypto-equity experiment of Swarm. Though these developments and possibilities are not without danger, and though most of the current enthusiasm is utopian and mostly based on hopes and just a few budding experiments, this technology is potentially a game changer by bringing down the transaction cost for self-organization.



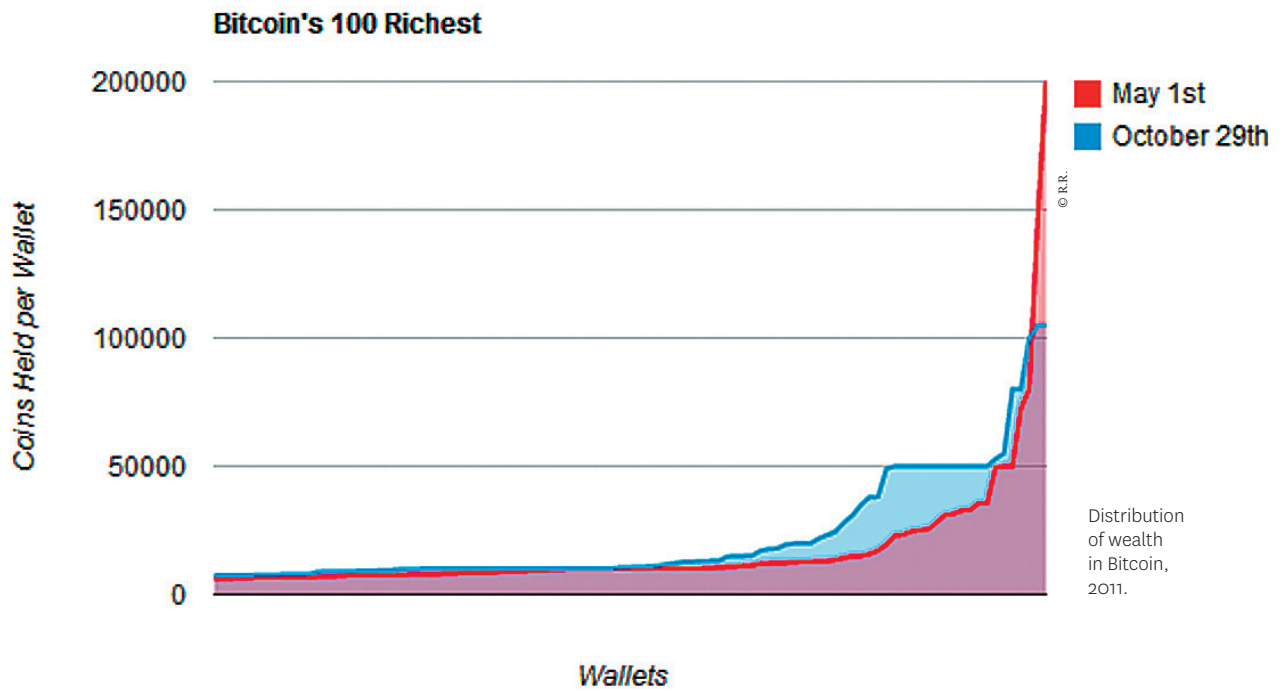
#### The Negative Aspects of Bitcoin

Notwithstanding the above, bitcoin's development comes with a potentially very high and anti-social price tag.

#### Bitcoin is not a true peer to peer currency but leads to more extreme inequality

It is sometimes asserted that bitcoin is a peer-to-peer currency because any computer with mining software can create the currency, but not everyone has access to





the same number of computers and not everyone has computers, hence, the design of bitcoin, which favours early entrants and those with investing power, is an engine of inequality. Bitcoin's Gini coefficient, a metric of inequality, is a whopping 0.87709 and according to Bitcoinica, 1% of the players own 50% of the coins<sup>(2)</sup>. That inequality is not diminishing, but rising: according to *Bitcoin Trader*, for a given period, "the top 100 have gone from holding 1,776,434 coins to holding 2,254,634 bitcoins, a whopping 27% increase!"<sup>(3)</sup>. The mining capacity is also already concentrated.

#### Bitcoin can't lead on its own to a disintermediated society

We live in an epoch of techno-utopianism with a strong drive for techno-crazy. The former means that many believe that technology alone determines certain outcomes, while the latter believes it is a good thing that flawed human processes are replaced by 'clean' technological processes. Both attitudes are very dangerous. First, distributed technologies do not necessarily lead to distributed outcomes. We have seen this historically with the effect of the invention of printing, which led to a democratisation of knowledge and literacy, but also in time replaced the local autonomy of free medieval cities with much stronger and controlling nation-states, i.e. more political centralization, not less. Networks which have no counter-measures to maintain equality inevitably lead in time to a new concentration of resources. Hence, in Amazon and iTunes, the so-called long tail of culture consumption predicted by Chris Anderson is no longer operative, and in P2P social lending, 80% of loans are provided by big bangs and institutions, the very forces the tech-

nology was supposed to disintermediate. Again and again, we see that the potential disintermediation of power, which may affect established powers, creates new intermediaries, such as the platform monopolies. Technologies are indeed, used by social forces, who inflect technologies for their own needs. The inequality of bitcoin ownership will inevitably further affect the structures that make bitcoin operational, leading to new kinds of monopolies. Technologies are always infused with human values, no programming or infrastructure is truly neutral in that respect.

#### Bitcoin funds a dangerous ideology

The big danger to the social movements of the industrial era were fascism and stalinism, both forms in which the power of the state became extreme. But what fascism is to the state, proprietarian libertarians are to the markets: they aim for the realization of a total market, where every aspect of human life is commodified. The design of bitcoin is anarcho-capitalist, i.e. it is designed to favour the freedom of property owners, and the more you own, the freer you are. Because such proprietarians do not want to see the existing inequalities in society, decreeing them to be the result of free choice, they inevitably ally themselves with oligarchic forces and support their political programs of the dismantling of social solidarity mechanism, and any regulation which limits the freedom of powerful corporate forces.

The valuation of bitcoin means an important transfer of social wealth to this political tendency, which allied with venture capital and the oligarchies that invest in bitcoin, alters the balance of power away from emancipatory and progressive political forces. Early libertarian investors in bitcoin

can sell their bitcoins at a premium to new entrants, thereby capturing substantial speculative value.

So while the claim that bitcoin is a pyramid scheme is obviously false, it does institute a rent from new entrants to existing owners. In this sense, bitcoin, far from being a tool of distributed equality, which is already a false empirical claim at present, is an ideal tool for the development of hyper-capitalist economic models. In this sense, bitcoin is an ideal tool for netarchical capitalism, the hierarchies that enable, but also control the networks, and capture value from it.

#### In Conclusion

Despite all the drawbacks mentioned, bitcoin remains a landmark and pivotal development, showing that globally scalable currencies are technically feasible. It sets the stage for potential commons-based P2P-driven currency systems, and the bitcoin ledger can become a tool for self-organizing communities. ■

**Michel Bauwens**

(1) Quoting from Alex Payne's article, *Bitcoin, Magical Thinking, and Political Ideology*: <https://al3x.net/2013/12/18/bitcoin.html>

(2) <http://ow.ly/trKoy>

(3) <http://www.thebitcointrader.com/2011/10/is-it-time-to-occupy-bitcoin-street.html>

Michel Bauwens is the founder of the P2P Foundation, a global network of researchers and activists which monitor and promote developments around peer production, peer governance, and property. <http://p2pfoundation.net>

# ONE YEAR IN BITCOIN

Ever since I arrived in the U.S., I had been living without a bank account to avoid the bureaucratic procedures and high transaction fees imposed by the banks. This is how I got into bitcoin—a decentralized cryptocurrency that has now become an important part of my life.

■ It was new year's eve 2014, when I came up with a new challenge for myself: I would try and survive by relying on bitcoin alone, boycotting the dollar and every other fiat currency during the whole coming year. And whatever the bitcoin economy was not (yet) able to provide, I'd have to find a way to obtain, either by going through an alternative path (which might not involve money at all) or by figuring out all the necessary steps to get it anyways—thereby preparing the ground for other bitcoin enthusiasts to survive in a world where the dollar is king. Here's what I have learnt from this experiment.

## #1 I don't need a cellphone

There was, at the time, no mobile phone operator in the U.S. accepting bitcoins.

I therefore had to give up my T-mobile subscription and rely exclusively on WiFi communications through the Google Voice number I had just set up. This was, in fact, only a marginal problem in a city like Boston with a rather ubiquitous WiFi coverage.

## #2 Bitcoin makes you fit

Public transportation was another problem. Given that neither the bus nor the metro system would let me purchase tickets with bitcoin, the only way for me to move around was either to walk or to cheat the system—easier said than done considering the amount of controllers patrolling the system. Luckily, my flatmate had a few extra bikes which he let me borrow for free. Albeit reluctantly at first (Boston can get as low as -30 degrees during the winter), I soon

became used to it, and eventually turned into an actual bike enthusiast.

## #3 I hate shopping

I'm definitely not the person that anyone would define as a shopper: whether this is shopping for groceries, clothing, or anything else—I simply hate it. In this sense, living off bitcoin actually made my life easier, as it made me realize that, in the U.S. at least, it is possible to buy pretty much anything online. In terms of basic survival needs, my savior was Foodler, an online food delivery service that accepts bitcoin. As for other basic needs, I could rely on Overstock for clothing or accessories and TigerDirect for electronics—making it difficult for me to come up with anything (which I actually wanted) that I could not purchase with bitcoin.



#### #4 Rent is cheaper with bitcoin

Rent is due on the last week of each month. Of course, I had to pay my rent without using the dollar, or any other fiat currency. This challenge turned out to be a fairly easy task, as my landlord was a bitcoin enthusiast himself, who actually would rather be paid in bitcoin than dollars. In the end, we both benefited from this deal: thanks to the high deflation bitcoin was going through, I basically had to pay less for my landlord to earn more.

#### #5 Social life is overrated

It soon became apparent that relying exclusively on bitcoin would considerably damage my social life. Most of what I could eat or drink was essentially limited to what was provided by

Foodler. Unless I could convince my friends to eat at those few restaurants that recognize bitcoin as a valid form of payment (which were, unfortunately, only two at that time), I would always eat by myself.

#### #6 I need friends

I like to consider myself quite an independent person, but bitcoin made me realize how important friends are. I had been suffering from my inability to spend money, beyond what I could purchase on the Internet through Foodler and a few other online merchants that mainly sold electronics. So I came up with a new rule—something that seemed a bit like cheating at first, but which actually turned out to be an extremely useful tool to expand the breadth of the bit-

coin ecosystem. Even though I was not allowed to rely on the so-called “human wallets” (i.e. asking people to pay for my expenses, and pay them back in bitcoin), I decided I could nonetheless use people who do not (yet) have a bitcoin wallet, only once. This would allow me to maintain a basic standard of life, while also contributing to expanding the number of people who own bitcoin, and thus need to figure out ways to spend them. Eventually, I became some kind of bitcoin missionary, teaching the wonders of bitcoin to my friends in order to get what I want. An easy task considering that my social entourage in the U.S. was essentially made up of a small crowd of Internet scholars from Harvard law school, and a bunch of techies from the MIT. >







### > #7 Europe doesn't understand bitcoin

With CheapAir—an online travel agency accepting Bitcoin—I could easily fly back and forth from Europe to the U.S. in order to attend conferences, workshops and the like. Yet, living off bitcoin in Europe was actually much harder than expected. It was, in fact, impossible for me to survive there without infringing my oath. Even with the human-wallet trick, I could hardly get any of my friends to play along. Most of them had never heard of bitcoin, and those who did mainly saw it as an attempt by a few technocrats at implementing a crypto-libertarian capitalist society through a monetary ponzi scheme. I was in trouble...

### #8 Academia can help

Academia is well-known for its low salaries. Yet, what academia does not provide through direct income is provided—indirectly—in terms of travel, accommodation and other daily expenses that one might ever need to incur in the context of any academic event. Luckily, most (if not all) of my trips to Europe were motivated by the need to attend a particular conference or workshop, where I would be always be fed—in both the literal and figurative sense—by great food and intellectual stimulation. Paris, Milan, Barcelona, Amsterdam, San Francisco, Dakar, Rio de Janeiro, Buenos Aires, etc.—the more I flew, the less I felt the need to rely on any kind of fiat currency, or even cryptocurrency for that matter.

### #9 Money is unnecessary

As the limitations of living off bitcoin became more and more apparent, I realized that money is actually not that useful. Most of what I had always paid for, I could actually obtain for free—with just a little bit of creativity. I thus began developing a new skill: from finding free food at various Harvard events, to getting free drinks at



many MIT parties; from free accommodation through friends and couch-surfing, to free transportation with biking and hitchhiking; from free movies screening in the park, to secret poetry readings in abandoned houses; from free conferences and talks, to free trials for the gym, yoga or swimming pool—I was actually getting more things done without money than I had ever done before. But while I was definitely having fun, I was haunted by the idea that, by living off bitcoin, I would be slowly turning into a hustler.

