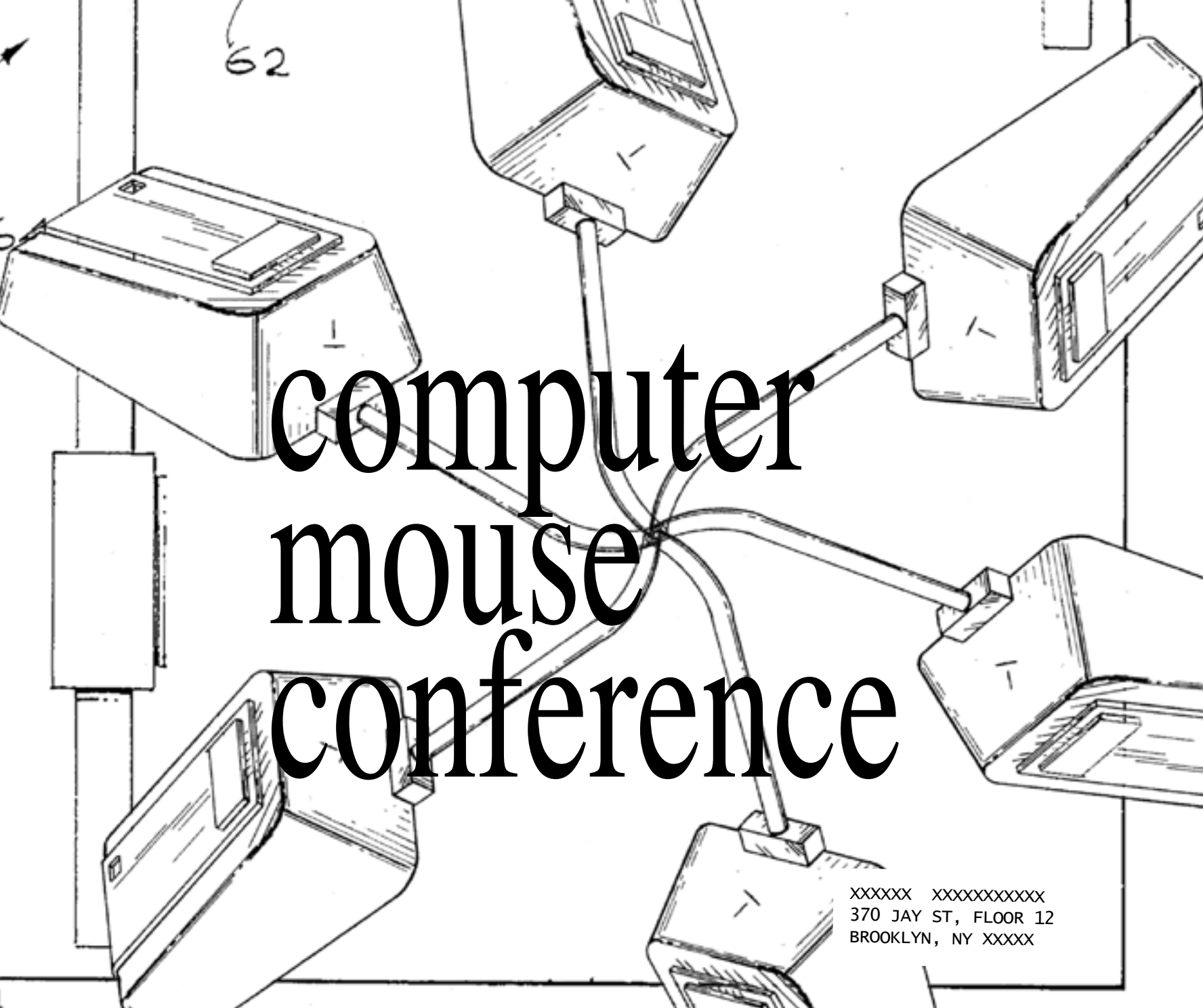

computer mouse conference

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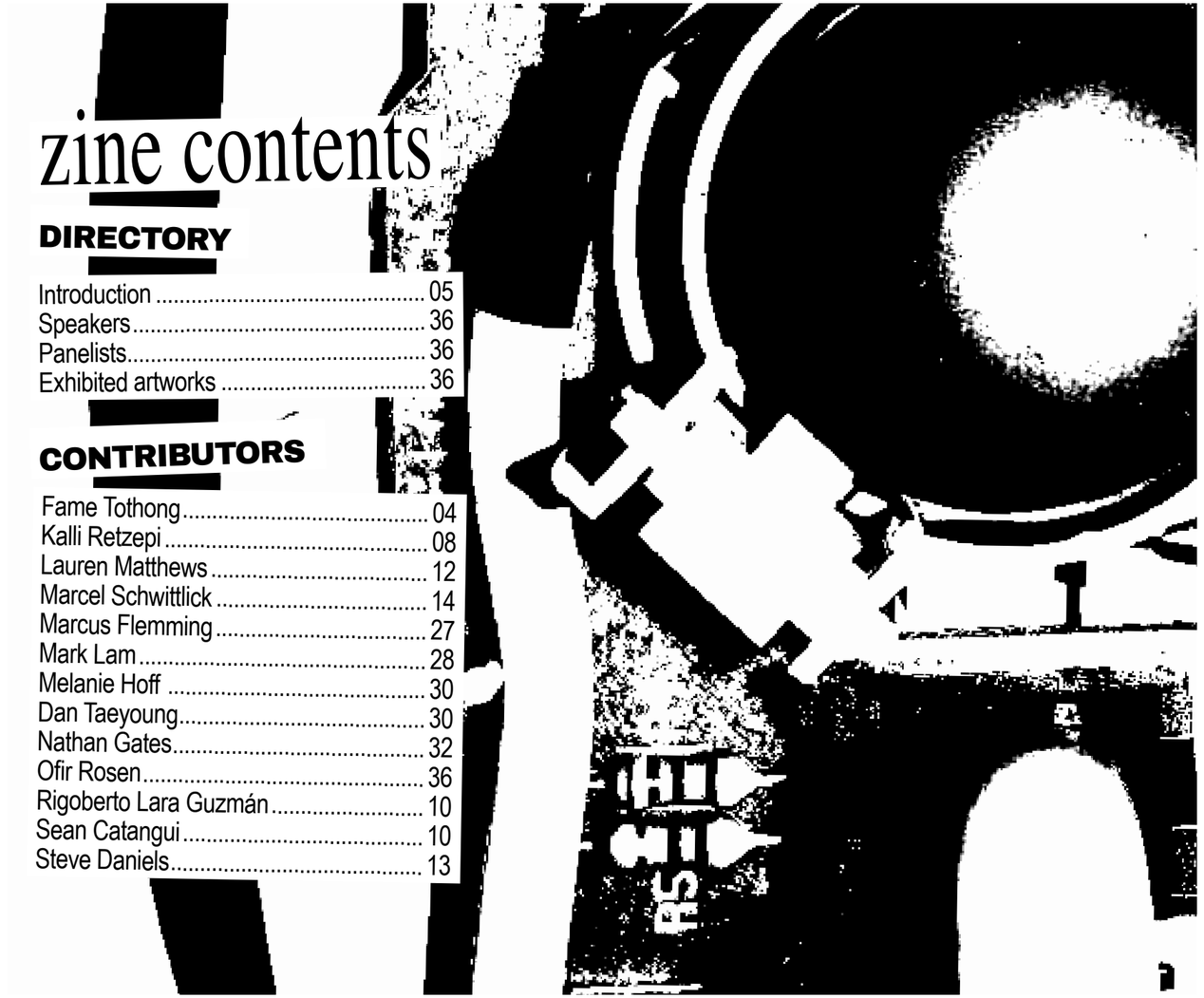
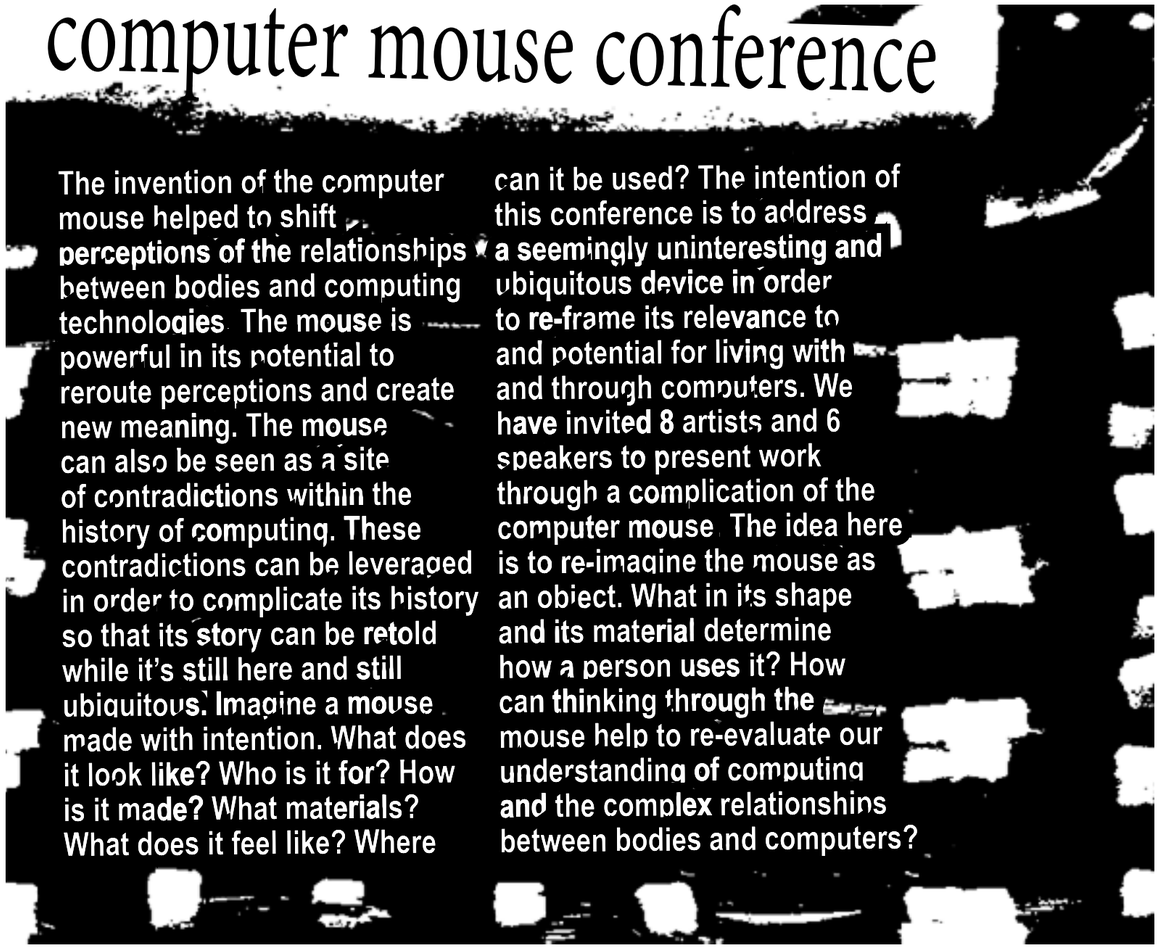


