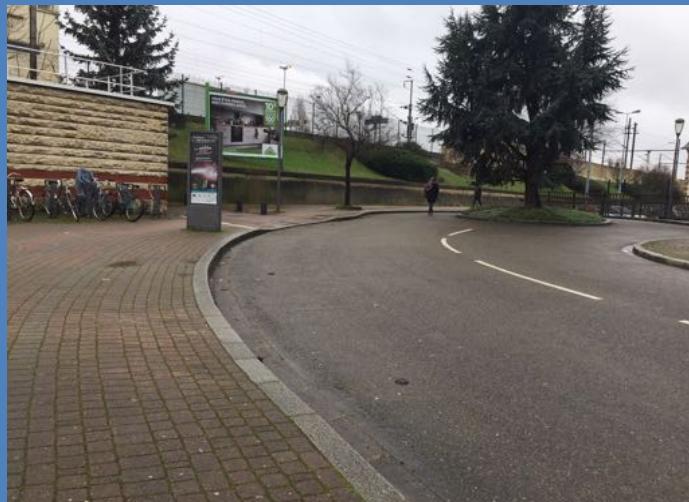


# Comprendre et changer les comportements

**Nicolas Fieulaine**  
Chercheur en Psychologie Sociale  
Université de Lyon









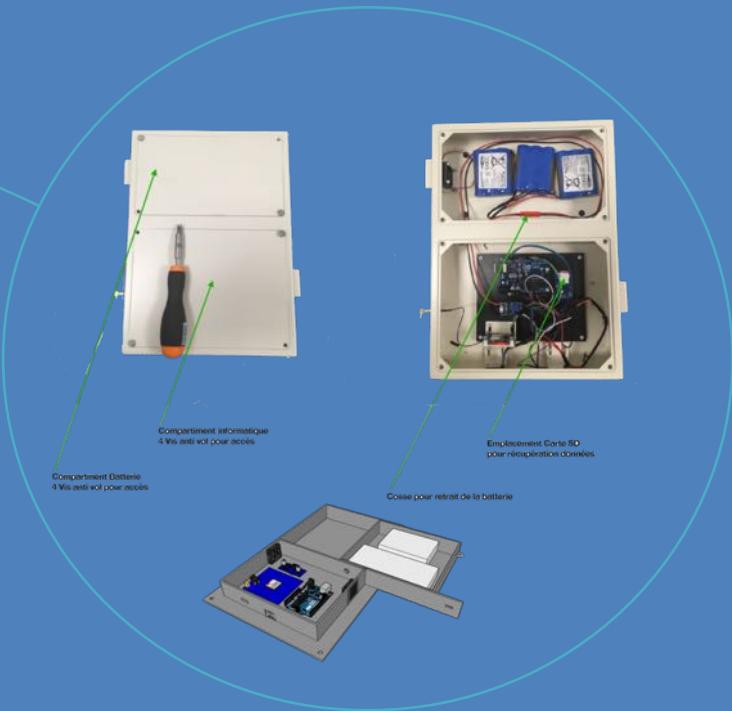
3

2

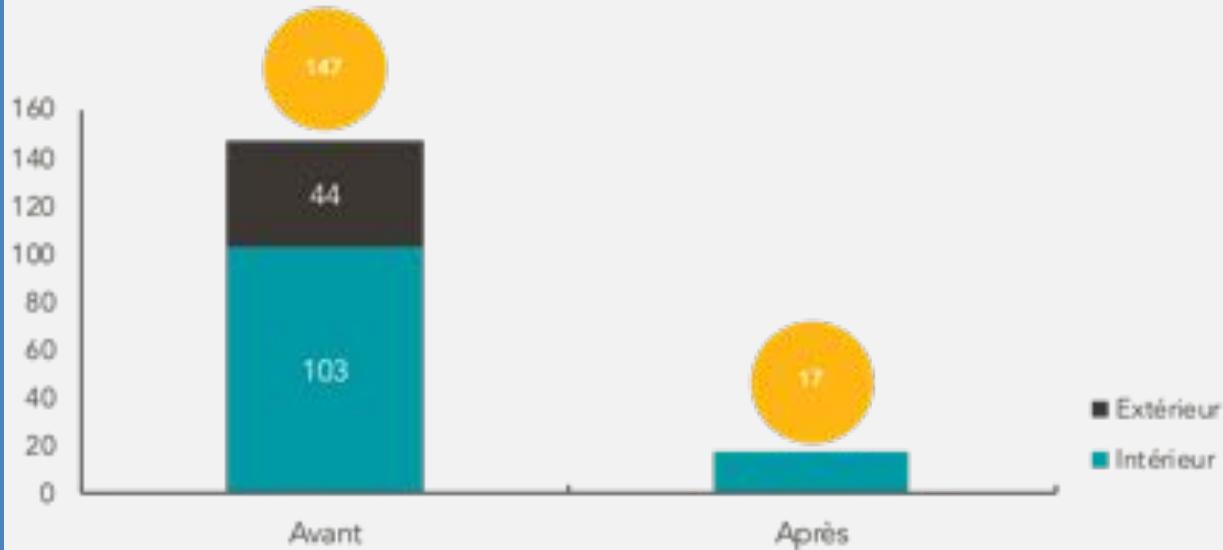
1







### Comparaison du nombre d'actes entre les deux périodes d'expérimentation



# La psychologie sociale

Lewin, 1951

$$B = f(P; E)$$

McGraw, 1963

VOLTAGE  
ENERGIZER

ON      OFF

MAIN POWER

ATTENUATOR

PULSE FREQUENCY

7      8      9      10      11      12      13      14      15      16      17      18      19      20      21      22      23      24

