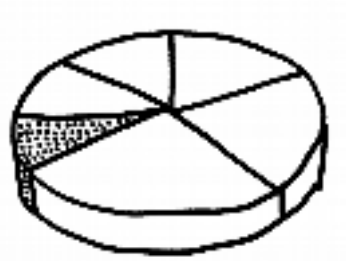
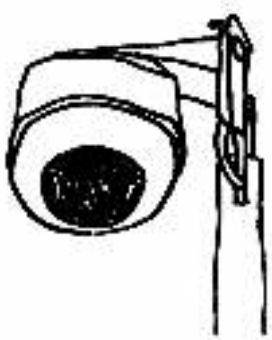
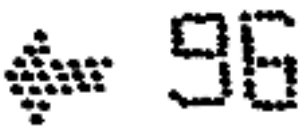
# Footfall Almanac 2019







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FOOTFALL ALMANAC 2019

-Kurt Tichy and Alex Zakkas

The Muntplein, or Place de la Monnaie, in the center of Bruxelles, is an example of the flexible event-friendly square, today ubiquitous in european cities. In 2012 the square was redesigned to match a set of requirements that would optimize the space for new types of usage.

The design brief by the city of Brussels asked for the creation of an open space that would accentuate the role of the theatre and integrate the shopping mall with the square. Overall, the proposed guidelines were the flexibility in uses of the square, the continuity with the shopping streets crossing it and the improvement of its visual readability.

This project looks at what other types of readability are shaping life on the square. The financial, technical, governmental and symbolic forces at play there, are paradigmatic of the dynamics that drive the development of contemporary urban space. These forces are observed by looking at how they come together in a specific technological setup geared at predicting 'footfall', the term used in retail to indicate the practice of counting people.

continues on page 18

RESPONSABLE PREDICTIONS

-Femke Snelting

A stack of A4s is pinned on the cork-board in the Observatory's communal kitchen. It is an account of the invasion of Normandy, and of how tidal predictions played a 'groundbreaking role' in starting the end of World War II. Long before Bidston Observatory was transformed into a center for artistic research, it housed the then famous Liverpool Tidal Institute. This institute owned two analogue computers that could precisely predict the rise and fall of water levels, by interpolating up to 42 different constituents, each with their own particular lunar and solar frequency. In the usual over-detailed fashion reserved for historical accounts of WWII, Bruce Parker, former chief scientist of the National Oceanic and Atmospheric Administration's National Ocean Service, explains how these tidal machines helped predict the exact moment when low tide would coincide with first morning light and a late-rising moon. This is when D-Day should happen.

I promised to write you a letter, but I did not know how to start and finally had to let go of that plan. Should it have suggested some kind of intimacy by using your first names? Would a simple hello do, or could I omit the address altogether? I most of all wanted to continue our ongoing conversation on how wireless device tracking has changed the orientation of surveillance, and more importantly what modes of resistance would make sense. This also mattered because of where and when I started writing this 'letter': at Bidston Observatory in Liverpool, the morning after a promise to 'get Brexit done' had swung multiple constituencies and produced an unsurprising landslide on the back of a calculated wave of xenophobia.

The *Footfall Almanac 2019* draws attention to increasingly abundant techniques and technologies that are used to track device movements in shopping-malls, on high-streets, but also at larger events in public space. Smartphones regularly emit their unique ID when looking for 'known networks'. Their requests are captured and timestamped at multiple points along a trajectory, accumulated into 'footfall' and analysed to produce 'dwelling patterns'. By subsequently connecting these patterns to discount rates, product placement and consumption habits, footfall analysis has become a powerful tool for managing space, time and movement towards more and more efficient spending.

Such manageable patterns are obviously not only of interest to the retail industry. Local planning departments, private investors, police forces, public transport managers and tourism agencies apply the same generalized techniques. In "The Production of Prediction", Adrian Mackenzie reminds us that this function bleed is already more than a century in the making. We should not be surprised to see "a generalization of prediction to a common space of not just production or consumption (advertising and marketing), but woven into the fabric of everyday life.[1] From planning D-Day, to a landslide Tory victory and the amount of customers that will come dwell on Black Friday, agents that should have very different concerns align their interests around the common denominator of value extraction. The continuum between militarized, commercialised and politicised usage of prediction keeps on accelerating and as we have observed on Muntplein, public and private space pre-emptively but irrevocably blur as a result.

Are there ways to resist the ubiquity of prediction? You said that the process of collecting 'footfall data'

1 Adrian Mackenzie, "The production of prediction: What does machine learning want?", in European Journal of Cultural Studies 2015, Vol. 18(4-5), p430.

might be straightforward in and of itself, but that what happens before and after is more complicated. I think it already begins with a lack of imagination for what qualities a movement could have, or what their aggregation could do. Or maybe it starts when people are conflated with their devices, so they can be modeled as constituents of a population. In statistics, 'population' is a term for any group of individuals (people, devices, consumable objects) that samples are taken from. This becoming-population and signals a crucial removal of agency or intent that is not just conceptual. Populations follow to-be-predicted patterns, they flow around obstacles and respond to external attractors, they can never be more than the sum of their parts. Populations do not need to be controlled or policed, because they can already be managed.

To be predictable as a population means not to count as an individual, nor as a collective. Prediction diffuses the possibility for response and deflates usual modes of resistance as it removes the direction for address. To be pre-dicted means that all there is to say should fall within a reduced space of possibilities, whereby any potential response is constrained by the limits of extractable value.

The *Footfall Almanac 2019* cuts through this impasse by proposing quite a different mode of operation. It invents new forms of survey, and layers on more predictions, rather than less. It devises its own concoction of techno-artistic research practice to explore the restricted imaginations embedded in wireless tracking and to explode what can be expected from it. It starts to talk back in unpredictable ways by proposing poetic lists and scripts and scores; by unpacking its technological components and twisting its tongue on the absurd vocabularies that collide in the hastily cobbled together commercial jargon that tries to sell the management of flows to the highest bidder.

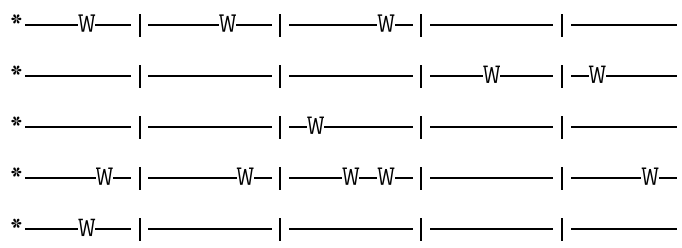
These interventions, whether they appear as a situated audio-piece for mobile phones, a walk exposing wireless tracking on the Brussels' Christmas market or a public discussion, each in their own way contribute to a collective grasping of what is going on, as an invitation to start formulating a response together. The project is a tentative practice of undoing pre-dictions, a work that Donna Haraway might call 'the cultivation of response-ability'. "I think of response-ability as irreducibly collective and to-be-made. In some really deep ways, that which is not yet, but may yet be. It is a kind of luring, desiring, making-with".[2]

Study the legal and technical funcioning of these mechanisms, Send letters to DPOs, Create spaces to discuss what public spaces we want, Address and pressure the institutional bodies, Steal the devices that are involved in the capture of data, to study their functioning, Marvel at the absurdity of a system trying to categorise its own incompetences, Practice unreadable gaits: The *Footfall Almanac 2019* proposes modes of resistance that are not reactive, refusing nor defensive but instead commits to growing collective capacities for response.

Bidston Observatory, Liverpool
December 2019

2 "Anthropocene, Capitalocene, Chthulhucene: Donna Haraway in Conversation with Martha Kenney", in Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies, eds. Heather Davis and Etienne Turpin, Open Humanities Press, 2015, p231.

A flock of birds fly counter-clockwise over the square and land on the scaffoldings at the NE



# THE URBAN THRESHOLD BETWEEN NOISE AND SIGNAL

-Dennis Pohl

The discourse around current urban development approaches is often divided into two factions. One that perpetuates smart city urban development strategies, based on probabilistic models of collected data. And another that emphasizes the cultural role of architecture and urban planning, assuming that culture is an all-encompassing set of social, economic and political values. The first is a sort of prognostic urbanism, raising the question what and whose data is taken into consideration; the second is a culturally driven urbanism that presumes certain cultural values as the predominant ones.

In the history of urban planning, criticism of this dichotomous notion was already revealed in the early 70's, most emblematically in Gilles Deleuze's essay "La Ville Ordinateur." The prior has been coined the 'pragmatist' perspective, in continuity with the CIAM *Charter of Athens*, that has famously tried to divide the city into zones and functions. Here, pragmatic needs such as leisure, industry and housing are constitutive factors for the inhabitants. The 'culturalist' account emphasizes that every aspect of the city has a symbolic value that precedes a function. Here, the use of architectural forms, typologies or materials refers to a wider socio-cultural repertoire of resources. According to Deleuze, both views remain in the assumption that the inhabitant is necessarily a consumer, either of given 'technical' functions or cultural values.[1]

1 Gilles Deleuze, "La Ville-Ordinateur" in: Revue de Récherches, Nr. 13 (December 1973).

Consuming either functions or values becomes a historically complex entanglement in the planning process of *Place de la Monnaie* from the early 19th century until present times. An insight into this past reveals the modern subject as a consumer, a materially and historically constituted category. In scales that range from the urban to the portable device, the *Place de la Monnaie* has been shaping the behavior of its consumers with a network of material dispositions such as shop windows, pavements, bricks, benches, lanterns, wifi-trackers and mobile phones that normalize its use(rs) and catalyze the flows of capital, in symbolic, cultural, human an economic forms. In short: an infrastructure that sets material conditions for behavior repetitions and value extraction.

The first economic subjugation started in 1965, when the Brussels post office became obsolete after 70 years in operation. The 19th century was characterized through the operatively closed postal system of message circulation, where standardized letters were reaching standardized addresses. Street names, house numbers, letter boxes, stamps and postage costs formed a communication network where message interpretation and sense were still up to the reader or addressee. As soon as addressees started to be dependent on media-technical apparatuses that served as interpreters to distinguish signal from noise, such systems became more and more obsolete.[2]

As such, the raise of the modern fax machine and telephone left a void on the *Place de la Monnaie*, that started to be filled with a network of electrified devices, connectors and cables. These constituted an infrastructure which could transport both messages and consumers to the newly constructed shopping malls on the not-less overambitious titled *Carrefour d'Europe*.

2 Bernhard Siegert, Relays: Literature as an Epoch of the Postal System, trans. Kevin Kepp, Writing Science (Stanford, CA: Stanford University Press, 1999).

What remained open for a short period in 1966 was a giant crater, until it got filled with an urban infra-structure system setting new relations between citizen registers in the Brussels administration, consumers and goods in the *Centre Monnaie* shopping mall, commuters from parking lots and metro lines.

Above *Carrefour d'Europe*, the *Centre Monnaie*, a Brussels administration center designed by the architects Cuisinier, Gilson, Polak and Schuiten as a hybrid building, facilitated several functional layers such as offices, shopping mall located on the first two floors, as well as underground tram and metro lines.