### #10 The more you give, the more you get

If society was giving to me, I had to give back to society. So I decided that everything I would receive for free, I would eventually pass it on to others—hoping that they would, themselves, pass it forward to someone else. “*The more you give, the more you get*” a friend once said to me. Perhaps this is the most important lesson that I have learnt through this experiment. Money only serves a purpose in a society where people don't share, nor care about each other. By trying to live off bitcoin, I stopped caring about money, and—consequently—I began caring more about people and what people care about. Despite the technical failure of the challenge (as it is virtually impossible to live off bitcoin alone), the experiment was definitely a success, in that I discovered the merits of a life without money. ■

Primavera De Filippi



Bitcoin ATM in Seoul, South Korea.

Primavera De Filippi is a postdoctoral researcher at the Cersa / CNRS / Université Paris II (Panthéon-Assas). She is currently a research fellow at the Berkman Center for Internet & Society at Harvard Law School.

# WHY I BUY INTO THE CULT OF DOGECOIN much soul, very emotion...

The author of “The Heretic’s Guide to Global Finance: Hacking the Future of Money” explains why he uses dogecoin, despite the fact that some in the crypto-currency community have written it off as a joke, or even a scam. The former broker insists: dogecoin is the best of all the so-called ‘alt-coins’.

■ I use dogecoin because I’m emotionally drawn to the dog. Unlike the distant, fossil-like Queen on the pound banknote, the Shibu Inu is at once transcendent and approachable, self-contained but cuddly, looking into my eyes with a sideways glance, as if it just noticed me and is wondering whether I want to play or be left alone. It’s not an aggressive dog, or for that matter, a bouncy dog trying to lick me. It has self-directed, quirky *soul*, and it’s almost impossible to imagine this dog being an asshole. Some people in the crypto-currency

community have written dogecoin off as a joke, or even a scam. Maybe it’s both, but does this matter? All currency in the final analysis is really a scam, and the real question is which of those scams we want to agree to. I for one would rather pledge allegiance to a mystical pooch than to worship the image of a redundant monarch. Indeed, dogecoin, to me, is the best of all of the so-called ‘alt-coins’, the alternative crypto-currencies that have emerged as offshoots from the original Bitcoin source-code. Here is why.

## Money isn’t ‘rational’

Run this question through your brain: *Why did people invent pottery?*

The response from many people is *because it must have been useful to store food and water*, an answer which chimes well with our prevailing rationalistic world view. The assumption that pottery was explicitly ‘invented’ is problematic though, and furthermore, evidence suggests that pottery was originally used to create abstract religious figurines.

There is a similar problem among many economists who attempt to peddle ahistorical narratives about ‘why people invented money’. Their story normally involves people ‘rationally’ designing money as an alternative to ‘barter’. There is very little immediately rational about exchanging real goods for pieces of paper or shiny bits of metal though. Sure, once the social convention of monetary exchange is set up, it’s *useful*, but the imagined process in which bakers and butchers ‘invent’ money to deal with the awkwardness of exchanging meat for sourdough loaves is an attempt to reverse-engineer history from the perspective of present dogma.

Money is not an object that can be invented. It is a social convention that has to be culturally constructed. The use of monetary tokens only appears rational once we’re party to a collective agreement (or delusion) to imbue those tokens with value, and that collective agreement needs to be constantly maintained.

## State power, local trust, meta-national mysticism and labour

In the case of our normal fiat currency, the collective agreement is given strength by the psychological (and real) force of official authorities. Most of our fiat currency is created by commercial banks, but derives much of its ‘reality’ from state endorsement of its legal status.

In the absence of a state championing a currency, you need other factors to induce collective acceptance. For example, a very small community might be able to create and maintain a local currency backed by nothing but the pre-existing communal trust network, woven together from mutual friend-





ships, ties of honour and anxiety at facing exclusion from the social group. To create belief in a non-national currency that is not located in a small community though, is especially hard. Bitcoin provides a fascinating case study of the process. When it first started, bitcoin commanded almost no value. It had one crucial feature though. At its heart was a mysterious, almost immaterial figure called Satoshi Nakamoto, a focal point for a community to rally around.

The mystique of Satoshi was vital, imbuing what was otherwise a clever but cold piece of cryptography with a soul that people could believe in. Satoshi was the holy ghost in the machine, and the act

of mining resembled a ritualistic quest to build on the blockchain started by the ghost. It's through this process that the imagined value of bitcoin came to life, and started taking on a reality.

By contrast, imagine if a well-known person, like Stephen Hawking, invented bitcoin. It would be devoid of all mystery, resembling a science project or a corporate product, rather than an underground *movement*. The specifics of Stephen's personality would replace the cryptic symbol that the Satoshi figure once stood for, and what would you have left? A clever piece of cryptography, and a somewhat banal act of using up energy in running computers.

That said, there is something about the pointless nature of randomly churning algorithms through a computer that is psychologically powerful. If you want to imagine that something essentially ephemeral is a useful commodity, it helps if you expend labour in creating it, because labour implies scarcity (you only need to work for things that are scarce), and scarcity implies a potential for an exchange value (if something is abundant there is no need to exchange anything for it).

The computing power ('labour') put into the bitcoin network does not create value in itself, but is a further psychological backer to bitcoin tokens' imagined value. >

› If they weren't valuable we wouldn't exert all this labour, would we, and because we exert this labour they must be valuable, right?

**The emergent myth of bitcoin's rationality**

Interestingly, as the ritualistic process of mining has become increasingly competitive, and the commercialisation of bitcoin has steamed ahead, new narratives have formed to explain why bitcoin tokens 'rationally' have value. Chief among these is the idea, touted by the bitcoin foundation itself, that bitcoins have value 'because they are useful'. It is part of a broader trend among the bitcoin elite to rewrite history and claim, in hindsight, that the value of bitcoin was always self-apparent, and that early adopters were just getting involved due to rational future expectations of increasing societal recognition of bitcoin's use value as a secure means of exchange.

In this formulation, bitcoin tokens derive their value by being part of a potentially useful system, the value of each bitcoin reflecting the aggregate market assessment of how useful it is to have a secure means of exchange. It's kind of like arguing that containers on train carriages derive the entirety of their value from the usefulness of the rail network. The implicit narrative is this: *Hey, these things are useful as transmitters of value for exchange, so let's compete over them, and in so doing create their market value, which can now be used for exchange.*

Circular no? There may be a glimmer of truth in it, but it's mostly an attempt to describe the essentially emotional and social process of currency creation with the language of cold individual rationality.

**Tin-man currencies ain't got no heart**

This thinking has subsequently influenced the way that a lot of alternative crypto-coins have attempted to market themselves. Rather than embracing their own absurdity, many alt-coins have marketed their efficiency, their security, or their application to some specialist use

case, as if the usefulness and competitiveness of the design was the most important aspect of why a person accepts a currency. The crypto-conference has thus become the realm of 'serious people' discussing 'serious business', not wishy-washing mysticism and emotion. They appeal to rational functionality, rather than *inspiring* people to use them. They are *techno-fetishistic*. A guy with a PowerPoint presentation calmly explains the business case for why his crypto-currency is valuable because it uses a state-of-the-art turbo hashing system, but *for fuck's sake, tell me why I should BELIEVE in it!*

It's true that this strategy has worked to some extent for some alt-coins like lightcoin, quarkcoin and peercoin, which have gained some popularity based on design, but think about this question: *Why do you use British pounds or yen?* The answer to that is never, *because they're well designed*, and neither is it *because I rationally see how useful it is for me to have a medium of exchange*, and neither is it *because I'm intimidated by the state and they force me to use it.*

Our answer is mostly just *because everyone else seems to use it and I was taught to use it.* We are born into currencies just like we are born into languages, and we learn to use them in a social context. If you want to convince a person to accept ephemeral electronic records as a currency, you need a story for people to hold on to. You need *heart*.

**Dogecoin is a cult, and that's how it should be**

Which brings us to dogecoin. I can believe in dogecoin because it gives me something to believe in. It's a direct appeal to irrationality, a direct appeal to transcend the banal world of individual utility calculation and submit to something hilariously absurd. It is, above all, a *cult*, and that is infinitely more attractive than any cold appeal to

Dogecoin.  
Design by Christine Ricks.



(C)DOGECOIN

robust design. It is the peaceful, playful gaze of the Doge itself that is the mystical foundation of the currency. It doesn't matter who invented it, because dogecoin is not experienced

as a narcissistic project of a particular person, and it's the symbol itself that is the leader. The Doge is a figure without ego, with cross-cultural, cross-gender, and yes, even cross-species appeal. We can all get something from the gaze of the Shibu.

This is reflected in the resultant community that has emerged around dogecoin, people who refer to themselves as 'shibes' and give each other gifts of Doge. While the bitcoin subreddit has turned into a moshpit of aggressive trolling, dogecoin forums feel inclusive and accepting, cohering around a surreal world of esoteric slogans and acts of goodwill.

In closing then, a word on design. If there has ever been any clever *design* in dogecoin, it's been in the way the core members have focused on creating a culture from the bottom-up, rather than fetishising currency creation as a technical solution to be marketed from above. The dogecoin community has grown rapidly in response to community acts that establish a reason to believe in the currency, such as the sponsorship of underdogs like the Jamaican bobsleigh team, and oddball stunts like backing a Nascar racer. These are things you can sit in a pub and laugh about, outside conference halls, and that makes all the difference. ■

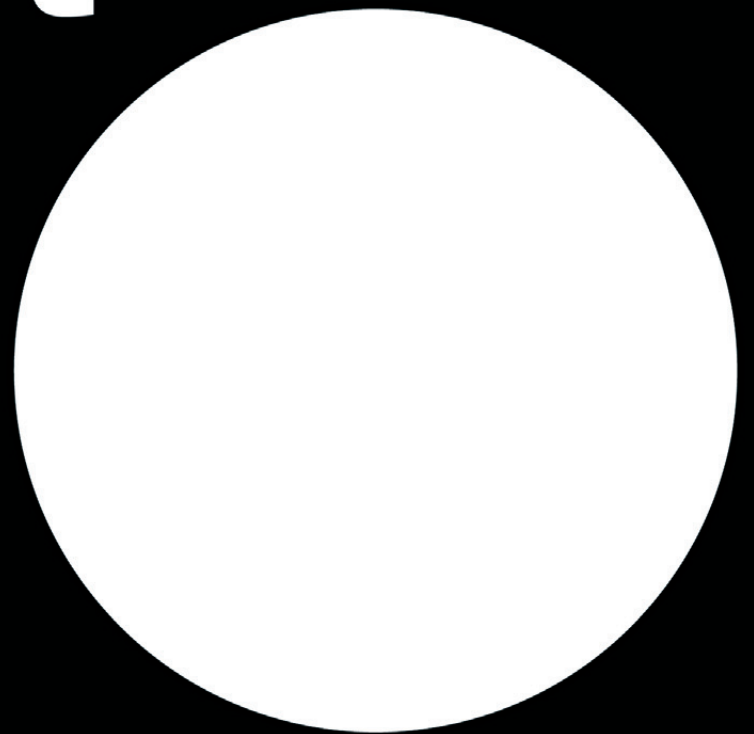
**Brett Scott**

Brett Scott is a journalist, campaigner and the author of *The Heretic's Guide to Global Finance: Hacking the Future of Money* (Pluto Press, 2013). <http://suitpossum.blogspot.co.uk> @Suitpossum



Brett Scott, *Heretic's Guide to Global Finance: Hacking the Future of Money* (Pluto Press, 2013).

# Économie solidaire de l'art



Proposer de nouvelles conditions économiques pour l'art contemporain : rémunération des artistes et professionnels, représentation, fonds de soutien...

[www.economiesolidairedelart.net](http://www.economiesolidairedelart.net)



# QUANTITATIVE EASING (for the street)

From late June to mid-October 2014, the artist Axel Stockburger installed a monumental sculptural object that randomly spat out one-euro coins in downtown Vienna, Austria. *Quantitative easing (for the street)* underlines the absurd scaling of globalized crisis, symbol of a crisis of abundance rather than scarcity.

■ If the frequently quoted antipodes of modern economics John Maynard Keynes and Friedrich August Hayek agreed on one thing, it was that a lack of trust has a destabilising impact. If, then, as in the financial crisis of the last several years, this manifestation of confidence is bathed in bright light precisely because such a loss has occurred the power of social relations exceeds economic parameters: the lack of trust desiccates the climate of capitalist trade relationships.

Axel Stockburger's intervention in public space draws our attention to such a situation, alluding to a climate change in the mesh of global economics whereby the current crisis is not characterised by scarcity but by abundance.