125  
VOLTS

195  
VOLTS

255  
VOLTS

315  
VOLTS

STRONG  
SHOCK

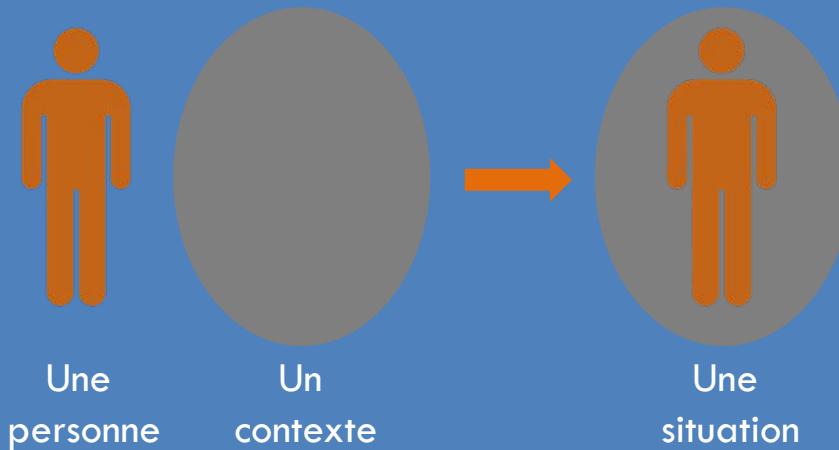
VERY STRONG  
SHOCK

INTENSE  
SHOCK

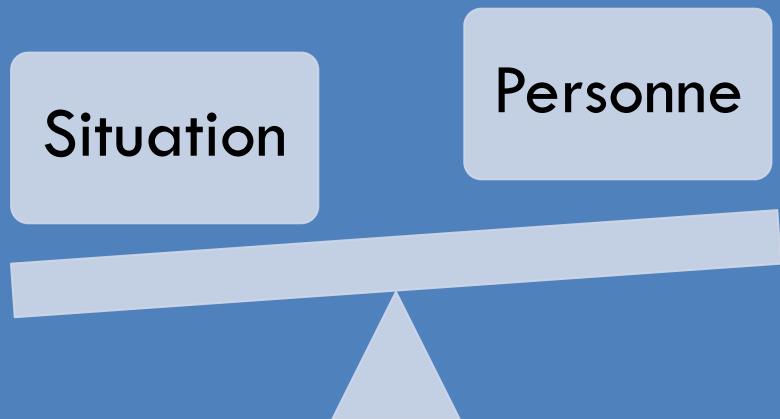
EXTREMELY  
INTENSIVE  
SHOCK



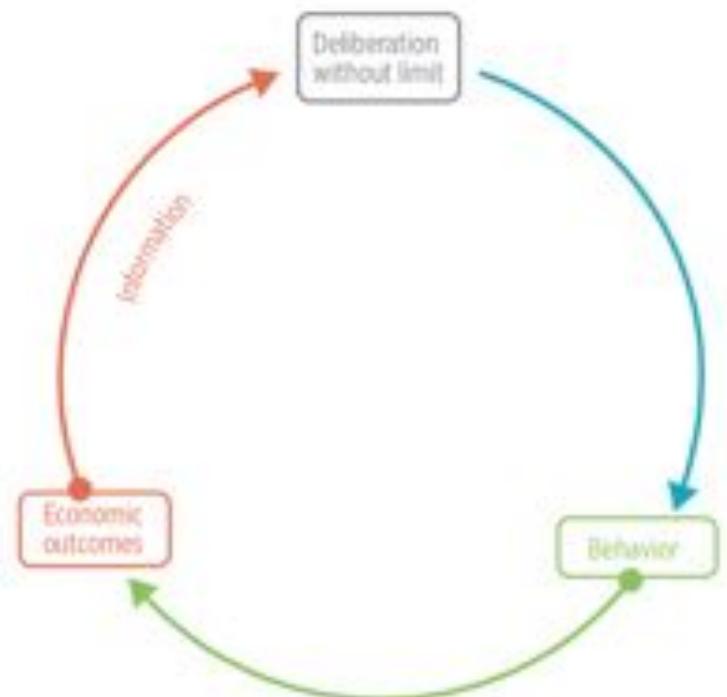
# Psychologie sociale



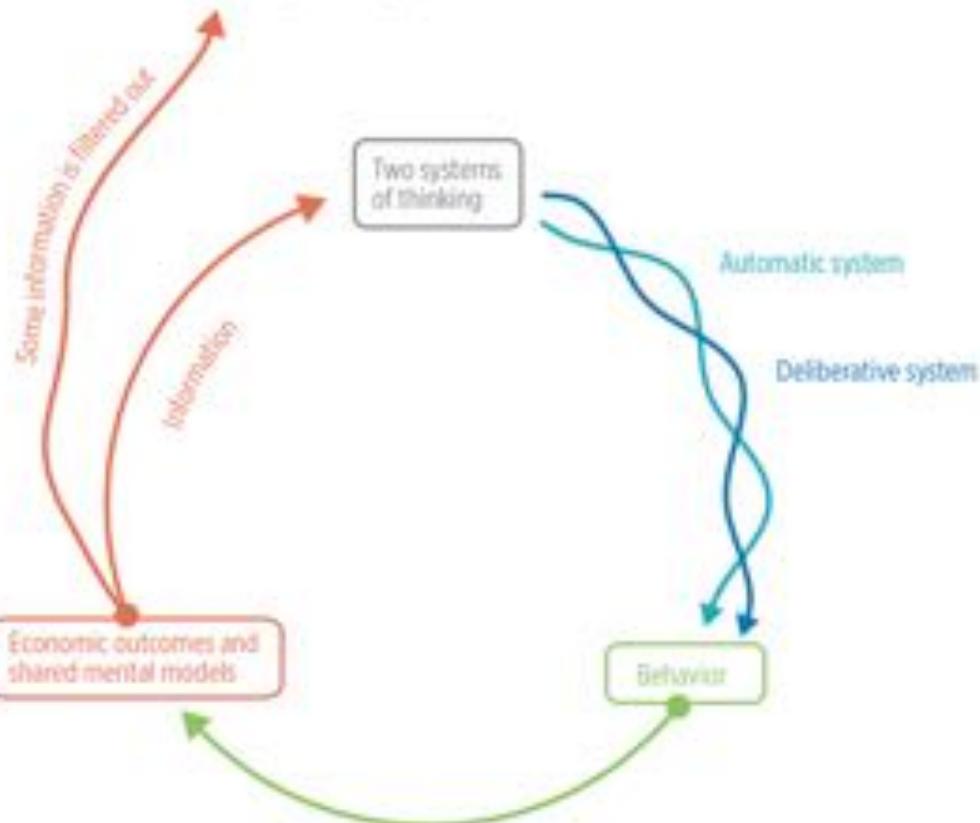
# La psychologie sociale



a. Standard economic model

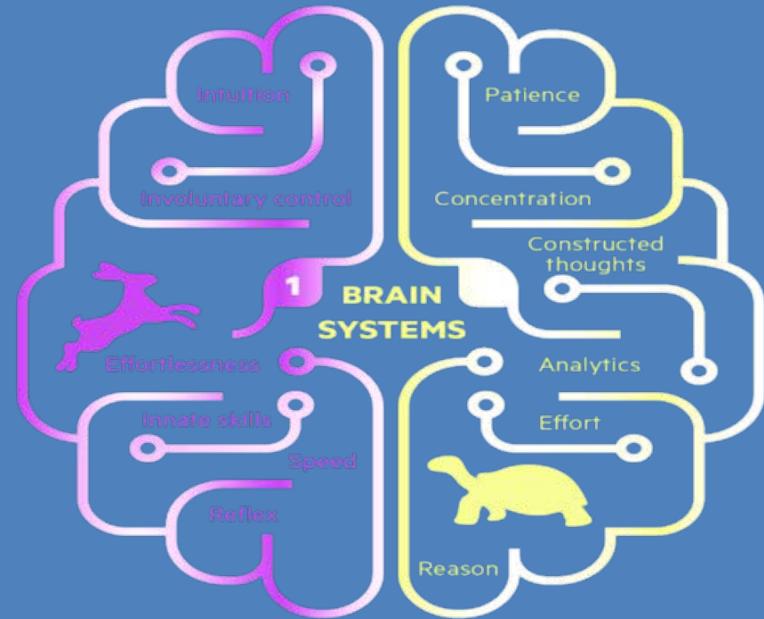


b. Model of the psychological and social actor

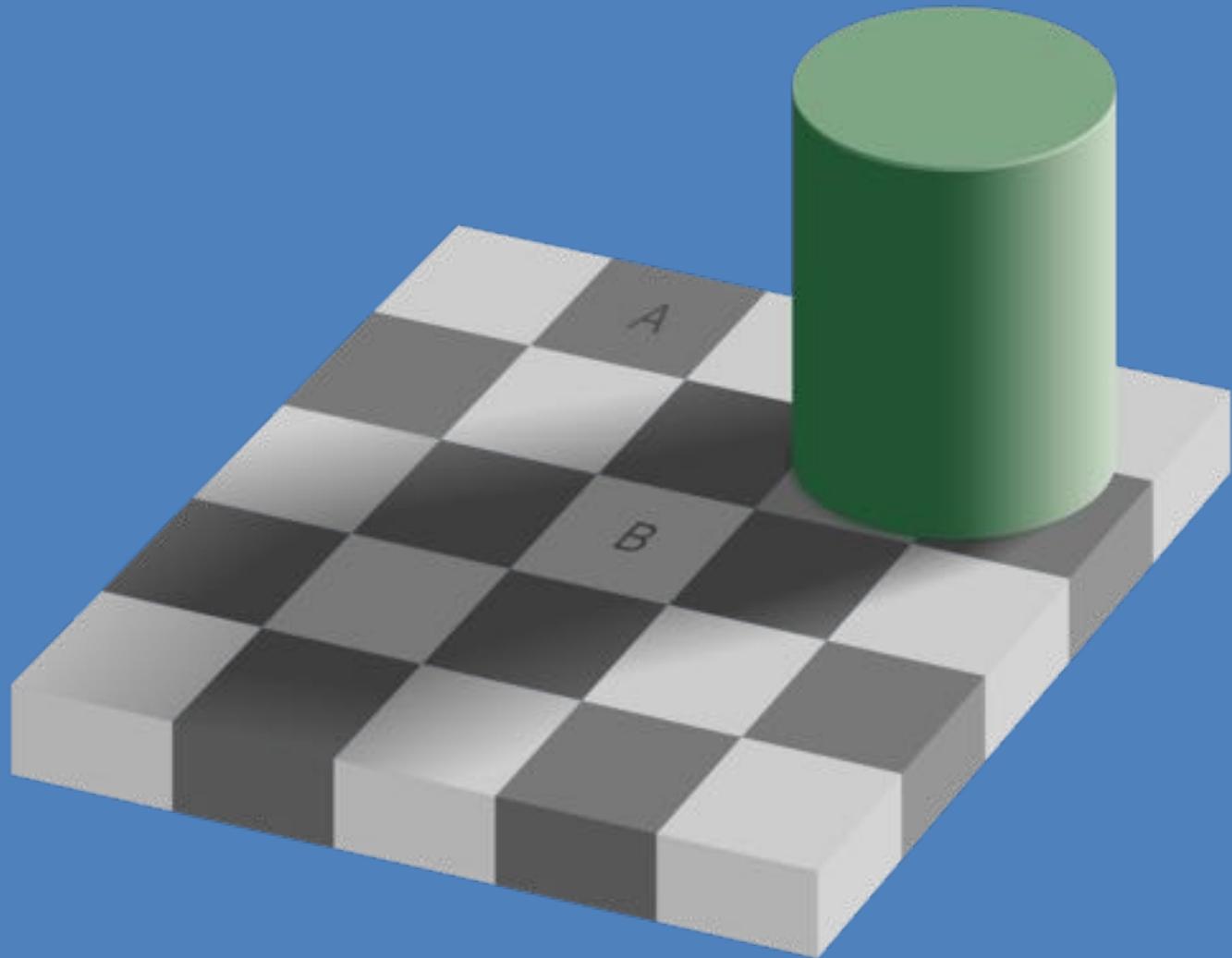


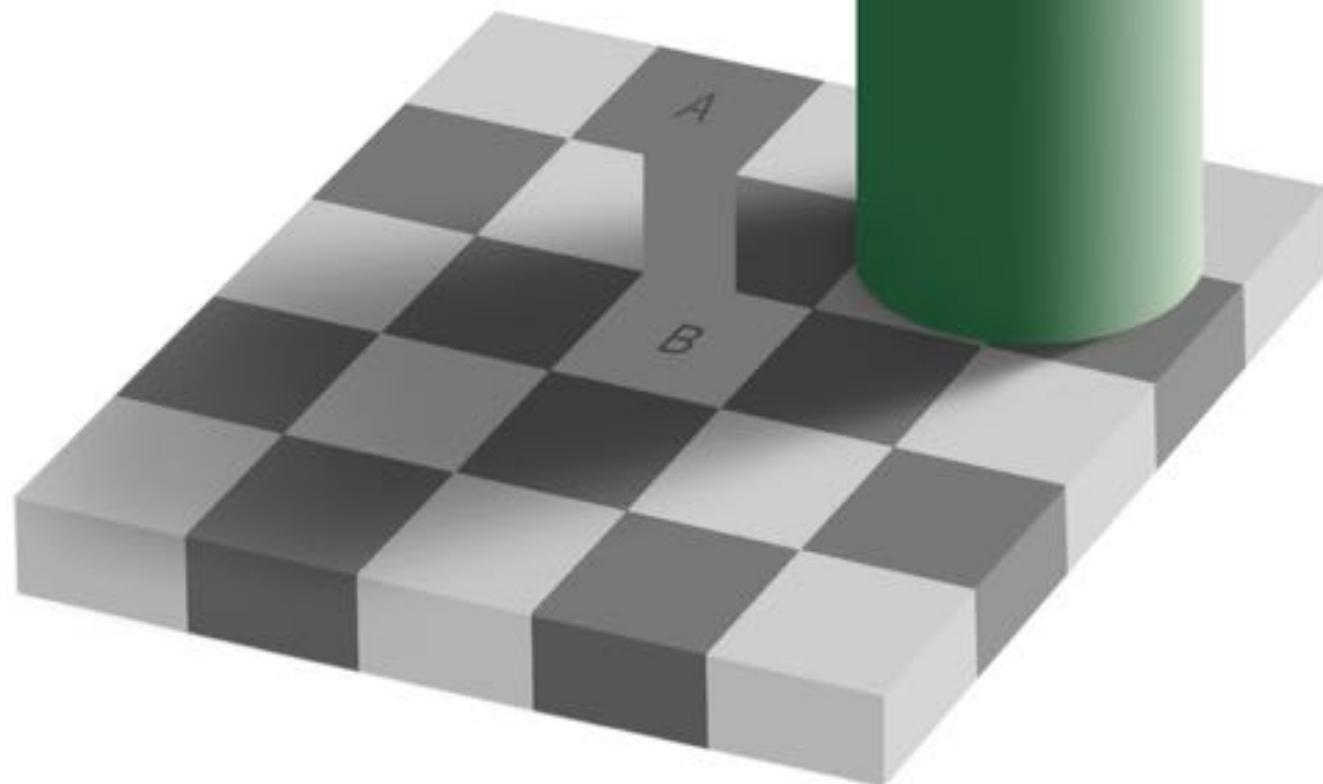
Source: WDR 2015 team.

# Les systèmes de pensée



**12  
ABC  
14**





# COGNITIVE BIAS CODEX

## What Should We Remember?

We favor simple-looking options and complete information over complex, ambiguous options

To avoid mistakes, we aim to preserve autonomy and group status, and avoid irreversible decisions

To get things done, we tend to complete things we've invested time & energy in

To stay focused, we favor the immediate, reliable thing in front of us

## Need To Act Fast

To act, we must be confident we can make an impact and feel what we do is important

We store memories differently based on how they were experienced

We reduce events and lists to their key elements

We discard specifics to form generalities

We edit and reinforce some memories after the fact

We notice things already primed in memory or repeated often