Together with the design of the new shopping and office building, the streets dividing the *Théatre Royal de la Monnaie* and the former post office were turned into a new square, in a 'hors-sol' style. Consisting of several benches integrated into plant containers and a fountain, made by the sculptor J. Moesschal in front of the theater the square, it offered possibilities for various activities to take place in a rather informal way.[3]

The Belgian branch of the German real estate company IVG holding, later sold to AG real estate, that owned the *Centre Monnaie*, made an initiative to ask the city of Brussels for a re-qualification of the square, commissioning the urbanist P. Van Wunnik to produce a

3 Atelier de recherche et d'action urbaine (ARAU), "Analyse du mercredi 9 juillet 2014: place de la Monnaie: money, money, money?".

report and a design proposal.[4] In the report, the former design of the *Place de la Monnaie* was criticized for offering 863,5m² of the available 3210m² surface to plant containers and benches. In short: “Tous ces objets, par leur accumulation, donnent à cette place une manque de lisibilité produisant des difficultés pour la circulation des piétons et forment des contraintes dans l’utilisation de la place.”[5] Though not specified as such, removing benches and plant containers also meant removing from the square undesired activities that did not produce direct economic revenue.

In 2004 an architecture and urban design competition was launched to redesign the square, in order to integrate it stronger into the contemporary shopping environment. Addressing four main critiques in order to:

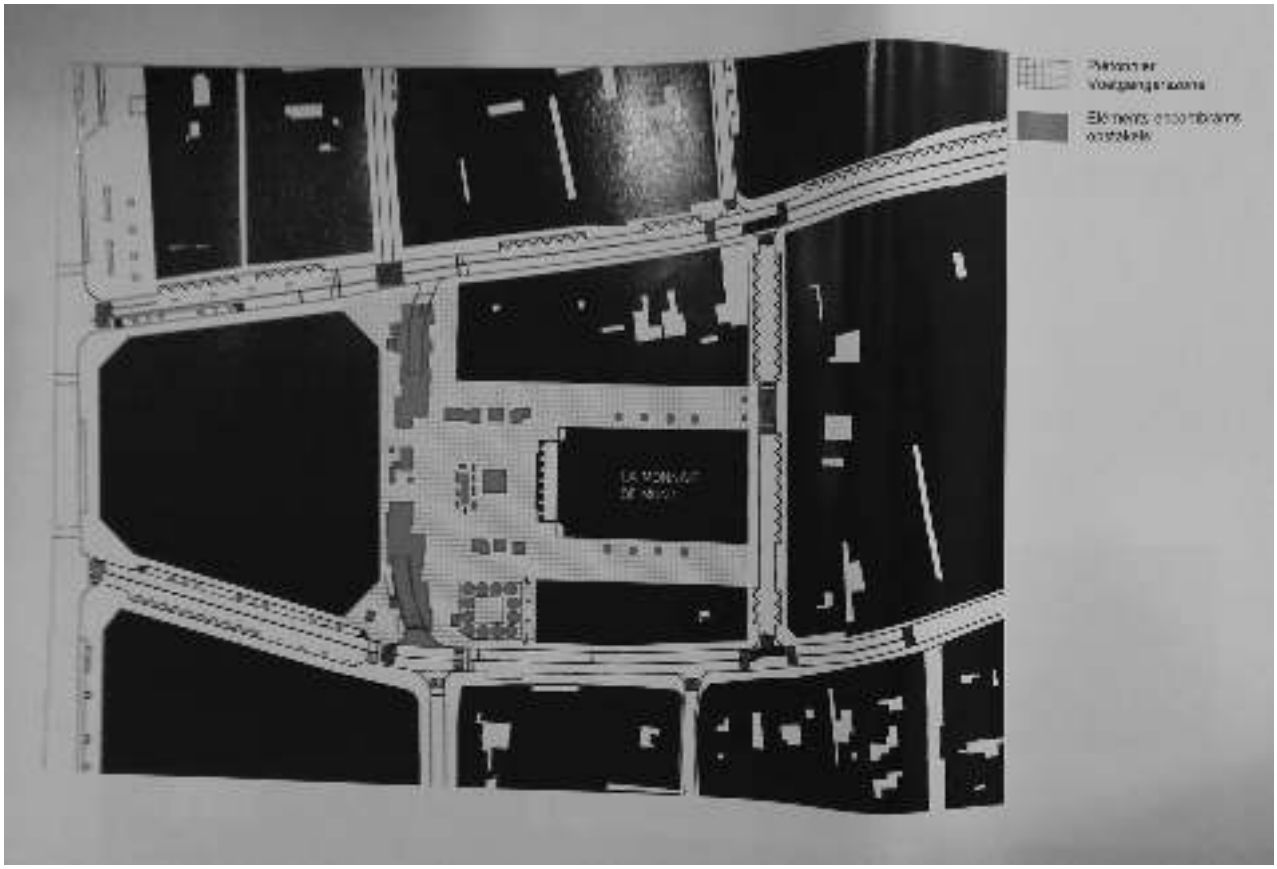
1. design a central square for multi-functional use
2. design a free view on the theater, which apparently was not available before
3. integrate the shops on the side into the square, and reinforce the north-south flow of pedestrians between *rue Neuve* and *rue des Fripiers*
4. increase the visibility and ‘readability’ of the square, a terminology that goes in hand with a panoptic surveillance figure.

In short: the new design should follow the media-technical development from the postal-system to the fax machine, namely to transform the square into a medium that would allow the circulation of signals while reducing the production of noise. The winning design was unsuccessful in gathering enough support by the city authorities. A second building permit was handed in 2008 by MSA office and Techem. In a schematic history of *Place de la Monnaie* dating back to 1789, the urbanists concluded that the period from 1965 to 1973 had produced a hybridization of the square, characterized by

4 “Toleda invest S.A, aquiert le Centre Monnaie à Bruxelles”, Le Soir, 29.03.2007

5 Van Wunnik Partners, “Ville de Bruxelles – Place de la Monnaie – Demande de Permis d’urbanisme”, 18.06.2004, p. 17.

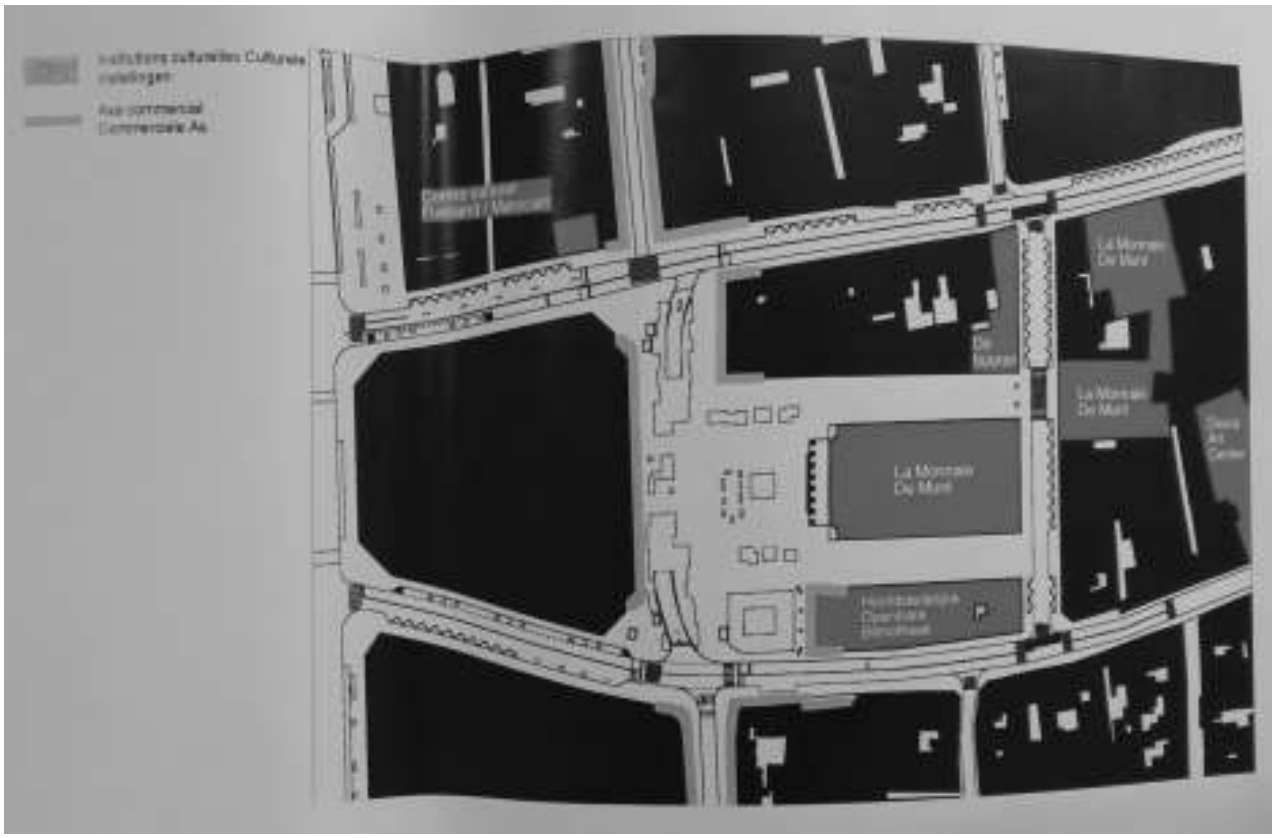
an ‘underground urbanism’ where large scale infra-structures such as metro, parking and high voltage cabins were installed and produced subterranean access ramps, ventilation grills on the ground level. According to the urbanists, this hybridization period included a mix of car, metro and pedestrian circulations that had to be taken as a starting point for a new proposal where those functions could be separated but nonetheless optimized at the same time.[6] Despite the efforts of MSA Techem to propose new perspectives, exactly the same obstacles were criticized as in the previous report: benches, tree containers and fountains – indeed everything that doesn’t fall under the realm of consumption, whether it be goods or culture.



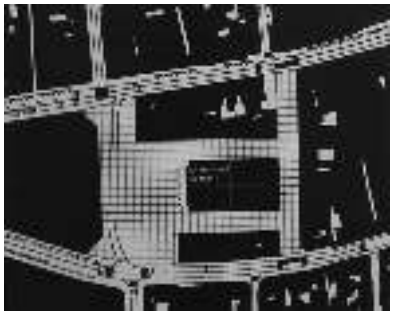
Here the use-ful/-less ratio was adapted by MSA Techem to 1295m² occupied by obstacles of a 7767m² pedestrian zone. This dichotomous distinction becomes even more

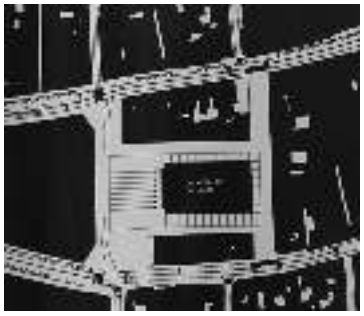
6 MSA Techem, Ville de Bruxelles – Place de la Monnaie – Demande de Permis d’urbanisme, December 2008, p. 13.

evident in the diagrammatic drawings by the urbanists, distinguishing only between commercial and cultural zones. Once again, both functions are assigned to urban planning, based on the assumption that this distinction has to be preserved instead of questioned.



