

IMMATERIAL

LABOUR

UNION

SMART
CITIES

#8

Editors' Note

Lidia Pereira and Δεριζαματζορ Προμπλεμ ιναυστραλια

Welcome to the 8th issue of the Immaterial Labour Union zine. The latest trend in urban development, one of the biggest concerns in the quest for the perfect 'smart' city is that of human behaviour and, more specifically, how that behaviour can be influenced. Human beings make irrational decisions, or so the line goes, which can hopefully be made rational with the intervention of 'smart' technology. All of this in the quest of the most efficient of all possible worlds. When we launched the open call we asked the following questions: "What consequences do 'smart' cities present for the future of labour? What governance modalities are at stake? What is the space for accident and error on a tech-utopian efficiency paradise? What is the role that corporate social networking platforms will play in the 'smart' city? What are the terms of service of the smart city and who is defining them?". We received contributions that not only reflect about the answers to these questions, but extend them and imagine possible, alternative futures. We therefore hope, with the present issue, to at least scratch the surface of the immense complexity involved in the political economy of 'smart', networked cities and the consequences presented towards a society where pervasive labour becomes the norm.

Simone Cassiani's poem echoes the fading voice of a subject immersed into a universe of metrics, statistics and hyperproductivity, which, operating under the effect of networked capitalism, can only demonstrate its reluctance. Jathan Sadowski presents us with an alternative politics of data management and storage, where data ceases to be a commodity owned by corporations and instead a new democratic institution is created, which, through participatory practices, serves the public good safeguarding access and transparency. Danja Vassiliev's "netless" appropriates part of the public transportation infrastructure to facilitate an independent network of data exchange related to citizens' urban experience. Silvio Lorusso's contribution reflects around the immersion of the individual into the concept of the office and its diffusion to non-traditional "work" spaces, through the extended use of digital devices and in alignment with existing structures of the "urban

sphere".

Joseph Knierzinger offers a set of browser plug-ins which challenge the notion of "smartness" within emerging browser based technologies. Humorous yet historically and culturally aware, these plug-ins are based on significant devices of production and organisation. Lídia Pereira documents a future media ecological and archaeological finding, a swan's nest built from hardware presented in the Museum of Natural History of Rotterdam in 2085. It wonders about the space for accident and error in a narrative full of smooth surfaces of automation and efficiency, thus questioning tech-utopian visions of quantification, measurement and automation.

Nikos Voyatzis's contribution remixes the 'Posture Chair' of Greek architect and cybernetician T Zenetos, a dystopian 'smart' piece of office furniture that would make ever getting out of it absolutely unnecessary, as it seeks to fulfil an individual's every need and bodily function.

Professor Ursula Huws was, unfortunately, unable to participate, so instead we are directing you to these two pieces she wrote about the issues surrounding platform capitalism and our constant state of connected labour: Platform Labour: Sharing Economy or Virtual Wild West?¹ for Progressive Society and Logged In² for Jacobin Magazine.

Contributions by:

Danja Vassiliev, Jathan Sadowski, Joseph Knierzinger, Lídia Pereira, Silvio Lorusso, Simone Cassiani, Δεριζαματζορ Προμπλεμ
ιναυστραλια

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Danja Vassiliev's contribution is licensed under the CC-BY-NC-ND License⁵.

1: <https://www.progressivesociety.eu/content/platform-labour-sharing-economy-or-virtual-wild>

2: <https://www.jacobinmag.com/2016/01/huws-sharing-economy-crowdsourcing-precarious-uber-workers/>

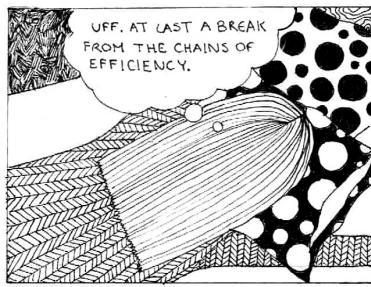
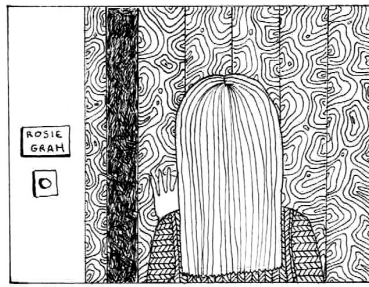
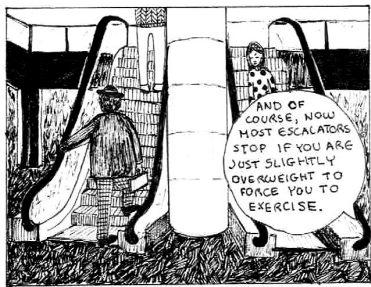
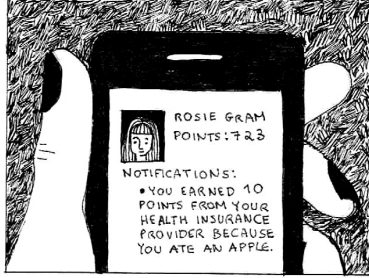
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Self-Control

