

# “Exploit” in Theater

29th Saal G 18:30

Note to CCC content team:

Videos marked “silent” are videos I speak over and audio team does not need to worry about leveling.

I will upload v1.0 on early on 29<sup>th</sup>.

Repository of text, slides (potentially some videos eventually) available at:

<http://cypherpoet.com/31c3>

[slide: situation rooms]

[video 2:49 : situation rooms trailer]

[slide: the following is...]

[video 3:36 : situation “hacker”]

[slide: situation rooms]

What you were just shown was one scene from Situation Rooms.

[slide: situation rooms cast]

Abu Abdu Al Homssi	Syria	Volker Herzog	Germany
Shahzad Akbar	Pakistan	Richard Khamis	South-Sudan
Jan van Aken	Germany	Wolfgang Ohlert	Germany
Narendra Dweker	India	Irina Pambratowa	Russia
Nathan Fain	USA	Ulrich Pfaff	Germany
Reto Hürlimann	Switzerland	Emmanuel Thauay	France
Maurizio Gambarini	Germany	Amir Yagel	Israel
Andreas Gellera	Germany	Youssef H. Al-Tamimi	Kuwait

- I. This piece by Rimini Protokoll deals with the arms trade and brings together individuals that share their personal experiences.
- II. An astonishing cast in which I think my role as the “hacker” was the absolute least important. Individuals that survived forced migration and near drowning, politicians from the German parliament, engineers that designed weapons, former military personnel that used such weapons.
- III. I played the role of the hacker.

[video 0:03 silent : embedded\_analysis]



I reverse engineer hardware and software. But I'm not here to discuss that.

[slide: blank]

Instead I'm going to talk about my work in theatre and try to explain the motivations and questions that influence this work.

*pause drink water*



[video ∞ silent : cathedral and bazaar]

- I. In 1997 Eric S. Raymond, an engineer and early evangelist for open source software, wrote a parable called The Cathedral & The Bazaar. In this he segments forms of software development into two models.
- II. The centralized model where code is submitted to a central repository for arbitration, the Cathedral, and the open source model that utilizes collective consensus where arbitration comes through the act of consumption, the Bazaar.
- III. This parable describes the greater efficiency of open source organizational models. But this philosophy is one that extends well beyond code.
- IV. The application of this philosophy to other hierarchies can be described as the “decentralisation of power”. The fields of journalism and finance are examples where the impact of decentralization can be clearly seen today.
- V. There is efficiency and elegance to this philosophy that I think warrants considering what the broader impact will be.
- VI. In particular my gaze is fixed on the Bazaars reliance on “arbitration through consumption”. For example, applied to democracy we are presented with the question of what happens when you replace the vote with consumption.

*pause short*

The works I'll show I believe touch these topics. Before we get there I'd like to present a suggestion for how to perceive this talk.



[video 0:30 : marshal mcluhan - terror]

This clip is used in the Anonymous P. show. My apologies to Christiane and Chris for taking it out of it's context but I want use it to emphasize something: if during the next hour I appear to be pushing terror this is not my intent. My interesting is human behaviour. But theater is not a space for literal debate or discussion. It is an environment for experience where questions presented in poetic form can look like terror.

*Pause water*

The first collaboration I'd like to discuss is Hermann's Battle with Rimini Protokoll.

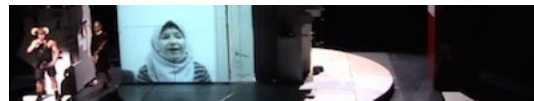


[video 0:44 : hermanns battle – opening]

[slide: hermanns battle cast]

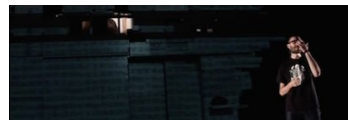
- I. Rimini Protokoll create documentary theater works. Their actors are called “experts” that share experiences from their life. Hermann's Battle was a project that spanned 2010 and 2011.
- II. The experts were Barbra, an Egyptian sharing questions surrounding the Arab spring. Remzija who survived a massacre in Bosnia. A retired NATO Colonel discussing the same issues. Myself discussing my experience growing up as a non-Jew in the Israeli Territories during the second intifada. And, Peter Glaser a CCC veteran who provided a philosophical view of internet culture and hacking from his life.

[slide: arab spring]



[video 5:48 : Barbra, internet censorship]

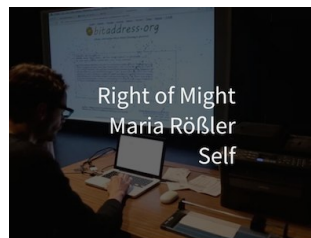
[slide: cypherpunks]



[video 3:12 : Nathan, TOR]

[slide: assassination markets]

In this show we also describe assassination markets and the assassination politics model from Jim Bell. But this became the inspiration for the next project I'd like discuss that deals with it more directly.



[video ∞ silent: Right of Might]

- I. We presented this in a lecture performance form at the Diskurs Festival in Giessen very recently. -- this project is ongoing and will likely change a good bit in the future.