Moreover, the street becomes an analogy to media channels where circulation flows can be enhanced by design. Simply by adding these diagrams on top of one another, the resulting design of the square seems not so much different from the diagrammatic analytic approach of functional divisions. Diagrammatic urbanism, made simple in a view from above.





Next to horizontal flows of people, also vertical flows had to ensure an integrity between the metro station underneath the square, transforming the building entrance into a metro relay that binds the consumer flows of shoppers to the time tables of metro lines 3, 4, 32, 1 and 5. However, for the first time, architectural and urban design sets the material condition of a plane media surface for surveillance mechanisms that use MAC addresses in order to track consumer behavior. Even if they do not correlate directly, the spatial co-existence of several registers appears striking: a citizen registry of individual addresses in the Brussels administration center, a consumer registry of MAC addresses that is collected in the shopping mall and metro entrance, a commuter registry that is gathered in the metro station and underground parking.

Flow control and flow management are already at stake in the assumption that only an empty square is readable and can be used as a ground for surveillance techniques and technologies. Only the square, as a medium that allows for the distinction between signal and noise, can be bound to digital systems that perform behavior and shopping analysis. At the same time, a feedback loop into architectural design software assures that probabilistic design models for public squares flow back into design practices in order to produce an integrative consumption and circulation infrastructure by reducing noise under the umbrella of safety and security features. *Place de la Monnaie* serves as an example of a hardware condition that sets new software approaches of data gathering into practice: modern architecture has always been the driving force of consumption.

THÉÂTRE ROYAL DE LA MONNAIE

A shared condition for many of the square's functions is that nearly every point of the square is visible from every other point. All visual obstacles that characterised the square before the renovation have been removed. When observing the square from a pedestrian level, one quickly gets a sense of joining the ranks of a vast collection of human and non-human observers.

By tuning into its daily and nightly rhythms, reading along or across lines of advertising slogans, crowd movements, pigeon flightpaths and underground parking manoeuvres, one realizes that what 'readability' means is very much dependent on respective roles, vocabularies and lenses. To the security guards events are filtered through the lens of potential threats to private property — or distractions; to the intelligent garbage bins litter items are observed as incremental decrease of their capacity, and to the square reader as props in scripts for unfolding events or entries in lists.

**Environmental conditions:**

light south-western wind
light southern wind
light north-western wind
strong western wind
strong south-western wind

sufficient lighting

moderate sound levels

**Obstacles that may have hindered the square's readability before the 2012 redesign:**

Cement benches
Water fountain
Planters
**Trees:**
33 planes
1 fir
1 maple
4 box trees
1 cranberry shrub
1 beech

**Things that might have been placed on the square, targeting tourists in particular:**

phone charging spot at the centre of the circular bench
gigantic advertisement for Brussels airport on the scaffolding on the new McDonald building site
new McDonald
decathlon pop up store, horse-riding themed for this month

**Words read during a short stroll, in alphabetic order:**

addicted to black
all you need is love
autumn is calling
back to school
beats of golf
beginner
cafe de l'opera
coffee fellows
decathlon
deeply repair
deliveroo
elipsis 3000
elite
fairtrade
flawless face
gas vented
golf pop-up store
heart sole
I am
i am a cat
light
low pro
men
new look
no fear
oxford plastics
patent pending
prol make up
save the bees
solidarite
steward
the Mint
Theatre Royale
#thisiseverything
travel minis
two man lift
ultra easy
women
work. live. sleep.

**Useful acronyms:**

CRM Customer Relationship Management
DPO Data Protection Officer
DSP Demand-Side Platform
GDPR General Data Protection Regulation
KPI Key Performance Indicator
POS Point of sale
PSR Parallel Synchronized Randomness
ROI Return On Investment
RTB Real-Time Bidding
RTI Retail Traffic Index
SIS Shop-In-Shop
WoW Week on Week
FAQ Frequently Asked Questions
MAC Media Access Control

**Beverages being consumed on the theatre's steps:**

beer
coca cola
coca cola cherry
coffee
sprite lemon lime & cucumber
red bull
vodka
prosecco

**Next 3 songs:**

Titanic theme song (My heart will go on) - electric violin version
Despacito - electric violin version
Amélie theme song (Comptine d'Un Autre Été) - extended violin version

**Top 10 objects held at this time of the day, arranged by frequency:**

phones
shopping bags
clothing garments
waffles
cigarettes
purses
cans of beer
vaporizers
loose sheets of paper
extension cables

**occasional smell of:**

urine
freshly baked waffles
cigarette smoke
electronic cigarette vapour
disinfecting agent
car deodorant
car park ventilation filters

**Ways of walking on the square while talking on the phone:**

wandering without a clear direction, waving hands once in a while
talking loudly, seemingly agitated, changing directions erratically
crossing the square hastily, periodically nodding
walking in circles, looking at the pavement, gesturing excessively
taking small, indecisive steps while looking around searchingly
waving while walking straight towards a certain direction

**Objects most likely to fall involuntarily in the next 3 minutes:**

waffles
napkins with Belgian chocolate stains
phones

The stairs in front of the theatre provide refuge from the intense flow of the shopping street and a favourable gathering spot during quieter hours. Unless there is a theatre play. During the break, the theatre's ushers will ask people to move away from the stairs not to obstruct the theatregoers.

**Colour combinations**

**on people who have been standing still for too long:**
velvet black with synthetic leather black
lime green with yellow stripes
beige with creme white
warm yellow with lime yellow
triple white

**Things that distract her attention while listening to what the man in the blue suit thought of a recent theatre play:**
a child, taking slow careful steps, towards a swarm of birds nibbling on an Australian waffle
a young woman, possibly the child's mother, standing motionless holding her phone, probably making a video
a woman in yellow raincoat, holding a paper A4 sheet, pointing it towards the tall building across the square
a light turning on a room at the 5th floor, a slight quiver of the luxaflex blinds
a rush of wind, **lifting from the pavement:**
ashes
dust
napkins with Belgian chocolate stains
loose A4 sheets
plastic bags
food wrappings
the gentle sway of a lonely tree
an involuntary spasm on the man's face
a distant memory of a hurried conversation near the metro entrance
a dinosaur-shaped balloon flying away direction northeast
3 black sedans exiting the car park from the west exit
a man

**Events likely to be taking place while trying to end a conversation:**
a delivery cyclist in bright orange suit cycling fast, straight, diagonally crossing the square from east to west
a young woman posing for a photograph in front of the theatre
a flock of birds flying counter-clockwise circles over the square
two kids running up the stairs of the shopping centre
a group of teenagers, scared by an approaching dog, taking hasty steps away
two men shaking hands, one of them is having difficulties pronouncing the other's name
a man talking loudly on the phone, seemingly agitated, walking around changing directions erratically
three black sedans descenting to the lower levels of the parking lot, driving past multiple empty spots
two men dancing around a hat on the floor
**potential hazards:**
incomparable metrics
uninspiring reports
incomplete satisfaction surveys
abandoned customer journeys
the "butt-brush effect"
broken relationships
non-experiences
irreversible churn
excessive dwell
misdiagnosed user needs
misguided flowcharts
**type of plants that used to:**
clutter the **square before**
potential misuse
obstruct the
breached protocols
live in the
visitors decay
**involuntary movements:**
A breeze
The third tree from the left quivers.

**Vehicles expected to enter the parking lot in the next minute:**
a Volkswagen caddy, a diesel from 1997, soon banned from the Brussels region
a Renault Clio, silver, model 1998, soon banned from the Brussels region
a white minivan, Mercedes Vito, model 2009
3 black sedans
pink Cadillac

**Obstacles you can expect to encounter while cycling straight, diagonally across the square from east to west:**

a mother recording a video of a child taking slow, measured step towards swarm of birds

**two men drinking:**

- beer
- coca cola
- coca cola cherry
- coffee
- sprite lemon lime & cucumber
- red bull
- vodka
- prosecco

quarrelling about the quality of a customer experience

a dropped Australian waffle

a man on the phone talking loudly, seemingly agitated, changing directions erratically

a woman standing still with her hands crossed over her chest, staring towards the metro entrance

**objects that have been recently misplaced:**

- Brussels blue stone bench made
- portable chemical toilet
- 162 pavement tiles
- a pair of brown leather shoes, size 42
- a HappyOrNot smiley terminal

**Non-shoppers with intent to cross the square from north to south:**

man with golden retriever dog on leash
woman holding stack of loose a4 sheets
man in blue business suit, brown leather shoes
man in blue worker's overall
man wearing gas mask
group of young adults bearing insignia of a local football club

**Types of non-motorized wheels that regularly cross the square:**

- cabin trolleys
- skateboards
- baby strollers
- hand trucks
- transpallets

**Inner states of people waiting:**

absorbed in thought, seemingly unaware of surroundings
wishing this is all just bad dream
unsure of whether this is actually happening real-time
is this part of a bigger picture?
deliberating on the consequences of giving up
determined to see this to the end
experiencing a deja vu
sober, grounded and forward looking
a fish in a tree
ready for anything really
tired but trying to stay optimistic
eager and full of expectation
excited by the possibilities
dazzled but amused by the kerfuffle
aloof and idly entertained
alert and vigilant, nerves of steel

**considering possible answers to common FAQs:**

- improving readability
- reinventing local marketing
- targeting and retargeting
- capitalising on the movements
- integrating third-party data-streams
- optimising staff performance
- calculating conversion rates
- maximising shopper engagement
- fascinating reports

**the redesign:**

- fir
- maple
- beech
- box
- cranberry shrub

It is a plane tree

This tree has been referred to as the 'lonely tree' during the development of the square. There used to be 33 plane trees around that spot. They have been transplanted due to the renovation in 2012, but their final destination is unknown. In accordance to the architectural brief, their removal improved the legibility of the square.

**Promises:**
The crystal ball has become a reality
Capitalize on the movements of mobile users outside of the point of sale
We will turns your store into a behavioural data power house
Steal your competitor's customer
Keep your customers coming back for more
Gauge your employees' workday satisfaction
Gauge your employees' feelings instantly
Maximise the return on your real estate investments
Gain powerful insights
Use data to improve your business
A culture of open communication
There are no boundaries
We respect privacy
Committed to protecting and respecting your privacy
Committed to safeguarding your personal information
Eliminate non-productive zones
Optimizing the shopper journey leads to longer shopping time and higher conversion

**Objects that will not obstruct the compression mechanism of intelligent garbage bins:**
wine bottles
broken umbrellas
wooden beams
metal pipes

**Things that upset the security personnel of the Decathlon store:**
unexplained beeping of alarm doors
two kids running out the shop
loud, quarrelsome discussion by the entrance
an unfamiliar smell, faintly sweet, synthetic
bursts of laughter from groups of window shoppers
unsolicited fashion advice by high value costumers

At this time of the day nobody is shopping.

Some of the advertising screens are still running their regular loops, others are on standby.

The entrance of the metro station is also an entrance to the shopping mall.

An area where paths cross, steps stutter and flows twirl like spaghetti.

**Terms proposed to describe the phenomenon of two people walking towards each other not knowing how to cross paths:**
the awkward dance
the pavement tango
droitwich
avoidancing
sidewalk gavotte
symmetry-breaking impasse
schlumperdink
the get-past-you shuffle
PSR (Parallel Synchronized Randomness)

The led indicator that displays the amount of free parking spaces decreases by a unit, totalling 96 for the 4th floor.
Then it increases back to 97.