## Take the coins and redistribute them

The artist enriches the Vienna Graben boulevard with a sculptural object whose actual inner worth is revealed to passers-by through its performative quality: from 27 May until mid-October 2014 an apparently gold-plated vault randomly spits out money in the form of one euro coins at one of the flushest locations in Vienna<sup>(1)</sup>. The horizontal flow of people is accompanied by a flow generated at random for the duration of the intervention that is also an invitation to participate. *Quantitative Easing (for the Street)* does not exclude anybody. On the contrary, it enables people to take the coins and to redistribute them regardless of whether they are fla-

neurs, tourists, shoppers, business people, beggars, random passers-by or local residents.

## Social fiction, art and economics

The art project engages with the impermanence, the volatility and the inequality intrinsic to an economically defined system of values, on what is probably the promenade and shopping street with the oldest tradition in Vienna. *Quantitative Easing (for the Street)* is part of a long tradition of engagement by artists with the social phenomena associated with economic dominance and its physical manifestation, money. As in earlier works, where Stockburger explored contemporary media, like film, video and computer games and their linguistic, gestural and material conventions, his interest lies in social fictions, which in this case are created both by economics as well as by art<sup>(2)</sup>. Both owe their existence to conventions and are subject to change. They govern our world view precisely because they are constructs of the mind.

In this sense the vessel Stockburger has erected on the Graben alludes to the cultural significance as well as to the economical value of gold. This value, among other things, results from gold's ability to "stay alive" beyond death as both a retainer of value and a raw material for the arts. Gold conserves lifetime achievements and is available to successive generations. Gold was and is, alongside its cultic significance, always also the raw material for the physical manifestation of both economics and art, whereby these two functions are frequently inseparable.



PHOTO © IRIS RANZINGER

Axel Stockburger, *Quantitative Easing (for the street)*, 2014.  
Installation, Graben, Vienna.

What is, however, literally dropping out of Stockburger's fictive reservoir of historical value systems—namely money in the form of one euro coins—is, at present, subject to an unbounded volatility, to shifts in value that are measured in milliseconds rather than in generations or centuries. The reality of money is accordingly at least double-edged: on the one hand, it is "the food" of social relationships of exchange, on the other hand it stands for virtual, i.e. fictitious, prices that are set on the financial markets, to an unimaginable extent and at incredible speeds.

Economic as well as artistic fictions are fragile and speculative. While art uses existence in the present to reflect reality in its appearance, financial markets produce appearances that have to be realised

as future realities in order to stop the house of cards of speculation and investment from collapsing. What we term "economic crisis" occurs in a reality where this contingent "world" perishes in the bottomless pit of austerity measures.

Stockburger's art project enters the arena after the event that defines our globalised world today. It positions itself where a new fiction—that of so-called quantitative easing—reconstructs this world, which is now conceived in purely economic terms. *Quantitative Easing (for the Street)* is accordingly an artistic engagement with a financial and political construct intended to save a "world" that has already collapsed.

What this means for the resulting social reality, to what extent the fictions of

money and art create worlds, and what or whom we can trust, are the questions that Stockburger not only ponders himself but also poses to everybody jostling along the Graben. ■

#### Gerald Nestler

- (1) The art project was curated by Muntean/Rosenblum for KÖR (Kunst im Öffentlichen Raum) in Vienna.
- (2) Axel Stockburger was part of the media art group D-Fuse in London. Since 2006 he lives in Vienna and works as assistant professor at the Academy of Fine Arts, Vienna. See <http://www.stockburger.at>

Gerald Nestler draws on performance, video, installation, speech and text to question finance-based methodologies, narratives and fictions, as well as their role in current biopolitics. [www.geraldnestler.net](http://www.geraldnestler.net)

# (W)ORLD CURRENCY EQUATION

This artwork illustrates a global currency through the creative formulation of an equation and a trading algorithm for the currency exchange market. The visionary creation of algorithmic trading combines art with the material that governs contemporary society. In doing so, it aims to introduce new art practices.

■ The artwork seeks to inspire social transformation through envisioning a positive and innovative economic tool. It addresses the inherent instability of various currencies, as well as the need for a new independent global reserve currency that could potentially empower and unite the world population.

As a sustainable financial instrument, the *World Currency Equation* will act as a cushion that will protect people against the increased volatility of individual currencies due to speculative manipula-

tions and economic swings, while preserving market access across different geo-political and social domains.

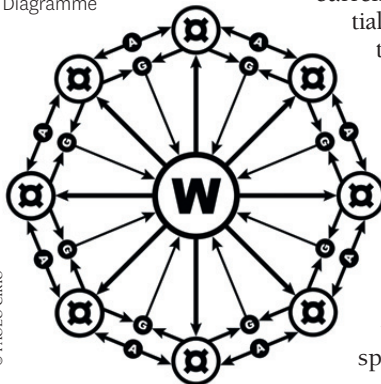
The proposed algebraic equation provides valuation and liquidity for a new currency (W) based upon the average of an index of individual currencies. The formula combines and secures dominant national currencies with new digital and local complementary currencies, preserving autonomy and diversification within universal acceptance.

The artwork is illustrated through the artistic expression of a mathematical equation and a diagram of an algorithm. These two elements indicate how the value of the currency is calculated and how its liquidity is created and maintained.

## How it works

*World Currency* is a global reserve currency backed by popular currencies. It's based on a value-weighted index, in which each currency in a basket influences the index in proportion to its exchange rate and spread for every combination of pairs of currencies traded. The overall average of the rate exchanges determines (W). In the system, the value of (W) is kept steady by the daily trading of each currency in the basket in an interconnected network of deposits. For every node of the network each currency is stored only for the average amount of the whole network. The gains and losses are also leveled equally in every deposit. The equal distribution of multiple reserve currencies always maintains the (W) with liquidity and stable value.

Paolo Cirio,  
*World Currency Equation*.  
Diagramme





$$W = \left\{ \begin{array}{l} \bar{G} = \left[ \frac{\sum_i^n \left( \frac{V^t Cx_i + V^{t-1} Cx_i}{V^t Cx_i} \right)}{n \text{ Currencies}} \right] + \bar{A} \\ \bar{A} = \left[ \frac{\sum_i^n \left( \frac{Cx_i}{Cx_{i+1}} + 1 \right)}{n \text{ Currencies}} \right] + 1 \end{array} \right\}$$

Paolo Cirio, *World Currency Equation*.  
Équation.

The equation and the algorithm make use of Forex market conventions and can only include currencies that are tradable electronically.

#### The equation

The equation illustrates how (W) is calculated upon an aggregate of exchange rate values of a basket of leading currencies within the gains and losses that the fluctuations among them generate over time. The mathematical average of the values of currencies (A) in the basket keeps the value of (W) steady. The gains compensate the losses in the total average (G).

#### The algorithm

The following diagram illustrates how an algorithm can automatically aggregate

(W) by wiring currencies over the multiple reserve deposits based on the recursive calculation of the (W) equation. ■

Paolo Cirio

Artwork by Paolo Cirio. Complete introductory and explanatory text published on March 5<sup>th</sup> 2014, New York City and Zagreb.

#### Glossary

W: Value of World Currency. Symbol (W).  
\*: Any currency symbol in the basket.  
A: Average of exchange rates between each pair of currencies in the basket.  
G: Average of spreads between each pair of currencies in the basket over time.  
N: Number of currencies in the basket.  
Cx: Current exchange rate of the currency of the index.  
V: Current value of the currency of the index.  
T: At past and future time period.

#### Notes

**World Currency:**  
[http://wikipedia.org/wiki/World\\_currency](http://wikipedia.org/wiki/World_currency)  
**Reserve Currency:**  
[http://wikipedia.org/wiki/Reserve\\_currency](http://wikipedia.org/wiki/Reserve_currency)  
**Forex:** [http://wikipedia.org/wiki/Foreign\\_exchange\\_market](http://wikipedia.org/wiki/Foreign_exchange_market)  
**Algorithmic Trading:**  
[http://wikipedia.org/wiki/Algorithmic\\_trading](http://wikipedia.org/wiki/Algorithmic_trading)  
**Fall of US Dollar:**  
<http://latimes.com/business/la-fi-shut-down-china-20131015,0,260996.story>

Paolo Cirio is an artist whose controversial works reveal conceptions, conflicts and potentials of contemporary realities. His artworks have unsettled Facebook, Visa, Amazon, Google, Cayman Islands and Nato, among others. <http://paolocirio.net>

# (A) P2P MONEY MANIFESTO

The global financial crisis has provoked the emergence of numerous alternative currencies, which are attempting to generate a new ecosystem. As agents of these mutations, we are primarily in the position of the “selected” according to Darwinian selection criteria, allowing the networks to shape our imagination and our judgment. This manifesto purports that “we can choose to position ourselves as ‘selectors’”. This is how.

- While the global monetary system seems to fall apart on all sides, alternative currency models (ACM) are popping up everywhere<sup>(1)</sup>, like spontaneous generations of new living species within a transitioning ecology. All ACM are competing with one another, as they try to proliferate on the same playing field of our forms of monetary exchange. We know that they will eventually combine, mutate or disappear until a new revitalized ecosystem emerges. In order to accelerate the transition to a legitimate and sustainable model, this manifesto proposes that the agents of change (i.e., us), not simply comply with ACM, but to instead behave as purposive selectors, that is to say, to apply to them some criteria of Darwinian selection.

## **Explosion of codes and the political origin of language**

The first explosion of “codes” is called “abiogenesis”, which is a concept describing the transition of a world without biology to a world with biology. Every living being (prokaryotes, eukaryotes, metazoans) was defined by a code governing its form and its reproduction. Most species that emerged after abiogenesis disappeared or mutated, while a small number have proliferated into the present.

The second explosion of “codes” was recently named<sup>(2)</sup> “atechnogenesis”: it is the passage of a world without technology to a world with technology. One can trace back the atechnogenesis to the emergence of the genus Homo, that is to say, to the emergence of a proto-language among some hominids.

The event that triggered this second explosion of codes was according to some researchers<sup>(3)</sup> the invention of

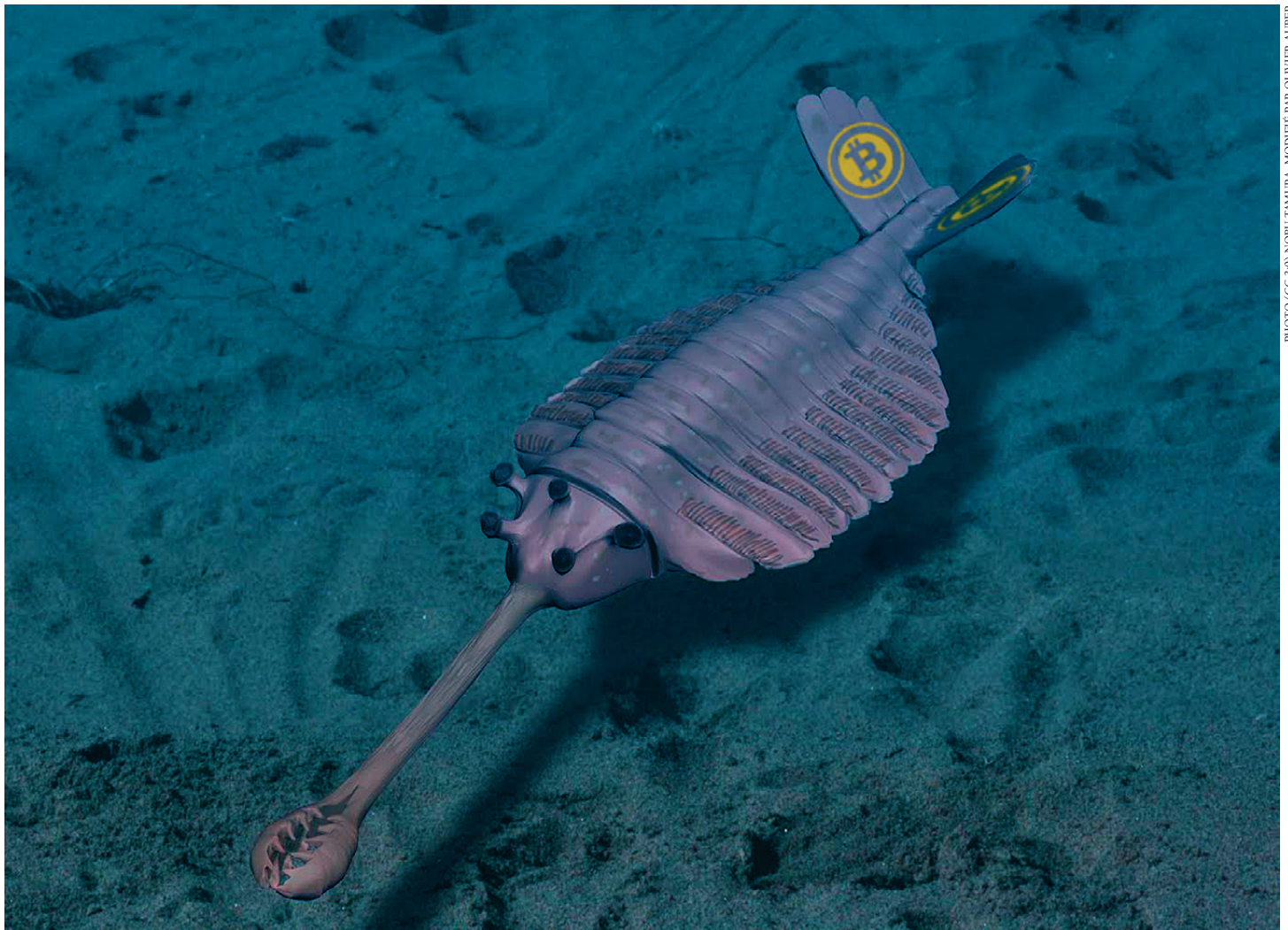


PHOTO (CC 3.0) NOBU TAMURA, MODIFIÉ PAR OLIVIER AUBER

bitcoin Cambrien.

weapons, even before the invention of fire. The weapon, in its most prehistoric version, made social order based on physical domination brutally obsolete, as it allowed hominids to kill without risk, not only wild beasts, but especially dominant peers.