COMPUTER MOUSE CONFERENCE
ORGANIZED BY ASHLEY JANE LEWIS AND EMMA RAE NORTON
SATURDAY, NOVEMBER 9, 2019
NEW YORK UNIVERSITY, INTERACTIVE TELECOMUNICATIONS PROGRAM

computer mouse conference



The invention of the computer mouse helped to shift perceptions of the relationships between bodies and computing technologies. The mouse is powerful in its potential to reroute perceptions and create new meaning. The mouse can also be seen as a site of contradictions within the history of computing. These contradictions can be leveraged in order to complicate its history so that its story can be retold while it's still here and still ubiquitous. Imagine a mouse made with intention. What does it look like? Who is it for? How is it made? What materials? What does it feel like? Where can it be used? The intention of this conference is to address a seemingly uninteresting and ubiquitous device in order to re-frame its relevance to and potential for living with and through computers. We have invited 8 artists and 6 speakers to present work through a complication of the computer mouse. The idea here is to re-imagine the mouse as an object. What in its shape and its material determine how a person uses it? How can thinking through the mouse help to re-evaluate our understanding of computing and the complex relationships between bodies and computers?

WHAT DOES IT MEAN TO BE A ‘MOUSE’?

Nuntinee Tansrisakul

Let’s assume our bodies, made up mostly out of water, are flattened, digitized and re-sized into a few black and white pixels a.k.a. a mouse. Our movements and expressions, walking, turning around, nodding, smiling become clicking, double

clicking, right clicking, sliding, scrolling, scrolling and scrolling...

We are only seen as xy coordinates now
Most of the time we spend on the screen, we’re being perceived as two numbers which define our position in the space, our presence is just a few pixels in this enormous screen space

We all look the same
We are pointers of different variations. Our actions are guided by how our bodies interact with the environment; that moment when a mouse turns into a finger suggesting that we click, or the rainbow wheel of death telling us to slow down

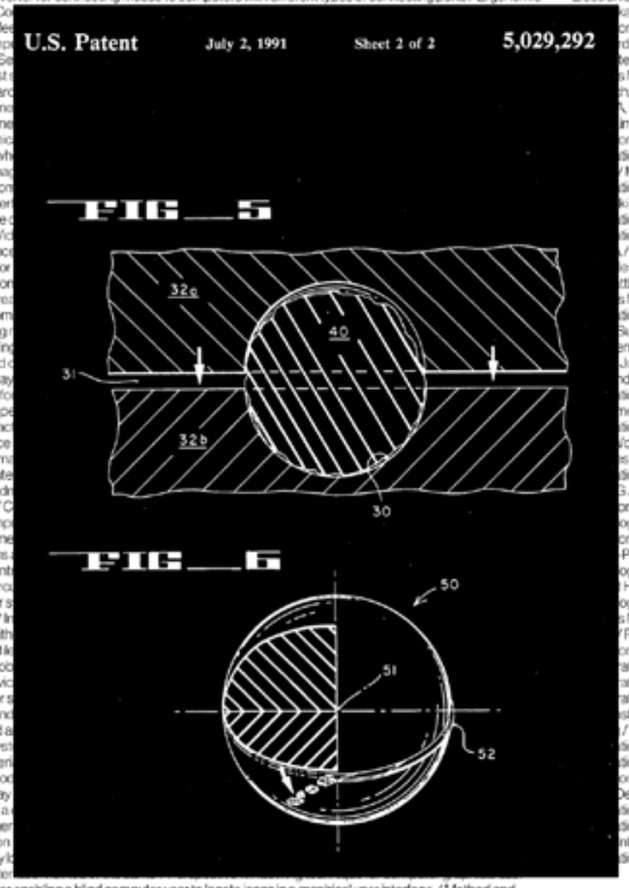
We think we’re alone
Have you ever seen more than one mouse on a

screen? We only see ourselves; although a million of us could be on the same webpage at the same time. Are we really alone?

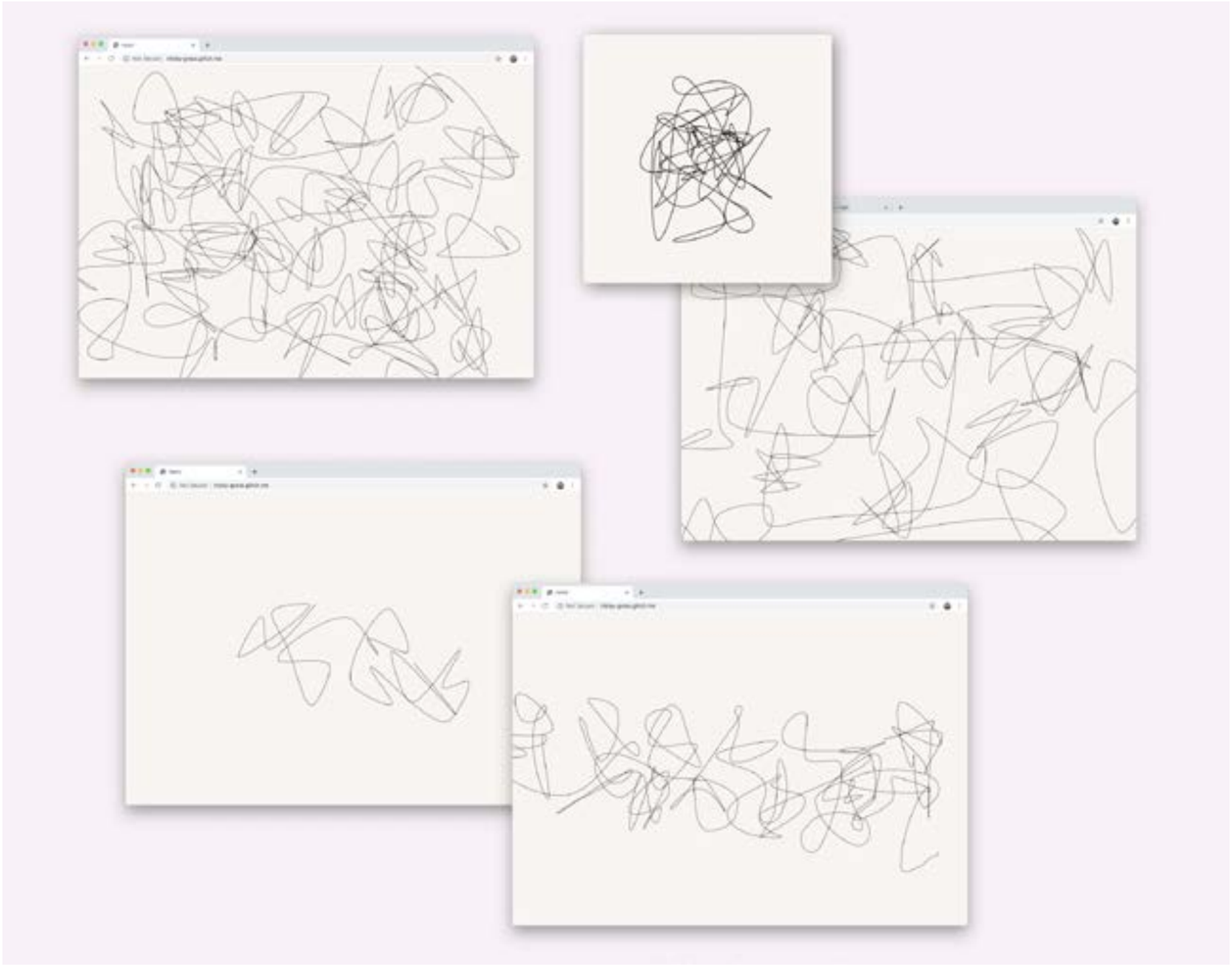
We’re actually more expressive
We don’t feel as awkward about addressing

uncomfortable questions, even when we’re sitting in the same physical space and sharing the same digital environment

So... what does it REALLY mean for us to be mice? And how can we design a more exciting web experience around it? (Also, doesn’t it sound funny, that instead of ‘a mouse’ we’re mice?)