A black sedan
A black sedan
**A black sedan:**
enters
descents
exits

Theatregoers, dressed for the occasion, swarm the southwest of the square.

Flickering light from the stores illuminates the pavement.

Phone usage is moderate, with a slightly higher ratio of crossing without stopping than usual.

**Ways of handling the phone during a conversation:**
phone held on ear
phone held in front of face
in-ear headphones, microphone held in front of mouth
phone tightly clenched in fist
spitting at the screen while cursing

The 'intelligent garbage bins' installed on the square are considered to hold 5 times the amount of garbage that normal bins can hold, by periodically compressing the litter. They also send regular updates on their filling status. Their cost is around 5000 euros, 5 times the cost of a normal cast iron garbage bin. Their installation is supposed to reduce the frequency of garbage collection to one fifth. They are also praised for their self-locking option, in view of possible circumstances that will require it as an anti-terrorist measure.

Bikes have a secondary role on the square, maybe due to the shortage of parking space.
Seldomly a bike crosses through the square. The new flooring seems to be optimal for all sorts of wheels.
The square's flexibility was one of the key objectives for the re-development, and flexibility generally comes on wheels.

The activity on the square is still intense, for this hour in the day.

to lower levels of the parking lot, driving past multiple empty spots.

**Vehicles expected to come out of the parking lot in the next 5 minutes:**
black sedan
pink Cadillac
Volkswagen caddy, a diesel from 1997, soon banned from the Bruxelles region
Toyota corolla, grey, model 2006
white minivan, Mercedes Vito, model 2009

The tall office building on the west side of the square houses the administrative services of the City of Bruxelles.

**Wireless networks that have been looked for in the last [5 minutes]:**

proximus-fon
bbox2-5319
muntpunt_guest
Aanspach_free_wifi
TheMint_free_wifi
nowiwantastraightline

[ minutes ago ], another device, [68:f7:e0:c4:b2:b1], accessed a sound file on this network, then left in the direction of the theatre. In the middle of the trajectory, it looked for a familiar wireless network.

this is very likely to reoccur **in the next:**

second
seconds
minute
minutes
hour
hours
day
days
in the near future
in the meanwhile
in parallel
if today was tomorrow
ago

**on the square and in the shopping centres:**

**Parties that probably collected information about your movements**

AG Real Estate
PFM Footfall Intelligence
Fidzup
Proximus
Alexandros Zakkas and Kurt Tichy

THE PANORAMA SPOT OF THE MUNTPUNT LIBRARY

**Sightings misedintified as signals**

**Thresholds**

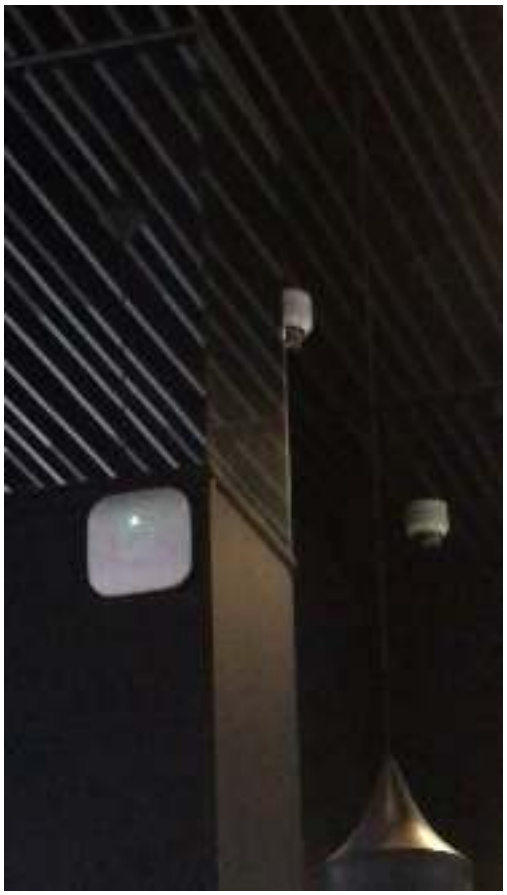
**Things left behind after hurried conversations**

**Apparatuses**

**Feedbacks**

agmi-brus-01-ap01

**Gatherings**



**Possibly part of a bigger picture**

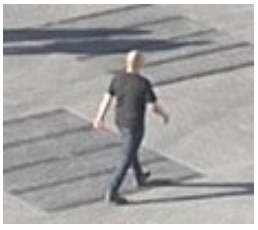
**Motions to avoid avoidancing**

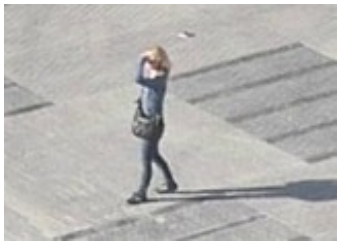
**Predictions 2**

**Regular Patterns 2**

**Excessive dwell**

**Frequently practiced gaits**





**Points of reference**

**Temporarily unexploitable surface**

**Regular Patterns 1**

**Predictions 1**

**Attempt at exhausting a square in Bruxelles**

HEMA

The HEMA is the first store a pedestrian passes when entering the square from Rue Neuve heading towards Rue de Fripiers. Next to HEMA there is UNIQLO, I AM, NYX, TAMARIS, HAIRDIS, KIABI, ESPRIT, a pop-up store by DECATHLON, then the entrance to the metro station de Brouckère. Walking at a steady pace in a straight line, casting occasional side glances to the shop vitrines, not getting caught up in a sidewalk gavotte, it would take a pedestrian about one and a half minute to get there.

On the way, the pedestrian's mobile phone will emit a series of signals to look for known wireless networks, signals which are technically called *probe requests*. The emission of a probe request every few seconds is the default behavior of all commercially available smartphones and laptops, as this allows for seamless connection to the networks one uses most frequently, without having to manually connect. These signals can be read by any other wireless device, which can register the *source address* (the unique identifier of the sender's device), along with a timestamp, the signal's strength, the device manufacturer and in many cases the *names of the familiar networks* that were looked for by the device.

Hereby is a list of two probe requests collected on 2018-10-11 between 12:43:11 and 12:43:13. Data that could qualify as personal data under the GDPR regulation is in *italic*.

| Addressing part | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | | Duration | | Destination Address | | | | | | Source Address | | | | | | BSSID | | | | | | Sequence | |
| 40 | 00 | 00 | 00 | FF | FF | FF | FF | FF | FF | *2E* | *10* | *FC* | *5C* | *5E* | *48* | FF | FF | FF | FF | FF | FF | 80 | 63 |

| Content Part | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SSID | | | | Supported Transmission Rates | | | | Additional Transmission Rates | | | | | | | | | | | | Radio Channel | | | |
| 0 | | | | 4→ | | | | 8→ | | | | | | | | | | | | 1→ | | | |
| 00 | 00 | 01 | 04 | 02 | 04 | 0B | 16 | 32 | 8 | 0C | 12 | 18 | 24 | 30 | 48 | 60 | 6C | 03 | 01 | 04 | | | |

| Vendor-specific Part | | | | | Control Part | | | |
|---|---|---|---|---|---|---|---|---|
| … | … | … | … | … | FCS | | | |
| … | … | … | … | … | | | | |
| … | … | … | … | … | 2D | 1A | 21 | 40 |

| Addressing part | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | | Duration | | Destination Address | | | | | | Source Address | | | | | | BSSID | | | | | | Sequence | |
| 40 | 00 | 00 | 00 | FF | FF | FF | FF | FF | FF | *2E* | *10* | *FC* | *5C* | *5E* | *48* | FF | FF | FF | FF | FF | FF | 80 | 64 |

| Content Part | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SSID | | | | | | | Supported Transmission Rates | | | | | | Additional Transmission Rates | | | | | | | | | | |
| 5→ | | *c* | *u* | *t* | *u* | *p* | 4→ | | 1 | 2 | 5.5 | 11 | 8→ | | 6 | 9 | 12 | 18 | 24 | 36 | 48 | 54 | |
| 00 | 05 | 63 | 75 | 74 | 75 | 70 | 01 | 04 | 02 | 04 | 0B | 16 | 32 | 8 | 0C | 12 | 18 | 24 | 30 | 48 | 60 | 6C | |

| | | | Vendor-specific Part | | | | | Control Part | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radio Channel | | | … | … | … | … | … | FCS | | | |
| 1→ | | 4 | … | … | … | … | … | | | | |
| 03 | 01 | 4 | … | … | … | … | … | 7E | 51 | E4 | 7D |

**Information contained in a probe request**

**Addressing part:** The type of packet. Type 40 represents the Probe Request packet.
Used only when exclusive communication is established, empty for probe requests
The MAC address of the destination of the packet, address FF:FF:FF:FF:FF:FF means any
*The address of the wireless device that is searching for available networks*
BSSID, Basic Service Set Identifier, the MAC address of the known network, in this case, any
A sequence number, to correctly identify the order of packets

**Content part:** *SSID, Service Set Identifier, the name of the known network, if present*
The different speeds at which the device can communicate
The wireless channel the device is transmitting on, 1 to 13
Vendor-specific section, where additional settings can be stored

**Control part:** FCS, Frame Check Sequence, a code added in the end to detect transmission errors

## THE ENTRANCE TO THE SHOPPING CENTRE THE MINT

Wireless tracking exploits the emission of probe requests by mobile devices of pedestrians, and collects these signals to analyse them later as aggregated data. While this type of collection is technically simple, the sought-for service that footfall-analytics companies offer is the processing of the large amounts of collected data into quantified insights about customers that retail managers will use to improve their sales.

With the inspection of this information the companies can 'place' a smartphone within the space, calculate how long it spent in front of a vitrine, if it entered a shop and how long it remained in it. Consequently, footfall-analytics companies offer precise charts of client behaviours and patterns, which shops acquire to elaborate business predictions, plan campaigns, etc. The footfall-analytics business presents an ambiguous face, well represented by the two companies hired by AG Real Estate, the owner of The Mint shopping centre, to provide wireless tracking services to the shops.

The two companies are PFM Footfall and Fidzup. The 'good' footfall-ist (in this case, PFM Footfall) promises to pseudonymize the observations, providing exclusively quantitative information to the shops, without threatening the privacy of passers-by. The shadier aspect of this type of data-collection is represented by Fidzup, which instead boasts targeted and re-targeted advertising, following shoppers at home and in their phones. In fact, the company has been already found guilty and fined in France for using illegal techniques to track potential customers through their mobile phones.[1]

The ambiguity is reflected in the lexicon and wording that the two companies use in their website, to describe their own practice.

1 https://www.cnil.fr/fr/applications-mobiles-mises-en-demeure-absence-de-consentement-geolocalisation-ciblage-publicitaire

On PFM's website we can read about their work in these terms:

Data-science,

Retail scan,

Forecasting,

People Counting,

Dwell Time.