This political crisis put enormous stress on the species. From then on, individuals whose behavior seemed more adapted to survival in these dramatic conditions were selected. The selected individuals were those who proved capable of both identifying signs of danger or opportunity and

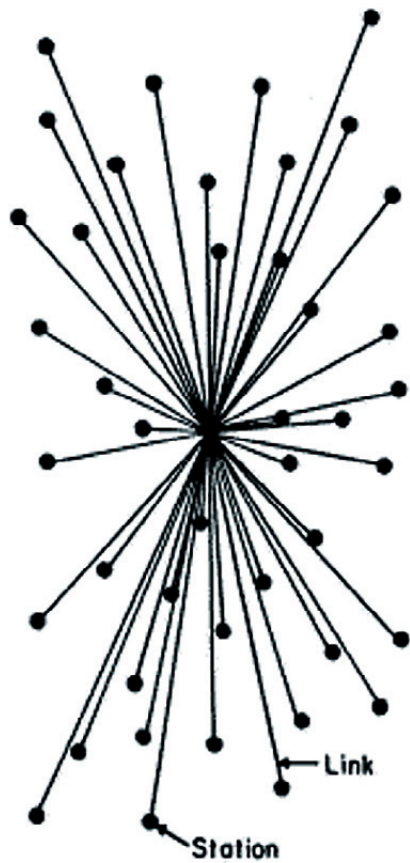
communicating them to peers by a hand gesture, a vocalization, and later an increasingly articulated language. Thus, language overthrew brute force to become the driving element of our social structure, as well as most of our activities. Language was our Evolutionarily Stable Strategy<sup>(4)</sup> to escape the political crisis.

#### **Money as a weapon**

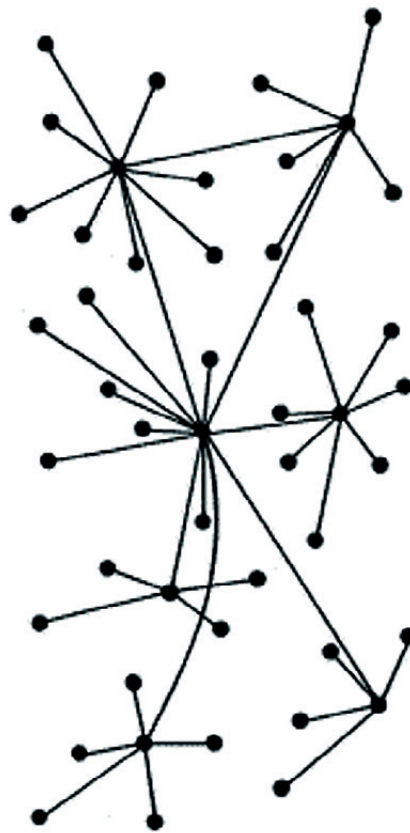
Both our prehistory and our recent history can be interpreted as reflecting the evolving sophistication of our language and its interaction with technology. If weapons were the trigger for language,

the two continued to evolve together until they were almost inseparable, so much that we now live within their complex entanglement. Even more refined than military weapons, there exist other invisible, immaterial and essentially logical weapons: capital and money. Currency, with the source code that we know, was forged for 5000 years ago<sup>(5)</sup>, and is a machine to concentrate the capital, which itself is primarily invested in ways to concentrate the currency. This tautological loop, offensive or deterrent according to circumstances, establishes our social order that is currently in crisis. >

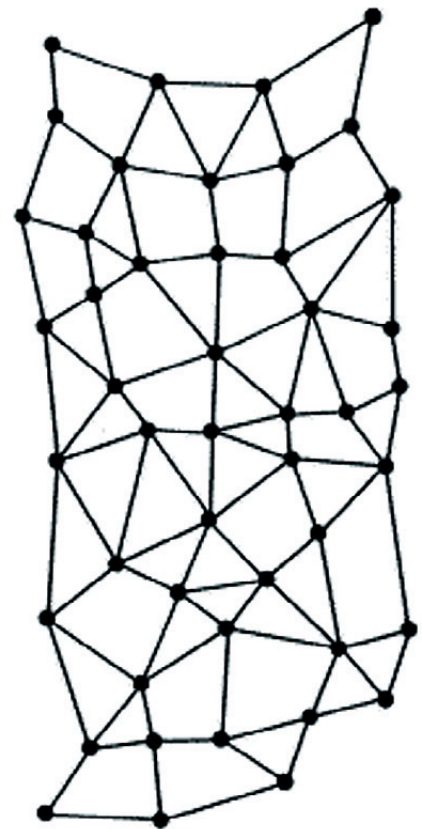




**CENTRALIZED**  
(A)

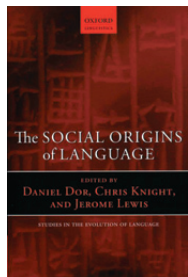


**DECENTRALIZED**  
(B)



**DISTRIBUTED**  
(C)

Paul Baran,  
*Networks topologies.*  
1964.



Dor, C. Knight  
& J. Lewis (Eds.),  
*The social origins  
of language.*  
(Oxford University  
Press)

Indeed, the monetary order has cracked recently: capital—traditionally seen as the accumulation of stocks and means of production—suddenly dematerializes in the form of complex economic and symbolic values, robots and artificial intelligence working automatically to their own power. This exponential concentration leaves around her vast desert areas, where money as other economic and symbolic values are maintained under perfusion.

This carnivorous monetary code, based on its mode of creation by debt, thus appears more and more like a bug that inevitably leads to the destruction of the quasi-living system that spawned it. Thus, it is as if the runaway of its tau-

logy made brutally outdated the social order based on the control of language, because it allows a kind of machinery to kill safely our fellow humans indiscriminately, at which point our species now seems submitted to political stress similar to the one which led to the invention of language.

In response to this crisis, alternative currency codes are created. No doubt, there are many weapons that can bring about a new social order. Among them, is hiding our new Evolutionarily Stable Strategy. How to detect it, build it, select it?

#### **Anoptical perspectives**

To assist us, we can try to observe a fact relatively unnoticed since the beginning

of the Industrial Revolution, particularly since the emergence of telecommunications: it is the irruption of two new “perspectives” that are analogue to the “Optical Perspective” (OP) of the Renaissance.

Indeed, the networks that determine every economic and symbolic value, can operate in two architectures, either centered or acentered. These architectures carry out constructions “in perspective” such as finding their vanishing point, in the first case in a physical center (for example, a server), in the second case, in a “code”; the means by which the agents in the network exchange (it is their sign of recognition in some way).

### Test: Are your networks TP or DP?

As an exercise, everyone can try, for some networks, to distinguish if they are part of a Temporal Perspective (TP) or a Digital Perspective (DP), and submit them to the proposed criteria of legitimacy.

For example, we can see that Facebook is a TP which does not meet criterion AB because its creator (Mark Zuckerberg) is not treated just like any agent A or B. We can also see that the currency network defined by the euro (or dollar) is a DP which does not even meet criterion A, as it is almost impossible to not trade in euro (or dollar) within the economic zone defined by this currency. We can see that the stock exchange network (NYSE for example) is TP which meets none of these criteria, particularly because it favors Artificial Intelligence agents (High Frequency Trading platforms) that human agents cannot recognize as peers. Finally, we can see that emerging alternative monetary models (ACM) are mostly DP type. Bitcoin is very far from being legitimate (a present A is not treated as a future B because bitcoin gives great emphasis on first entrants). We'll see eventually that other models are close to become legitimate, especially those based on a Universal Dividend<sup>(8)</sup>.

In the case of centered architecture, it's a "Temporal Perspective" (TP): the network's own time as set by the interaction among its members, emerges moment by moment from the center.

In the case of acentered architecture, it's a "Digital Perspective" (DP): an arbitrary digital code (vanishing code) guarantees the emergence of the network's own time in each of its nodes.

Most often without even knowing it, we build, perceive and evaluate the networks on which the above-mentioned quasi-living species proliferate by using these two perspectives. Without knowing it, because unlike Optical Perspective that address our eyes, these new perspectives address our entire cognition. Thus, they are called "Anoptical Perspectives" (AOP)<sup>(6)</sup>, i.e., non-optical.

These two new Anoptical Perspectives share numerous topological and symbolic attributes with the Optical Perspective; in this regard we can also talk about "Legitimate Perspective"<sup>(7)</sup>, as painters and architects did during the Renaissance.

### Refounding the legitimacy at the time of networks

As network agents structured by these Anoptical Perspectives, we are most often in the position of the "selected",

leaving them to shape our imagination and our judgments. On the other hand, by becoming aware of these perspectives and questioning their "legitimacy", we can choose to be in the position of the "selectors" of the quasi-living species structured by these perspectives.

To summarize, three criteria allow any agent to evaluate the legitimacy of any given network to which it belongs:

- A) Does any agent A have the real right to access the network if he requests it? Can A leave the network freely?
- AB) Is any agent B (present or future, including agents that conceive, administer and develop the network) treated like A?
- ABC) If agents A, B and C (where ABC is the beginning of a multitude) belong to a network that meets the first two criteria, are they peers?

Note that these three criteria propose a reformulation appropriate to networks of ancient and somewhat forgotten principles, for example those of the French Republic *LIBERTY - EQUALITY - FRATERNITY*. Thus, this manifesto is in line with many other attempts of mankind to enter an era in which systemic predation would disappear. This new era could be called "aethogenesis" (from a world without economic ethics to a world with economic ethics). With the help of everyone, this would lead to a new explosion of "codes" respecting the beings of all species, starting with our own. ■

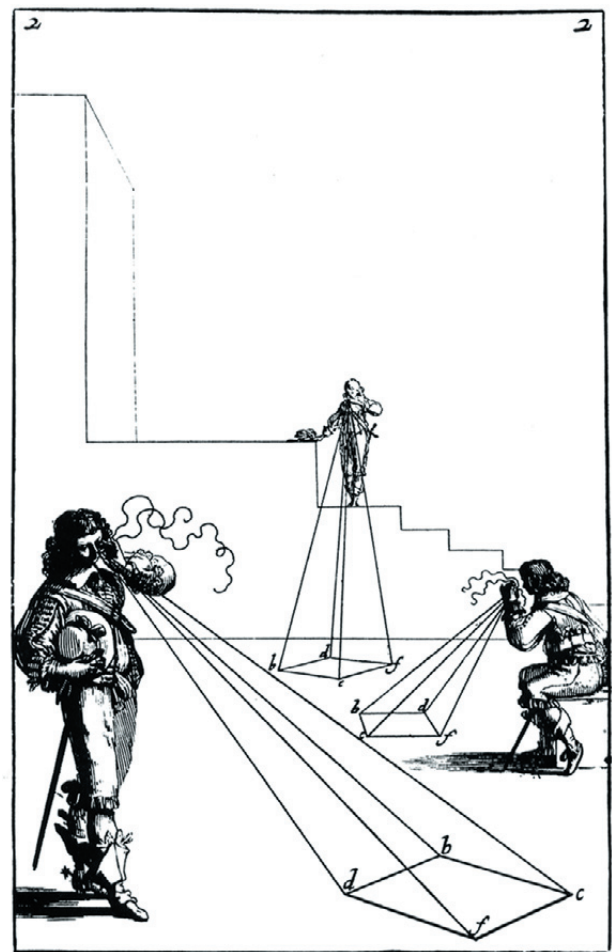
Olivier Auber

A proposal by Olivier Auber, published under the Free Art Licence

(1) Bitcoin, IEML, ethereum, safemaid, openUDC, ucoin, complementary currencies, hypothetical Facebook or Google currencies, the standard gold, etc.