Kalli Retzepi



Sean Catangui

TO A COMPUTER MOUSE, ON TURNING HIM UP IN HIS NEST WITH THE MOVING BOXES

Lauren Ellis Matthews

Oh tiny sleekit clicking bubble
Forgot in generations' rubble
Your back in squares divided double,
I used to use you.
You crept across with little trouble.

A shining page view.
But now you're broken, limp and dusty,
And buried in an attic musty.
You're obsolete, no one is lusty —
Off in the offing,
In strangling tail, abandoned thusly
Your unheard coughing.

And your successor has some flair too:
More sleekit, silver, tailless, square too.
You see, we bred it out (that hair too).
He's docile, frozen.
We squisht him thinly, built-in lair too,
He's flat, and chosen.

So here's the thing, my little mouselet,
Your nimble paws, I'm willing to bet —
Though once we cleaned them, dried them when wet
Are tired and done for.
You served your time as tool, paid all debt.
Your tour is over.

But we have miles to lumber, heigh-ho
We die and die and die and die so
Our children learn what we cannot know.
But you are sterile.
Escaping from this endless tarot
While we stay feral.

O little mousling torn asunder,
Your breedy dreams we steal; we plunder.
We needn't you no more. You wonder,
What could I have done?
But nothing would have spared you. Blunder,
Blip, temp, fad, outrun.

But now you'll grow a nation quiet,
A radicant, oh tangled riot.
Of rubber mouse tails, compost diet
So nutrient dense.
A rat king blooming, who would buy it?
Planned obsolescence.

Mus musculus, your time is over.
Return you now into the clover.
Bucolic living as a rover
With fuzzy brothers.
You're pied, you're helpless, we the drover.
There will be others.[1,2]

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1 Adapted from Robert Burns' poem "To a Mouse, on Turning Her Up in Her Nest With the Plough, November, 1785."

2 This piece was originally published in Silica's Issue No. 3: Critters, May 2018.

Ofir Rosen

el internet es una ratonera global
Rigoberto Lara Guzmán
scanned oil pastel and pencil drawing on 3" x 5 " index card; half toned in post.

Enigmatic epigraph in the spirit of a Basquiat SAMO © street tag: "the internet is a global mousetrap" refers to the entrapment of working poor POC into remote, low–tech; low wage IT labor for high tech; high earning multinational corporations. Click bait is not only a consumer-side experience but the motor behind today's digital underclass, or what Gray & Suri call Ghost Work.

HOW I LEARNED TO STOP WORRYING AND LOVE THE SHELL

Mark Lam

I use to be an avid computer mouse user and a pretty good one at that. I had the precision to draw perfect circles with bezier tool and the speed for headshots in Counter-Strike, but when I began using text terminal emulators as my primary interface for file navigation, I found that my relationship towards computers and the act of computing itself began to dramatically change. Since embracing the shell I have become more conscious of my computer actions to be more efficient with the time I spend on computers as well as the footprint that computing has on my life.
The terminal can be a foreign and scary place for those coming from purely using graphic interfaces. Some might think it is a dated way to use a commputer as Macs and Windows continue to make updates to their desktop interfaces. Additions like the navigation dock in OSX or Windows tiles are meant to simplify the interface but each update requires time to learn the changed features that they offer. Whereas the Bash shell was first released in 1989 and continues to be bundled in new macOS and the Windows counterpart, MS-DOS, was released in 1981. The fact that these text interfaces are still included by default is testament to the robustness of the text interface.
Shifting from a graphic interface to a text interface can feel like stepping back in time. The familiar monospace on black evokes the history of modern computers and the blissful naivete of early technological pioneers before consumerism and big brands have enveloped the screens around us. The widespread use of graphic user interfaces play a large part in how major computer

companies have shifted modern computing from DIY culture towards a culture of consumerism. It becomes advantageous for them to obfuscate the inner mechanics of computers and operating systems to create a reliance on their retail centers and genius bars. The point and click actions appeals to a larger user base by simplifying the interface at the cost of abstracting the act of computing to the point where a majority of users no longer know even where files and programs are located on their hard drive and thoughtlessly point and click until it can be found.

The minimal features of text interface forces me to be more mindful about my computer actions. Each action of navigating through my file system must be manually typed out. While this may appear to be more “work”, these slower actions allow for more contemplation as I operate a machine. In added benefit is that many Unix terminals save the history of commands in case I ever want to remember what I was previously doing. These small actions and the text interface of the terminal also forces me to be more conscious about organizing my directories and more syntactic about my file naming convention, which I benefit from beyond using a computer.

Finally using the text terminal allows me to take part in a greater community. There is a great number of technologists and developers that are contributing to the free and open source software movement. The principles of the movement is grounded in openness and co-operation in the pursuit of knowledge. But a great deal of these programs begin and operate on the command line, so some proficiency with the terminal is needed to benefit.

In the end I highly encourage all intermediate and curious computer users to try using a terminal for a period of time. While its unneccessary for everyone to perform sysadmin command line magicry, being comfortable enough to navigate your file system and perform simple tasks might just change your view of computers.

# of mice and men

These men failed to be there for me when I needed them most. Instead, they were dismissive, angry, and forceful. The phrases on each image are things that men have said to me after I expressed doubt or fear.

These are screenshots from an interactive computer program. In the video, I am massaging myself with a computer mouse after a long day of work. As I drag the mouse across my physical body - the pointer floats across my body on the screen, which is made up of a mosaic of individual images. Each image shows a different part of my body. These images enlarge when the pointer hovers over them. The words on each still image are direct quotes from other cis men in my life.

My guess is that these men never learned how to be gentle with themselves. I refuse to be like them. I deserve gentleness. I like pampering myself. I'm learning about sensitivity. I'm interested in subverting the mouse - a tool grown out of patriarchal control. What happens if I bring the responsiveness of the mouse back to my body - closer to my heart?

Marcus Fleming

Mischief Ouijia
Melanie Hoff, Dan Taeyoung

Atta-matic: mind the body
Fame Tothong

Mousepad
Shira Feldman

MOUSEPAD

Shira Feldman

Consider
the discovery of
the mousepad, 200 years
in the future.

Rubber squares of
form & function
ergonomics rendered
obsolete.

What will be thought of the custom
printed mousepads? The family photos
embellished upon synthetic material?

And how to explain those shrunken
Persian Rugs? A miniature carpet
adorned with texture and fringe.

Perhaps they will be stitched and quilted,
forming a cultural heritage of
computation past.

FEELING DATA

Interview by Julius Voigt featuring Marcel Schwittlick

JULIUS: How are you feeling, now that the exhibition is over?

MARCEL: The exhibition is actually not over, yet. The finissage is on Saturday and I'll be around for another two hours. But in general I am happy and satisfied with the exhibition. Almost everybody that I invited showed up to the opening already. I didn't expect that since at the same time, the Berlin Art Week was running. I was actually surprised, everybody was there. Though I have to admit I put a lot of effort into inviting everybody very personally this time. Essentially I started inviting in the beginning of this year when I sent around 50 drawings to various people all over the world. About half of these drawings I sent to friends and curators within Berlin, almost all showed up the opening.
Apart from that I am pleased with the exhibition itself, too. I really like how the works reveal themselves in this rather small scope. The exhibition was small and unobtrusive. I had a good time working on this, the process to create the drawings is quiet long and complex. One of the small drawings took 3 hours to draw. One of the larger ones even about 20 hours.

J: The machines draw that long, if I understand right? And what is happening before that, what was the process that lead to these?

