

OUR (fantasm)ODORIFIC ENVIRONMENT —

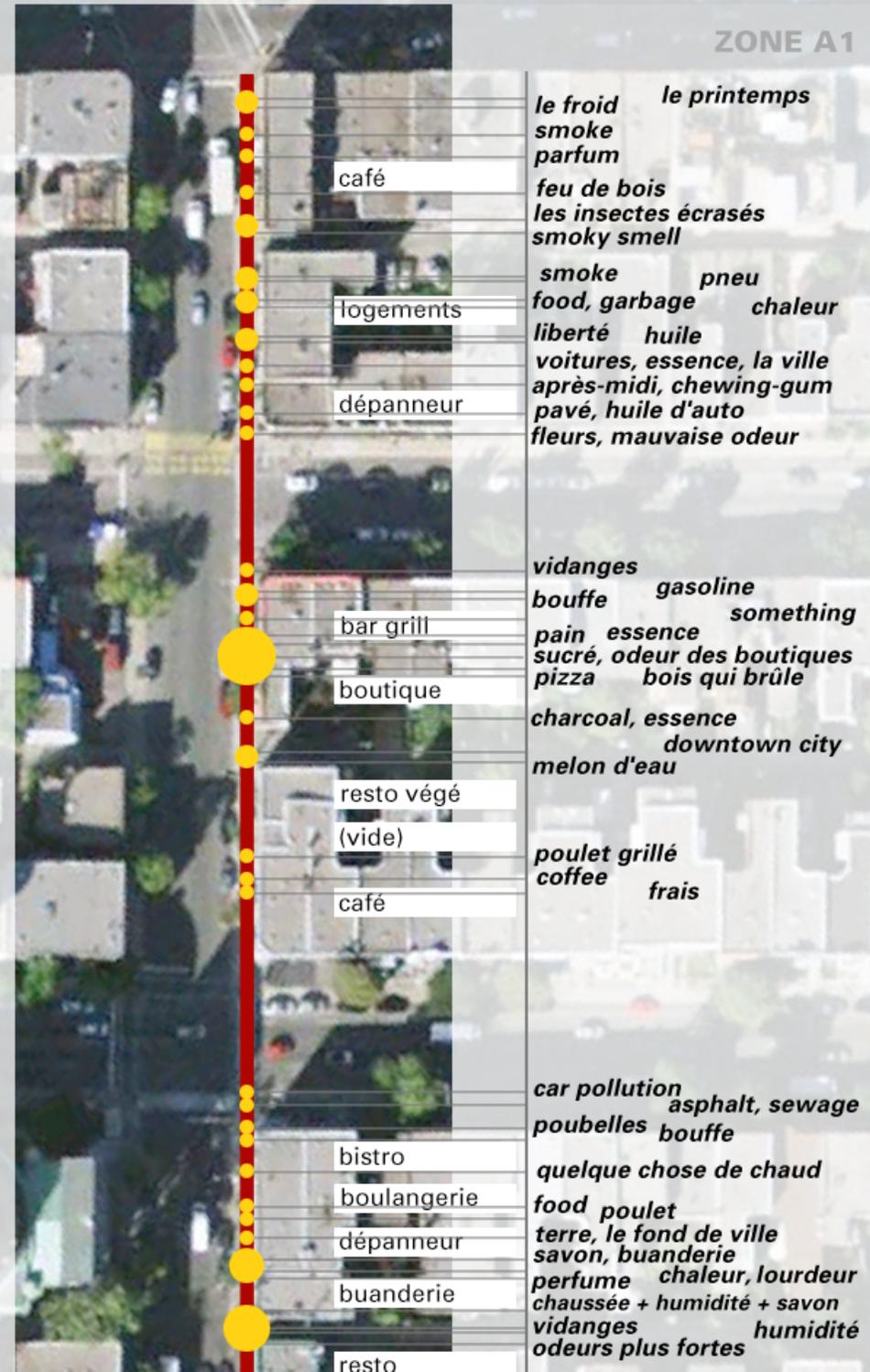
the influence of the olfactory memory over
our spatiotemporal perception