Bizarre, funny, visually striking, or anthropomorphic things stick out more than non-bizarre/funny things

We notice when something has changed

We are drawn to details that confirm our own existing beliefs

We notice flaws in others more easily than we notice flaws in ourselves

We tend to find stories and patterns even when looking at sparse data

We fill in characteristics from stereotypes, generalities, and prior histories

We imagine things and people we're familiar with or fond of as better

We simplify probabilities and numbers to make them easier to think about

We think we know what other people are thinking

We project our current mindset and assumptions onto the past and future

## Too Much Information

We notice flaws in others more easily than we notice flaws in ourselves

We are drawn to details that confirm our own existing beliefs

We notice flaws in others more easily than we notice flaws in ourselves

We tend to find stories and patterns even when looking at sparse data

We fill in characteristics from stereotypes, generalities, and prior histories

We imagine things and people we're familiar with or fond of as better

We simplify probabilities and numbers to make them easier to think about

We think we know what other people are thinking

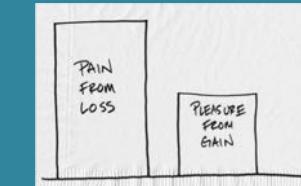
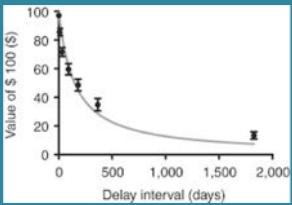
We project our current mindset and assumptions onto the past and future