M: Yes, exactly. This might be a good place to start at the beginning: In 2012 I started recording the movements of my computer mouse. I wrote a piece of software that is running in the background on the computer and records every single movement of the cursor on screen. Everything is being recorded and saved. All movement that happened between two clicks is interpreted as a line. It was important to me to save these lines are detailed and true to the original as possible. And with time I have developed a framework, a toolbox to handle these lines in various ways. This framework contains algorithms and processes which can modify the material "cursor lines". It's crucial for controlling and handling this overwhelming amount of data, which exists of millions of lines. It's a unconventional process to get an overview. You can't just easily print them and lay them all out on a table, to get an overview. This was a challenge for me, organising and exploring these recordings.
One thing that becomes obvious very quickly is, that they have no meaning anymore. The original intension of the movement is gone, nothing is left. There is no record of what each line was meant to do originally. I analysed the lines according to my aesthetic criteria and with time have developed a feeling for their properties. And then I attempt to condense these criteria into algorithms, the tool you need in order to shape digital material.
For some compositions, almost all lines don't match the criteria of the algorithms, for that particular artwork. This is the entire purpose of the framework. With this framework I can look at every single line automatically, inspect it's properties and if it's satisfies the requirements of the current algorithm, continue using this line down the pipeline for the next steps. This works pretty well in the digital world, because every line has a certain set of parameters and properties. And if it doesn't have these, one can calculate these properties for a line. A line consists of discrete points, which originate in the continuous movements of the hand, that moved the mouse or touchpad. Within the system of the computer, these continuous lies are being translated into pixel coordinates which, when connected, make up the line. Some criteria that I usually use is for example the absolute length of a line, how many seconds it took to draw it and more complex parameters like the entropy of a line.

J: What does that mean? I have heard about the entropy of the water before...

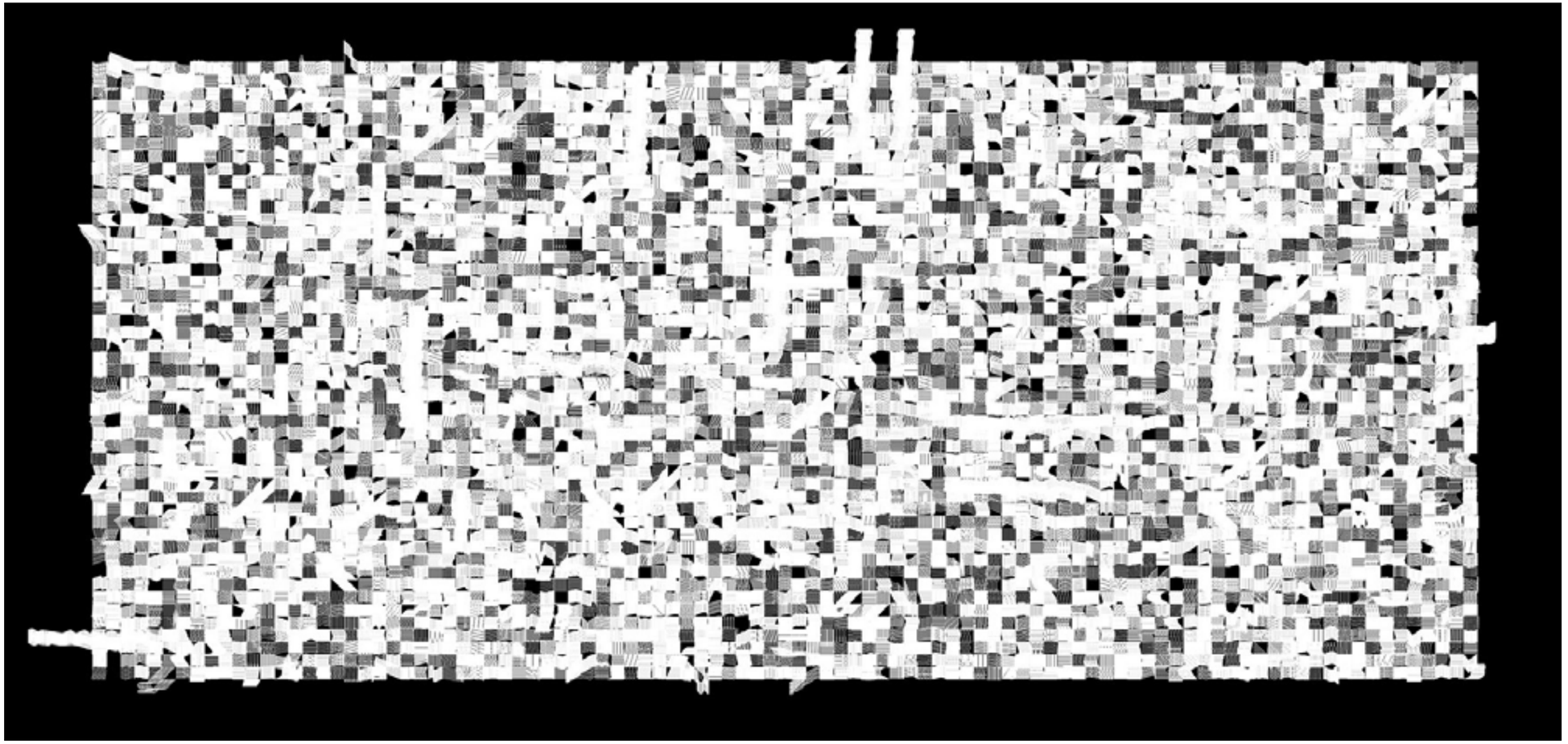
M: In this case this describes the unpredictability of a line, you can see it as a chaos-value or surprise-property. There are two definitions of entropy. One originates in the theory of thermodynamics and one from information theory. And I use the latter.
For instance, in the first step for many of my compositions I want to select lines according to its entropy. I prefer lines that are not too simple and straight and not too long, absurd, curled or figurative. Somewhere in between. And in the next steps I narrow the selection of lines by a few more parameters. Until only a few hundred are left over from the originally millions of lines. Thats where the manual decision begins. At this point I actually render and look at them. And just chose one by gut-feeling.

J: I can totally understand that process, the idea of it. Lines are being recorded and re-used. From this incomprehensible chaos something is being shaped, almost like a sculptural approach. The material wood, stone or in your case a line is being shaped and processes in more detail in next steps.

M: Interesting, but I can agree. But here it's virtual, digital with the help of algorithmic tools: code.

J: What I find interesting is that the tree that the wood is made of, for example, grows by itself. The digital material is not nature-made. You are synthesising the material at the same time?

M: You can compare it to that. We're starting from nature. Something that you don't fully understand. When you look at a



Composition #19
Marcel Schwittlick

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M: You can compare it to that. We're starting from nature. Something that you don't fully understand. When you look at a tree, it's something unknown in it's origin, how it's made of, it's something given. Its real. And it's got a high degree of entropy, everything is unique about it, every stick and leaf. And that's what I find also interesting about the digital material. Every line is unique and has had its original intention. But I am leaving this intention away. I am only interested in the human-ness, the human essence, the nature-aspect within these data. This is one of the core points for me. The movements are real, they have not been artificially synthesized for the drawings.
As you know, I am coming from the computer-corner. I studied computer science. I often work with data that has been created in a mathematical way or is being processed in a mathematical way. But lines, curves and graphs that are created by mathematical rules are boring to me, from an artistic perspective. Their content is exhausted quickly.

J: The mathematical approach is not an aesthetical one. You begin where a mathematician stops.

M: Well, you can generative complex lines with nested and filtered sine curves. Though I don't think they are notably interesting, they are predictable. And the sculptural approach is missing. This would be rather a chemical, take synthesis of meaning.

J: A more rationalistic approach. You have an aesthetic approach, the perception plays a big role. The result is, that is can be perceived.

M: And in this exhibition, I want to portrait a cycle. Here (pointing at Mousepad) is a mousepad, just a piece of paper that I have used as a mousepad for about 6 months. The majority of lines that I have been using have been created, or how I like to call it "performed", here, on this A3 sheet. This here is the origin, the source of the data. At least a fragment of the creation. From here on, everything went into the digital world, formed according to my aesthetic conception. We talked about this. And after that they are being transferred back onto paper, with the same bandwidth like they have been created. For me this is an appropriate technique. It's important that these works are not mistakenly seen as prints. They are drawings. Also because it's not a perfect, technical reproduction. The process of drawing yields more space and freedom to influence the drawing. The properties of the pen.

J: I find this interesting. Two things. The beginning is of analoguous-human kind, the hand movements on the paper with the technical device mouse. And this is being sent into the electronical-digital machine. And the end product is mostly analog. It's for the human perception pretty easy, because we're so familiar with the pen. We can feel the pen. And you bring this all together. The beginning and the end make sense to me. And in the middle the digital black box.

M: Well it's true, it's encapsulated. The Mouse is as simple as the pen. This is super fascinating for me and I am having endless ideas. Earlier this year I have been working on another project. I sent 50 drawings to friends and colleges, artists, curators and collectors all around the world.

J: It was a similar to what we see in the room here. But something different?

M: Exactly. Earlier this year it was Composition #37, this here is number #52.

J: And the framework is different for every series?

M: Well, you gotta picture the framework differently. The framework is the code that is shared among all the compositions and drawings. It's the code that is responsible for general filtering, handling the data, morphing lines in general. Every composition has it's own logic, a different algorithm that arranges the lines. This one could call the essence of one series, this algorithm.
I want to do some things a bit slower. I want to take more time for my projects. These drawings were finished already for some time, too.

J: I like that point. Doing things slowly. And rather one thing instead of 5 things in parallel.

M: Yes, just give things some more time. Let some space for passive thinking. Projects naturally become better, more mature like this.