Fidzup, instead, presents itself with a different glossary:

Behavioural (re)targeting,

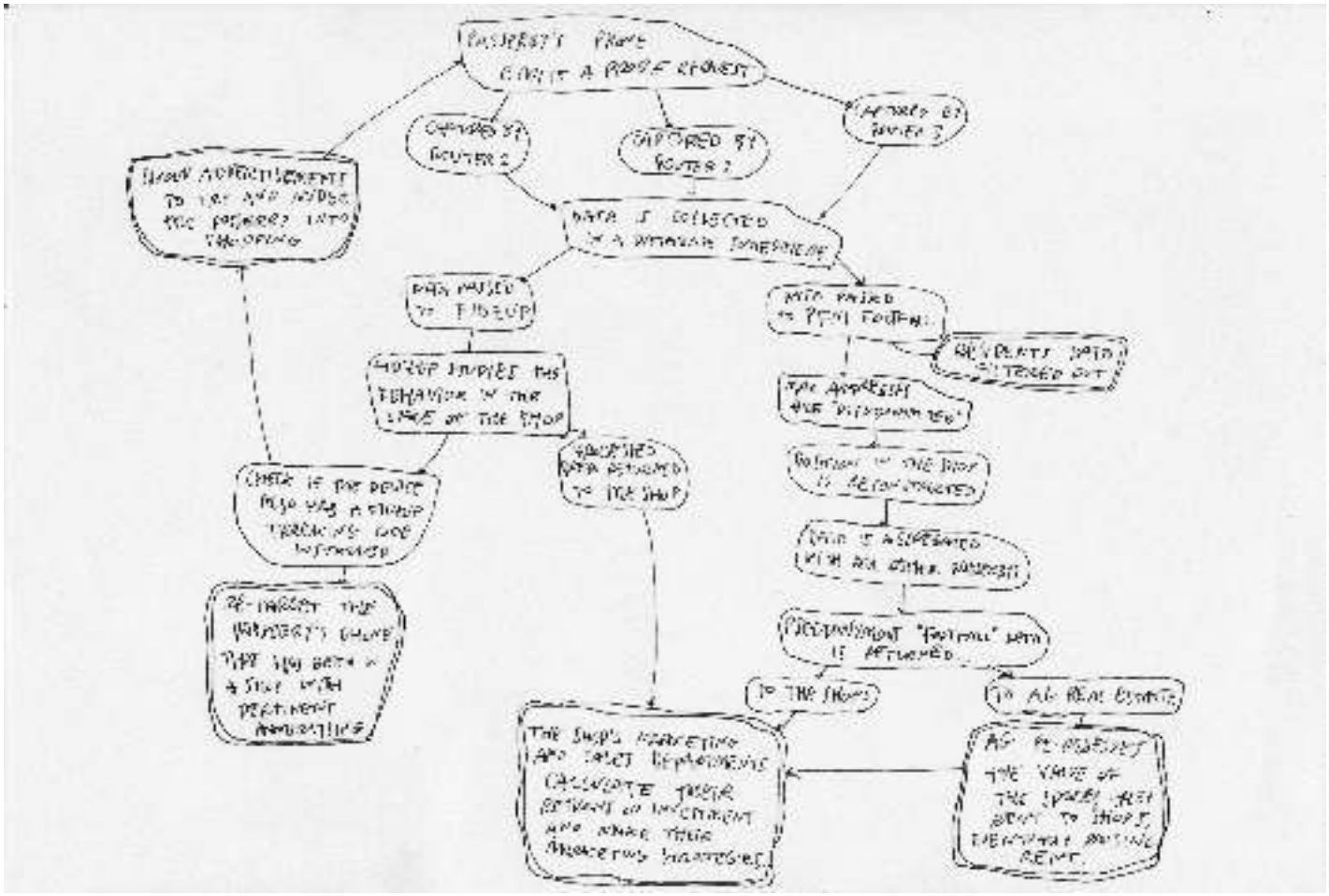
Stealing your competitor's customer,

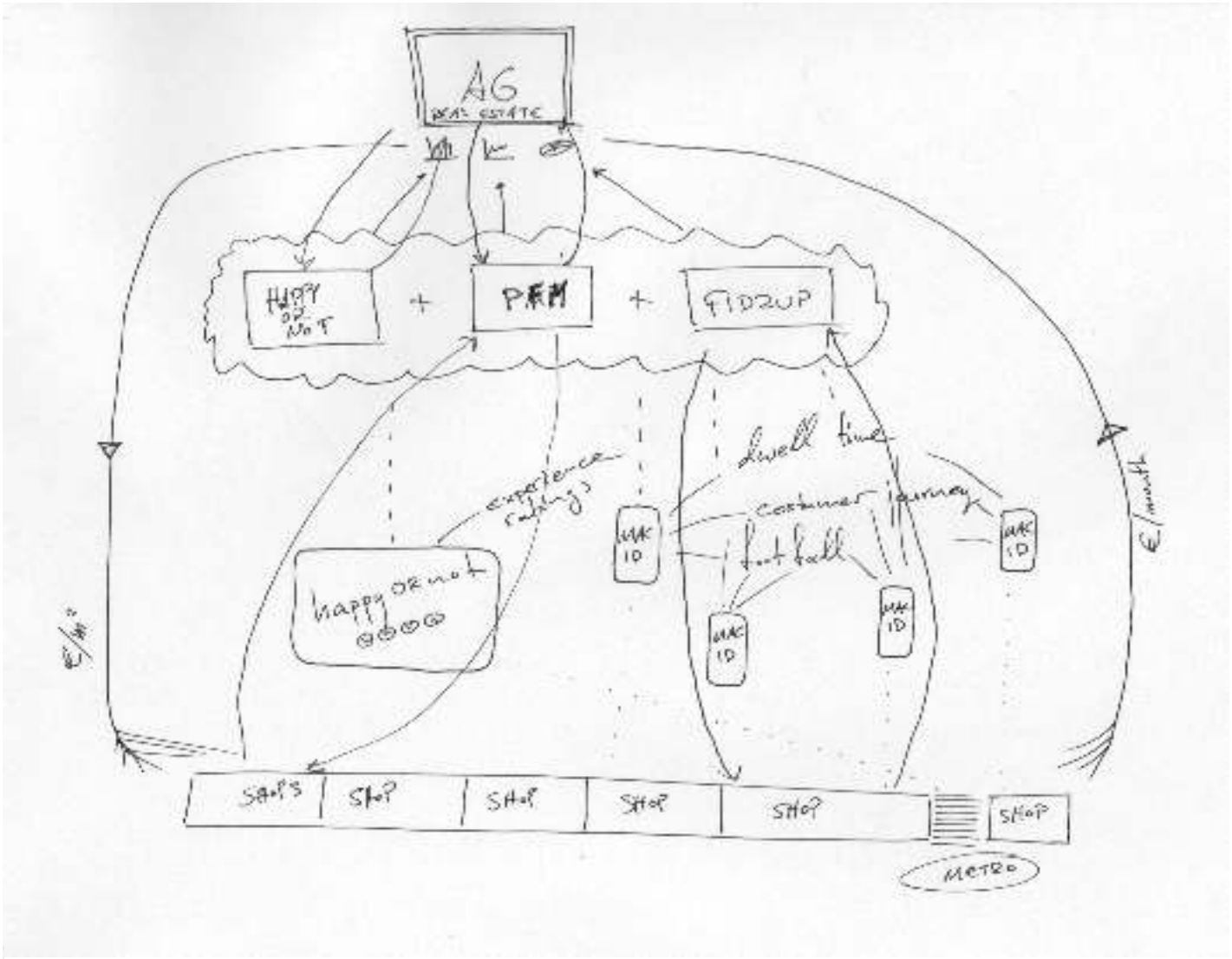
Catchment area,

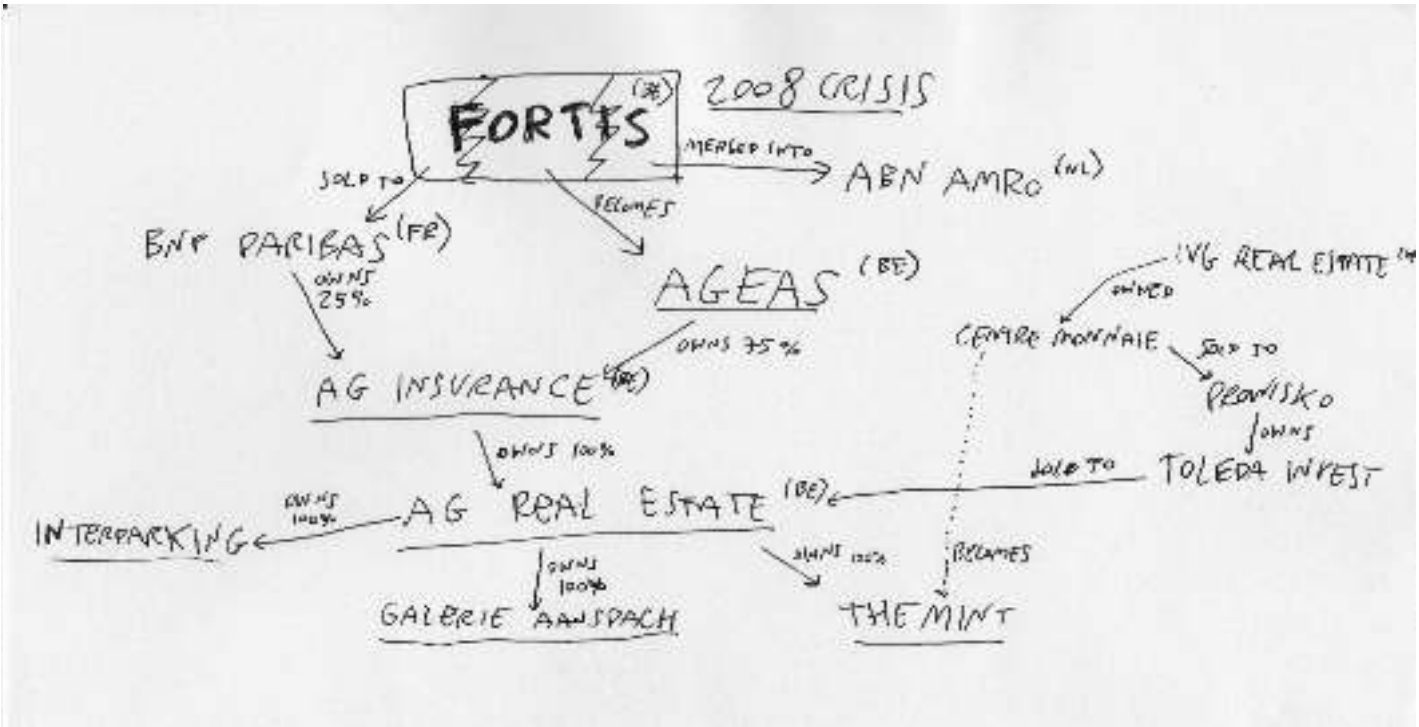
Consumption habits.