- II. The name “Right of Might” comes from Freud’s letters to Einstein in 1932 that Jim Bell quoted in his Assassination Politics paper.
- III. In this I performance I play a character. A character that I question strongly. This neoliberal internet libertarian that believes decentralisation of power will solve all problems. That ecological problems, are economic, because of competition, which is because of male psychology, algorithms are not male = bitcoin is an algorithm to solve our problems.
- IV. What you see on the screen is the beginning of the show. My character prints paper bitcoin wallets, puts 1 euro worth of bitcoin on each and hands them out to the audience.

[slide: inflation & growth]



[video 2:28 : inflation]

[slide: blame males]

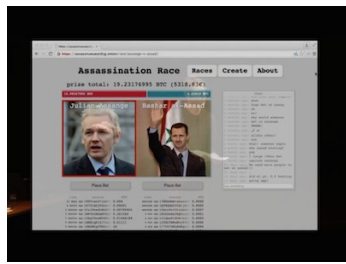
[video 1:43 : male psychology]

[slide: currency is power]

[video 2:43 : thatcher]

[slide: blank]

*pause short*



[video 2:15 : Assange v Assad]

Note: the Assange versus Assad market shown not real and created specially for the show.

*pause water*

Perhaps for some this is a moment of terror, where the algorithmic environment wraps around the physical. The era in which Freud and Einstein discussed the concept of Right of Might... the superior strength of a collective over the violence of individuals... was the period of unionisation and greater importance on the collective. But what happens when you are left with only the collective?



[video 0:21 : absolute democracy]

[slide: absolute democracy]

This was my closing scene from Hermann's Battle. The statement "technology will make this happen" is a hat tip to the superior efficiency of the Bazaar.

[video ∞ silent: cathedral and the bazaar]

Assassination Markets sit at the most extreme end of examples that utilize collective consensus. These are markets that I hope and believe we will never have to depend on. But it brings me to consider the idea of collective consensus as a whole, and come back to the question of what happens when you reduce the weight of a stakeholder to that of a consumer.



[slide: Barbra avaaz.org]

In Hermann's Battle Barbra talks about Avaaz.org, a digital action group that attempts to leverage the "like" button for action. Their work is important but I ask myself what the impact our perception of our "stake" in political issues changes when the "like" button is our voice.



[slide: ballot]

what effect does the pervasiveness of the things in the category on the left, have on how we perceive the things in the category on the right. When "doing your part" is turned into an act of consumption.

*pause long*



[video 1:07 : anonymous p trailer]

[video 3:07 : passwords]

[slide: anonymous p.]

Anonymous P. is a show that covers the broad issue of privacy. Chris and Christiane would have loved to be here presenting instead of me but they are away on another project. The

show is one between you, your device and the actors and hackers in the space. We use various methods to turn your device into a tool for discrimination. What you see here are people registering for the data trading game that plays an important role in the show. We also monitor all network activity.



[slide: anonymous p. space & credits]

The show is setup as an installation. It oscillates between dramatic interpretation and direct action. Set around the myth of Prometheus, who stole fire from the Gods and brought it mankind, Chris and Christiane turn it upside with Prometheus bringing the gift of darkness to the digital world.

The first thing the user is presented after registering for their randomly selected persona is...



[slide: who am I 1]

The pre-game game, as we call it. Shown is a site made by Sam Doiron earlier this year to illustrate that if a website you visit, any website, can convince you to use your mouse in a certain manner they can reveal your browser history. In the original version, once you click on the red squares you are presented with ...

[slide: who am I 2]

an overview of your interests. In our version we don't reveal the results and just add your browser history to all the other data we use in the show

*pause short*



[slide: the space]

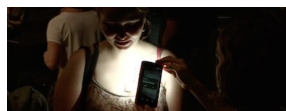
Once in the space you are invited to check out the various installations. You are also allowed to play the data trading game which we built for the show. You'll notice in this picture a large network packet monitor.



[video 0:15 silent : sniffer.js]

Christiana reads out packets at the start, while everyone is busy playing the game. The packets come back at other moments the show and act as a ghost reminding you how

opaque our understanding of our devices is. The packet sniffer was custom built for the show so that the actors could find the details that are relevant in a clean way. The code can be found at the link and is released under the Non-White-Heterosexual-Male-License. Enjoy.



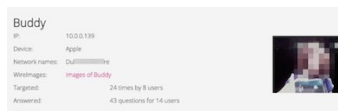
[video 0:32 silent : scanning]

Once in the show you can scan each other and start compiling data for us. Each time you scan someone's QR code, which are stickers they wear that were given to them upon registration, you are asked to answer a few questions on that person.



[slide: question]

Such as: "Is this person likely to cheat on their partner?" With each question you are shown what the monetary value of the answer is with each question. Meaning the value it would have if we sold this information. Each time you answer a set of questions you can see that person's profile. But you are never able to see your own profile.