Lidia Pereira



Unwilling

Simone Cassiani

Deeply conflicted, I recognize yet internalize the pressure:
Accountable for being miserable, responsible for failing life
An efficient procrastinator, pattern of halfways and lies.
A machine to inhabit others, entirely measured set of thoughts
And movements, and actions, self-reproducing productivity
And self-analysis to exhaustion, by-product of data-drilling
This is understanding beyond profitability:
I am a market subject, sure, but unwilling.

My expectations are inflated as regards to self-improvement:
Say it's our choice - call it what you want, but it's void!
It's impossible not to feel lonely when so much rests on our
shoulders
We are force fed your guilt in bouts of 'empowerment'.
Extracted even asleep, disgusting sense of debility
And self-analysis to a nausea, by-product of mental healing
This is understanding beyond predictability:
I am your data subject, sure, but unwilling.

Emancipation from (Data) Accumulation

Jathan Sadowski

This snapshot of a plausible near future may not represent outcomes of our current trajectory, neither is it an unrealizable dream. It is, instead, a brief vision of what could happen and what could be achieved if we made different—even if difficult—decisions about techno-politics. I maintain that we still have the ability to change course. Doing so, however, will require a critical combination of theory, creativity, politics, and practice. My hope is that this snapshot will be a step towards inspiring us to envision alternative futures and make a new present.

Emancipation from (Data) Accumulation

It was the tech companies and financiers who first argued that data must be seen as more than merely a technological issue. They argued data should, instead, be treated as capital and commodity, as a valuable asset that must be accumulated as such.¹ Thought leaders consulted with capitalists. Financial elites plotted about how best to generate value from all the data constantly being gathered from every person, process, and thing. They relied on the opacity of these esoteric matters to shield them from inquiry. The impacts of designating data as capital were not obvious, nor were they immediate. But others were catching on that data was more than just a thing that excited geeks. Data was now an important part of contemporary political economy.

The rampant practices of data extraction and hoarding became too difficult to ignore. There was an arrogance to it; a sense that tech platforms and service providers could get away with mass surveillance and behavioral manipulation. The standard narrative was that people didn't know or didn't care because the "free" products were all worth it. In reality, people just didn't know what to do about it. They didn't know there were better options.

The accumulation of data—of this capital and commodity that seemed to define the info age—grew at an unprecedented rate. It generated value for so many, and in so many different ways. Ironically, even with all that data at their fingertips, there was both willful and

unwitting ignorance to the growth of an enormous data bubble. This bubble touched nearly all aspects of society: it affected how policing was done, how cities were governed, how production was managed, how finance was organized. And when it burst—like an unfortunate spawn of the dot-com bubble in the late 90's and the financial crash in the late 00's—the trust and tolerance people had towards unconstrained economies of data began to evaporate. No longer just the concern of specialists, data ownership became a battleground for debate and protest.

As issues of inequality became more prevalent—serving as catalysts for social movements and as central parts of political platforms—the vast data divide was criticized as another way in which Wall Street and Silicon Valley cross-pollinated for their own mutual benefit. Protesters and politicians alike raised concerns about huge concentrations of data in the hands of a small class of elites. The ownership of so much data-as-capital nurtured the growth of monopolistic companies with vast wealth and power—plus the ambitions to match. By some estimates these data-driven tech titans wielded more capital and influence—and several were more vicious—than the robber barons of the first Gilded Age. It became clear to many people that, for these executives and entrepreneurs, “disruption” was more like a scorched earth technique for obliterating competition and “innovation” meant finding a way to secure market position.

People began questioning why corporations should own all that data about the world, about us, in the first place. What right did they have? Was the ability to extract, store, and analyze the data reason enough for them to hoard and use it for whatever purposes they wished? Why should the means of data production and the data banks be owned by a small class who use those systems to individualize, control, and commodify everybody and everything else? The answers to these questions often relied on reasserting the status quo—this is how things are done, how could it be otherwise, changing things would be perilous—but those reasons were no longer good enough.

After the bubble burst many social movements took on new energy, reinvigorated by a fresh harm caused by an old regime. There were demonstrations and direct actions, boycotts and protests, organizing and lobbying. Politicians could hardly ignore the vox populi: The groundswell of demand for sanctions and for a new paradigm that would benefit society, not subject it to the

impulses of dataveillance capitalism. The crux of the movement came when political pressure finally translated into legal action. These new rules focused on one of the root issues: the economic status of data.