We notice flaws in others more easily than we notice flaws in ourselves

# L'irrationalité prévisible

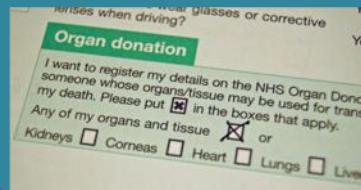
- Les « biais » de décision et d'action sont connus
- Quelques exemples:

Nous sommes moins sensibles au bénéfices quand ils sont dans le futur



Nous sommes plus motivés à éviter les pertes qu'à atteindre des gains

Nous favorisons le choix qui nous épargne des efforts



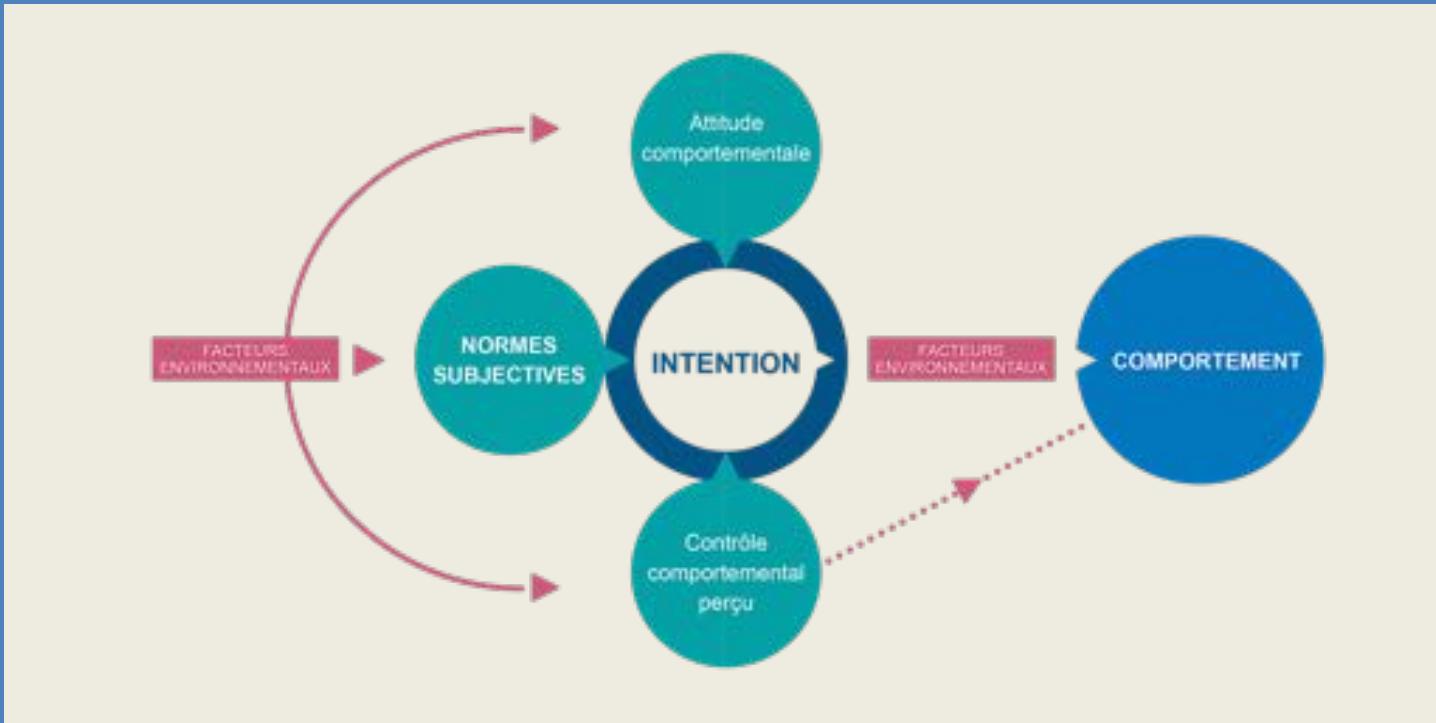
Nous nous engagerons plus facilement dans ce qui nous paraît agréable que dans ce qui nous paraît important