(2) Cadell Last: *Deep Future of Big History* (2014) <http://theadvancedapes.com/deep-future-of-big-history/>  
 (3) Jean-Louis Dessalles: Why talk ?, 2014, in D. Dor, C. Knight & J. Lewis (Eds.), *The Social Origins of Language*, 284-296, Oxford, UK: Oxford University Press. <http://perso.telecom-paristech.fr/~jld/papiers/>  
 (4) Evolutionarily stable strategy: [http://en.wikipedia.org/wiki/Evolutionarily\\_stable\\_strategy](http://en.wikipedia.org/wiki/Evolutionarily_stable_strategy)  
 (5) David Graeber: *Debt, the first 5,000 years*, Melville House Publishing, 2013.  
 (6) Anoptical Perspectives as defined by the author within the *Poietic Generator's* research: [http://en.wikipedia.org/wiki/Poietic\\_Generator](http://en.wikipedia.org/wiki/Poietic_Generator)  
 (7) Leon Battista Alberti: "De pictura", 1435. [http://en.wikipedia.org/wiki/De\\_pictura](http://en.wikipedia.org/wiki/De_pictura)  
 (8) Universal Dividend, as defined by the Relative Theory of Money (RTM): [http://en.wikipedia.org/wiki/Relative\\_theory\\_of\\_money](http://en.wikipedia.org/wiki/Relative_theory_of_money)

Abraham Bosse,  
*Les Perspectiveurs*,  
 print,  
 Paris 1647-48.



(DOMAINE PUBLIC)

Olivier Auber is an artist and independent researcher, a member of the P2P foundation, an associate researcher at ECCO Laboratory (Evolution, Complexity and COgnition group) at the Free University of Brussels (VUB) and at the Global Brain Institute. <http://ecco.vub.ac.be> <http://globalbraininstitute.org>

# ZERO ART EURO ART

“

*Look at zero and you see nothing,  
but look through it and you will see the world*

”

Robert Kaplan

The *oEURO* is both a new banknote and an unlimited but signed and numbered artwork with a face value of 0 (zero). It promises to pay the bearer of on demand nothing. Foreign exchange and financial market on one hand, and art market on the other, both work with their own inner and not necessarily logical market mechanisms. What is the real market value of 'nothing'?

■ **Zéro**

For thousands of years Europe did not have any idea of zero. Neither the Greek nor the Romans had a symbol for it, not even a word to name it. The concept of the zero as a mathematical number is supposed to originate from India during seventh century and it took another six centuries until it was brought to Europe via Arabs through the Hindu-Arab numeral system we still use today. It took a long time of philosophical and theological dispute until it was finally

accepted in Christian-dominated Europe, as it seriously challenged existing proofs of God and Aristoteles's doctrine of world view. But sophisticated mathematics required a zero. What do you need a sophisticated mathematic system for? Of course: economics.<sup>(1)</sup>

**Euro**  
The *0EURO* is a perfect addition to the existing euro banknote series. It measures 113 x 55 mm. That's one proportional step smaller than the 5 euro note and exactly what a potential 1 euro note would be. With the launch of euro banknotes on January 1<sup>st</sup>, 2002, it was not only that European Union created a common currency area (following the creation of a common economical area). The euro banknotes also turned into a carrier of a common European identity and solidarity. The political curren-





ZERO EURO. © MICHAEL ASCHAUER

“

*I have nothing to say and I am saying it  
and that is poetry as I needed it*

”

John Cage

cy also got its political banknotes: To avoid any dispute between member states, the design of the original euro banknote series by Austrian money designer Robert Kalina does not feature any real buildings or people, but fictitious and fake buildings that are prototypical for eras and architectural styles of European history.

The windows, arcs and gates on its front should be a symbol for innovation and openness within Europe, whereas the bridges on the back side are intended to symbolize Europe's connection to the rest of the world. Consequently the 0EURO leaves the front side empty and adds Turkey's half moon into that void. The bridge is modeled after an existing

original: The *Most Slobode* or *Liberty Bridge* in Novi Sad, Serbia, as it looked like after being bombed by NATO in 1999 (until it was finally rebuilt and reopened in 2005, mostly financed by the EU but certainly not without political clashes)<sup>(2)</sup>.

**Art**

From *Art = Capital* (Beuys) to “Capital Art”.

From Scarcity to mechanical reproduction.

From mechanical reproduction to infinite digital copies:

The Work of Art in the Age of a Zero Marginal Cost Society?<sup>(3)</sup> ■

Michael Auschauer

(1) As John D. Barrow points out it is fundamentally necessary and essential for the development of progressive and commercial mathematics: *The more space that you need to leave, the harder it becomes to judge. This is why positional notation systems eventually need to invent a zero symbol to mark an empty slot in their positional representation of a number. The more sophisticated their commercial system the greater the pressure to do so.* John D. Barrow, *The Book of Nothing*, 2001

(2) [http://en.wikipedia.org/wiki/Liberty\\_Bridge\\_Novi\\_Sad](http://en.wikipedia.org/wiki/Liberty_Bridge_Novi_Sad)

(3) Jeremy Rifkin: *The Zero Marginal Cost Society*, Palgrave Macmillan, 2014.

Michael Aschauer is an artist, an art technologist and an undisciplined researcher. He lives and works in Vienna. Occasionally he makes money. <http://m.ash.to>

# ECONOMY O

The shadow of capitalism's death will outlive its history, and money will continue to accumulate. Avoiding the dialectics of domination and resistance, gains and losses, artist Grégory Chatonsky challenges us to consider an Economy o that is neither opposed to or associated with liberalism.

■ The crisis that we are currently undergoing is not a crisis. It's an extinction. It's also possible that everything will continue as before, but worse. The shadow of capitalism's death will outlive its history, and money will continue to accumulate until it threatens the very conditions of domination. We want to propose alternatives, utopia, annulments, self-management and sharing, open source, donation, solidarity or *blockchain*, whatever, we are desperately searching. We want to overcome it, as another way of continuing.

In 1972, Jean-François Lyotard pointed out the *Zealous* nature of capitalism, and the impossibility of developing an external resistance, because it would mean submitting to the values of + and -, gains and losses, in other words joy and pain, threatened hopes, the mechanism of dominated affects. The revolution is still a matter of profits and balance sheets; its messianism is also a wager on a future gain. *Criticism becomes the subject of its subject, moves into the other's territory, accepts the other's dimensions, directions and space, even as it questions them*<sup>(1)</sup>.

#### Ad lib exploitation

There is no boundary between the inside and outside of the system, just a random journey, a capacity to integrate everything beforehand, including resistance, to do anything as long as it lasts

on the edge of the precipice. This unregulated integration of capitalism is based on the development of an industrial society that considers all things to be a potential source of *energeia*.

By transforming raw matter, we can use it in such a way that its exploitation is limitless; it applies to the Earth, the cosmos, everything that is. Marx defined money as a general equivalence<sup>(2)</sup>. Money is something that is valid for all things, just as any matter can be converted into energy: *Money is not itself a value, but the operator of value. Fundamentally, it is the effect of a collective belief in the efficiency of its liberting power, since everyone, by accepting the money sign, bases their arguments on the fact that others also accept it mutually*<sup>(3)</sup>.

#### Economically neutral

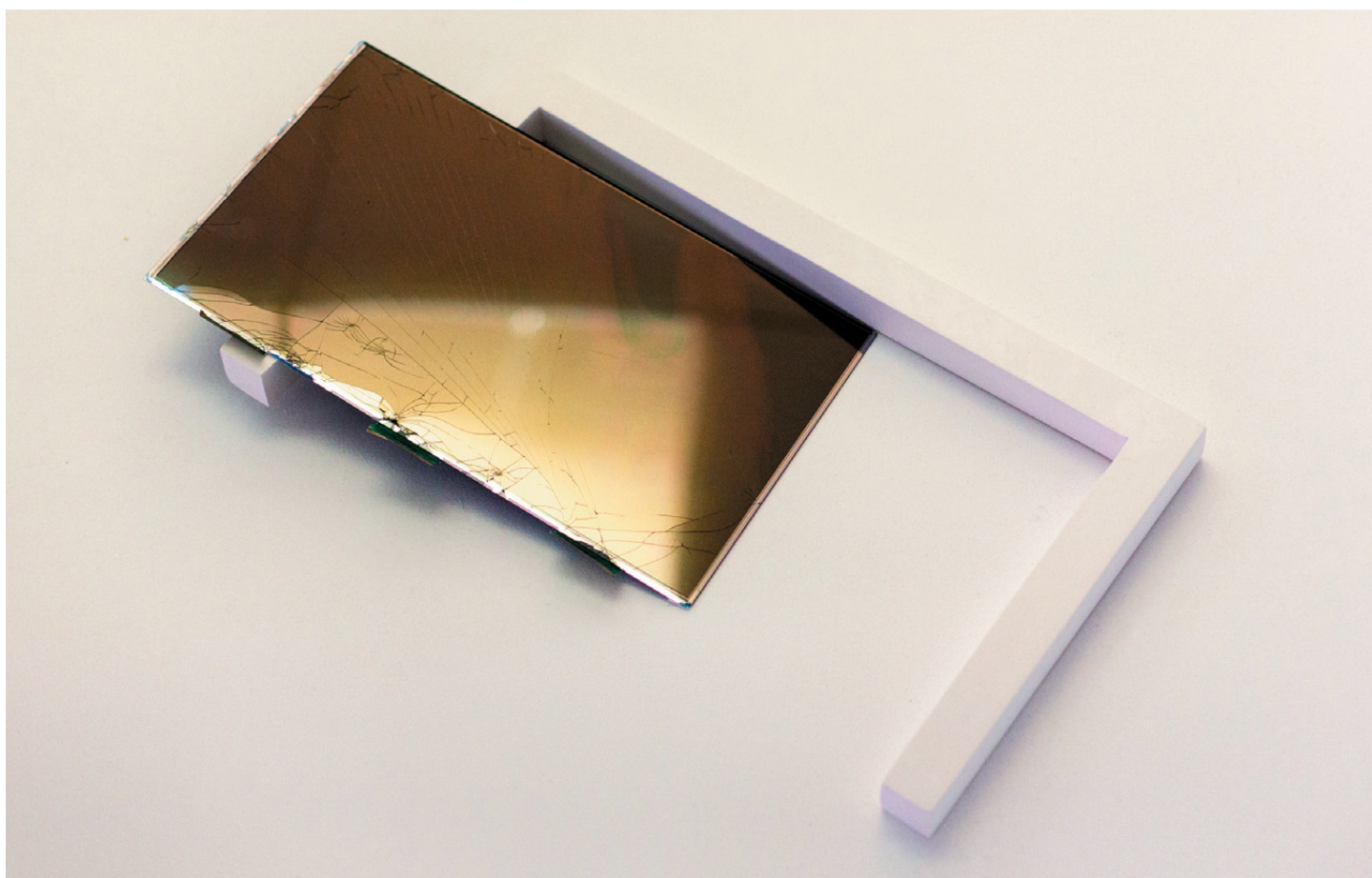
Some contemporary phenomenon seem to escape the dialectics of domination and resistance, gains and losses. Here, the expenses and gains are balanced and cancel emotional expectations. It's an *Economy O* that is neither opposed to or associated with liberalism. It is indifferent to liberalism, because it knows how much all the counter-proposals to power are a reflection of its iron grasp. Economically neutral designates an apathetic space that is neither outside nor inside the trading system. This "neither nor" logic is not a way to suspend the economy, even

less to denounce it, adopting not a passive attitude, but strategies that defy divisions based on identity.

Some things cannot be appropriated. Losses and gains lead to affects, fears and satisfactions, expectation or precipitation, defense or predation. These affects reduce the force of flows by retaining, delivering and identifying. They attempt to stabilize them in substantial forms. Economy 0 lets the currents flow, a lot or a little, contingently. Extraction, cutting, decoding and encoding flows are functions attributed to production, not balance. Balance stops the flow, as if treating a hemorrhage. Production expresses contingency: everything is possible. Economy 0 is not an economy of minimum subsistence. The flowing expenses may be important, but no matter, since there will be neither loss nor gain, neither disappointment nor satisfaction, no hope for a better or worse future, simply the factuality of what is effectively produced.

#### The contingency of affects

In 2001, a German computer scientist met an engineer at his home, after several online exchanges. In the course of the evening, with the engineer's consent, he devoured him. Every kind of offer can be met online; anthropophagy is *Autophagy*. The Internet is not a space for newfound freedom that runs off with



Grégory Chatonsky & Dominique Sirois, *Mall*.  
Installation, 2014.

rhizomes, replacing the verticality of power with the horizontality of the crowd. It is also a matter of protocols<sup>(4)</sup>, controlled fluidity. It is where everything is possible: everything *can* be because everything is.