Data is no longer treated as a kind of private capital, which companies can accumulate and profit from simply by owning, selling, and/or renting the data. Instead, data is designated as personal property and as public good. People are free to gather and use data about themselves for their own personal purposes, such as the kind created by wearable trackers or home devices. But when it came to the large data banks—which aggregate and analyze big data sets about society, governance, and infrastructure—a new institution had to be created to manage them: the People’s Data Repository.

The PDR administers the collection, access, and use of data-as-a-public-good. Rather than, for instance, a company like Uber—monopolistic, extractive, politically ruthless—gathering all that data about mobility for their own benefit, the data is used to enhance and expand public transportation. With the data, analytics, and applications provided by the PDR, nothing precludes publically owned, non-profit agencies from building services that take full advantage of information technology. It is now no longer acceptable to allow private entities to claim ownership over what ought to be common goods and public services. Additionally, the PDR does more than provide support to public agencies. It also assists companies that are organized with social ownership in mind, like employee cooperatives and citizen equity firms. Such companies are given the resources to produce and are encouraged to innovate. They are rewarded for providing goods and services that contribute to society; if they work towards the public benefit, the amount of data they can access from PDR far outstrips what they would likely have collected on their own under the old system. By setting terms on access to the data needed to operate technological systems, the idea is to begin weakening the techno-capitalist imperatives that incentivize exploitative and extractive structures.

In terms of institutional structure, the PDR is similar to the Federal Reserve, in that it oversees data policy, regulates data services, and is independent within the government. However, unlike the technocratic structure of the Fed, the PDR incorporates regular democratic, participatory processes into its decision-

making. This constant feedback, accountability, and oversight helps ensure the PDR supports programs that people need and desire—rather than ones driven by profit and privilege. The PDR’s founding principles are simple: If data comes from the people, then it should belong to the people and be used for public goods.

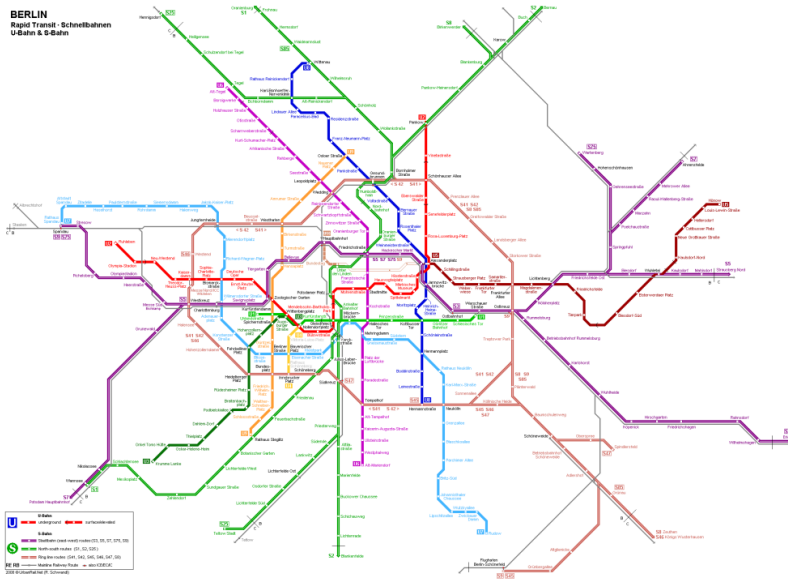
1: See, for instance, a recent white paper released by MIT Technology Review Custom and Oracle (2016) called, “The Rise of Data Capital.”