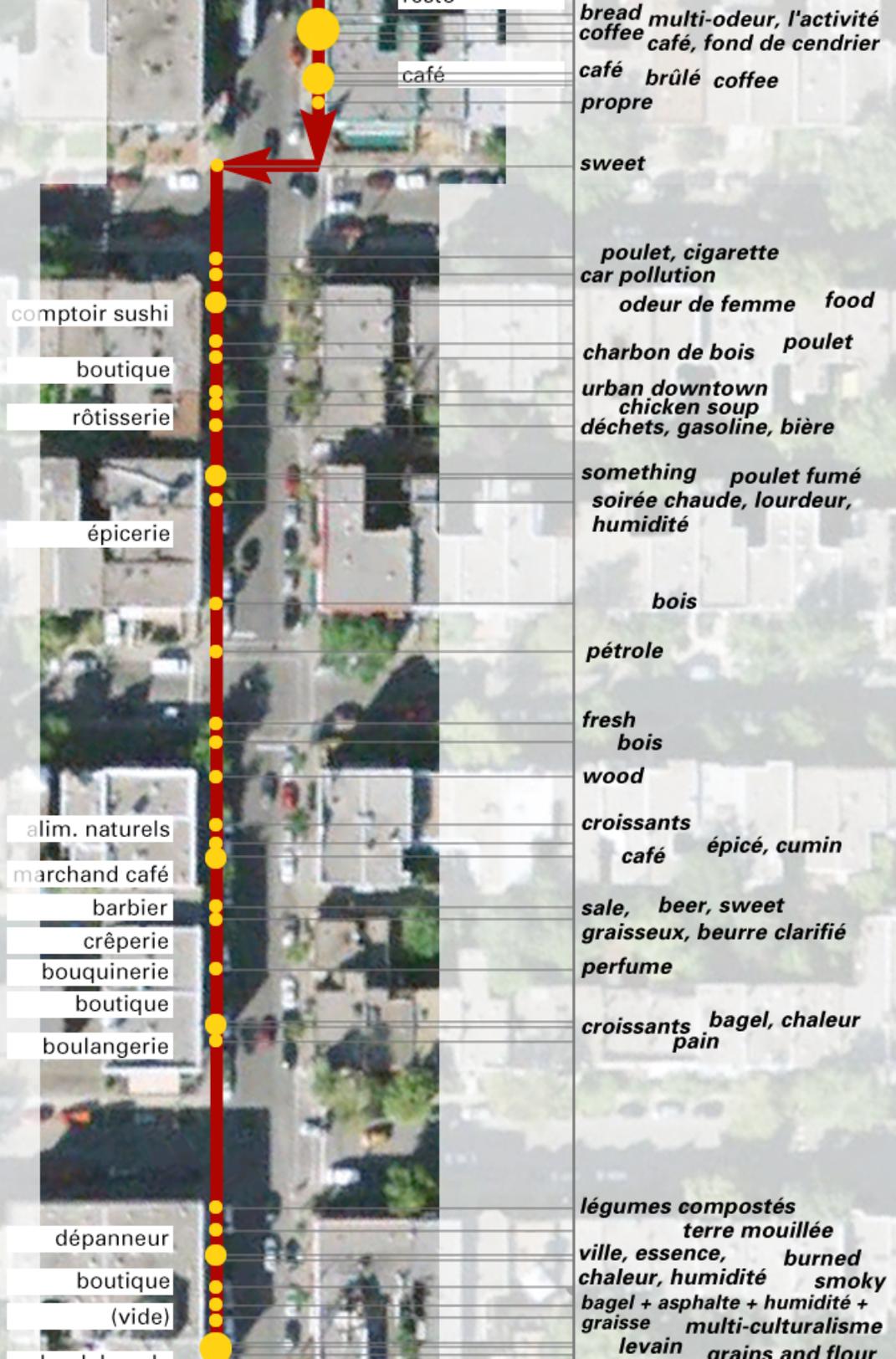
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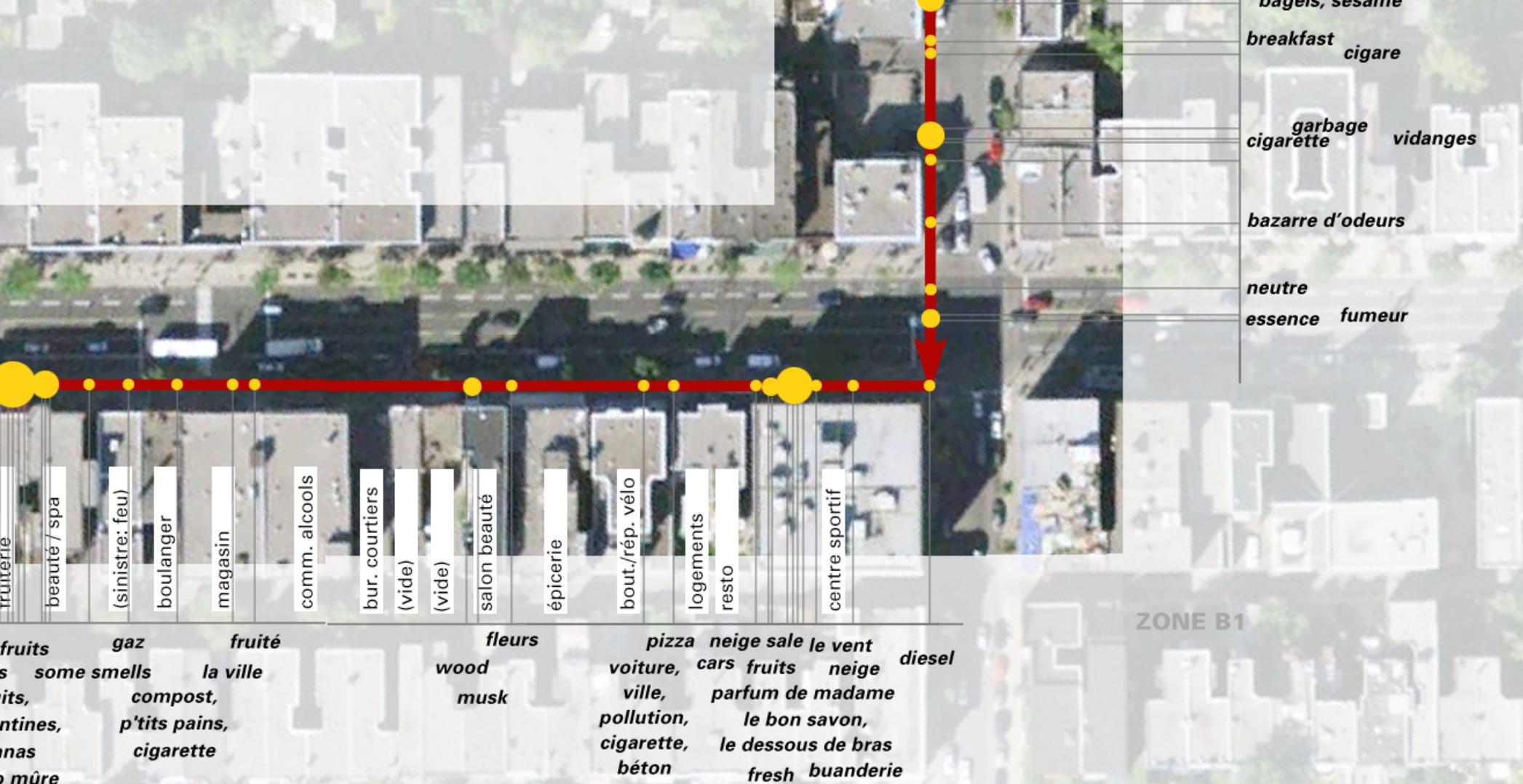
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The reality of **the environment** **is** shaped by the unstable ground of our memory which follows various temporal rhythms. Its geometry is static, yet **constantly flooded by various dynamic atmospheres**; thus, it transmits a range of signals which are all possibilities for the individual to make sense of the space