J: Interesting topic, time. For your work very important, I think. You can really see time in your work. In the context of acceleration, digitalization. Through your work I get a new approach toward the digital and working in the digital.

M: Funny... One thing I noticed over the time, something that I tend to do. I build a system, a digital tool, just to create a scenario so that I wait for the computer.

J: I remember you once said that you love watching loading-screens.

M: Yes, I love it. Have a strong computer in front of you, all CPU cores on 100%, all RAM used, graphics card on 90°C. And then it's time to wait. Lovely.

J: Listening to the sound of the busy machine.

M: It's the same thing with drawing machines. Start and wait.

J: This seems like a new loading screen, in complicated and beautiful! You built your own loading-bar, so you can sit in front of it.

M: Finally get some rest! (haha). Just sit around with peace of conscience, knowing that work is going forward. But having a moment to breathe and relax, you gotta do nothing. But! Then you can duplicate yourself by still continuing to work, on something else.

J: Okay right. But this is another big topic. Doing multiple simultaneous work-processes.

M: Every software process is meat grinder for data. It's always about algorithms, logical processes that work upon data. And in the end they produce an output, which is also data. Input, process, output. And when you synthetically generate data, there is something missing I believe . The software has no meaning, when the data has no meaning. It's just going towards the void, because the beginning is missing. In my opinion, in digital art, generative art- the data is the most important. That's when life is coming into play.

J: I see.. otherwise the computer would be a meat grinder without meat..?

M: Yes, you can't eat artificial meat!

J: And here the whips in the room. These are completely different works, right?

M: Totally different. But they fit the topic of the exhibition very well. Finally a simple concept for one of my works.

J: This seems like a completely different approach, different way of working, too. Much more physical, sensual and material and less conceptual. And as a footnote to the drawings, it works! And I am excited to see what else will result out of that initiative. It looks like a starting point to new work! You are using the material ethernet cable.

M: Yes. What made me continue this, is that is's got some humor!

J: Right, it's funny.

M: It's got this bit of humour that I am missing in my own work, and in the work of many other artists. And the artists themselves, haha. I don't mean at all that I want to get rid of the serious-ness in my work, on the contrary actually. Though I think it's important to touch different sections of the brain and heart.

J: I see what you mean. For example in many artistic research projects, exactly this might be lacking. Maybe it's just difficult to incorporate this. To some degree you present yourself as an artistic researcher, too, right? So let me pose this question properly: Which role does research play a role in your work? Often time this is not being consciously appropriated, so..

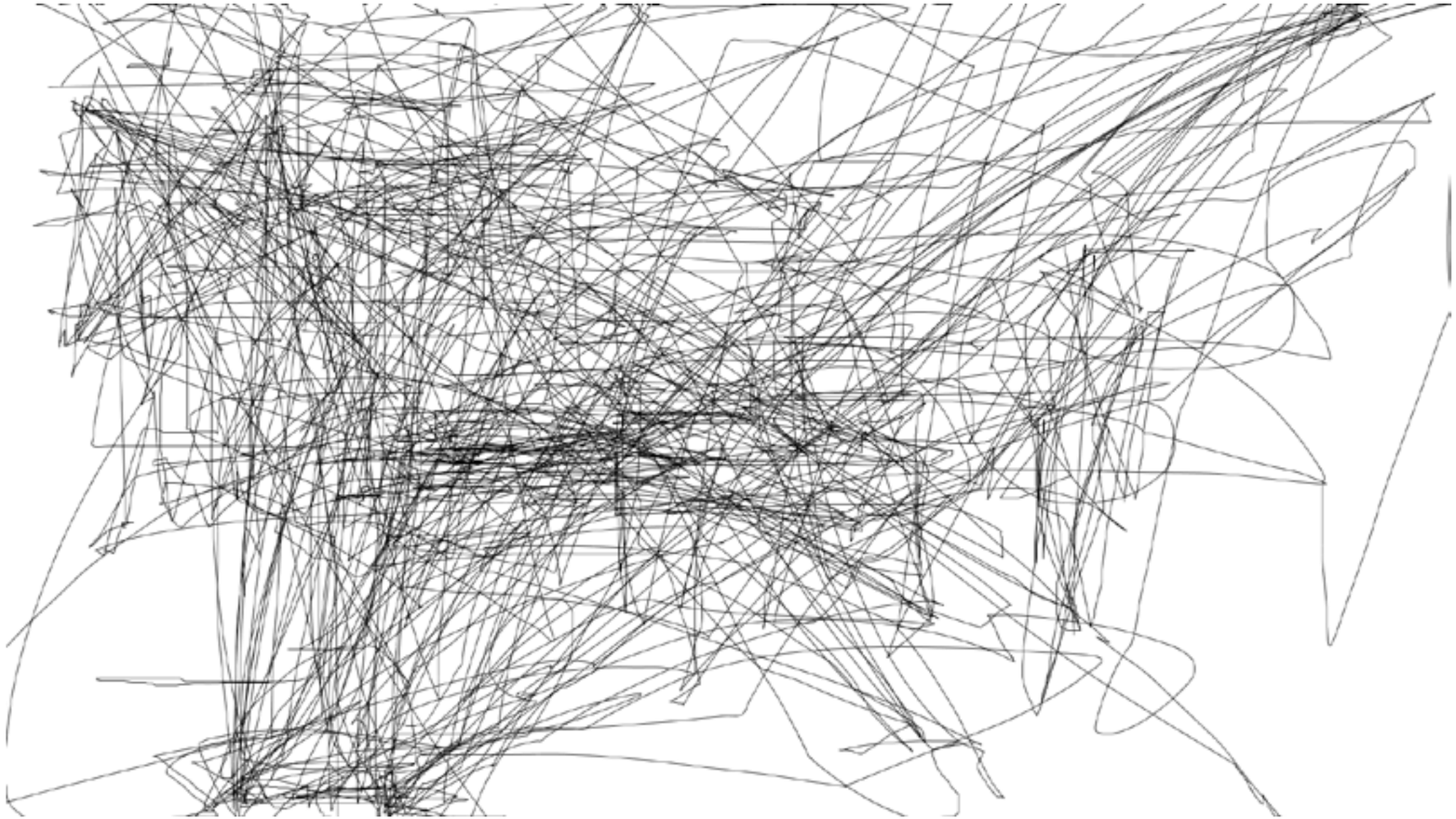
M: I learned a lot from the books of the old computer artists. This was a strong inspiration.

[Break. Talking about another project: Electronic Chaos Oracle]

This here is Composition #56 (point at exhibition poster). Here is another filterchain happening. I am creating 100 different concrete implementations of the composition and then I manually chose one, curate the output of the machine. And this drawing here is one where the machine made a mistake, when drawing. That's why this one made it just for a poster.

J: Interesting, let's talk about the error in the machine. I think it's a funny coincidence that we're in Erratum Gallery right now. Erratum means an error in printing. That could be an interesting point to discuss closer. What role does the error play in your work?

M: In the first step, the process of conceptually, virtually creating a composition, there is no error. Just aesthetics. The error is really part of the data, the lines do no right or wrong, the fact that they are unique makes an error impossible. And in the second step, the implementation of a drawing, there is no error allowed. You can see that the pen faded out, the ink ran empty on a few drawings here. You can see this as a classic erratum. For me this changed from the first moment this happened. After the pen faded out the first time, it stopped being a surprise, an error. It became the main point.
And in general, it depends on the error obviously. A good error is not an error. It's subjective. And an error like the one in the poster, this is a no-go. This is trash for me.



Screen recording
Marcel Schwittlick

1/24 screen recordings of mouse movements from his screen

But in contrast, the one to the right here. There's no error. In this drawing, there is one complete content of a pen. From beginning to end, a new pen, at the end it's empty. And this is the first drawing where my self-built machine did not run into a bug or problem. The first time that the motors didn't overheat, the paper did not skew, the drawing got straight without drift. I see this as an extension to the cycle we talked about earlier, the first successful drawing on my new machine.

J: In connection to the Exhibition title "Feeling Data", I was thinking.. Do you mean sensing or feeling? Sadness etc. This would be one way of seeing all this here. Or do you see this exhibition more in the meaning of sensing data. That there is no pre-constructed feeling, but rather an aesthetical feeling. (Probably more important in german).

M: This is true, I am just realising this myself. For me this is more about the sensoric feelings for abstract, virtual data. To develop a feeling for the material, which was a big topic for myself in many projects. This has always been my strategy for handling big data. Just developing a feeling. One could probably go about this in a more strategic and analytic way, though this was not a natural approach for me.
Seeing data as a material. And developing a feeling for this was interesting for me. This has been an important point for many other projects. Let's look at the sculpture of laptops here, the totem. In the introduction text to the exhibition I mentioned the distinction between warm and cold material. The drawings use warm material, because the data is based on human, unique movements. I see the computers, here the laptop the same way as a warm material. For every single one of these laptops, there is a story attached. When I picked them up from, colleagues, friends, family and strangers, we had a last chat about the machine. The owners had a goodbye ceremony, told me what the machine meant for them, how they shared a life for some time.
In the end people build up a rather personal relationship with their computers, especially when they invest all that energy into one device for many years. All these stories are part of each of these machines. This context makes these objects very special. These are not new computers. For many years these have been worked on with fingers and mind. Personal ideas and thoughts were typed into the machine, but at the same time there are so many of them here, they are all the same.
People see it as trash when it comes in quantities. But the pieces of aura are still attached to the computers. And this is what I find so interesting. Also the process of collecting them was special. I didn't buy them and paid by the kilo. I wanted to attach more memories and context to this hardware. And this makes it warm material.