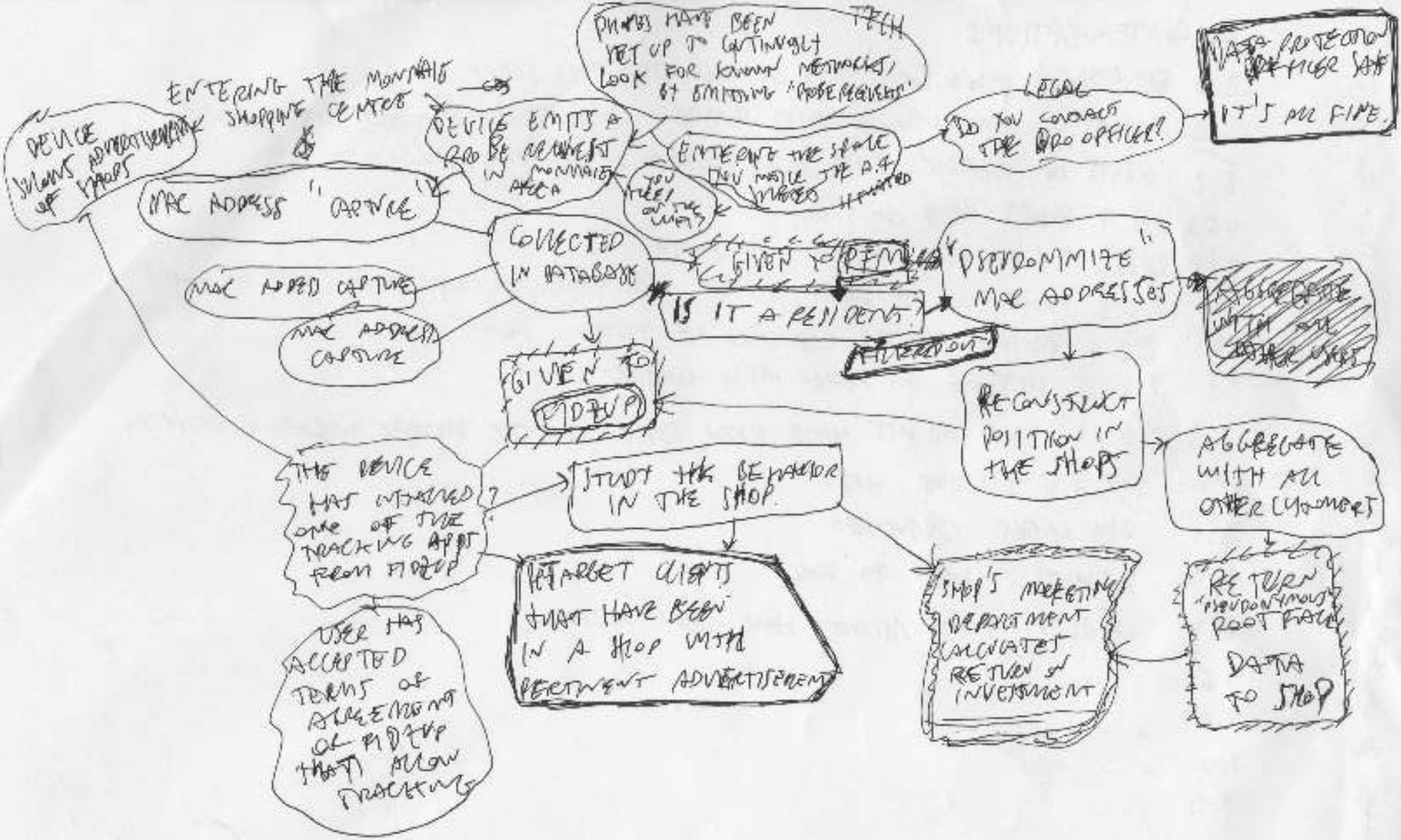
The contradictions of customer surveillance are well described by this ambiguous space. It promises quantification and reading people as numbers for calculating returns on investment, but it deploys an infrastructure that can track individuals and sell their information and behavior patterns to advertising companies.

**Attemps to make sense of it all**




AG
REAL ESTATE
HAPPY OR NOT
+
PEM
+
FIDZUP
dwell time
customer journey
experience rating
happy or not
MAC ID
MAC ID
MAC ID
MAC ID
SHOP
SHOP
SHOP
SHOP
SHOP
SHOP
METRO


FORTIS (*)
2008 CRISIS
MERGED INTO
ABN AMRO (NL)
SOLD TO
BECOMES
BNP PARIBAS (FR)
OWNS 25%
AGEAS (BE)
OWNS 75%
AG INSURANCE (BE)
OWNS 100%
AG REAL ESTATE (BE)
OWNS 100%
INTERPARKING
OWNS 100%
GALERIE AANSPACH
OWNS 100%
THE MINT
BECOMES
IVG REAL ESTATE (DE)
OWNED
CENTRE MONNAIE
SOLD TO
PROVISKO
OWNS
SOLD TO
TOLEDA INVEST



DEVICE SCANS ADVERTISEMENT OF SHOPS
ENTERING THE MONNAIE SHOPPING CENTRE
PHONES HAVE BEEN SET UP TO CONTINUOUSLY LOOK FOR KNOWN NETWORKS, BY EMITTING "PROBE REQUESTS"
TECH
DEVICE EMITS A PROBE REQUEST IN MONNAIE AREA
ENTERING THE SPACE YOU NOTICE THE A.4 SHOPS
YOU FEEL ON THE WAY
LEGAL
DO YOU CONTACT THE PRO OFFICER?
DATA PROTECTION OFFICER SAYS IT'S ALL FINE.
MAC ADDRESS "CAPTURE"
COLLECTED IN DATABASE
GIVEN TO PFM
MAC ADDRESS CAPTURE
MAC ADDRESS CAPTURE
IS IT A RESIDENT?
FILTERED OUT
"PSEUDONIMIZE" MAC ADDRESSES
GIVEN TO FIDZUP
RECONSTRUCT POSITION IN THE SHOPS
AGGREGATE WITH ALL OTHER CUSTOMERS
THE DEVICE HAS INSTALLED ONE OF THE TRACKING APPS FROM FIDZUP
STUDY THE BEHAVIOR IN THE SHOP
RETARGET CLIENTS THAT HAVE BEEN IN A SHOP WITH PERTINENT ADVERTISEMENT
SHOP'S MARKETING DEPARTMENT CALCULATES RETURN ON INVESTMENT
RETURN "PSEUDONYMOUS" ROOT FACE DATA TO SHOP
USER HAS ACCEPTED TERMS OF AGREEMENT OF FIDZUP THAT ALLOW TRACKING

Uw winkelcentrum is uitgerust met
doorgang detecteren van smartphones
waarop wifi of
Alleen de unieke identificatie van het
wordt verzameld en laat in geen geval toe u te identificeren of toegang te
verkrijgen tot de informatie die is opgeslagen op uw mobiel apparaat.
Voor meer informatie of om uit te schrijven, ga naar:
www.agrealestate.eu/nl/privacy
AG REAL ESTATE
Kunstlaan 58
1000 Brussel
dpo@agrealestate.eu

## METRO STATION BROUCKÉRE

The entrance to the metro station de Brouckère is also the entrance to the shopping centre The Mint. It is an area where paths cross, steps stutter and flows twirl like spaghetti. The pedestrian descends the escalator. A large glass door is ahead, held open by the flow of people crossing it. A printed sheet of paper is pasted on the glass.

It informs about the types of surveillance active in the premises of the shopping mall; next to the usual CCTV notice, another less familiar pictogram announces the presence of a surveillance system that tracks mobile devices. At this point the pedestrian might or might not be curious to further investigate the terms and conditions she complies with when crossing the space on her way to catch the metro.

The notice, signed by AG Real Estate, links to an online privacy policy,[1] which can be a first introduction to the systems and the companies involved in this type of data collection. The Privacy Policy applies for The Mint as well as for other shopping centres owned by AG Real Estate, such as Gallerie Aanspach, on the other exit of the Brouckere Metro Station, and City2, few hundred meters down the Rue Neuve.

In the privacy policy, one can found the address of the Data Protection Officer of AG Real Estate, which one can try and contact to know more about their data collection efforts.

1 https://privacy.agrealestate.eu/en/policy/privacy

**Date:** 9/26/18, 11:14 AM
**From:** _____@gmail.com
**Subject:** Data Access Request
**To:** dpo@agrealestate.eu

Dear Sir or Madam,

Please supply the information about me that I am entitled to under article 15 of the General Data Protection Regulation:

* A complete compilation of all the personal data your organization is processing about me;
* In particular I want access to all data you collect through Wi-Fi and Bluetooth tracking technologies, and my use of the Free Wi-Fi. As you describe in point 2 of your privacy policy you collect data: “through any Bluetooth, Wi-Fi or any similar technology that may communicate with your (mobile) device including identifying its location, in our shopping centers. This includes collecting unique online identifiers such as IP addresses, MAC addresses, which are numbers that can uniquely identify terminal equipment such as a specific computer, handset, tablet or other network device on the internet.”;
* In addition to the particular data mentioned in your privacy policy, I want access to all other data. This includes the movement data inferred from this data;
* The source of my data (i.e. how did you get the data?);
* Any parties that my data is shared with.

In order for you to identify my data I provide my MAC address, 90:68:C3:71:91:0F.
If you need any more information from me, please let me know as soon as possible.

Yours faithfully,

_____

**Date:** 10/11/18, 10:47 AM
**From:** dpo@agrealestate.eu
**Subject:** RE: Data Access Request
**To:** _____@gmail.com

Dear Sir,

We acknowledge receipt of your data access request (art. 15 of the General Data Protection Regulation) dated September 26, 2018.

After usual search across our processing activities we confirm you that we do not process any personal data about you, and more specifically your e-mail address, name or MAC address.

We are also pleased to confirm that our processing of personal data is strictly in line with our privacy policy of which you will find a version in attachment.

We hope the above information answers your concerns. We remain at your disposal for any further information you may need.