Drawing upon our memory, the multiple fluxes of smells creating a mobile and intangible topography alter our perception of the spatio-temporal structure of the environment. In other words, **we navigate the environment by passing through different past and expected places that our intellect envisions in our present in reaction to the smells we encounter.** These scenes, that I call timescapes (paysages temporels), are part of the theater of our olfactory memory.

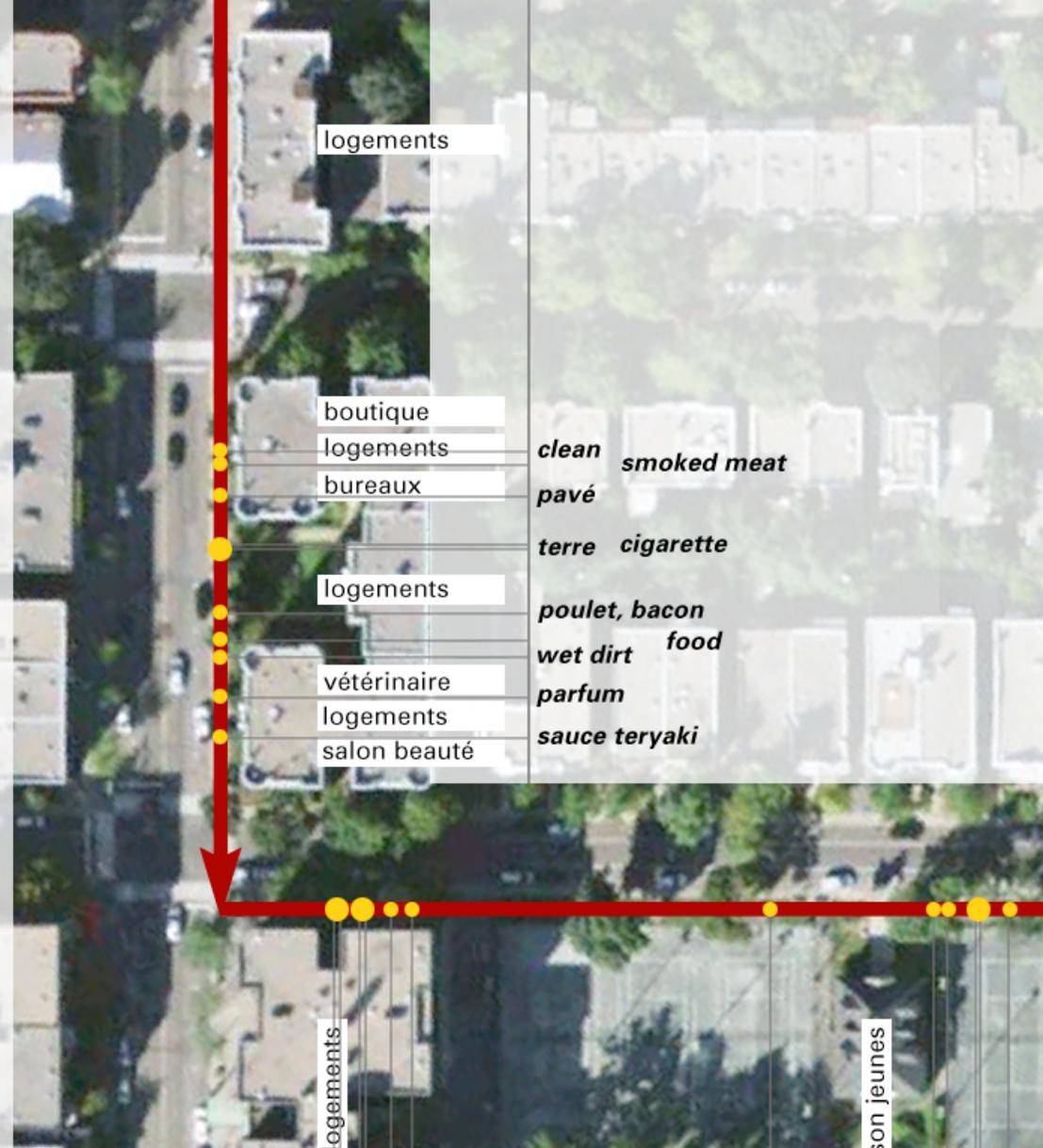




As part of a research on the power of smells to shape our spatiotemporal perception of the environment¹, I used **a method that allows real-time storytelling of a journey**: the commented course (le parcours commenté).

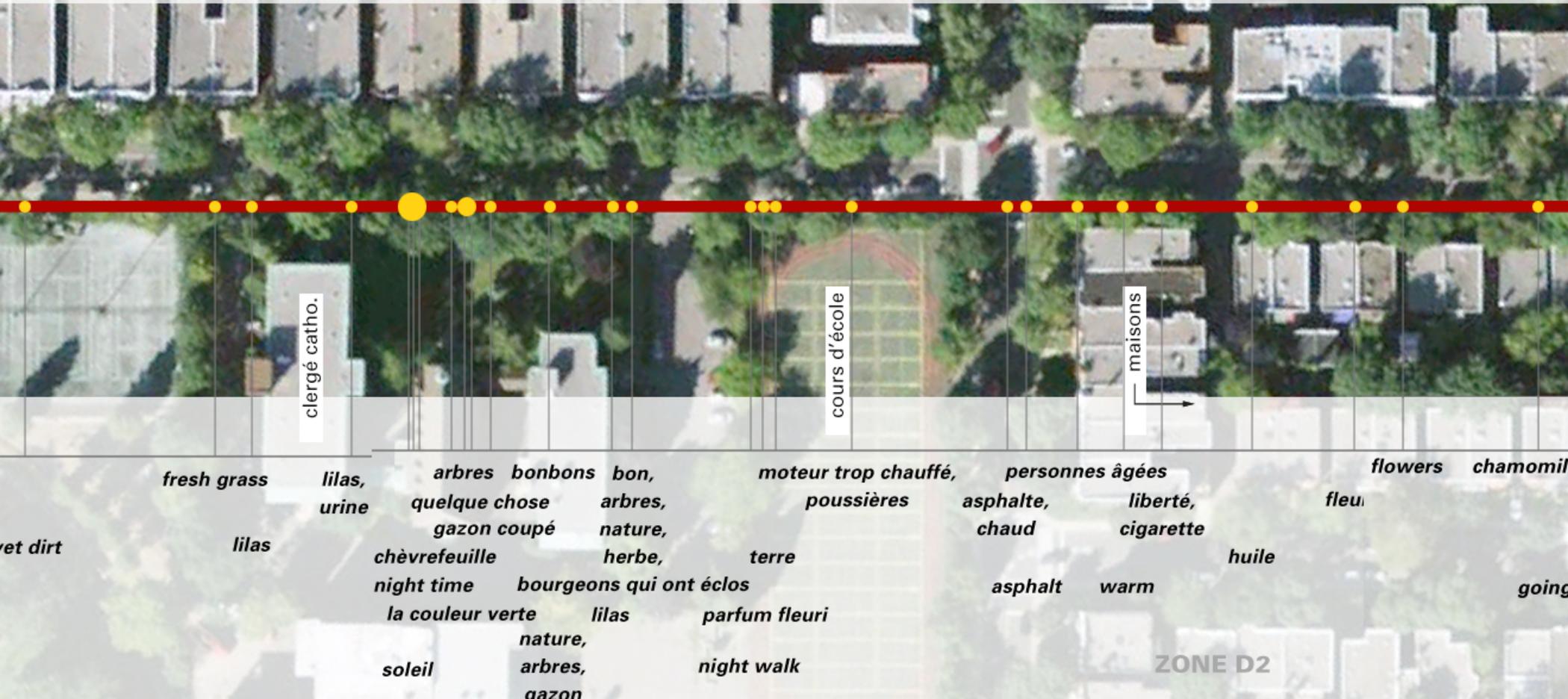
¹ BOUCHARD, Natalie (2013). *Le théâtre de la mémoire olfactive*, Udm (mémoire).