Everywhere are images that represent nothing, auto-generated, unpredictable and turbulent, swirling. There is neither loss nor gain, no more convertibility, simply the contingency of affects. Economy 0 works in self-referencing, self-nourishing systems. They adopt cybernetic feedback as a principle of materialistic production. So when Bill Viola plugs one machine into another in *Information* (1973), he not only produces a signal that represents nothing, he loops this production into a continuous and variable process: *Every time I pushed the button, something different happened*<sup>(5)</sup>.

#### Self-destructing art

Paolo Cirio's *Google Will Eat Itself* (2005) generates revenue from Google

advertisements to acquire shares in the same company, as if Google were buying itself<sup>(6)</sup>. Caleb Larsen's *A Tool to Deceive and Slaughter* (2012) is a cube for sale on Ebay that, every 10 minutes, checks to see if its auction has expired, in which case it automatically puts itself back up for sale<sup>(7)</sup>. If someone buys it, the former owner must send the object to the new owner so that the cycle can start anew. With Stefans Tiefengraber Pixelkino's *User Generated Server Destruction* (2014), people can go to <http://www.ugsd.net> to activate hammers that destroy the physical computer server.

Since 1959, Gustav Metzger has been developing self-destructing art<sup>(8)</sup> integrating computers and all of human activity into processes of dislocation that produce no remains or ruins. Entropy is reversed by self-destruction, as a testament to the compulsive nature of consumerism and the programmed obsolescence of objects. It becomes self-production and accelerates<sup>(9)</sup> to a

point 0 that is no longer within the range of capital, because it no longer recognizes it. ■

#### Grégory Chatonsky

Based on a fragment originally written on June 4, 2007: <http://chatonsky.net/fragments/economie-0/>

- (1) Lyotard, J.-F., 1994, *Des dispositifs pulsionnels*, Galilée, p. 24.
- (2) Marx (1872), *Le Capital*, Lachâtre, p. 26.
- (3) Lordon F., 2010, *Capitalisme, désir et servitude*, La Fabrique, pp. 27-28.
- (4) Galloway, A. R., & Thacker, E., 2007, *The Exploit: A Theory of Networks*, Minneapolis, University Of Minnesota Press.
- (5) Interview for *Cahiers du Cinéma* in Paris, february 1984.
- (6) <http://www.paolocirio.net/work/gwei/>
- (7) <http://caleblarsen.com/projects/a-tool-to-deceive-and-slaughter/>
- (8) <http://oldsite.english.ucsb.edu/faculty/ayliu/unlocked/metzger/selections.html>
- (9) <http://criticallegalthinking.com/2013/05/14/accelerate-manifesto-for-an-accelerationist-politics/>

Grégory Chatonsky founded Incident.net in 1994. His practice focuses on technological, physical and anthropological currents. He is represented by the XPO Gallery (Paris). <http://chatonsky.net>



# IMAGINE THE FUTURE OF MONEY

## **Freecoin, a Social Blockchain for the Re-Appropriation of Money Power**

**Money is software for programming social behavior. If one looks at the conventional monetary system, what kind of behavior is programmed on the users of official, proprietary currencies? Essentially, schizophrenia.**

■ Alongside the paradoxical need for perpetual growth of the global economy within a context of finite resources and merely for paying the interest on non-existing electronic money, we have built-in short-termism, competition at the expenses of cooperation, and the fake political bipolar battle among left and right, democratic and conservative with the flawed conviction that Russia or China are different from either the EU or the

USA. They are not, as both systems enforce the same social programming by having in common one peculiar private institution: the central bank. This situation is not new and it had been lasting since the dawn of modern times (the oldest central bank, Riksbank in Sweden, began its operations in 1668) in the substantial form that all financially included humans had been experiencing, consciously or not, but always coercively!

An alternative would be to accept the extinction of the economy, us, since total global debt cannot be repaid, with more debt. Indeed, interested financial institutions are buying time rather than building a future as the slow-motion collapse and exotic monetary policies such as ZIRP (zero interest rate policy) and NIRP (negative interest rate policies), or the news that Italy plans to include prostitution and illegal drugs in GDP calculations in order to stay in this real-world version of the puzzle-platformer retro-game *Lemmings*<sup>(1)</sup> are showing. And the vast majority of the population sits to watch-TV—seemingly hypnotized under a collective Stockholm Syndrome. The solution? To either contribute to the next big war and rebuild from scratch or to stop wasting one's

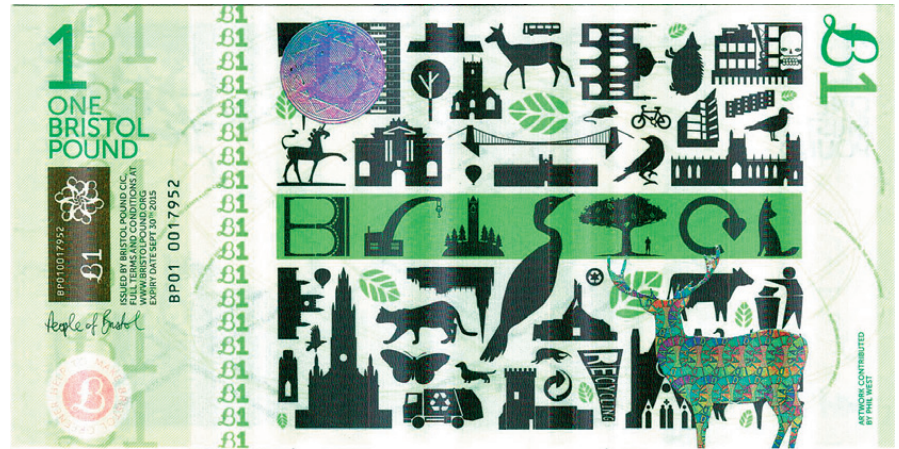


Libbitcoin. Logo.

energies in criticizing the problems of the current monetary system and, rather, focus on creating new protocols for the transfer of value that will allow the social body to move on as the current system will eventually fall apart, see bitcoin. Indeed, with an empathic approach to ICT development, we can grow money through developing a diversity of empowering experiences around financial transactions. With these new protocols, we can assure provisioning for basic needs to meet for living, all, a decent life. And we can get there only if we overcome the unconscious and subconscious dynamics that characterize our engagement in economic interactions with money.

**The root, the trunk and the foliage of our monetary system**

The conventional monetary system—the one in which national currencies like the euro flow—is a complex flow network that processes exclusively one type of currency: positive interest-bearing bank debt. Although national currencies present different names, the systems in which they flow resemble the same arborescent fractal pattern. In effect, what one may define as the “monetary tree” represents the traditional, centralized modern monetary system. At the international level operate institutions such as the Bank for International Settlements, the International Monetary Fund and the World Bank representing the top level of hierarchy in the global banking system. Here, the *root* of monetary power is very well reached as they set the agenda at the global level. At the second hierarchic tier, the *trunk* is represented by national central banks. Finally, at the retail level, there are commercial banks with *branches* holding personal accounts, or *leaves* of the *foliage*.







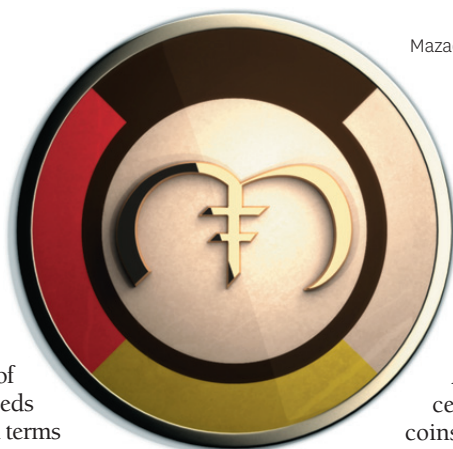


### Co-design digital tools with netizens

D-CENT is an inter-operable social networking platform thought of as to serve the needs of communities in terms of data sharing in order to address major societal challenges, also through the design of social blockchains that foster the anthropo-genetic model of human development: productive economy for goods and services, health, education and culture run on the blockchain technology, i.e. the freecoin protocol<sup>(7)</sup>. With the assumption that money is primarily what should allow each human being to eat every day both food for the body and food for thought, the aim is to co-design with netizens useful and proper digital tools, especially for transitioning in critical times of austerity. Therefore, D-CENT users belonging to pilot communities in Spain, Iceland and Finland are indicating to researchers and developers those features and desired outcomes of their own self-managed, decentralized and FLOSS tools for collective monetary deliberation. But how can we make sure not to fall back again into conventional monetary social programming?!

### Money as the last Taboo

After death and sex, money is the last *Taboo!* that humanity at large has to make explicit in order to escape crises like the present, once and for all: *Memento!—Gold is the feces of Hell.* According to M.D. Paula B. Fuqua, if one looks at psychoanalytical analyses of childhood development, it is remarkable that “*children show a natural pleasure both in defecating and in holding back their stools while the retained feces are their first savings and their first toys. Later, they begin to collect stones with sensual pleasure and enjoy bartering them with other children. The stones become glass marbles, buttons, and finally coins.* As cognitive development enhances the



Mazacoin.

© R.R.

child's abstracting ability, the coins are replaced by stocks, bonds, and figures”<sup>(8)</sup>. And in the 21<sup>st</sup> century by crypto-coins.

Hence, since money is unconsciously associated with defecation, it is *Taboo!* to discuss about it openly and this is an advantage for the 1% owning, managing and gaining from the conventional system. Let's speak about money, more! Desirably, this started to happen in the digital world when VISA, Mastercard and PayPal froze Wikileaks accounts in 2010 and miners increased their efforts to enhance the bitcoin network as a statement giving more substance to Operation Payback.

Within the D-CENT platform, a technical application for overcoming the social *Taboo!* on money is freecoin, an open source code-base protocol allowing for virtually instantaneous transfers of value within a public programmable database, or blockchain which acts as a transaction ledger. In the case of freecoin the proof-of-work mechanism acquires a new sense as it becomes social in nature, analogue: now users inform the trend for creating the open-sourced money supply, which is then managed by admins who act as system auditors and miners, becoming *de facto* gatekeepers of the social control, issuance and transfer of credit. In order to process economic exchange, the amount of credit created derives from previously agreed-upon rules deliberated by the users of the system themselves. Therefore, it is by adding the possibility to collectively deliberate on the very monetary policymaking process of the system that it becomes technically viable to go in the direction of money systems that are far more self-manageable than the present one, i.e. an open source payment system that structurally works for the users, and not the contrary.

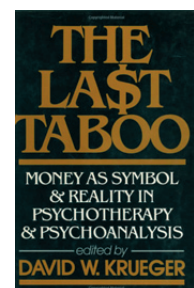
Thanks to the switch to a conditioned and commonly agreed-upon regular system for the exchange of economic value and alongside a growing interconnectivity of the population by means of social media exposure, D-CENT tools can help increase collective self-management practices within sectorial and geographical communities to enhance their Local Multiplier Effect. All this, irrespective of that which happens in the conventional banking system and at negligible cost for local public authorities, which can now also profit from these alternative moneys, cf. the case of the Bristol pound in the United Kingdom<sup>(9)</sup>. The backend is a social blockchain that a community can fully customize for its own needs. That is why it is more correct to conceive freecoin as a protocol, before and rather than confine it as a crypto-currency. Fluid UI design will take care of front-end dynamics related to usability.

As an ongoing conclusion, one may observe that it is through this collective monetary policy process that users become able to start experiencing the re-appropriation of the power of issuing money and thus the power to act on the destiny of their own economic lives. De-programming by means of monetary literacy, i.e. de-dollarization of the mind. ■

Marco Radium Sachy

- (1) See <http://on.wsj.com/1pwbLdv> and <http://bit.ly/1weAauP>
- (2) See <http://econ.st/18FrLTF>
- (3) See <http://bit.ly/1tj4Xh>
- (4) See <http://www.bloomberg.com/news/2014-08-11/ecuador-turning-to-virtual-currency-after-oil-loans-correct-.html>
- (5) See <http://www.mazacoin.org>
- (6) See [www.dcentproject.eu](http://www.dcentproject.eu)
- (7) See <http://freecoin.ch>
- (8) Fuqua, 1986.
- (9) See <http://bit.ly/1tu7vf0>

Marco Radium Sachy is a Ph.D candidate in management with a thesis on “Money as a Commons” at the University of Leicester. He is co-leading the design of freecoin with the D-CENT project. <http://dcentproject.eu>



*The Last Taboo*  
(ed David W. Krueger, M.D., Classical Psychoanalytic views of money (Paula B. Fuqua, M.D.), Brunner/manzel, INC. New York, 1986.