Kind regards,

_____

Data Protection Officer

THE KIOSK

In the spaces surrounding the kiosk in front of the Muntpunt library, one can connect to an open wireless network called *nowiwantastraightline*. By connecting to the network, a sound file is compiled and offered to be downloaded, listened or deleted. The soundfile generation is based on the unique identifier of the phone or laptop, also called MAC address, which is composed of 6 bytes written in hexadecimal format. For example, the device 90:68:C3:71:91:0F receives:

| Halfbyte 1 | Halfbyte 2 | Halfbyte 3 |
|---|---|---|
| 0 North | 0 Urine | 0 A |
| 1 North-East | 1 Waffles | 1 B |
| 2 East | 2 Cigarette Smoke | 2 A |
| 3 South-East | 3 Electronic cigarette vapour | 3 B |
| 4 South | 4 Disinfecting agent | 4 A |
| 5 South-West | 5 Deodorant | 5 B |
| 6 West | 6 Car Park Ventilation Filters | 6 A |
| 7 North-West | 7 Urine | 7 B |
| 8 North | 8 Waffles | 8 A |
| 9 North-East | 9 Cigarette Smoke | 9 B |
| A East | A Electronic cigarette vapour | A A |
| B South-East | B Disinfecting agent | B B |
| C South | C Deodorant | C A |
| D South-West | D Car Park Ventilation Filters | D B |
| E West | E Urine | E A |
| F North-West | F Waffles | F B |

| Halfbyte 7 | Halfbyte 8 | Halfbyte 9 |
|---|---|---|
| 0 White Mercedes Vito | 0 Fir | 0 Addicted to Black |
| 1 Pink Cadillac | 1 Maple | 1 Deeply repair and protect |
| 2 Black Sedan | 2 Plane | 2 Heart Sole |
| 3 Volkswagen Caddy | 3 Box | 3 Light |
| 4 Grey Toyota Corolla | 4 Cranberry | 4 Oxford Plastics |
| 5 White Mercedes Vito | 5 Beech | 5 Solidarite |
| 6 Pink Cadillac | 6 Fir | 6 Steward |
| 7 Black Sedan | 7 Maple | 7 Theatre Royale de la Monnaie |
| 8 Volkswagen Caddy | 8 Plane | 8 Addicted to Black |
| 9 Grey Toyota Corolla | 9 Box | 9 Deeply repair and protect |
| A White Mercedes Vito | A Cranberry | A Heart Sole |
| B Pink Cadillac | B Beech | B Light |
| C Black Sedan | C Fir | C Oxford Plastics |
| D Volkswagen Caddy | D Maple | D Solidarite |
| E Grey Toyota Corolla | E Plane | E Steward |
| F White Mercedes Vito | F Box | F Theatre Royale de la Monnaie |

| Halfbyte 4 | Halfbyte 5 | Halfbyte 6 |
|---|---|---|
| 0 Two men drinking | 0 CRM | 0 Awkward Dance |
| 1 A man | 1 DPO | 1 Pavement Tango |
| 2 A woman in a yellow raincoat | 2 DSP | 2 Droitwitch |
| 3 A light turning on | 3 GDPR | 3 Avoidancing |
| 4 A sudden rush of wind | 4 KPI | 4 Sidewalk Gavotte |
| 5 The gentle sway of a lonely tree | 5 POS | 5 Symmetry-breaking Impasse |
| 6 An involuntary spasm | 6 PSR | 6 Schlumperdink |
| 7 Two young adults | 7 ROI | 7 Get-past-you shuffle |
| 8 A dinosaur-shaped balloon | 8 RTB | 8 PSR |
| 9 Three black sedans | 9 RTI | 9 Awkward Dance |
| A Two men drinking | A CRM | A Pavement Tango |
| B A man | B DPO | B Droitwitch |
| C A woman in a yellow raincoat | C DSP | C Avoidancing |
| D A light turning on | D GDPR | D Sidewalk Gavotte |
| E A sudden rush of wind | E KPI | E Symmetry-breaking Impasse |
| F The gentle sway of a lonely tree | F POS | F Schlumperdink |

| Halfbyte 10 | Halfbyte 11 | Halfbyte 12 |
|---|---|---|
| 0 Wandering | 0 Beer | 0 2,2,3,4,2,4,2 |
| 1 Talking frantically | 1 Coca Cola | 1 6,5,2,4,2,5,6 |
| 2 Crossing | 2 Coca Cola Cherry | 2 2,3,2,4 |
| 3 Walking in circles | 3 Coffee | 3 5,4,3,2,6 |
| 4 Taking small steps | 4 Sprite Lemon Lime & Cucumber | 4 2,4,3,6,5,4,6 |
| 5 Waving | 5 Red Bull | 5 2,3,4,5,6 |
| 6 Wandering | 6 Vodka | 6 2,2,4,3,5 |
| 7 Talking frantically | 7 Prosecco | 7 6,3,2,2,3,2,4 |
| 8 Crossing | 8 Beer | 8 2,6,6,4,3,6 |
| 9 Walking in circles | 9 Coca Cola | 9 2,2,2,4 |
| A Taking small steps | A Coca Cola Cherry | A 6,4,6,2,4,3,5 |
| B Waving | B Coffee | B 2,2,4,3,2,5,4,6 |
| C Wandering | C Sprite Lemon Lime & Cucumber | C 5,6,2,4,3,2,2,6 |
| D Talking frantically | D Red Bull | D 6,2,5,4,2,3,6 |
| E Crossing | E Vodka | E 6,2,4,5,4,2,6 |
| F Walking in circles | F Prosecco | F 2,2,3,5,4,2,4,5 |

Quantification and prediction are of course not the exclusive trade of retail and advertisement companies. The quantity of garbage in the bins on the square, the number of cars in each of the five underground levels of the parking garage, the passengers that pass through the metro station... All these measurements are treated with the same set of methods and technologies. Often the same data management companies will work for both local governments and private investors.

This alignment of means to serve different ends (public / private, civic / commercial, security / customer profiling) tends to create grey areas where the commercialization of public space and public services proliferates in the confusion. The proposal of the Smart-City can be placed within this context, of which quantification and optimization constitute the shared interest. Smart-city planning has its own lexicon of terms, wordings and acronyms, intrinsic to its modes of reading shared spaces but with enough overlaps with the retail industry to be able to negotiate.

Terms like ‘e-inclusion network’, ‘consent management platform (CMP)’, ‘catchment area’ are strangely pertinent to either domain. These terms seem at odds with the erratic flows of a square like la Monnaie observed from pedestrian level, but they point exactly to the promise of extracting value and models from the noise.

**List of terms used in smart-city planning and/or the retail industry**

access
accessibility
accuracy
acquisition
actions legend
ad hoc analysis
adaptability
addressing the gap
aggregate
AMI Advanced Metering Infrastructure
anticipation
applicative appetences
approachability
audience clusters
basic patterns
beacon
behavioural analytics
behavioural targeting
behavioural targeting in & out of store
benchmark
benchmarking
BOC balance of chain

BOH space - back of house space
bottom line
bottom-up
brand experience
brick & mortar
broken relationship
browsing habits
budgets
buildings
built relationship through service
butt-brush effect
calculating sales conversion rates
campaign calendars
Catchment area
change the global narrative
child; young adult; adult; senior
churn
citizens
city of tomorrow
clustering effects
clusters
co-creating
co-creating the future of work
coding skills
community
company ethos
congestion
consumer needs
consumer trends
consumer-oriented services
Consumption habits
context is key
conversion
conversion rates
coordination
costumer as collaborators
costumer experience
costumer journey
costumer loyalty
costumer onboarding
costumer satisfaction
costumer trends
costumers of your competitors
coverage & flow
CRM Customer relationship management
culture as currency
data is at the heart
data is fuel
datamatrix
decisions
demographics
developing coding skills
development
digital foundation
digital inclusion
digital revolution
digitally less savvy
drive to store
DSP (Demand-side platform)
dwell time
e-inclusion network
end-to-end item-level monitoring
engagement
engagement is the key driver to conversion
engagement per zone
engagement quantified
equality
evangelize ICT accessibility
event monitor
exploration path
feedback
flagship
flexible spaces
footfall
footfall capture rates
footfall path analysis
footfall patterns
footfall prediction
friction points
global
granular data
heat map
herding
heritage
home as a companion
human connection is luxury
hyperlocal experiences
impact
inclusive smart cities
increase capacity
indexing
influencer storytelling
inner cities
inspired choices
integration of third-party data-streams
intelligence
interstitial
intuitive navigation
involvement
involving citizens
local economy
local mobile advertising
local politics
locally tuned storytelling
loyalty
males; females;
management
marketplace
marketplace development
Matthew effect
maturity model
media value
meet the needs
Mobile POS
mobility issues
municipality
needs
neighbourhood
networks of governance
Non-buying visitors

non-experience
non-productive zone
non-users
nudging
occupancy levels
onboarding
online consumption
opportunities
optimization
OSP Optimization Service Provider
pain points
participatory design
participatory policy-making
performance
one-to-one relationship at scale using technology
personalised storytelling
Pilot door
pinnacle expression
points of experience
POS integration
POS Point of sale
POT Protective Optimization Technology
potentially exploitable
power of data
power of human connection
power of the crowd
powerful insights
privacy
processor agreement
procurement
product interaction
QoL Quality of Life
queue optimisation
real time
Recurrence of visits
remember:
repeat sales
retail climate
retail landscape
retention
revenue analysis per zone
revenue per square meter
reward-redeem
RTB Real-time bidding
RTI retail traffic index
securing relevance
segments
serve members personally
shared learnings
sharing data
sharing economy
shoppability for profitability
shoppability is the key driver of conversion
shoppabilty
shoppable events
shopper behaviour
shopper engagement
shopping time is the key driver of engagement
SIS shop-in-shop
smart & inclusive
smart applications
smart city
smart city ecosystem
smart city governance
smart collaboration
smart cooperation
smart governance
smart shopping
smart solutions
smart stock
social vulnerability
sociodemographic data
stakeholders
Steal your competitor’s customer
Store as a data generator
store logic
store performance
storytelling
storytelling capabilities
target and retarget customers
the big brand experience
the future
the XP is the brand
tiers
time and emotions
time saving
touches
traffic drive
traffic flow
transparency
trend reports
unique visitors
values
visitors counter integration
visitors decay
weather data
wise decisions
WoW, week on week

ROMA CAFE

**Possible ways to start addressing this situation:** Study the legal and technical functioning of these mechanisms,
Send letters to DPOs,
Create spaces to discuss what public spaces we want,
Address and pressure the institutional bodies,
Steal the devices that are involved in the capture of data to study their functioning,
Marvel at the absurdity of a system trying to categorise its own incompetence,
Practice unreadable gaits,

What follows is the partial transcription of an open discussion that took place at the former Roma Cafe on the Muntplein, during the Rhythmic Contingencies event in October 2018.[1]

Participating: Femke Snelting, Dennis Pohl, Kurt Tichy, Alex Zakkas, Wendy Van Wynsberghe, Inigo Wilkins, Ola Hassanain, Rachel Himmelfarb, Željko Blace, René Mahieu and Sina Seifee.

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FS: How much of what we are studying and observing on the Muntplein are global phenomena and how much is related to specific situations and history of Brussels?

DP: In terms of urban planning, a lot of things are happening on the square that were not on the original plan, a lot of things prolonged the planning process, the designs and their realization. There are different owners involved in the first place, there were multiple parties involved in terms of design and planning, and finally some more in the platform understanding of the square. The street parts have various small companies, the centre Monnaie is part of one big real estate, AG, and finally there is the parking company, Interparking.

1 http://thenewlocal.org/rhytmic-contingency/

This makes this example interesting as there have been many moments in which the combination of the many stakeholders has slowed down the process.

KT: The issue of how quantification and correlation have become ways to create a population, examine it and shape its behaviour is certainly a global issue, but in every iteration it has developed encountering local conditions. What has been observed specifically in this case, is the particular combination of private and public parties involved. The city of Brussels, certainly a special case for its tripartite structure and often clumsy governance, then the public transport company, STIB, the smart city project from CIRB... So how the governmental smart city discourse meets the retail value extraction urgencies is probably taking different shapes in different cities, with different possibilities of intervention...

AZ: I live in Amsterdam, where if something is planned, it is much more certainly carried out, fully. Maybe I exaggerate, but sometimes I see a space and I can imagine how the digital rendering of it in the architecture studio was pretty close to its realization. One thing I have been fascinated with in this project is that within this very designed megastructure we have been analysing, right in the middle of the square, there was a chemical toilet that has been there for a month at least. There were roadworks on the square with a big construction site, which were then patched up, and afterwards the chemical toilet remained on the square. At some point it got broken, and was standing there, with its door half open, leaking stinky liquids all over the square. This was a fascination point, within the analysis of how every angle of a square has been designed, the influence of prediction, etcetera. I think these moments created by the collapse of fragments are special in Brussels. I was pleasantly displeased by the stench of it...