Netless & Netless2

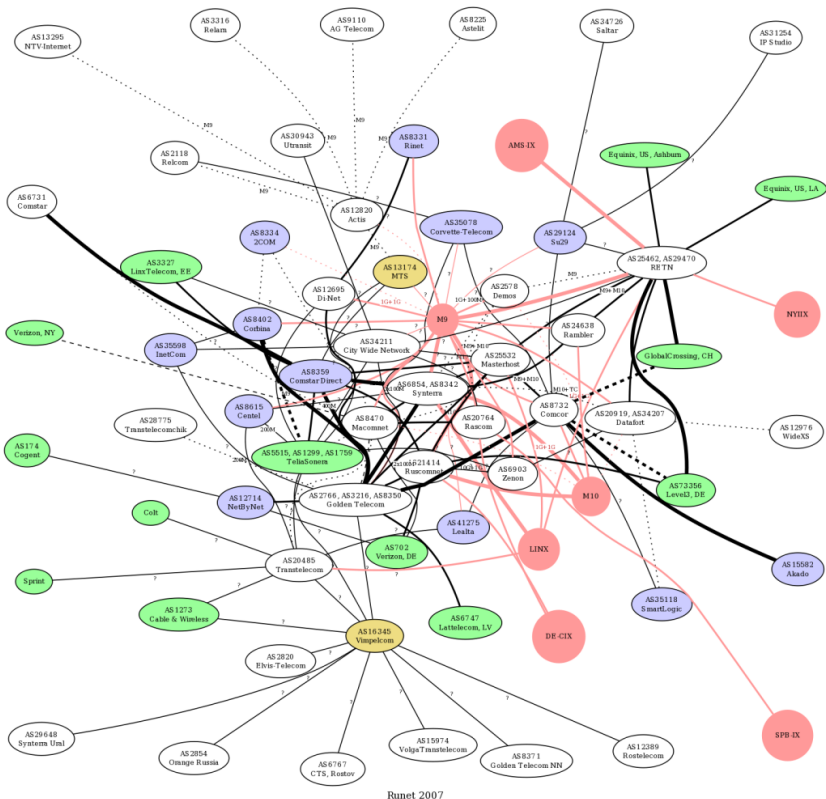
Danja Vassiliev

Netless¹

Netless is an attempt to define alternative data exchange strategy. Building upon the principals of Sneakernet data-courier, Netless hooks onto existing city transportation infrastructure.



Pedestrian ways, roads, subway and bus lines become the vectors of data distribution. This effectively creates a parasitic type of network, independent of commercial data carriers, government-owned cable networks and state regulations. Data exchange within the context of Netless chain is not affected by political and monetary decisions. Due to the actual absence on the transport medium as such effects of network ownership, network correction and regulation are being removed.



Small transponder devices attached to city vehicles or carried around by the citizens create a flat, horizontally structured network. Whenever two or more devices appear in a vicinity of each-other they swap their stored data. Hopping in a chain-like manner from one device to another the data eventually gets widely distributed.



The devices participating in this exchange don't need to be individually addressed - the data simply flows to the nearest neighbor; and like that the entire structure remains completely anonymous - it is impossible to determine where the data originates from and where it is destined to.

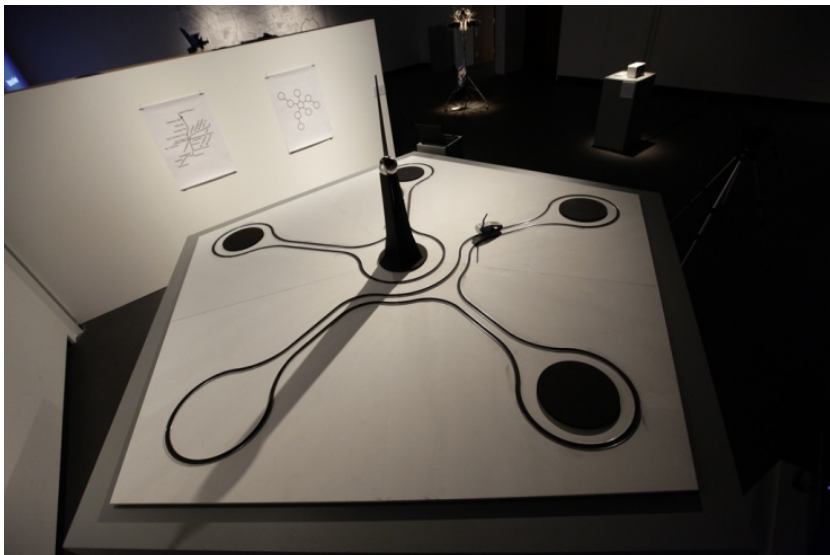
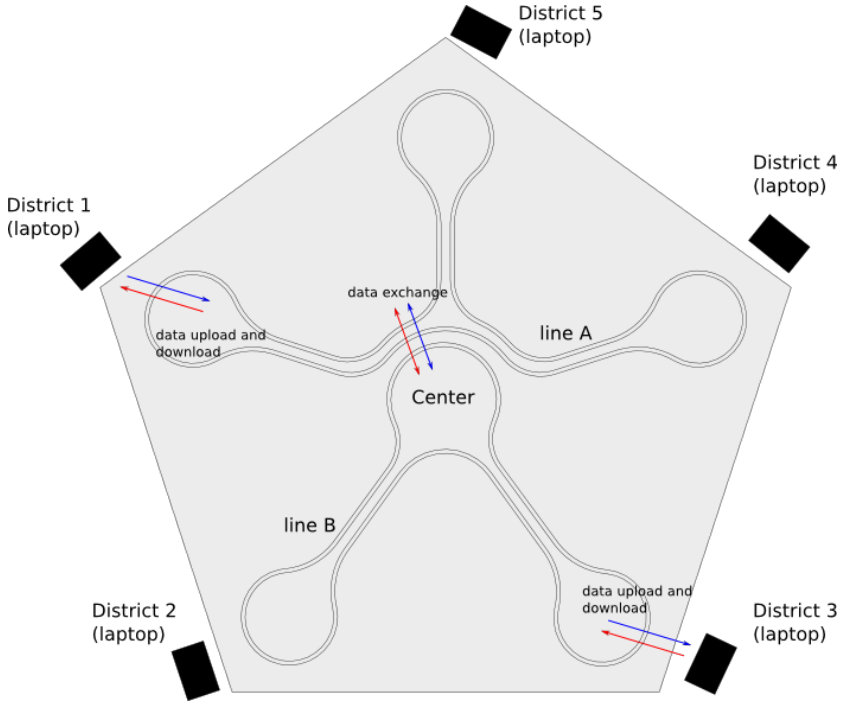
keywords: permission-less, sneakernet, net-less, parasitic network, off-line data-sharing, city-net, WAN, othernet, decentralized, node-network, sneakernet, sensor-network, grassroots-network, wireless