# BIBLIOGRAPHY WEBOGRAPHY

*These references are meant to be bilingual—both English and French versions are listed whenever possible.*

## ■ Bibliography

- Joseph Beuys, *What is money?: a Discussion*, Clairview Books, 2010.
- Paulina Borsook, *Cyberselfish: A Critical Romp through the the World of High-tech*, Little, Brown & Company, 2000.
- David Graeber, *Debt: The First 5000 Years*, Melville House, 2011.
- Yann Moulier-Boutang, *Cognitive Capitalism*, Polity Press, Cambridge and Malden, MA, 2012.
- Bruno Latour, *An Inquiry Into Modes of Existence*, Harvard University Press, Cambridge, Mass., 2013
- Elisabeth Lebovici, Mike Hunt, Hans Ulrich Obrist, Dana Wyse, *How to turn your addiction to prescription drugs into a successfull art career*, Editions du Regard, Paris, 2007.
- Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World*, Random House, 2001
- Frédéric Lordon, *Willing Slaves of Capital: Spinoza and Marx on Desire*, Verso Books, 2014
- Karl Marx, *Capital: A Critique of Political Economy*, Penguin Books, 1976.
- Jean-Charles Massera, *Sex, Art & The Dow Jones*, Lukas & Sternberg Inc. New York, 2003.
- Thomas Piketty, *Capital in the Twenty-First Century*, Harvard College, 2014
- Jeremy Rifkin, *The Zero Marginal Cost Society: The internet of things, the collaborative commons, and the eclipse of capitalism*, Palgrave Macmillan, 2014
- Brett Scott, *The Heretic's Guide to Global Finance: Hacking the Future of Money*, Pluto Press, 2013
- Johan Söderberg, *Hacking Capitalism, The Free and Open Source Software Movement*, Routledge, 2007.
- D-Cent (Decentralised Citizens ENgagement Technologies): <http://www.dcentproject.eu>
- P2P foundation: <http://p2pfoundation.net>
- Adrian Bowyer, *Wealth without money*, (2004), [http://retrap.org/wiki/Wealth\\_Without\\_Money](http://retrap.org/wiki/Wealth_Without_Money)
- Nuria Güell, *How to expropriate money from the banks*, 2013 : [http://www.nuriaguell.net/projects/12/How to expropriate money from the banks\\_nuria guell.pdf](http://www.nuriaguell.net/projects/12/How%20to%20expropriate%20money%20from%20the%20banks_nuria_guell.pdf)
- Alex Payne, *Bitcoin, Magical Thinking and Political Ideology* <https://al3x.net/2013/12/18/bitcoin.html>
- Denis Jaromil Roio, *Bitcoin, the end of the Taboo on Money*, 2013, <http://www.dyndy.net/2013/04/bitcoin-ends-the-taboo-on-money/>

## Resources

### On money, bitcoin and alt-coins:

- <http://www.thebitcointrader.com>
- <https://bitcointalk.org>
- <http://brixtonpound.org>
- <http://performingeconomies.org>
- <http://e-flux.com/timebank/branch/new-york-city>
- <http://www.wired.com/2014/03/decentralized-applications-built-bitcoin-great-except-whos-responsible-outcomes/>
- <http://www.e-ir.info/2014/06/01/visions-of-a-techno-leviathan-the-politics-of-the-bitcoin-blockchain/>
- <http://we-make-money-not-art.com/archives/2014/01/my-notes-from-bitcoin-alternat.php>

### On art and money:

- *MoneyLab: Coining Alternatives*, Institute of Networks Culture : <http://www.networkcultures.org/moneylab>
- Time Exchange: <http://www.time-exchange.gr>



## Exhibitions and events

2008

- > *L'argent*, Plateau Frac Ile-de-France, curators Caroline Bourgeois and Elisabeth Lebovici, <http://www.art-societes.org/f/f-lebovicibourgeois.html> and <http://www.poptronics.fr/L-argent-sur-un-Plateau>
- > *Art Price and Value*, Palazzo Strozzi, Florence (Italie): <http://www.strozzi-na.org/artpriceandvalue/index.html>

2011

- > *Utopies Monétaires, Imaginer le futur de l'argent*, Mal au Pixel, Paris: <http://rybn.dyndns.org/malaupixel/2011/index.php/fr/rencontres/18-utopies-monetaires>

2012

- > *Economie 0*, Upgrade Paris, France: <http://incident.net/upgradeparis/economie0/>

2014

- > *MoneyFest #2*, Paris, France: <http://events.numa.paris/Evenements/MoneyFest-2>
- > *Show Me the Money*, Manchester, United Kingdom: <http://www.imageoffinance.com>
- > *Currency as Space*, HDLU Treasury and Mint Zagreb, Croatia: <http://borroworrob.org>
- > *MÓN3Y AS AN 3RRROR | MON3Y.US*, online exhibition: <http://www.mon3y.us>

- > *Performing economies*, a research initiative from the College of Arts and Science, University at Buffalo, the State University of New York: <http://techne.buffalo.edu/programs/performing-economies/>

## Artists' projects and websites

- > *Anti Data Mining*, RYBN: <http://antidatamining.net>
- > *A Tool to Deceive and Slaughter*, Caleb Larsen: <http://caleblarsen.com/projects/a-tool-to-deceive-and-slaughter/>
- > Bureau d'études: [Bureaudetudes.org](http://Bureaudetudes.org)
- > *Feral Trade*, Kate Rich: <http://www.feraltrade.org>
- > *(W)orld Currency*, Paolo Cirio: <http://www.paolocirio.net/work/world-currency/>
- > *Loophole for All*, Paolo Cirio: <http://www.paolocirio.net/work/loophole-for-all/>
- > *Google Will Eat Itself*, Paolo Cirio, Alessandro Ludovico and Ubermorgen: <http://www.paolocirio.net/work/gwei/>
- > Scott Campbell: <http://scottcampbellstudio.com>
- > Enric Duran: <http://www.enricduran.cat>
- > *Economie 0*, Gregory Chatonsky: <http://chatonsky.net/fragments/economie-0/>
- > *Euro 0*, Michael Aschauer, <http://m.ash.to/en/Projects/0Euro>
- > *Space bank*, Fran Ilich: <http://eyebeam.org/projects/spacebank>

- > *LAfro*, Mansour Ciss & Baruch Gottlieb: <http://g4t.info/deberlinisation/>
- > *Agliomania*, Shu Lea Cheang: <http://agliomania.com>
- > *Mona LHO*, Albertine Meunier: <http://www.albertinemeunier.net/mona-lho/>
- > *Quantitative Easing*, Axel Stockburger: <http://www.stockburger.at/qe/>
- > *Time Bank*, Julieta Aranda and Anton Vidokle: <http://www.e-flux.com/timebank/>
- > *User Generated Server Destruction*, Stefan Tiefengraber: <http://www.stefantiefengraber.com/ugsd.php>
- > *Money no object*, Heidi Hinder: <http://www.moneynoobject.co.uk>
- > *The Biljmer Euro*, Christian Nold: <http://www.biljmereuro.net>
- > *The Time is Money*, Ivan Argote: <http://www.thetimeismoney.com>



# LES EKLUZ

PARIS 10<sup>ème</sup>

Depuis le 1<sup>er</sup> mai 2014, MCD a pris la direction des Ekluz, une "fabrique culturelle et numérique" située aux abords du Canal Saint-Martin dans le 10<sup>ème</sup> arrondissement de Paris. Le lieu réunit artistes, associations et sociétés dédiés à la création numérique sous toutes ses formes (création visuelle, graphique, médias en ligne, objets connectés, design interactif, production artistique...).

## # LE RETOUR DES DAMES D'HYPE(R)OLDS

Accompagnées cette année par l'artiste Cristina Hoffmann, le gang de seniors connectées se réunira tous les quinze jours aux Ekluz jusqu'au mois de mai. Vous pouvez suivre le projet HyperOlds et les créations en ligne des participantes aux six ateliers en activité (Gaîté Lyrique, Centre des Arts d'Enghien, Maison Populaire de Montreuil, Château Éphémère, Café culturel d'Aubervilliers) sur le site dédié : [www.hyperolds.com](http://www.hyperolds.com)

## # LES NOUVEAUX ATELIERS MCD

**Lucky13 : une proposition de We Love The Net**  
Bastien Didier accueillera un groupe d'enfants de 8 à 10 ans pour une initiation ludique à la fabrication électronique et numérique conclue par une exposition d'"objets inutiles", interactifs et/ou connectés. <http://labotrucs.tumblr.com>

**Road66 : une proposition de We Love The Net**  
Cristina Hoffmann animera un atelier de couture connectée à partir de janvier. Un groupe de femmes de plus de 66 ans fabriquera une collection, prélude à un défilé assuré par les couturières-conceptrices elles-mêmes. <http://labotrucs.tumblr.com>

**Parismage :**  
Benoît Champy du collectif VNBC animera un atelier stop-motion avec des enfants de 8 à 10 ans pendant les vacances scolaires, pour réaliser des courts-métrages d'animation librement inspirés de Méliès et Gondry. [www.vnbc.fr](http://www.vnbc.fr)

**En Reportage Permanent :**  
Sarah Brown formera en février une équipe de web-reporters de 10 à 14 ans qui réaliseront un JT décalé sur la vie des Ekluz avec notre partenaire Aires 10. [www.enreportagepermanent.com](http://www.enreportagepermanent.com)

## # LES NEWS DES RÉSIDENTS

**MOCAPLAB / AVATAR 3D / LANGUE DES SIGNES**  
Au terme de plus de 3 ans de recherche et développement, la société Mocaplab a mis au point une transposition fidèle de la langue des signes sur un Avatar 3D en capturant via la technique de la mocap les mouvements du corps, du visage, des yeux et des doigts.  
Entre autres applications, le projet permettra de multiplier les personnages virtuels pour les films d'animation ou d'apprentissage de la langue des signes à destination des enfants sourds. Découvrez l'avatar 3D en langue des signes de Mocaplab présenté dernièrement à Cap Digital : <http://vimeo.com/mocaplab>

**WATER LIGHT GRAFFITI / ANTONIN FOURNEAU**  
Water Light Graffiti est un mur d'expression composé de plusieurs milliers de LED s'illuminant au contact de l'eau : l'invention d'un nouveau matériau et d'une nouvelle approche éphémère et poétique du graffiti imaginée par Antonin Fourneau, et produit par Art2M.  
L'œuvre est partie en novembre pour l'Abu Dhabi Science Festival, sera en janvier au festival Lux à Helsinki, et en février au Sharjah Light Festival et au Cambridge E-Luminate (plus d'information : [www.art2m.com](http://www.art2m.com)).  
Pour le public parisien, il est possible d'expérimenter l'œuvre jusqu'au 1<sup>er</sup> Mars dans l'exposition : #Street Art - L'innovation au cœur d'un mouvement proposée par la Fondation EDF [fondation.edf.com](http://fondation.edf.com)  
Pour ceux qui l'auraient ratée, retrouvez par ailleurs l'interview d'Antonin Fourneau aux EKLuz dans la vidéo *Vidéogame Hacking* diffusée récemment dans Tracks : <http://tracks.arte.tv/fr/video-game-hacking-white-game-cube>

## # LES RÉSIDENTS

- > Albertine Meunier - net-artiste ;
- > Antonin Fourneau - artiste ;
- > ART2M - art et innovation ;
- > Artof Popof - artiste ;
- > BDM TV - télévision associative ;
- > BOT42 - studio de création numérique ;
- > Clément Gariel - ingénieur son ;
- > Édition Inculte ;
- > Igor Baloste - artiste ;
- > Makery - le media des labs ;
- > MCD - musiques & cultures digitales ;
- > Mocaplab - société de Motion Capture ;
- > Moderne Multimedias - création éditoriale en ligne ;
- > Moha - artiste ;
- > Pixel Carré - agence de création visuelle ;
- > Sarah Goldberg - artiste ;
- > Taoufik - artiste ;
- > VNBC - agence visuelle et graphique ;
- > WebForce 3 - formation aux nouveaux métiers du web ;

**Ekluz, fabrique culturelle et numérique** est un projet porté par MCD, 13, rue des Écluses Saint-Martin, Paris 10<sup>ème</sup>.  
Contact : [ekluz@digitalmcd.com](mailto:ekluz@digitalmcd.com)  
Site : [www.digitalmcd.com](http://www.digitalmcd.com)

**À venir :** lancement d'un rendez-vous mensuel dédié à la communauté des hackers et bidouilleurs / Informations sur : [www.facebook.com/ekluzmcd](http://www.facebook.com/ekluzmcd)

Soirée performance aux Ekluz  
avec VNBC et Pixel Carré.