Taking approximately thirty-five minutes to complete on foot, **the route**, drawn at the confluence of two different districts of Montréal (QC, Canada)—Plateau-Mont-Royal and Outremont— **allowed participants to meet with a variety of smells as well as various types of urban spaces**. Thus, I was able to harvest a diverse range of expressions from them.



ZONE D1	
état statique	grass
ketchup & vinaigre	terre
terre	pissenlit
dégagé	herbe, w
fleuri,	cigarette
parfum pour enfants	bouffe,
musk	steak
	rien

The significant quantity of oral data collected brought me **to stage graphically** the perception of the participant on an aerial map. In transcribing each of the commentaries at the place where it was expressed, I was able to confront the reality of the individual with the reality of the space. Like **a universe of narratives**, every route takes thus the shape of a large format poster **that shows the intimate relationship that is built between the individual and the space** he perceives.



The superposition of all maps in the end revealed the topography of a smellscape particular to the group, that was representative of a collective olfactory memory.

The Olfactory Memory Theatre. Cartographic narrative: excerpt of two routes. One expressed in French by a Francophone participant; the other in English by a Hispanic participant.

participant #10-OP
 age: 34 sex: M
 ethnic group:
 latino (Mexican)
 departure time: 18:23
 date: 07/08/2011
 season: summer
 weather: light rain
 • 23°C
 • wind N-19km/h
 • 78% humidity level
 spoke in English →

participant #07-ET
 âge: 53 sexe: F
 groupe ethnique:
 Québécoise (née au QC)
 heure de départ: 20:04
 date: 07/06/2011
 saison: printemps
 météo: ensoleillé
 • 27°C
 • vent SO-17km/h
 • 42% taux d'humidité
 s'exprime en français →

banane!
 odeur de
 prendre
 s'autres
 e jeune,
 anane et
 avec une
 squ'à ce
 raiment
 illement
 ne écre-
 e donne
 inger un
 anane et
 s (rires). (laughs).

I can smell fruits. It reminds me of a market, but not a closed market, an open market. And most especially it brings the picture of a lettuce to my mind

right now I don't smell anything.

pas évident de ne pas se laisser influencer par les sons ou par ce que je vois...

that small smell reminded me of Mexico City. Like being downtown. I don't know why. Probably because of the pollution of the cars.

rien de particulier sauf un fond d'humidité.

again, that car pollution smell. It reminds me of a city.

encore! c'est dommage! une bonne odeur de poulet et encore la cigarette qui est derrière. Ça me défait toute le plaisir de cette senteur-là.

toujours les mêmes odeurs d'une soirée chaude, lourde... humide... ça me fait penser à des goutelettes.

that smell reminded me of wood, all wood. Yes. Basically wood. Yes.

I can smell some perfume. It reminds me of being inside a mall, where you have all the cosmetics. Probably the women over there have perfume.

ici ça sent la grande ville : l'essence, la chaleur, l'humidité.

there was a very small smell that reminded me of breakfast.

ça sentait comme du poulet grillé. Un oncle dans la famille avait une des premières rôtisseries à St-Jérôme. J'avais toujours plaisir d'aller manger mon poulet BBQ au Coq d'Or. Je remonte à longtemps! Des beaux souvenirs ça.

that smell reminded me of bread.

y'avait j'sais pas quoi là... aah! le café! oh! avec la cigarette, dé-gueu-lasse! c'est deux odeurs mélangées : superbe de café et l'fond de cendrier. Ça sentait comme des "botchs" de cigarette dans un seau avec de l'eau... quand t'ouvre ça ouach!

that smell I don't know but, it reminded me of... I don't know. I know that smell...