Nous sommes influencés par le choix des autres

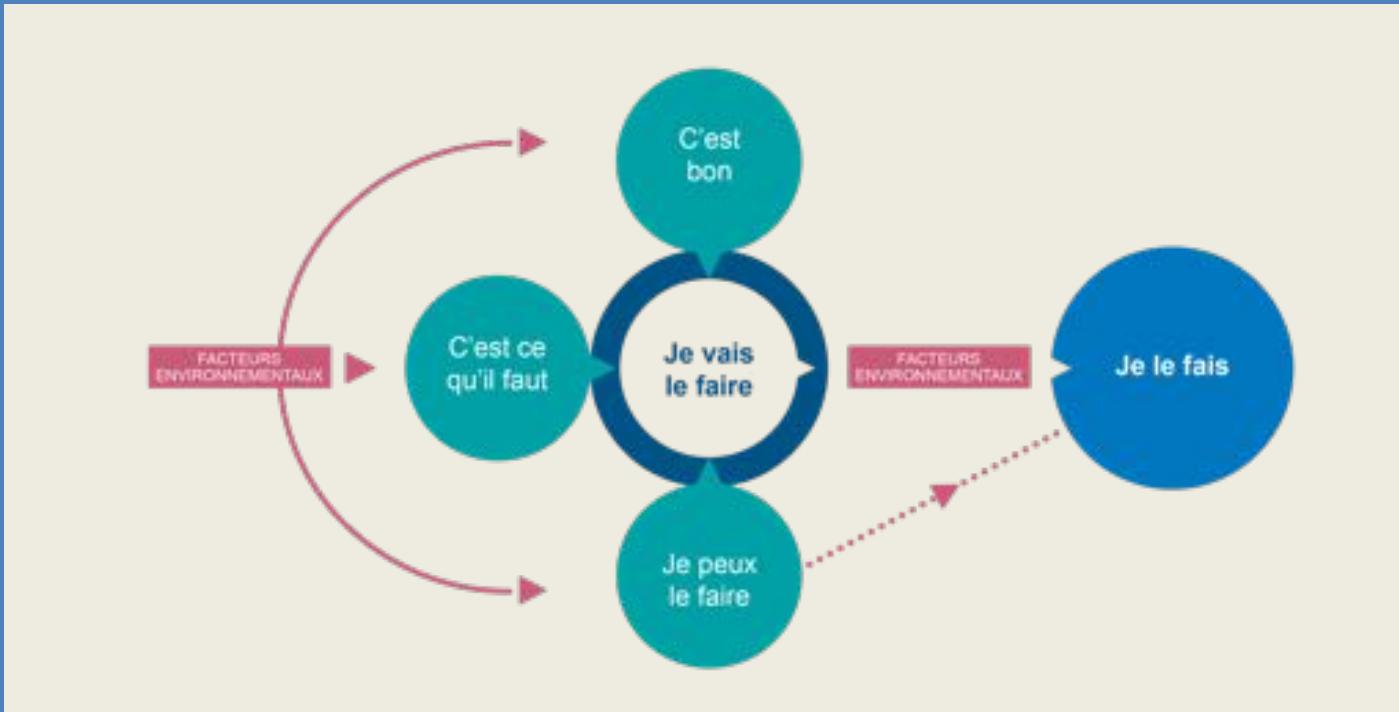


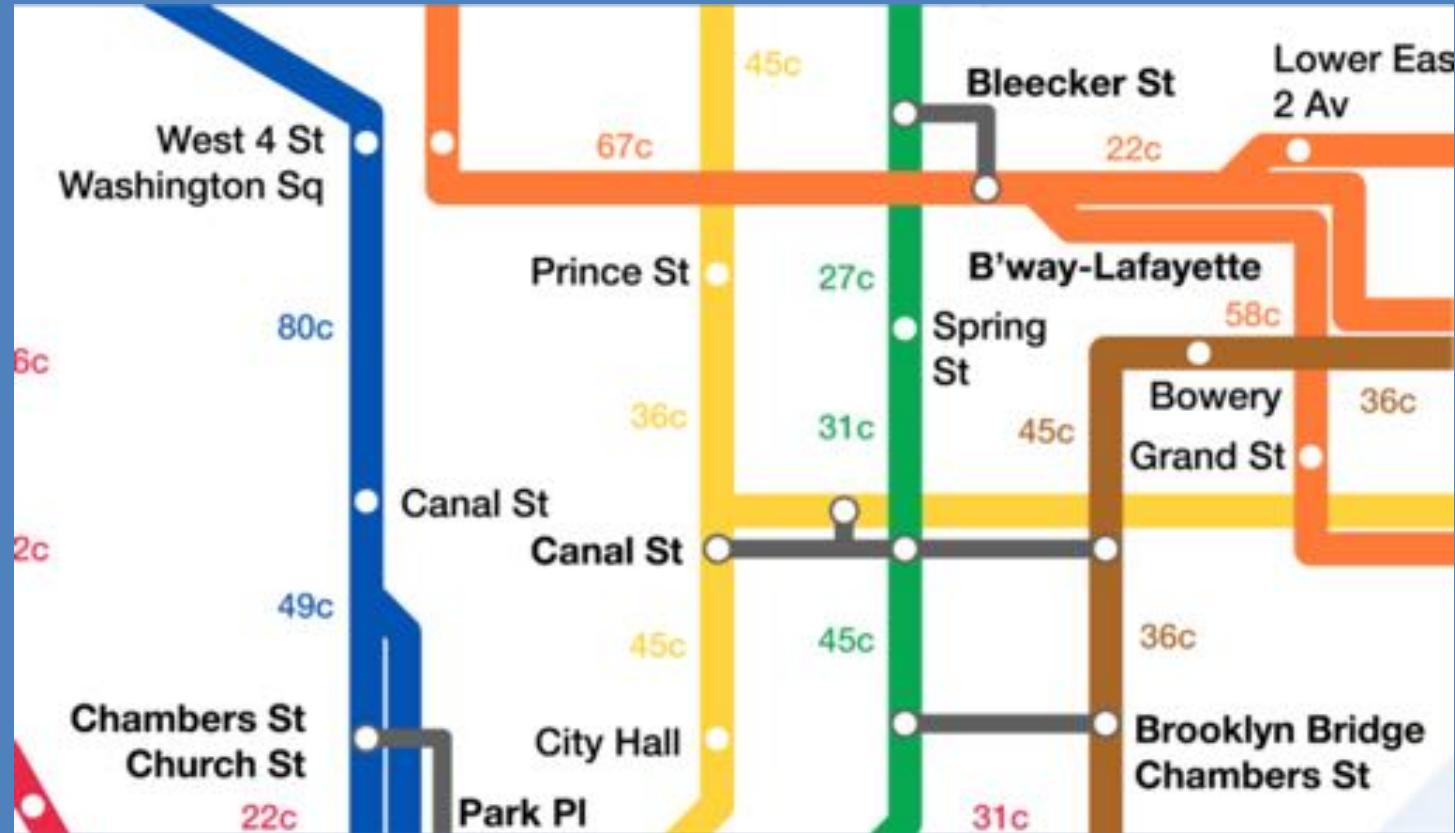
# D'où vient un « comportement »