PHOTOS © QUESTES CHEVRIER, R.R.







mcd #58



mcd #59



mcd #60



mcd #61



mcd #62



mcd #63



mcd #64



mcd #65



mcd #66



mcd #67



mcd #68



mcd #69



mcd #70



mcd #71



mcd #72



mcd #73



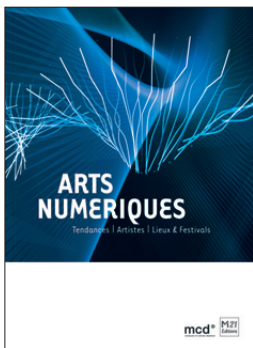
mcd #74



mcd #75

BACK ISSUES AND ONLINE SUBSCRIPTION

[www.digitalmcd.com](http://www.digitalmcd.com)



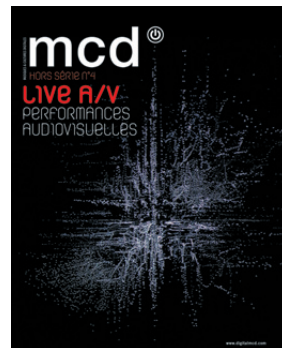
Arts Numériques,  
"Tendances, Artistes, Lieux  
& Festivals"

FR



WJ-SPOTS #1  
15 ans de création  
artistique sur Internet  
15 years of artistic  
creation on the Internet

FR/UK



Live A/V  
Performances audiovisuelles

FR/UK



Internet des Objets  
Internet of things

FR/UK



# MCD' SUBSCRIPTION

I wish to subscribe for one year (4 issues)

€30 rate instead of €36

+ shipping rates  France and Europe €5,20  Worldwide €8,60

## UNIT MAGAZINE AND SPECIAL ISSUES

Magazine MCD (FR/UK): €9 ATI

Issue wanted: .....

Internet of things (FR/UK): €9 ATI

Live A/V - Audiovisual performances (FR/UK): €10 ATI

WJ-Spots - 15 Years of Artistic creation on the internet (FR/UK): €9 ATI

+ shipping rates:

France and Europe €3,10  Worldwide €4

All issues are available on demand in return of the purchase order. You can order them in paper format or digitalized (pdf) that you can download online at [www.digitalmcd.com](http://www.digitalmcd.com)

I attach a cheque of .....€ including shipping rates.

Or I Send an email to [info@digitalmcd.com](mailto:info@digitalmcd.com)

Surname: .....

Name: .....

Company name: .....

Activity: .....

Email: .....

Phone: .....

Address: .....

Country: .....

City: .....

Postcode: ..... Date: .....

Signature:

Cheque payable to < Musiques et Cultures Digitales >.

Postal address: Musiques et Cultures Digitales

8 rue du Général Renault - 75011 - Paris

Téléphone: 01 83 89 13 73

E-Mail: [abonnement@digitalmcd.com](mailto:abonnement@digitalmcd.com)



## MCD THE DIGITAL ART AND CULTURE MAGAZINE

- > Published quarterly with dedicated themes
- > Bilingual editions: French and English
- > An artistic practice and innovating usage analysis
- > Feature article and interviews
- > Over a hundred pages
- > A reference collection

### Upcoming issues of MCD in 2015

- > mcd#77  
La politique de l'art
- > mcd#78  
Villes du futures
- > mcd#79  
Environnement 2.0
- > mcd#80  
Art & science

[www.digitalmcd.com](http://www.digitalmcd.com)

## who's

MCD - Musiques & Cultures Digitales

Quarterly

EDITORIAL EDITOR

Anne-Cécile Worms < nc@digitalmcd.com >

EDITOR IN CHIEF

Laurent Diouf < laurent@digitalmcd.com >

GUEST EDITOR

Shu Lea Cheang < shulea@earthlink.net >

ASSISTANT GUEST EDITOR

Annick Rivoire < annick.rivoire@poptronics.fr >

CONTRIBUTORS

Alain Le Cabrit < zadistan / poptronics.fr >

Alexis Rowell < alexisrowell@googlemail.com >

Annick Rivoire < annick.rivoire@poptronics.fr >

Brett Scott < b.r.scott.06@cantab.net >

Denis Roio alias Jaromil < jaromil@dyne.org >

Économie solidaire de l'art < contact@economiesolidairedelart.net >

Effie Amanatidou < effie.amanatidou@gmail.com >

Ewen Chardronnet < e.chardronnet@gmail.com >

Geert Lovink < geert@xs4all.nl >

Gerald Nestler < mail@geraldnestler.net >

Giorgos Gritzis < ggritzis@auth.gr >

Giselle Beiguelman < desvirtual@gmail.com >

Gregory Chatonsky < chatonsky@gmail.com >

Harry Halpin < hhalpin@ibiblio.org >

Karolos Iosif Kavoulakos < kkavoula@gmail.com >

Kate Rich < kate@rational.org >

Lenara Verle < lenara@verle.com >

Mabel Tapia < tapia.mabel@gmail.com >

Marco Radium Sachy < radium@dyne.org >

Maria Ptqk < mariaptqk@gmail.com >

Michael Aschauer < m@ash.to >

Michel Bauwens < michel@p2pfoundation.net >

Nathaniel Tkacz < nathanieltkacz@gmail.com >

Olivier Auber < olivierauber2@gmail.com >

Paolo Cirio < press@paolocirio.net >

Primavera De Filippi < primaver@gmail.com >

Regine Debatty < regine@wmmna.com >

Shu Lea Cheang < shulea@earthlink.net >

Stephanie Reisinger < stephanie.reisinger@gmx.de >

Tanja Brandmayr < tanja@servus.at >

Tiziana Terranova < tteranova@tiscali.it >

TRANSLATION ENGLISH > FRENCH

Valérie Vivancos < valerie.vivancos@gmail.com >

TRANSLATION FRENCH > ENGLISH

Cherise Fong < cf@espionne.com >

TRANSLATION GERMAN > FRENCH

Annabelle Georgen < bonjour@annabellegeorgen.fr >

TRANSLATION PORTUGUESE > FRENCH + ENGLISH

Marcia Bechara < marciabechara@ymail.com >

GRAPHIC EDITOR

Yann Lobry < contact@rendez-vu.fr >

Cover © Zéro Euro/Michael Aschauer, Piotr Pawinski/Fotolia.com

MCD / MUSIQUES & CULTURES DIGITALES is published by the association Musiques & Cultures Digitales presided by Hadda Fizir.

ASSOCIATE DIRECTOR

Guillaume Renoud-Grappin < guillaume@digitalmcd.com >

PRODUCTION MANAGER

Camille Bari < camille@digitalmcd.com >

MARKETING & PARTNERSHIP

Muriel Knezek < muriel@digitalmcd.com >

< communication@digitalmcd.com >

HEAD OF DEVELOPMENT

Milka Wagner < milka@digitalmcd.com >

SUBSCRIPTION

+33 (0)1 83 89 13 73 < abonnement@digitalmcd.com >

ADDRESS

Musiques & Cultures Digitales, 8 rue du Général Renault, 75011 Paris, France.

PRINT

ETIC graphic, Z.I. des Touches, BP 2159, 81 boulevard Henri Becquerel, 53021 Laval cedex 9, France < www.etic-graphic.fr >

DISTRIBUTOR: MLP

INTERNATIONAL DISTRIBUTION: Numero0

Tél: +33 (0)9 82 42 63 09 < marie@numero0.fr >

ORDER ON LINE < www.digitalmcd.com >

All rights reserved

ISBN 978-2-36807-042-0 - ISSN 1638-3400

Dépôt légal à parution: January 2015.

**mcd**<sup>®</sup>  
magazine des cultures digitales

Site < www.digitalmcd.com >

E-mail < info@digitalmcd.com >

Infos < www.facebook.com/digitalmcd >

Social < https://twitter.com/mcd\_mag >

**EKLIZ**  
Fabrique culturelle et numérique

**ran**  
RÉSEAU ARTS NUMÉRIQUES

MCD is member of Réseau  
Arts Numérique (RAN)  
< www.ran-dan.net >

Sold at newsstands and bookshops:

- > Lyon : 57 place de la République, 69002
- > Lyon : K SNCF Lyon Part Dieu 1, 69003
- > Lyon : 75 rue Massena, 69006
- > Lyon : 39 rue de St Cyr, 69009
- > Marseille : Relay Esplanade St Charles, 13001
- > Marseille : Presse Relay Galerie Marchande, 13001
- > Marseille : CCI Marseille Provence Aéroport, 13700
- > Nantes : 9 rue de la Paix, 44000
- > Paris : 67 rue St Honoré, 75001
- > Paris : 2 rue des Petits Carreaux, 75002
- > Paris : 217 rue St Maur, 75010
- > Paris : 107 avenue Ledru Rollin, 75011
- > Paris : 95 avenue Philippe Auguste, 75011
- > Paris : 25 avenue des Gobelins, 75013
- > Paris : 318 rue Vaugirad, 75015
- > Paris : 64 av de Versailles, 75016
- > Paris : 7 place de Clichy, 75017
- > Paris : 62 rue Damremont, 75018
- > Paris : 4 avenue Jean Jaurés, 75019
- > Paris : 3 place Gambetta, 75020
- > Strasbourg : 4 rue du Fbg de Pierre, 67000
- > Toulouse : 19 Place du Salin, 31000
- > Quimper : 4 rue St Francois, 44000

Available for reference:

- > Bourgogne : Espace Multimédia Gantner, 1 rue de Varonne
- > Gardanne : Médiathèque Nelson Mandela, Bd Paul Cézanne
- > Issy-les-Moulineaux : Le Cube, 20 cours Saint Vincent
- > Montreuil : Bibliothèque Robert Desnos, 54 rue Victor Hugo
- > Paris : Bibliothèque Publique d'Information, 19 rue Beaubourg, 75004
- > Paris : Centre Musical Barbara Fleury Gouttes d'Or, 1 rue de Fleury, 75018
- > Paris : IRMA, 22 rue Soleillet, 75020
- > Paris : Médiathèque musicale de Paris, Forum des Halles, 75001
- > Paris : NUMA, 39 rue du Caire, 75002
- > Perpignan : École des Beaux-Arts, 3 rue Maréchal Foch
- > Reims : Centre culturel Saint-Exupéry, Esplanade André Malraux
- > Rennes : Bibliothèque Les Champs Libres, 46 bd Magenta
- > Rennes : Le Jardin Moderne, 11 rue du Manoir de Servigné
- > Rosny-sous-Bois : Espace Jeunesse - Cercle J, 45 rue Gardebled
- > Saint-Denis : Association Synesthésie, 15 rue Denfert Rochereau
- > Saint Herblain : La Bibliothèque, rue François Rabelais
- > Saint Médard en Jalles : Médias Cité, Place de la République
- > Toulouse : Centre culturel Bellegarde, 17 Place Bellegarde
- > Villeneuve d'Ascq : Bibliothèque Université Charles de Gaulles Lille, 3 rue du Barreau

# mcd<sup>Ⓞ</sup>

magazine des **cultures digitales**

# #75

septembre/octobre/novembre 2014



# Archéologie des médias

**ARCHIVAGE / RECYCLAGE / VINTAGE / MÉDIATION  
ÉCOSYSTÈME / COLLECTION / EXPOSITION / CONSERVATION  
OBSOLESCENCE / LOLCAT / BUG & GLITCH / RETROGAMING  
STEAMPUNK / INGÉNIERIE**

[www.digitalmcd.com](http://www.digitalmcd.com)

DOM: 9.9€ - BEL/LUX: 9.9€ - CH: 14FS - CAN 14.99\$ca - D: 10.50€ - N CAL/S: 1250 cfp - POL/S: 1450 cfp

L 14922 - 75 - F: 9,00 € - 30



9€, available on [www.digitalmcd.com](http://www.digitalmcd.com)



# GRMTools<sup>3</sup> by ina



Les plugins GRM Tools - conçus et réalisés par l'Ina GRM - sont le fruit de nombreuses années d'expérimentations et de développement de logiciels de traitement sonore.

**De notoriété mondiale, ils sont utilisés aussi bien par les musiciens, les compositeurs et les designers sonores que par l'industrie du cinéma, les studios de production musicale et de jeux vidéo.**

**NOUVEAU**  
**BUNDLE**  
**SPACES**  
DISPONIBLE  
DÉBUT 2015

Aux incontournables GRM Tools Classic (8 plugins), Spectral Transform (4 plugins), Evolution (3 plugins) s'ajoute le nouveau bundle Spaces (3 plugins).

## **SPACES**

Les trois nouveaux GRM Tools du bundle Spaces vous offrent trois traitements pour explorer l'espace, fragmenter et disperser les sons, les filtrer et les retarder dans l'espace multicanal.



La troisième génération de GRM Tools  
disponible sur [store.inagr.com](http://store.inagr.com)

**ina**  
GRM