il y a quelque chose d'épicé là... cumin... ça me rappelle, voilà plusieurs années, d'avoir découvert la bouffe indienne avec de supers bons amis. On avait fait un festin incroyable dans un restaurant sur Sainte-Catherine. On avaient mangé mangé, comme des cochons!

ah! le dépanneur. Ça sentait pas les poubelles mais quasiment. Ça sentait comme des légumes compostés.

j'sais pas c'était quoi là... le levain peut-être? ah! c'est ça, une boulangerie! mais ça sentait pas le pain. Ça sentait très fort. C'était probablement ça, le levain.

j'aurais aimé que ça sente l'épinette ou le sapin (en passant devant un bosquet d'arbustes).

encore la cigarette! J'la sens de loin celle-là. C'est une odeur qui m'est agressive, qui me rappelle probablement quand j'ai arrêté de fumer y'a plusieurs années, c'était tellement pénible...





Our results indicate that if our perception of smells is undeniably influenced by other sensory signals present at the same time, sight has probably the most significant one. **A close relationship is established between sight and smell**, sometimes even going as far as remodelling the *smellscape* and consequently the *timescape*.

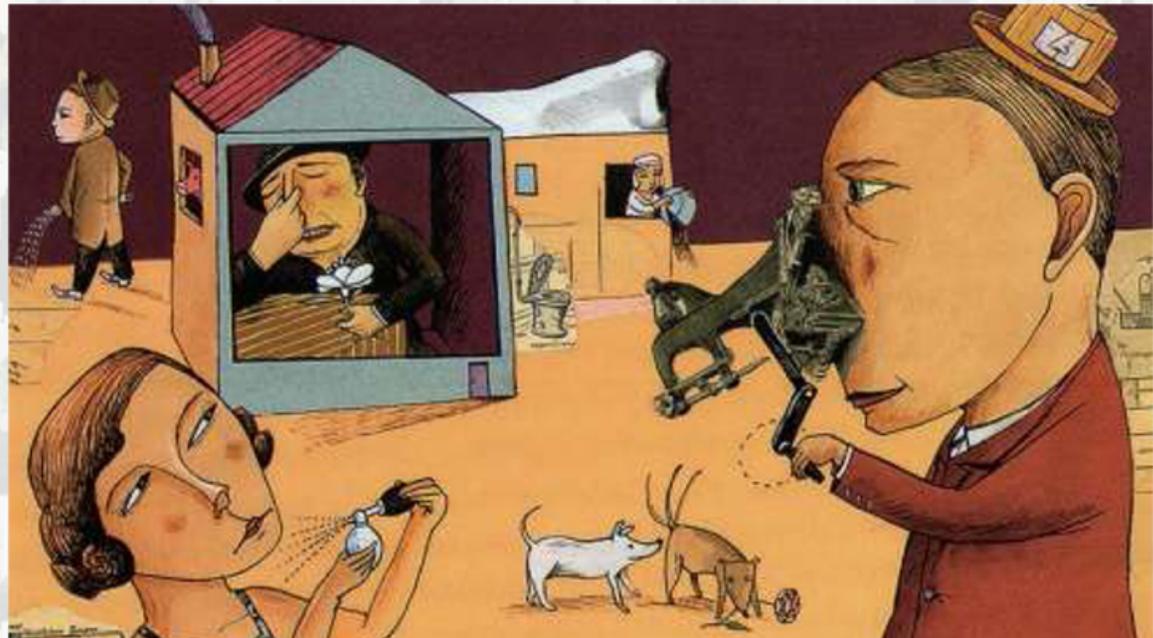


Olfactory fluxes play as much as a role in the impromptu appearance of memories in the individual as they do in the imagining of possible scenes, and in inspiring future actions. Our perception of the environment can be under the influence of an anticipation, as well as dotted with imaginary scenes. Mental representations **allow us to not only free ourselves from constraints both temporal and spatial of the present to relive the past, but equally to imagine ourselves in the future**²

² TULVING E. et al., 2010. Consciousness of subjective time in the brain. *PNAS*, 107(51).

thank you for your attention, I look forward to answering any questions that you may have

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