Netless²

Netless2 is the second work in the series of Netless experiments. It is a table-sized model of a data network existing on top of public transit system of a city.

Netless2 is roughly based on a schematic of 1986 Berlin's subway which, coincidentally, happened to have been built in a "star" shape. The choice for star-like topology in city planning however is not accidental - just like in computer networks such layout

proves to be the most effective in distribution and exchange of "payloads" between network peripheries and its center.



Peaks of Netless2 network represent different city districts, interconnected by two "metro" lines. Trains operating on those lines run from one area to another, picking up data at one place and carrying it across the city to another. In this model city districts are symbolized by computer terminals (laptops) installed at each of the five corners of the model; visitors can send their own messages and read the messages received from others.

1: <https://k0a1a.net/netless/>

2: <https://k0a1a.net/danja/netless2>

Squatting the Continuous Office

Silvio Lorusso



Bea Fremderman, Kafka Office (2013)

The use of mobile phone testifies the way in which cognitive work has slipped out its canonical environment --the office-- to become an uninterrupted presence in our lives. Work that exists both as actuality (the email we're replying to) and as potentiality (the red badge notifying that there are still emails to read). Clearly, there have been some antecedents, such as the laptop and, before that, the desktop computer. Even with the telephone, work outside the office was possible. However, the mobile phone represents a qualitative shift since it radicalizes the mobility and ubiquity of work.

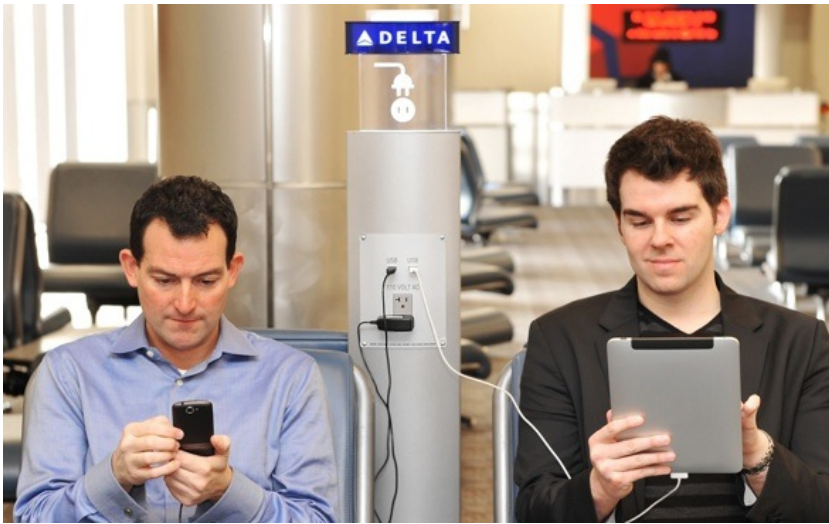
Not only digital devices have brought work in our homes, bags and pockets, but they have also multiplied the types of work that we do: we do marketing and PR for ourselves and for our products, we administer our weekly or monthly schedule, we set meetings, reset passwords, and so on. After all this peripheral work, our actual job can begin. We're hyperemployed¹, as Ian Bogost puts it.

The French Socialist Party has recently attempted to fight the "digital burnout" caused by overtime work and exacerbated by

peripheral work. The main idea is to grant workers the right not to access their company's email address after the official working hours. Socialist MP Benoit Hamon maintains² that "employees physically leave the office, but they do not leave their work. They remain attached by a kind of electronic leash - like a dog." Although a positive conversation starter about digital work, the "right to disconnect" law doesn't take into account the fact that contemporary workers do work overtime, often willingly but also inevitably, as peripheral work is almost unescapable. Since work is now both internalized and generalized, any kind of regulation that is not anticipated by a cultural shift is doomed to fail.