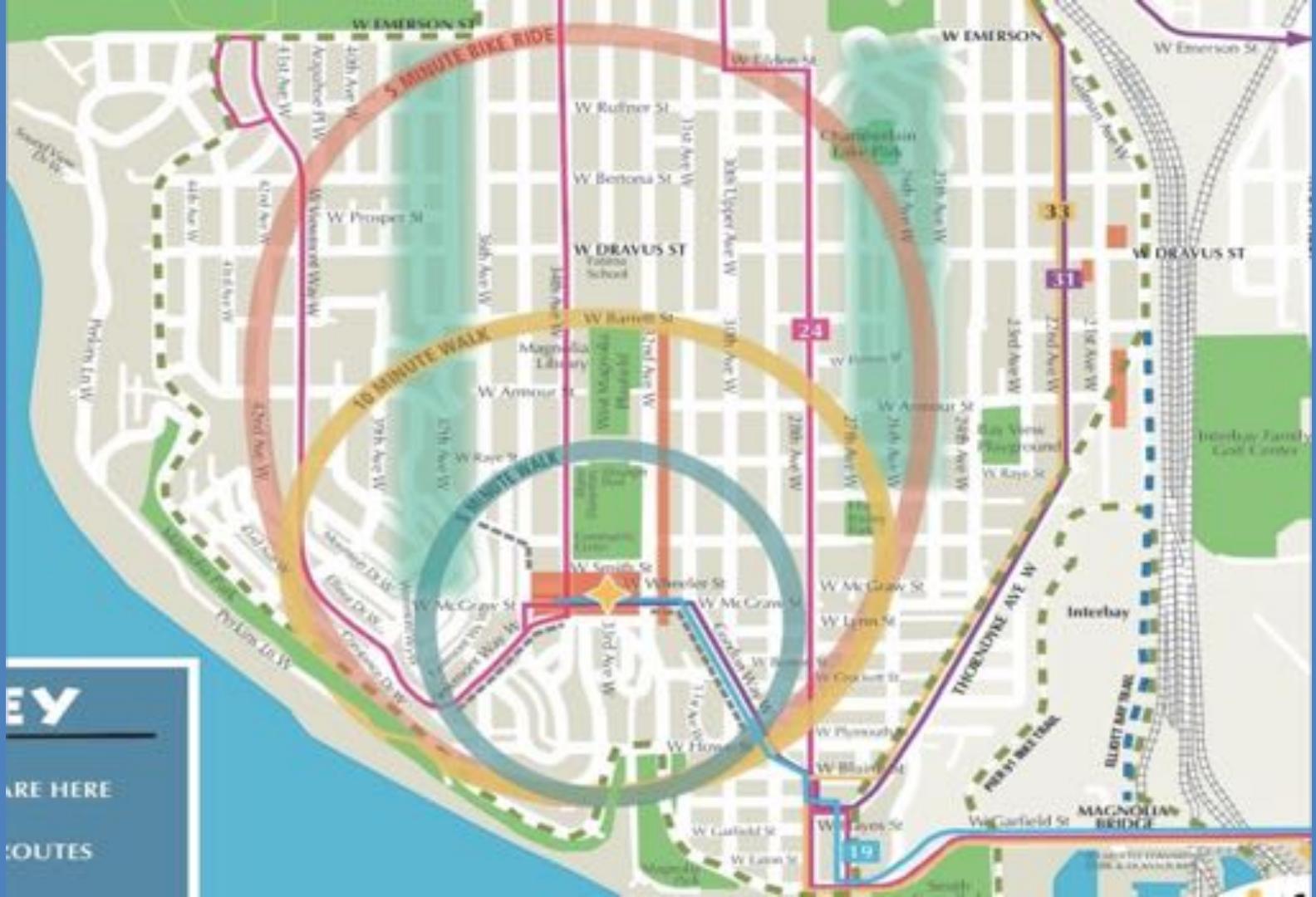


Ajzen, 1991

# D'où vient un « comportement »

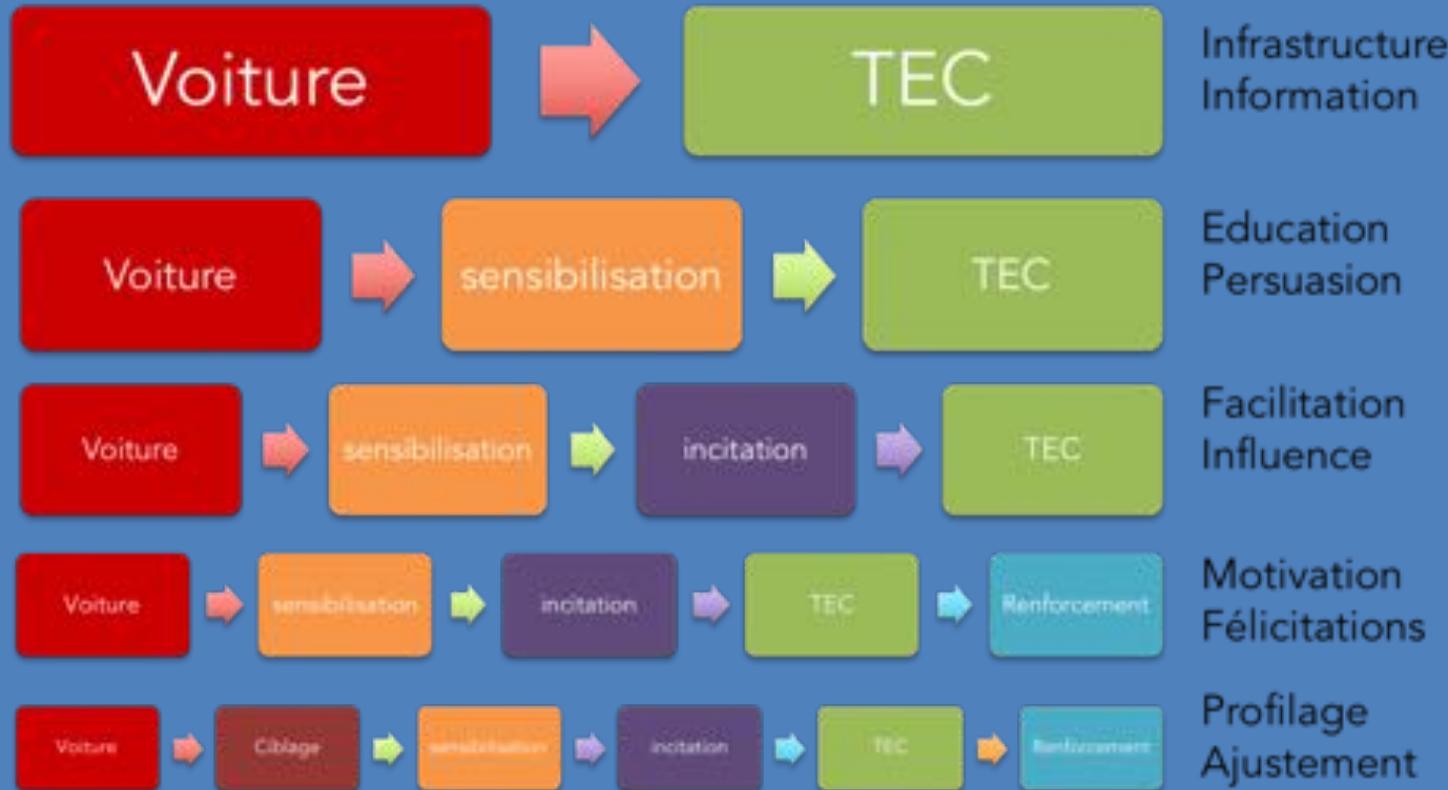








# Le changement de comportement



# New Year's Resolutions for ~~2009~~~~2010~~~~2011~~ 2012

1. Lose weight <sup>more</sup> again
2. Get fit next year
3. Give up alcohol less  
<sup>and cigarettes! drink</sup>  
<sup>find job</sup>
4. Stand up to boss
5. Be nicer to my <sup>ex-</sup> wife  
<sup>^</sup>
6. Sort out junk in shed <sup>life</sup>

**24**  
hours

# FITNESS

POINT LON  
MANICA  
TE APP  
LOCATED  
24 HOURS



WHICH JUSTIN?

BIEBER

TIMBERLAKE

Ballot Bin®  
PHOTOGRAPHY





**AVIS TRÈS IMPORTANT**

Il a été remarqué récemment une tendance de certains à uriner à côté de la cuvette.

Dans l'intérêt général, nous vous demandons de respecter ces lieux.

Si vous êtes orgueilleux, avancez d'un pas, elle est plus courte que vous ne le pensez.

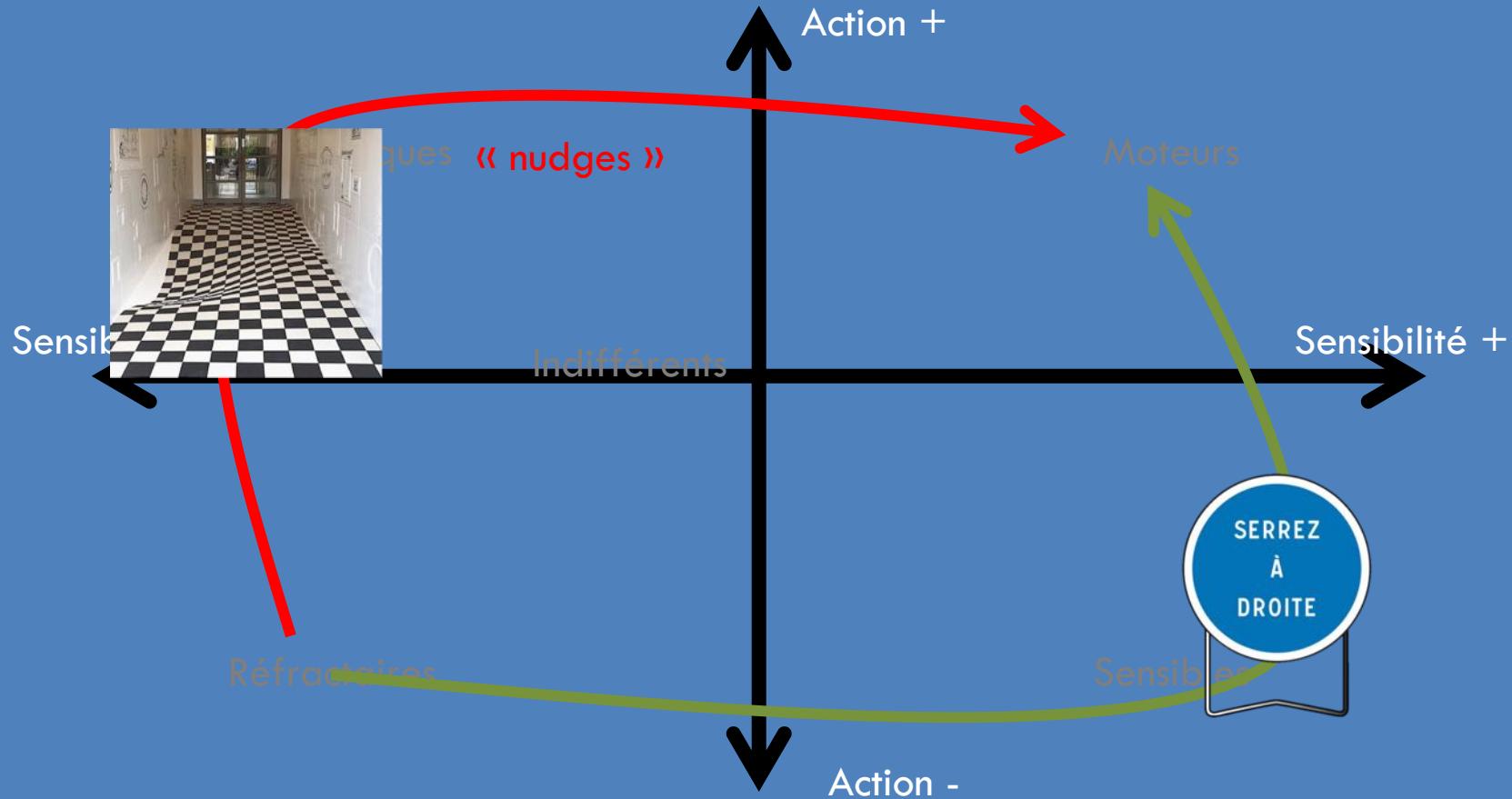
Si vous êtes distrait, déboutonnez votre braguette au lieu de votre gilet pour éviter de pisser dans votre pantalon.