J: Ok, this opens a new topic, the drawings are some kind of struggle with yourself. With your own movements, your own body.

M: Well, not necessarily. I recorded lines from other people as well. I installed the software on some friends computers and used their cursor lines also.

J: Ok ok. Another question. On the one hand, you tried to understand the data overload, to develop a feeling. You are trying to make it accessibly by feelings for yourself. On the other hand, do you have the visitor, spectator in mind? You have an exhibition here titled "Feeling Data". Is there some conscious or unconscious intention from you to discuss topics like data, digitalization, digitality with the people?

M: Totally. For you, me, us, the digital is something very normal and natural. Still, it's a complex construct which is in constant flux, always changing. This are moving, new concepts developing. Our generation grew up totally analogue. But we were still young enough to experience the digital world as a young age, we were able to develop a natural relationship with that. And I am thinking about the visitor, I want to bring digital fragments out of the computer. I want to provoke direct contact, get rid of the digital layer. I want to bring the body to the forefront. This piece of our reality that's responsible for so much of our would. The digital world has a lot of power and possibilities, though our body will remain important. I think.

J: I just notice, there's something else stuck in my mind. We are a weird generation. I got my first cellphone and at the same time the internet was coming up. And I was developing some kind of consciousness for myself being a human being, too. At the same time we still understand our grandmas very much.

M: When we were kids, we went to ring on our neighbours friends places, just to find out whether they were around. Today you send a message via Signal. But we got older, too. I think this whole topic is big and we should look at this seprately, more carefully.

J: Okay. Did I forgot about anything else.. Hmm, maybe the following question. We are here in an art exhibition. What kind of art is happening here? I would definitely say this is artistic work. Though maybe we can go deeper and investigate what is the art, that is happening here.

M: Well, good question. The concept, the sensory experience. Broadly speaking..

J: I'm just thinking and trying to figure it out myself. There are many artistic aspects. One thing, you do is you take something and turn it into something else, bending it.

M: Sometimes I see it kinda like a mirror. Like experimentation with timely media and possibilities. Digitalization, Algorithms, Data cruinching, everything pretty contemporary. All of the social media plattforms are working with these things. They take input from people in order to form it into something else and present it back to them as something new. Recycling data. Usually I call it the same when working with the cursor lines from earlier, I'm recycling lines.
And I find it interesting to see the digital in real.

J: The digital is also the real world. But on a different level, levels of perceptions. It's strong to imagine all these invisible data streams, which we fuel ourselves. And they are invisible but they do so much to and with us.

M: Maybe this is the point. The shift of attention. More and more aspects and processes of our life are happening in the virtual. And it's important to understand them, I think. At least being aware of what's happening in order to be able to take consequences for yourself. So you know what to do and what not, according to your values. And the processes are becoming more complex? More or less opaque?
In general, when you buy something at Amazon for example. You already know now that it has negative consequences for

the environment because of the high co2 production of transportation. So bad for the world in general. But for other processes it's not yet so easy to understand what things mean For example that data, the attention represents pure gold for the companies. And we give it to them 'for free'.. or not.
What I'm talking about is about the idea of understanding the consequences of your actions. Maybe with the internet this got a little more complex, because the virtual aspect of life got bigger. This might be another idea of this exhibition, just being contemporary by inhabiting the natural level of complexity of our world.

J: Right, and we can't keep up with our perceptions. For a long time people don't understand how things work. And they needed a way to explain them. Just to scratch on the surface, to develop a feeling/conscience for processes that one does not understand.

M: Pretty abstract in the end. I love this.

J: Yeah, you deliver no answers or solutions.

M: I don't think I'm clearing anything up, I'm rather causing some more confusion. Just a feeling. And what do people see in this? I don't want to limit this, I want this to work in multiple contexts. And I don't like the idea of needing a certain kind of knowledge in order to understand my work. I want to open this up, I think it's okay to see it as design as well.

J: Right, to catch people on the perceptive, sensory level. These works are beautiful, I love looking at them.

M: And there are all these old computer artists. They have been doing similar things for a long time. During times before there were computers with screens. Back then there were completely different problems and situations. And they were a great influence to me. But I want to mention here that I want to continue what they started. I'm missing the feeling in these old works. I am looking for unpredictability in drawings. Because I am using data from the real world, this continues something. Back then they were using mathematically and with random processes. No internet with closed, artificial and mathematical systems. But still looking at them from aesthetical viewpoints. This was real cutting edge stuff! But even back then this wasn't greatly appreciated and I have the feeling they still don't get the attention they deserve today even. But for me a huge influence.

J: Back then they didn't have the possibilities to work like you are now. The naturally grown digital infrastructure and means just weren't there. They had to grow the tree before cutting sculptures out of them, so to say. And now we are somewhere else, you can work differently.

M: Right, the people back then didn't know what they were doing mostly, too. For example Frieder Nake and other Artists like Manfred Mohr and Vera Molnar, who have been painting before and just had a unconventional way of thinking. They needed other possibilities and tools. Artists who wanted to create their work with some kind of automatic and aleatoric flavour. Algorithms and graphics.

Composition #52
Marcel Schwittlick

Nathan Gates

REFLECTIONS OCTOBER 2019

Steve Daniels

I made a mouse once (www.spinningtheweb.org/projects/theDistance.html). It came to be when I brought into contact a found monitor, a lost sewing machine pedal (literally pulled from a lake) and an etch-a-sketch. Like most works it likely had a web of inspirations—two stand out all these years later. The found screen and its likeness in scale and form to an etch-as-sketch and a life long burning desire to etch a circle.

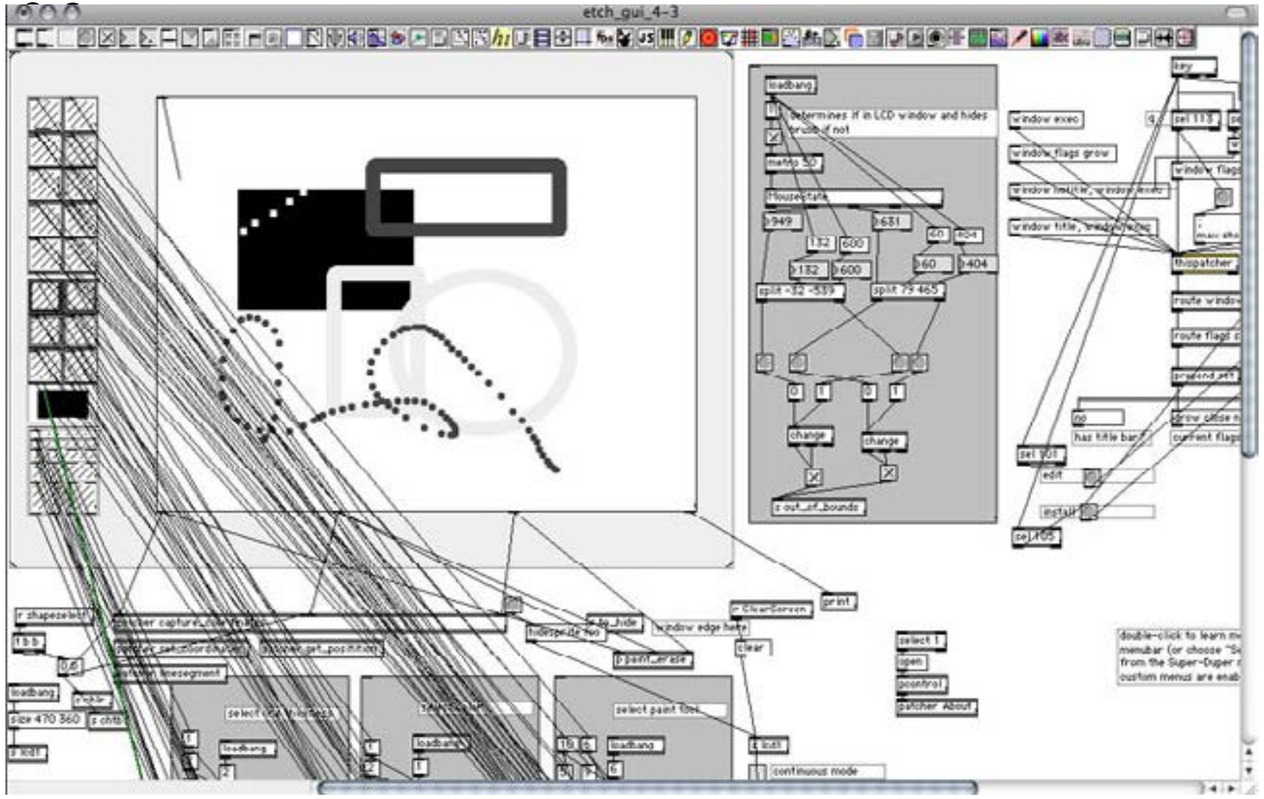
Around the time I made this, there was an online explosion of people using steppers to draw on etch-a-sketch surfaces. They could make circles. I don't recall if this came before or after that. It doesn't really matter because I didn't want a robotic etch—I was pursuing a different dream. My etch would be a mouse.