Work has crossed several boundaries: the spatial one (where we work), the professional one (the kind of work we do), and finally the imperative one (who demands this work). For the time being, I would like to focus on the spatial dimension and ask: how does the use of digital devices shape the space around nomadic workers? In which ways are cafes, hotel rooms, means of transportations, libraries converted into informal spaces of work? How do laptops, tablets and smartphones determine the way we inhabit them? Do these code/spaces³, as Rob Kitchin and Martin Dodge call them, serve the same functions offered by the office? During the 1960s, Mario Tronti noticed that the factory was spilling out into the city. Nowadays, the factory society is turning into an office society.

An obvious consideration comes to mind: informal work spaces are suppliers in the first place. They offer the main utilities needed by the nomadic cognitive worker: electricity and internet connection. Go to a café and you will see people scanning the blackboards in search of the wifi password. Walk through an airport and you will meet passengers connected to the power grid through the umbilical cord of their chargers.



"Is That an Office In Your Pocket?"⁴, asks Micha Kaufman, CEO of the Fiverr. For now, the answer seems to be "no". The idea that a single digital device is enough to carry out any possible task is still delusional: laptops, tablets, e-readers and smartphones coexist (not to speak of blocknotes, printed books, pens, pencils, etc). Because of this multiplicity, workers are particularly careful when they have to choose the equipment to carry devices, peripherals and other instruments.

10 HANDY FEATURES



This is why there are several crowdfunding campaigns promoting the ultimate backpack for work and life, like SOLO⁵, both water resistant and compliant to carry-on baggage regulations, thanks to which you'll "travel happier and be more productive". Or Lifepack⁶, which is solar powered, divided into a "workzone" and a "lifeline" and provided with bluetooth speakers. Its creators claim to have "re-invented the mobile office". Lifepack's crowdfunding goal was \$20,000, in the end it raised more than \$600,000. Apparently, the primary extension of the nomadic digital worker is not the device, but the backpack.



Luxafor light indicator

The spaces we inhabit have a relational component: they affect, and are in turn affected, by the people who experience them and by their interactions. Our devices do the same: digital technology is creating new social rituals related, among other things, to the notion of busyness (caveat: this is not to say that "all this technology is making us antisocial"). Busyness is even codified into specialized devices, like a traffic light⁷ that turns red when someone is busy. However, even without this light indicator, one can convey the same message by simply wearing headphones, that perhaps aren't emitting any sound.

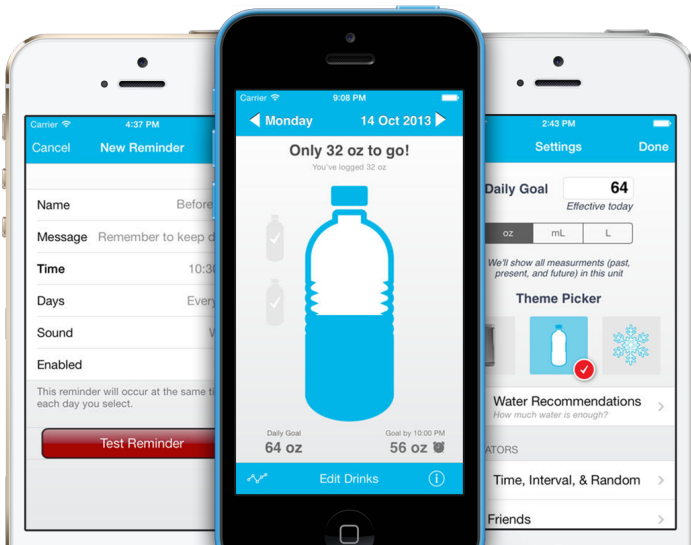


Google San Francisco. Photo: Scott Beale⁸

The actual office is in turn morphing into an amusement park. It increasingly incorporates facilities for relaxation, entertainment and sociability: take a nap in the pod, call your wife from the private conversation room, play table tennis with your colleagues, have a Mohito at the free bar before going home. In the days of Tronti, the faith in the advent of a soon-to-be "leisure society" was common. This prediction turned out to be somehow correct: some of us live in a leisure society, but one in which leisure has been subsumed by work. Independent workers and freelancers who long for these social functions are welcome to rent a spot in coworking spaces, often filled with propaganda about sharing ideas and having fun while working. In one of these, I once saw a missile (or was it a submarine?) with a big label saying "everybody must like everybody".



Certain routines like lunch break are semi-rigidly regulated by the office. Generally speaking, office life is split into a series of diverse periods of time, it has interruptions. On the contrary, work performed within the digital environment is uniform, seamless. So, the administration of time carried out by the employer is now delegated to apps. Although, there is a difference, both in tone and intimacy: apps now tell us to drink water, to go to sleep or to stand up every 15 minutes. By adopting an informal, friendly language, they resemble a nanny or a mom, rather than a supervisor.