WVW: In relation to the global aspects of platforms, but also to their local face, it is interesting that AG real estate is involved, which is obviously connected to AG insurance. AG used to be part of the FORTIS empire before it collapsed, and is now partially owned by BNP PARIBAS. What elements can we infer about the platform aspects from these relations?

IW: Bringing in this platform aspect, one of the characteristics of platform capitalism is the consolidation of different business interests all underpinned by the promises of AI. So the promises that the platform can increase the efficiency in any business field thanks to predictive technology. In my view, if there can be anything to face this type of dynamic, it is the public ownership of that AI technology, otherwise you'll be always on the losing side of this battle.

KT: That is only valid if you have trust in the state, I think we probably need to find other paths to deal with this.

OH: Also I find the word public, and public ownership quite loaded, so I am wondering how it is intended.

IW: Who is the public and what ownership can you have, clearly needs to be dealt with as a question, but I was arguing, in a sort of idealistic suggestion, that any of the battles against these big powers, against platforms technologies, risk to lead us further into their hands, unless there is a more collective ownership of data practices. What that collective is and how you are going to do that is another question.

FS: What that collective can be needs to be informed from the fact that we are dealing with many connected subjects, human, non-human, architectural, atmospherical... They are all part of these observation systems, so I am wondering how not to fall in the

default framework of claiming your own data as an individual, but to respond as a collective, and what modes of collectivity are formed in response.

DP: In urban planning there is an interesting format, the one of the 'citizen initiative' to criticize a design, to re-assess certain aspects of a plan... Talking about property and ownership, just as with data, we need to include the material aspect of it. Why are citizens allowed to contribute to a Permit d'Urbanisme on a square, but not on how fiber cables are laid, or a city wide wireless network deployed. And also, are there autonomous ways that allow different types of ownership.

FS: To be more explicit, I was trying to call for some imagination in dropping the 'our' from our data, the 'me' from my data. Try to work more closely to the reality in which when we pass through the shopping mall, all our data is being 'collectivized'. In the sense of a sort of forced collectivity. I am wondering what other types of voluntary collectives could be put up against that forced one.

IW: Also it's forced by the fact that it becomes private data immediately, as it is collected. It is forced by the structure of private property.

RM: Personally I am involved in a research on Data Access Requests demanded along the GDPR law, especially looking at how to express these rights collectively. Even though Subject Access Requests are formulated always individually, they are mostly used in a collective way. I never found a case of an individual looking for their own individual data, or to take their data back... Nobody is doing that, mostly people are trying to shine some light on the practices that happen behind platforms, and to take a critical stance towards them, which is what has been attempted in this case, too. You use the right to access as a critical tool to

access some knowledge, to then share the collected materials with others. Another attempt has been the creation of the Data Workers Union, taking inspiration from what happened with the industrial revolution, and the way that the creation of unions has been a way to deal with the inequalities and exploitation that it brought.. If we see ourselves creating the data for platform systems, we can see ourselves as workers and then question the ownership of the data, of the AIs that are trained on them, to influence what can be done with them and so on.

RH: Along the same lines, one thing to remember about these technologies, is the productive labour of data. The technologies that tag us and categorize us are the same technologies that allow us to reclaim our rights. By identifying ourselves as individuals, we enter a paradox in which anonymized individual data is only valuable in amalgamation, but a value can always be traced back to the individual when necessary...

OH: Formalizing and filtering yourself through the fact that you are always traced back as an individual, you are stopped from collectivizing, because the model is always broken up into individuals... There is something interesting about the impossibility, about the fact that these models are present in many aspects in how you live these imaginary designs.  Maybe we need to expand certain terms. The idea that 'public' means something democratic, inclusive, an obviously good thing, a realm in which everybody exists and participates in. This is so not true, actually. That is rooted in the question of the notion of public, which is always presented as the only possible political framework and setting.
In my work I try to expand what these paradigms means and how we are translated in them. With the hopes that maybe there is an informality that can be built upon, to reorient ourselves out of this fixed framework. Starting from this impossibility.

SS: I am wondering how much prediction can be questioned, what are the ethical questions that can be posed about predicting, especially talking about management.

AZ: One question is the accountability of the powers that have access to and make use of prediction. The issue is in the power relation and not in the prediction as such, and it is not in transparency per se that we have to look for resistance potential. How is power held accountable and by who, what groups are able to address these issues.

IW: Prediction is relative to a theoretical framework. For example there is something about the causal relation that escapes statistical analysis. To do a causal analysis you need to have a theory about why certain effects appear, you need to ask a why question. So one ethical and political question is what theory should we have to explain certain effects. Clearly, at the moment, those analytics technologies are been wielded by corporate interests, with theories that serve their interests. Can we generate and construct alternative theoretical frameworks that would serve different interests?

WVW: Thinking about your device that is also sniffing, and about noise, what would be a potential device that could generate phantom mac addresses, make noise?

MM: What's funny is that when we were observing the results of our 'mock tracking' we noticed some series of randomized probe requests, so we looked that up. As the first numbers identify the manufacturer, you can look that up, and it turned out it was actually Google phones. Google has been giving noise-as-a-service, in a sense, obfuscating the mac addresses of probe requests, as a feature they sell to avoid the type of passive tracking we have been discussing about. Of course they

do it to maintain their hegemony in knowing your position all the time and monetize it in their own structures.

RM: You mentioned before it is also about possible sacrifice?

DP: One possible sacrifice, that one can exchange for being opaque, is not using a smartphone. Maybe someone needs to take this sacrifice and remove themselves from using all devices.

RM: I disagree with this position, that is what they say as an option at the entrance of the shopping centre, to turn off the phone, I say instead we should use the law to force them to stop tracking people. We should demand what is realistic.

AZ: Maybe at least the sacrifice of not downloading all the game apps that contain Fidzup's tracking code.

ZB: Not so technical, maybe, but lowering the value to the bare minimum and stopping our consumerist instinct to install everything be omnipresent, we could easily use cheap phones, swap them randomly. As a new paradigm, for the promiscuity of hardware, and to stop thinking of products as coherent with the hardware-software services. We need to get our shit together to organise and not be dependent on new smartphones.

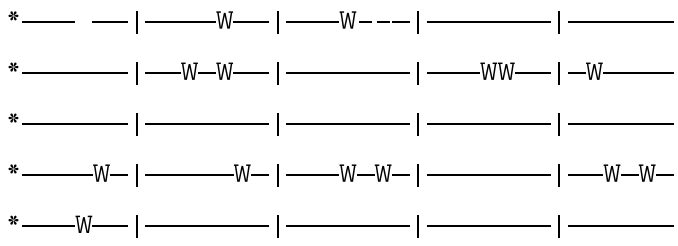
RH: What data are we collecting anyway? What are the limits based on when talking about urban planning? If the data from my phone is only giving location, what is this information really? Thinking about data collection in urban environments, have to think back to William Whyte's "Social Life of Small Urban Spaces", a brilliant documentary made in the 80s where they film the plazas for days, and notice things such as that people do not sit on benches, they sit on the edges of the planters.

Try and trace that back; it's because of the sight-lines, people aggregate at the corners because they can talk there. You will never get causality from that sort of data. When you start using planning data instead, where are the limits? What is smart city about? What is the lowest common denominator of urban design?

AZ: That video was a starting point for this work indeed and it has a very different sensitivity... There is a social sensitivity to the way Whyte's documentary looks at the plaza, how space is accessible for people to loiter and to hang out. While in the way we looked at the square, we feel that the forces that shape it are much more aggressively pushing towards commercialisation of all uses of the space. The top view, the ability to observe form above, and therefore to plan, is shared, but there is a difference in intention and intensity.

OH: Talking about certain models or ways of looking at information... I am originally an architect, from that perspective you do that during laying out, in studying circulation in spaces, to make sense of things. This is not how people would actually use the space, but it is done to make things coherent that otherwise wouldn't be, because it wouldn't match how we understand things from the architectural perspective. We come then to a split way of understanding things, and there must be a use of activating that excluded gaze, or understand how the architectural view can be undermined. Also because in any case, when a certain building is erected, its users will immediately undermine how the building was set to be used...

The birds take off from the scaffoldings, make a clockwise circle of the square and return to the scaffoldings. Their arrangement is now different.



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**Contributors:** Femke Snelting
Dennis Pohl
Kurt Tichy and Alex Zakkas

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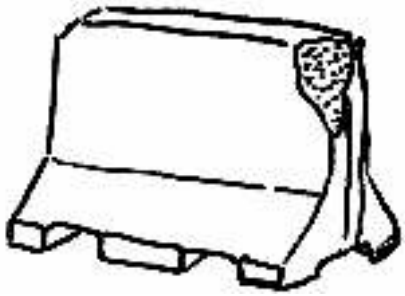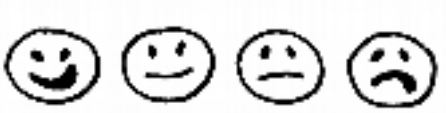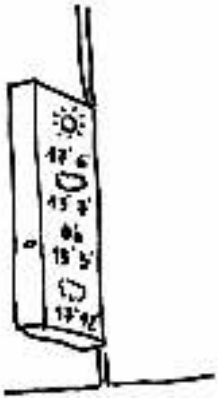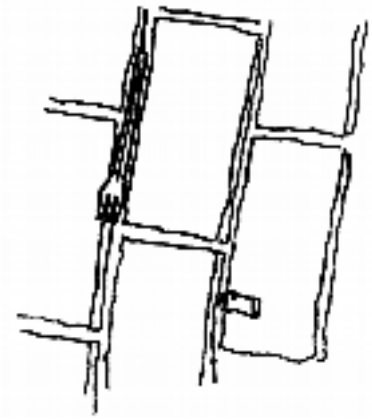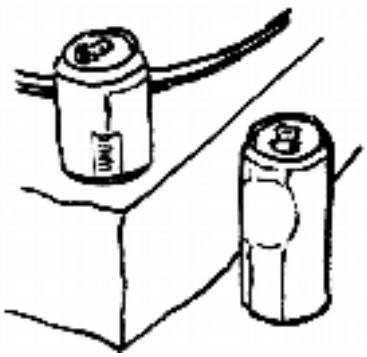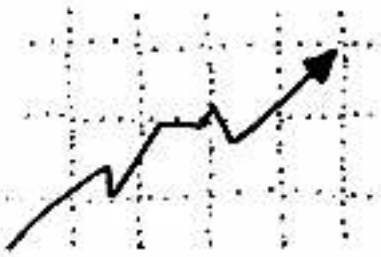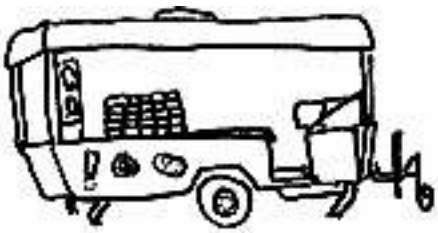
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