I was sure it would be easy—but etch-a-sketches have a way of revealing the unexpected by drawing attention to the power of constraints. I wanted my etch to map mouse movements and it does—but I also hoped it would reveal something about the experience of analog and digital spaces. It does that too but not in ways I expected.

I learned that mice work because we can be selectively absent when we use them. We are absent in digital space every time we move without clicking. We are absent in our embodied analog space every time we physically lift the mouse and place it differently on our work surface (the later was nearly the downfall of this work). These departures let us constantly re-orient ourselves in our screens.

With an etch-a-sketch you can never leave. The stylus is always attentive. You are always present. This is part of what makes it hard to draw a circle with an etch—even in digital space.

Shortly after I completed this work, Apple released the iPhone, and the future of etch-a-mice tanked. This new screen need neither a stylus or an iconic arrow. I was no longer in my screen. It was now in me.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clear
open
pcontrol
patcher About
continuous mode

computer mouse conference DIRECTORY

ARTISTS

Arnab Chakravarty (he/him/his)
Arnab Chakravarty is a second-year student at NYU ITP with a background in design and ethnography. He hopes to, one day, build a super-computer that makes the perfect tea.

August Luhrs (he/him/his/they/them/theirs)
performance art && interactive installations && group games && neuroevolution && big stuff

Cezar Mocan (he/him/his)
Cezar is an artist and programmer based in Brooklyn, interested in the relationship between technology and intimacy. He has a background in computer science and graphic design.

hannah tardie (she/her/hers)
hannah tardie was born in Orange, California. She studied English Literature and Visual Art at Bates College, and is now studying at New York University. Her work examines intimacy and labor, making connections to gender, technology, and time. She currently lives and works in New York.

Jackie Liu (she/her/hers)
Jackie Liu is somehow still burnt out from studying computer science in college, yet is now a second year ITP student here to design and make art. She is interested in user interfaces, gender & technology, and making things that are cute, whimsical, and critical.

Katya Rozanova (she/her/they/them)
Katya Rozanova is a Brooklyn-based person trying to find new ways to be.

Shea Fitzpatrick (she/her/hers/they/them/theirs)
Shea Fitzpatrick playfully experiments with comics, animation, and digital tools to make abstract worlds that conjure narratives. Shea works as a self-taught user interface designer and is trying to draw more.

Winnie Yoe (she/her/hers)
Winnie Yoe was born in Hong Kong, and is now based in New York. She is an artist and designer working at the intersection of art, design, and technology. She is interested in exploring the social and emotional implications of technology and draws from a background in graphic and exhibition design, sculpture-performances and curatorial work to create interactive experiences about boundaries and discomfort. She graduated from Dartmouth College and is working towards a master's degree from NYU's ITP program.

SPEAKERS

Ashley Jane Lewis (she/her/hers)
Ashley Jane Lewis is a Tech Educator and interactive artist with a focus on bioart, afrofuturism and speculative design. In the summer of 2016 she was listed in the Top 100 Black Women to Watch in Canada. Her new media work has exhibited in both Canada and the US, most notably featured on the White House website during the Obama presidency. She is now studying to get her Masters at ITP (Interactive Telecommunications) in New York University's Tisch School of the Arts. She's been featured as a Tech Activist in Metro News, Reader's Digest, Huffington Post and has highlighted diverse tech education as a keynote speaker on numerous occasions for audiences at TEDx, FITC, International Women's Day and Maker Faire. Ashley feels honoured to have had the opportunity to help more than 3000 youth learn how to code to date.

emma rae norton (she/her/hers)
emma rae norton is an artist working with and through software. Her work, while mostly existing online, has appeared in the form of DAT zines, CD-ROM and collaborative hand coding workshops. Emma is committed to unpacking the ubiquitous networked and computational world that she lives in through a research-based art practice. Her current research focuses on the computer mouse as an impactful technological object

luming hao (he/him/his)
luming hao is a second year student of ITP, focusing on philosophy of technology, discard studies, and electroacoustic music.

Lydia Jessup (she/her/hers)
Lydia is a creative + public interest technologist working at the intersection of urban space, tech + design. She is currently a master's student at NYU ITP and previously worked in public policy research at the University of Chicago Urban Labs and abroad in Peru at Innovations for Poverty Action.

Mimi Doan (they/them/theirs)
Mimi Doan is an artist and technologist who builds and theorizes about things.

PANELISTS

Ayo Okunseinde (he/him/his)
Ayodamola Tanimowo Okunseinde (ayo) is a Nigerian-American artist, designer, and time-traveler living and working in New York. He studied Visual Arts and Philosophy at Rutgers the State University of New Jersey where he earned his B.A. His works range from painting and speculative design to physically interactive works, wearable technology and explorations of "Reclamation." Okunseinde was the co-founder and creative director of Dissident Display Studios, an award winning studio and art gallery based in Washington DC. As a collaborator with, amongst others, choreographer Maida Withers, Carmen Wong, and Yoko K., Okunseinde has created several interactive performance based works and has performed in several countries including Mexico, Finland, and Croatia. His art residency participation includes ITP's S.I.R., IDEO's Fortnight, The Laundromat Project, Eyebeam, New INC, and Recess Assembly. He has exhibited and presented at the 11th Shanghai Biennale, Tribeca Storyscapes, EYEO Festival, Brooklyn Museum, M.I.T. Beyond the Cradle, and Afrotectopia amongst others. His works themselves exist between physical and digital spaces; across the past, present and future. They ask us, through technology, to reimagine notions of race, identity, politics and culture as they travel through time and space. Okunseinde has taught at New York University, Pennington College, Hostos CUNY and 92Y. He holds an MFA in Design and Technology from Parsons School of Design in New York where he is currently an adjunct faculty member.

Laine Nooney (she/her/hers)
Laine Nooney is a computer and video game historian and Assistant Professor of Media and Information Industries in the Department of Media, Culture, and Communication at New York University. Her research has been published in The Atlantic, Game Studies, and The American Journal of Play, and she has been extensively interviewed on the

subject of the American computer and video game industries. She is a founding editor of ROMchip: A Journal of Game Histories and organizes the leading annual conference for historians of computing as part of her work with the Special Interest Group in Computing, Information, and Society. @ sierra_offline

Tega Brain (she/her/hers)
Tega Brain is an Australian born artist and environmental engineer. Her work takes the form of online interventions, site specific public works, experimental infrastructures and poetic information systems. She has recently exhibited at the Guangzhou Triennial, Haus der Kulturen der Welt, Berlin, the Science Gallery Dublin and Eyebeam in New York City. Her work has been widely discussed in the press in the New York Times, Art in America, The Atlantic, NPR, Al Jazeera and The Guardian and in art and technology blogs like the Creators Project and Creative Applications. She has given talks and workshops at museums and festivals like EYEO, TedxSydney and the Haus der Kulturen der Welt.Tega is an Assistant Professor in Integrated Digital Media at New York University. She works with the Processing Foundation, and serves on the Advising Committee of the School for Poetic Computation. She has been awarded residencies and fellowships at Data & Society, Eyebeam, GASP Public Art Park, the Environmental Health Clinic and the Australia Council for the Arts.

ART

Calm down hands mouse
Katya Rozanova
A computer mouse that invites you to put your hand on top of a glove filled with sand and lead shot, then letting another such "hand" rest on yours. The gesture is reminiscent of a human one but falls short, perhaps offering something else. The "hand's" exaggerated weight on top of yours is somewhere between cumbersome and soothing and its overstuffed, cartoonish quality is used to abate (but not erase) the unsettling view of a hand without a body, to disarm and reassure that this is an abstraction.

Cursorworld
Jackie Liu
While the physical computer mouse fades into obsolescence, the design of the mouse cursor (or pointer) is likely here to stay. If the computer mouse mediates exchange between body and computer, then what can the design of the mouse cursor say about desire and intent? Examining the mouse cursor as a site for personal modification - CURSORWORLD is a mouse cursor creation and sharing tool, guided by our collective values as computer users.

The Itch
Arnab Chakravarty, August Luhrs
In the age of perpetual notifications and personalized algorithms, all technology needs to be constantly 'touched'. Notifications engorge, inboxes swell, news feeds multiply and reminders increase until you fulfill their need to "engage". The 'click' is now an itch that will never bring you peace, only fleeting moments of temporary relief.

Red Mouse
hannah tardie
Drawing from Emma Rae Norton's scholarship, I am looking to explore the idea that the mouse holds the user. "It holds you," stayed with me as a gesture towards feminized labor, both in form and functionality as a substrate between the hand and the cursor. In red mouse, I wonder what a mouse that holds the body, rather than the hand, might feel like.