Waterlogged app

While the office is continuously present throughout the city and within the computer, no genuine continuity is granted to the worker, no reliable routine, no control: damn, the café is full today and the wifi password just changed... Hey wait, why was my favorite spot replaced with these uncomfortable stools? The zones inhabited by the nomadic worker are temporary but not autonomous. We briefly squat them for energy, connection and the faint feeling of being part of a social group. Like urban sherpas, we carry our devices with us, devices meant to *empower* us. But if we think of the endless quest for a plug, it looks like we are the ones literally empowering them. We become the extensions of media.



Eric De Nijs (2008)

In 1969, Austrian architect Hans Hollein conceived the Mobile Büro, a portable inflatable office enclosed in a suitcase. In the promotional video (the project was realized for a TV show), we see a small aircraft landing. Together with another man, Hollein walks towards a green field where he inflates his office and can eventually work, equipped only with a phone and a drawing board. Finally, creative workers can now do their job wherever and whenever they like. This is what autonomy and self-sufficiency look like. But this apparently autonomous structure clearly reveals the profound dependence of the worker, who looks almost like a fetus inside the uterus. According to Andreas Rumpfhuber⁹ -- to which this text owes much -- Hollein was very strategic about his personal brand. He was an entrepreneur, an "idea man". Given the chance, would he have launched a crowdfunding campaign to mass-produce his Mobile Büro?



Hans Hollein, Mobiles Büro (1969)

While the traditional office dissolves into computers and informal semi-public spaces, people begin to idealize it. This is how *office nostalgia* emerges, with its romantic idea of the cubicle, the daily chats in front of the coffee machine, and the joky complicity among colleagues. In this perspective, the office is seen as a symbol of authority meant to be mocked by employees. An instance of office nostalgia is the Generic Office Roleplay Public Group¹⁰ on Facebook, where users simply replicate the typical bureaucratic confabulation you would expect from Microsoft in its heyday. Another case in point is *Smash the Office*, a mobile game which seems to take inspiration from the cult 1995 movie *Office Space* and the numerous "office rage" YouTube videos. Here, the player needs to smash as many PCs, desks, plants, chairs as they can. This is the expression of rage left to nomadic workers, because what else could they possibly destroy, the closest Starbucks?



DREAM COME TRUE!

Smash the office

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- 1: <https://www.theatlantic.com/technology/archive/2013/11/hyperemployment-or-the-exhausting-work-of-the-technology-user/281149/>
 - 2: <https://www.bbc.com/news/magazine-36249647>
 - 3: <https://mitpress.mit.edu/books/codespace>
 - 4: <https://www.forbes.com/sites/michakaufman/2015/01/02/is-that-an-office-in-your-pocket-or-are-you-just-appy-to-see-me/#54d6eea1c5e6>
 - 5: <https://www.kickstarter.com/projects/travel-backpack/solo-is-the-ultimate-work-life-travel-bag>
 - 6: <https://www.kickstarter.com/projects/solgaarddesign/lifepack-solar-powered-and-anti-theft-backpack>
 - 7: <https://www.entrepreneur.com/article/241922>
 - 8: <https://www.flickr.com/photos/laughingsquid/2910885532>
 - 9: <https://www.youtube.com/watch?v=RKSWEW7vYak>
 - 10: <https://www.facebook.com/groups/GenericOfficeRoleplay/>

The Things of Internet

Joseph Knierzinger

More smart extensions for the smart people in the smart cities

Recently I heard this story, that it took 11 hours to boil water with a smart Wi-Fi kettle. As a dilettante - in terms of engineering - I'm surprised that every technology just has to be reinvented in a "smart" way. The old story of finding a problem for the solution. Anyway, finally the locomotive code was polished, uploaded as a zip-file and now I pressed the "publish"-button in the developer dashboard of the chrome webstore. 20 minutes later the Google Chrome Web Store team responded with unclear "Removal notification for Locomotive":

Your item did not comply with the following section of our policy:
"Do not post repetitive content.

Do not use irrelevant, misleading, or excessive keywords in app descriptions, titles, or metadata.

Do not attempt to change the placement of any Product in the store or manipulate any Product ratings or reviews by unauthorized means, such as fraudulent installs, paid or fake reviews or ratings, or offering incentives to rate Products.

Do not post an app where the primary functionality is to link to a website not owned by the developer.

Do not post an app where the primary functionality is to install or launch another app, theme, or extension. For example, if your app's primary function is to launch a desktop app that the user has already installed, that is not allowed. Another example is a packaged app that just launches a website.

Your app must comply with Google's Webmaster Quality Guidelines."