Si vous êtes trop petit, prenez un tabouret au lieu de pisser partout en sautant.

Enfin, si vous pissez de côté, mettez-vous donc de travers.



# Les sens du changement



# Nudge

(Thaler & Sunstein, 2008)

*« A nudge is a function of (condition I) any attempt at influencing people's judgment, choice or behavior in a predictable way (condition a) that is motivated because of cognitive boundaries, biases, routines, and habits in individual and social decision-making posing barriers for people to perform rationally in their own self-declared interests, and which (condition b) works by making use of those boundaries, biases, routines, and habits as integral parts of such attempts. »*

Hansen, 2016

Niveau d'intervention

**Ne rien faire**

**Informer et éduquer**

**Rendre possible le choix**

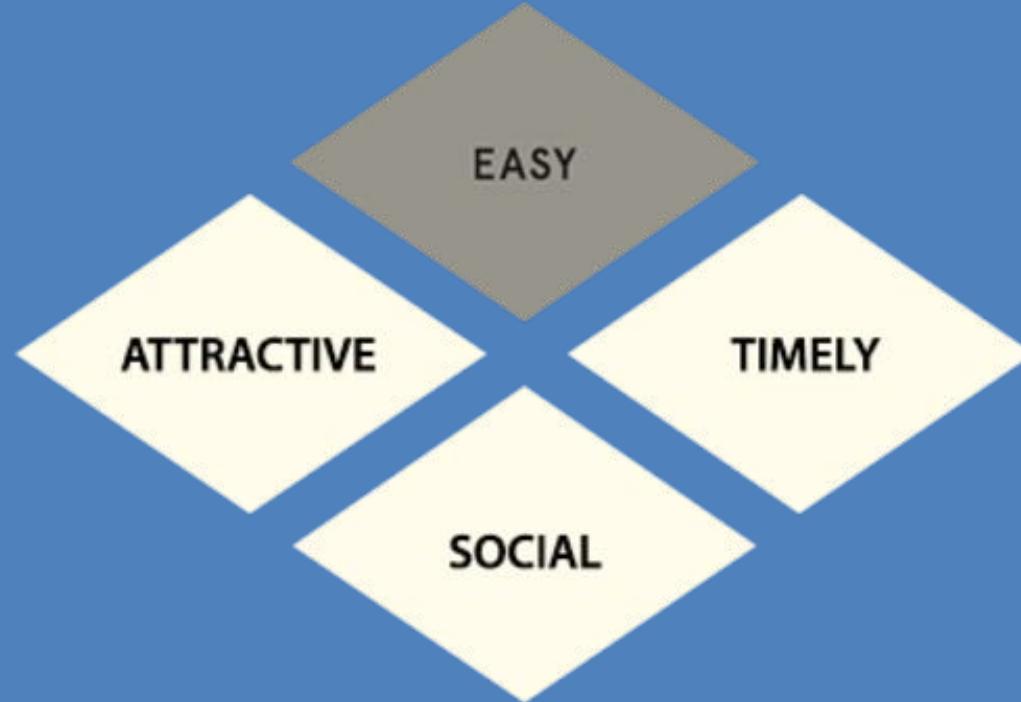
**Guider le choix par l'option**

**Guider le choix par les incitations**

**Guider le choix par des dissuasions**

**Restreindre le choix**

**Eliminer le choix**





## Opower's monthly Home Energy Report

The screenshot shows the Opower Home Energy Report interface. At the top, it says "Last Month Neighbour Comparison | You used 14% MORE than your efficient neighbours." It displays a bar chart comparing energy usage:

Category	Usage
Efficient Neighbours	6,519*
YOU	7,485
All Neighbours	7,660

\* This energy index combines electricity with natural gas (therms). It's a rough measurement.

On the right, there's a "HOW YOU'RE DOING:" section with a "GOOD" rating and a "HIGHLIGHT" button.

Below this, there are two more sections: "Last Month Heating Comparison" and "Last Winter Heating Comparison".

At the bottom, there's a WordPress dashboard with a notification about work time ending.

**Last Month Heating Comparison**

Last winter you used 37% more energy on heating than your neighbors.

Category	Usage
Your Heating	6,471
All Neighbors	4,800

**Last Winter Heating Comparison**

Last winter you used 37% more energy on heating than your neighbors.

Category	Usage
Your Heating	6,471
All Neighbors	4,800

**Dashboard**

Welcome to WordPress! Where would you like to go next?

**Get Started**

Comment Your Site

**Next Steps**

Write your first blog post!

**Notification**

Your regular work time is over. If you continue with work, you renounce your **leisure time**.

**OK**

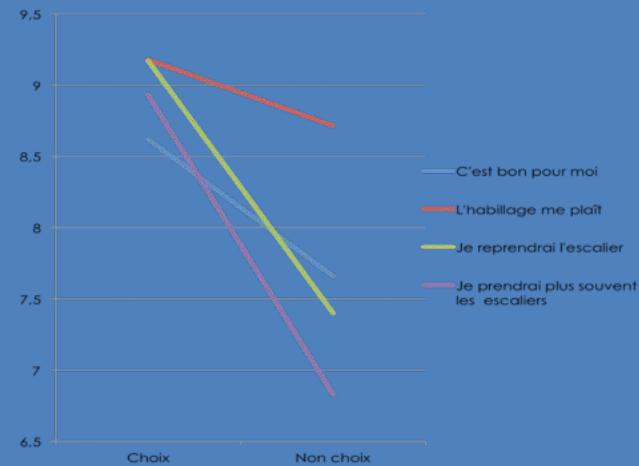
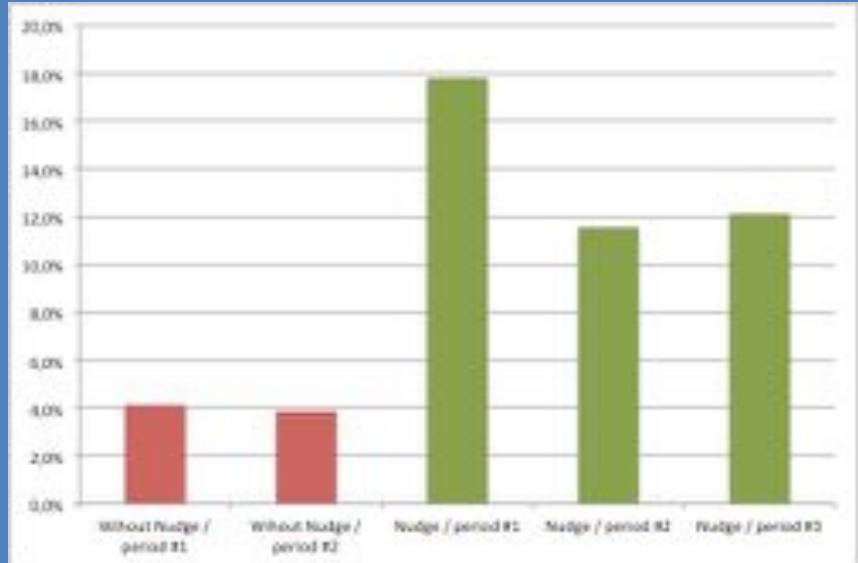
**WordPress News**