Stretch breaks
Shea Fitzpatrick
12-page, 2-color Risograph zine
Stretch Breaks is a collection of impractical exercises for computer-caused pain management. Nodding to credentialed medical advice and ergonomics, Stretch Breaks offers suggestions for balancing conflations of productivity and self-worth, chronic pain, and conscious pursuits of bodily escapism.

Ton
Winnie Yoe
Ton is a mouse. As you flick Ton, the screen de-pixelates and makes clear a photo of you from an online image search. Based on the reflection of an abusive relationship, the project explores the relationship between digital agency and privacy by drawing parallels with an equally powerful and revealing sexual act.

Untitled
Cezar Mocan
UNTITLED. is an exercise in using the computer mouse gently. Our gestures on screen have often ignored consequences in the physical world. This work surfaces the direct relationship between the computer mouse and the human body.

TALKS

Ashley Jane Lewis
TKTK

emma rae norton
How has the mouse created new kinds of distance between computers and humans? Through a historical account of the computer mouse, this talk will discuss the implications of this distance; what being "close to the metal" might mean in 2019 and how women throughout the history of computing have always been the closest.

luming hao
Despite repeated debunking, profitable anthropomorphic mythologies of technology as autonomous objects of emergent hyper-rationalist agency continue to recur as the result of contempt for the act of maintenance. In this talk, I will share my current efforts to develop a theory of "calibration labor" to define technology by its continuous demands for alignment, adjustment, and correction in the form of obscured labors of maintenance.

Lydia Jessup
Economies of the Computer Mouse (a.k.a. the Mouse Across Space and Time)
What can the computer mouse tell us about the world? This lecture will explore human engagement with objects by looking at the production and design of the mouse as an instance of the electronic and computer peripheral industries. I will report on research conducted to understand the computer mouse as an informational medium - the economic, cultural, political and historical information it holds and the information that a future mouse could hold.

Mimi Doan
Through the computer mouse we reach into our machines and towards other dimensions of space and possibility. Where are we going? What are we looking for? What can the computer mouse and its functions tell us about the climate of our networked desires?

PANEL

Ayo Okunseinde, Laine Nooney and Tega Brain

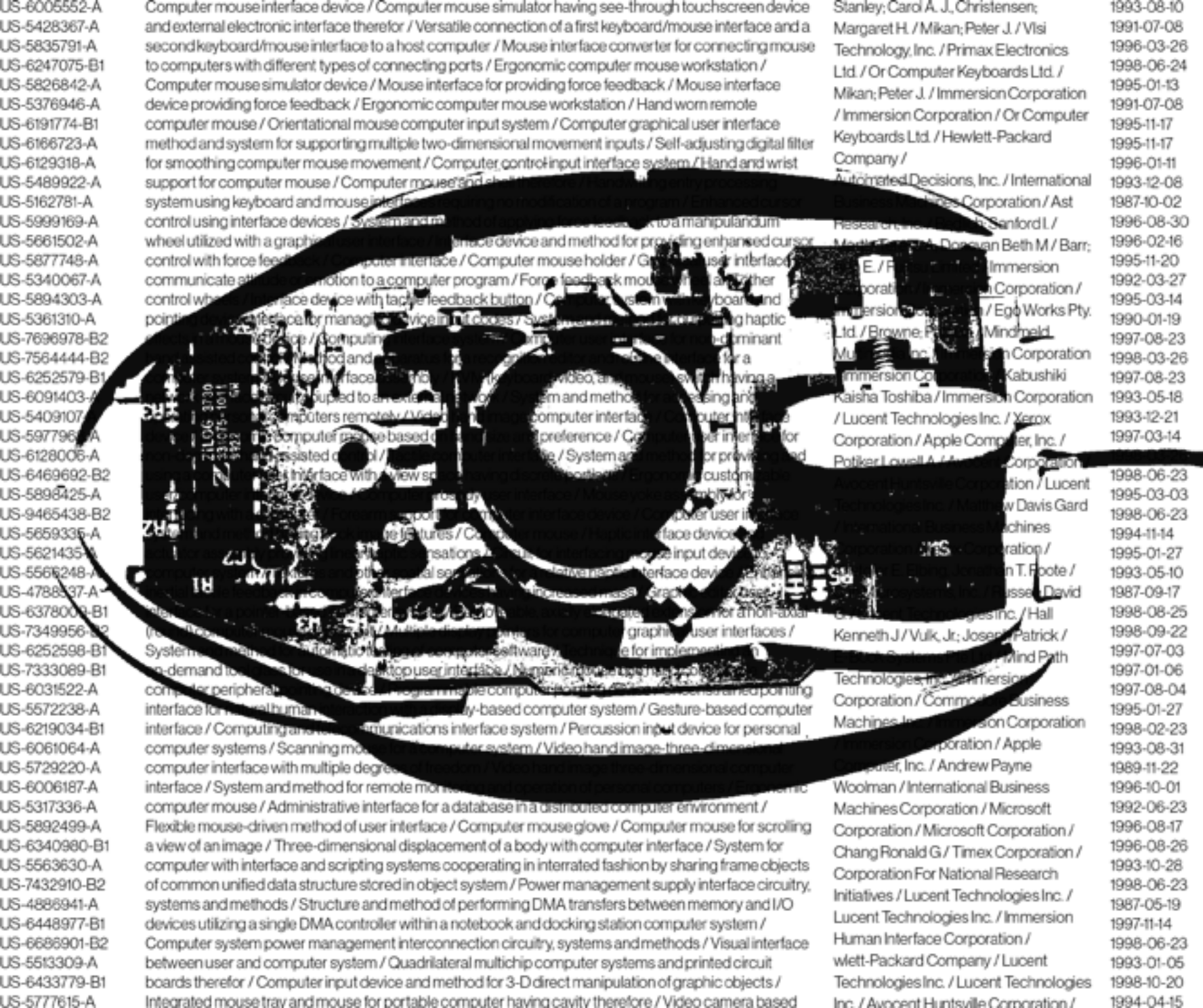
in conversation moderated by Ashley Jane Lewis.

ZINE

neta bomani (name/she/her/hers/they/them/theirs)
neta bomani is a worker who engages in visual storytelling, direct action and anti art practices through organizing and making archives, writings, prints, zines, circuits and workshops. Neta's work has materialized as an educator of the Pioneer Works collaboration with Good Shepherds after school programs, a steward of the School for Poetic Computation, a member of Stephanie Dinkins Studio and a participator in grassroots organizing against prisons and borders in New York City and beyond in solidarity with No New Jails, Take Back the Bronx and more.

ZINE CONTRIBUTORS

Dan Taeyoung (they/them/theirs/he/him/his)
Fame Tothong (she/her/hers)
Kalli Retzepi (she/her/hers)
Lauren Matthews (she/her/hers)
Marcel Schwittlick (he/him/his)
Marcus Flemming (he/him/his)
Mark Lam (he/him/his)
Melanie Hoff (they/them/theirs/she/her/hers)
Nathan Gates (he/him/his)
Nunintee Tansrisakul (she/her/hers)
Ofir Rosen (they/them)
Rigoberto Lara Guzmán (they/them/name)
Sean Catangui (he/him)
Shira Feldman (she/her/hers)
Steve Daniels (he/him/his)



US-6005552-A	Computer mouse interface device / Computer mouse simulator having see-through touchscreen device	Stanley; Carol A. J., Christensen;	1993-08-10
US-5428367-A	and external electronic interface therefor / Versatile connection of a first keyboard/mouse interface and a	Margaret H. / Mikan; Peter J. / Visi	1991-07-08
US-5835791-A	second keyboard/mouse interface to a host computer / Mouse interface converter for connecting mouse	Technology, Inc. / Primax Electronics	1996-03-26
US-6247075-B1	to computers with different types of connecting ports / Ergonomic computer mouse workstation /	Ltd. / Or Computer Keyboards Ltd. /	1998-06-24
US-5826842-A	Computer mouse simulator device / Mouse interface for providing force feedback / Mouse interface	Mikan; Peter J. / Immersion Corporation	1995-01-13
US-5376946-A	device providing force feedback / Ergonomic computer mouse workstation / Hand worn remote	/ Immersion Corporation / Or Computer	1991-07-08
US-6191774-B1	computer mouse / Orientational mouse computer input system / Computer graphical user interface	Keyboards Ltd. / Hewlett-Packard	1995-11-17
US-6166723-A	method and system for supporting multiple two-dimensional movement inputs / Self-adjusting digital filter	Company /	1995-11-17
US-6129318-A	for smoothing computer mouse movement / Computer control input interface system / Hand and wrist		1996-01-11
US-5489922-A	support for computer mouse / Computer mouse and [illegible]	Automated Decisions, Inc. / International	1993-12-08
US-5162781-A	system using keyboard and mouse [illegible]	[illegible] Corporation / Ast	1987-10-02
US-5999169-A	control using interface devices / [illegible]	[illegible] Stanford I. /	1996-08-30
US-5661502-A	wheel utilized with a graphic [illegible]	[illegible] Donovan Beth M / Barr;	1996-02-16
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