I had to read the mail twice. And I thought, someone must have been telling lies about Josef K's extension, he knew he had done nothing wrong but, on this day, nothing was approved for publish. To be sure, I checked the code, if it is even working, but everything seems to be fine. OK, lets submit it again, but got again a "Removal notification". Now I updated a used js-library to a recent version, submitted it again and again a the "Removal notification". I remembered the situation, when my supervisor once said to me "Your data structure is so kafkaesque!". What should I



Locomotive

Chrome: <https://chrome.google.com/webstore/detail/locomotive/njlepdpeebjjdopnjpbepggjebnboio>

Firefox: <https://addons.mozilla.org/en-US/firefox/addon/locomotive-browser/>

A swan stole my heart

Lidia Pereira



This swan's nest was found on the year of 2074 in a secondary canal of the city of Utrecht, the Netherlands. Among the jumble of wires, cables and half-broken electronics, a working sensor gone missing from a children's toy wreaked temporary havoc for the Smeets family. The toy in question belonged to their youngest son, Gert-Jan, who was four years old at the time; this 'smart' toy was designed to measure little Gert-Jan's heart rate, blood pressure and respiratory rate. Without the Smeets noticing, the sensor responsible for the heart rate measurements went missing one day during their customary Saturday park walk, only to end up in a swan's nest somewhere in the heart of the city of Utrecht. As a 4 year old child's normal heart rate is close to that of a swan's, at first nothing particularly out of the ordinary was taken notice of. But when the readings started constantly indicating higher heart rates than those expected, the Smeets began to be concerned. Adding to their worries, their e-mail boxes were filled daily with information about tachycardia, advertisement for cardiac

specialists around the Netherlands and automated admonishments from their family doctor. That's when the whole procedure took place that would culminate in the finding of this swan's nest, which our curators have jokingly nicknamed Zeus.

(excerpt from the exhibition 'Internet of Birds', currently at the Museum of Natural History of Rotterdam until April 23rd, 2085)

NTABIIPSSPIIBATN

Δεριζαματζορ Προμπλεμ ιναυστραλια

the work appropriates a sketch for the "posture chair" of greek architect and cybernetician T Zenetos·

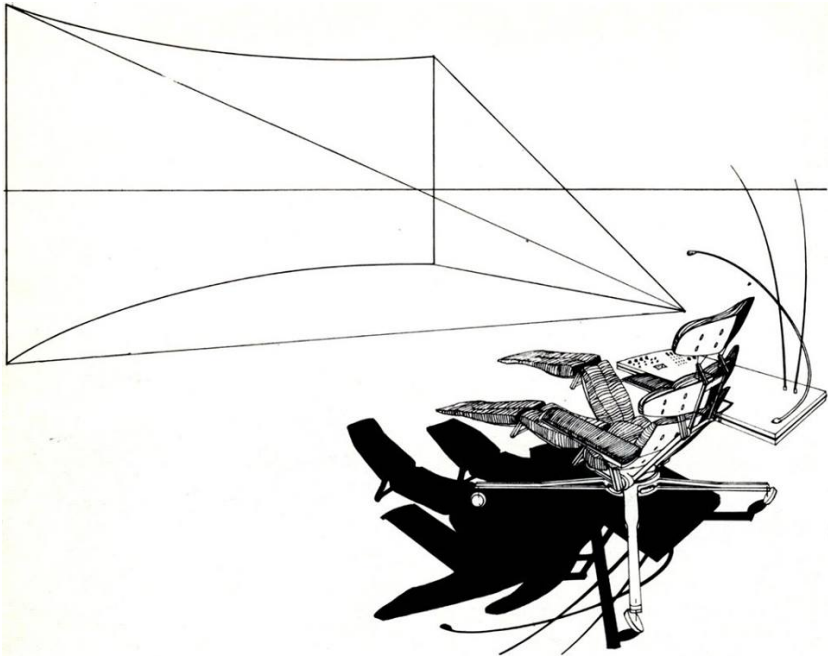
*according to scholar Lydia Kallipoliti ¹,
"The chair was intended to accommodate all human activities as a duplicate body receptor—including sleeping, working, exercising, having sexual intercourse—and enhance one's leisure with digital projections and immaterial microenvironments—all managed by a keyboard fastened to its arm. Equipped with a group of electromechanical devices for the control of temperature, sound and visual effects, the chair was a replicate body intended to re-sensitize the muscular and nervous system"*

in our work the chair is surrounded by tags that describe it, and projects a scene from everyday life bureaucracy depicting a queue of people and an administrator sitting in front of a computer·

*according to Bruno Latour [quoted in Alison Adam ²],
"the main job of the bureaucrat is to construct lists that can then be shuffled around and compared".
the tags surrounding the projection attempt to enforce associations with the ideas embedded in the chair project·*

the title of the work can be read both ways·

- 1· Lydia Kallipoliti· Masters and Slaves· a text for eflux and Superhumanity*
- 2· Alison Adam· Lists· in software studies: a lexicon, ed· by M· Fuller*



T Zenetos original 'posture chair'