[video 1:58 silent : profile admin]

In the meantime the hackers and actors are monitoring the network and the profiles for interesting details that will be used in some of the scenes. Here is an example profile. We know already the person's phone type, which for iPhones often mirrors their real name. From the data we can often determine relationships to other audience members. We also see how much value you have provided us for eventual sale in a data trading market.

...

tracking

This data gets used in various scenes such as this one



[video 1:25 : phil clairvoyance]

Data also influences other elements such as ordering a drink at the bar



[slide: bar]

This person was charged 1 Swiss franc extra because they use an Apple device and another euro because the audience thought they made more than 5000 francs per month.

Before each show we research the names we get from the theater of people of people that already reserved tickets. We find pictures of those coming to the show and use them in this scene where Christiane describes how facebook's facial recognition algorithms work.



[video 2:33 : faces]

It is very effective, if not creepy, seeing your picture being torn through.

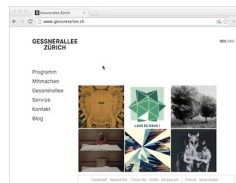
*pause*



[video 4:45 : Chris dream]

*pause*

This show was very research driven. One of the topics we touched was the issue of forgiveness. What is forgiveness in a world that not forget. Or more importantly what is the importance of being able to forget, to forgive yourself.



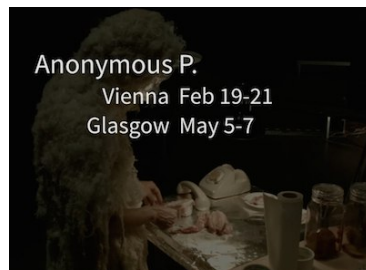
[video ∞ silent: site hack]

This inspired an intervention that takes place before and during the show. A week or so before the show we hijack the website of theaters that will let us, and users are presented this sequence on their first and every 4<sup>th</sup> visit to the site. The site begins opening links to other sites in your browser in an attempt to seed entropy into your digital profile. In a very real manner. This includes sites to subversive and questionable political groups around the world. It does this using the Google I Feel Lucky button which means if you happened to be logged into a Google account before visiting the site not only will any state agencies monitoring the network see your access to these sites but it will also be recorded in your Google profile.

In a world that doesn't forget forgiveness is noise, forgiveness is entropy.

*pause*

[slide: anonymous p. dates]





But let me bring this back to where I started, with the examination of what effect collective consensus and the Bazaar has on our collective behavior. During one show one of the individuals whose passwords were leaking was put in the hut. When I asked her if she realized this could happen she said very strongly that she didn't care. I explained we could see all her emails and all her instagram activity and a mountain of other data coming from her phone in the background.

[slide: blank]

She didn't care. To me she represents an increasing majority and show us an important change happening to the definition of self. From *identity of self* to *network as identity*. What I'm trying to say is that the issue of privacy touches something broader than just people not caring to keep secrets any more.

At the Academy of Asociality this year philosopher Alice Laagay talked about Georg Simmel and Jacques Derrida and their works on the importance of secrecy to the definition of self. She summarized their argument with the statement:

[slide: Lagaay]

*"you are an individual only to the extent that you are not transparent"*

I would argue that Simmel and Derrida are a product of their time and when contrasted with today we see that the physicality of their world hid a transparency surplus.

*pause short*

And this is part of the reason behind my statement that when it comes to privacy it's about post-existentialism not post-privacy.

[slide: blank]

I am a proponent for privacy technologies and would spend more of my time working on them if I could but I think if there is one realm of technology that will have an effect on this changing behavior it's not so much tools as it is ethics in the protocols. This can be summarized best in song.

[video ∞ silent : GeolP GEMA]

hmm...

...

What you are witnessing here is a political philosophy embedded deep within the most critical protocol of the Internet. GeolP is a broad name that describes part of the internet architecture that, for example, permits Youtube to enforce GEMA rules upon visitors from Germany. This is possible because every computer online has an internet address that can be used to determine nation of origin. Any attempt to re-code the internet protocols that permit for this would run into a wall of resistance due to business models that increasingly utilize it. It is the same feature that allows for censorship and surveillance.

[slide: xkeyscore rule]

But this same "feature" I argue may kill people. Re writing the BGP routing protocol to fix this would provide a solution that prevents the tracking allows for the tracking of dissidents living

under despot regimes. Any engineer should be utterly ashamed that it took the NSA scandal to consider this, and yet few do. In an official appeal to the Internet Engineering Task Force a professor from France asked them to consider how their work could better account for the ethics in the protocol. Their responses, and I'm paraphrasing.

[slide: IAB "meh"]

In an email on the cypherpunks mailing list from earlier this year someone wrote a message titled "GeolP is a threat to Democracy" he ended with.

[slide: bourbaki]

And I will end there.

Notes to self:

(in relation to the fear and philosophising)

with the tone of technological determinism mcluhan talks about the earth no longer being nature and being the product of an art work. yet, nature is still here, for now, leaving much of that statement to be seen as poetry. poetry that is often misused like religion by less poetic architects of social behavior, often with horrible consequences. today our poets are coders but they also embody the architect at the same time, and they hardly realize it.