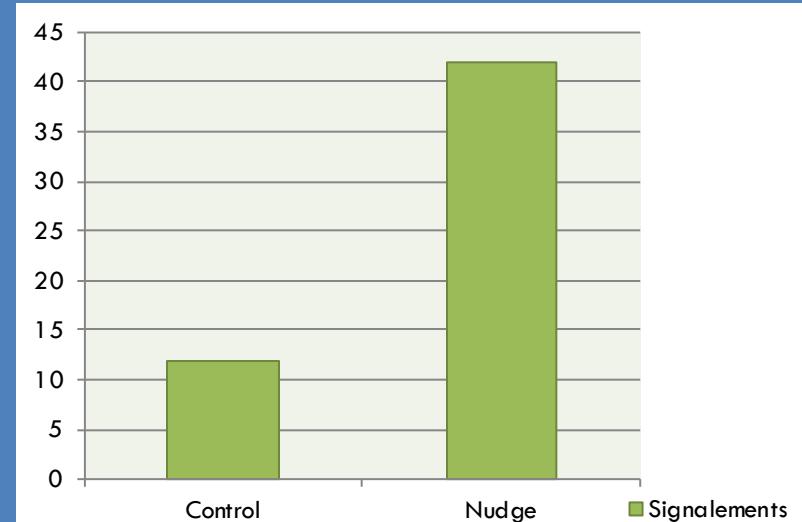
WordPress 3.9 Beta 2 - March 20, 2014

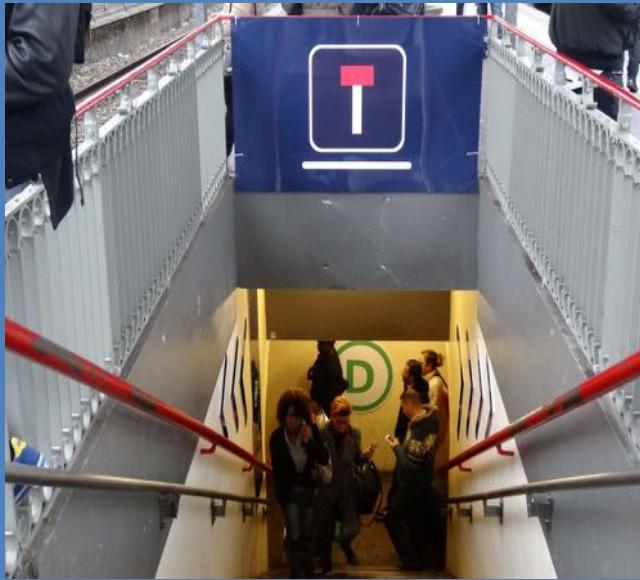
WordPress 3.9 Beta 2 is now available! This is the fourth beta release since the previous one was released just a few days ago. It includes a new visual editor, a new theme, and a new dashboard.

WordPress 3.9 Beta 2 is now available! This is the fourth beta release since the previous one was released just a few days ago. It includes a new visual editor, a new theme, and a new dashboard.

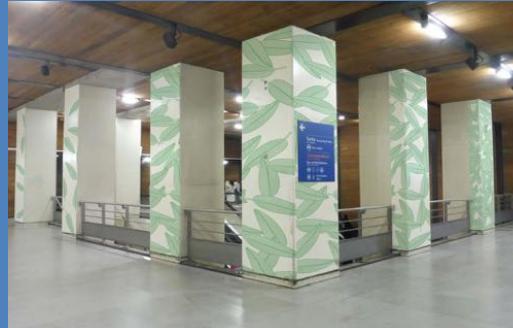
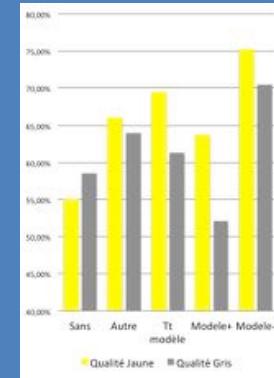
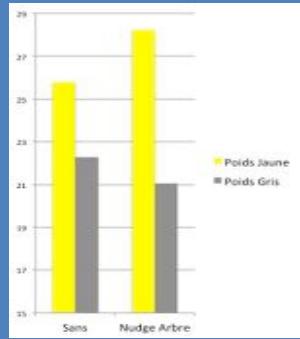
WordPress 3.9 Beta 2 is now available! This is the fourth beta release since the previous one was released just a few days ago. It includes a new visual editor, a new theme, and a new dashboard.





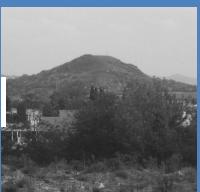
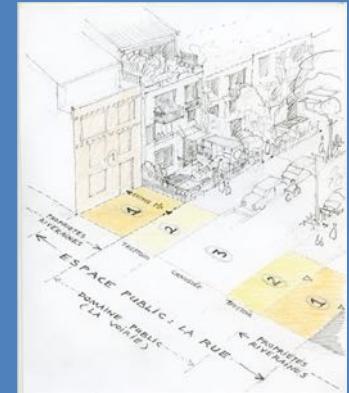


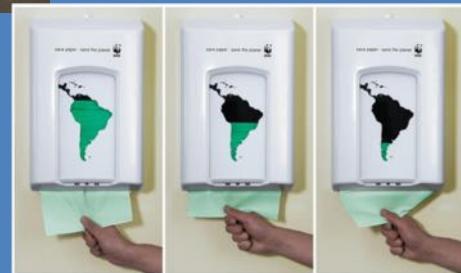
- 42%



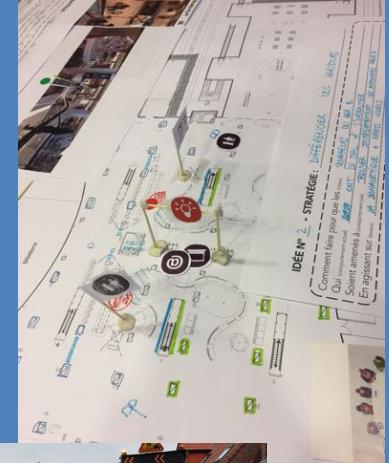
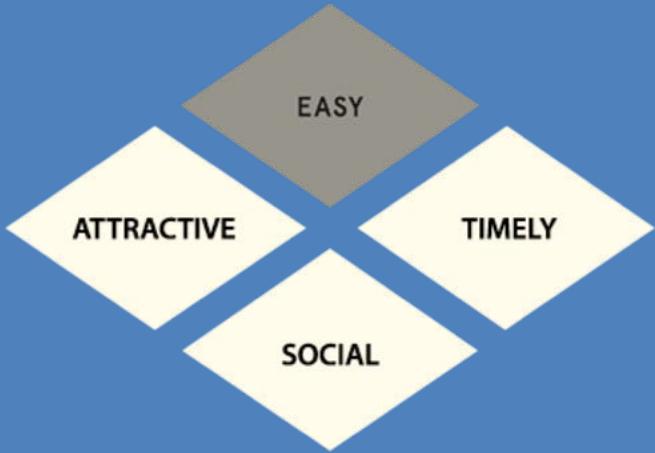


# Nudge et design urbain





# Oui, mais comment ?



# Participation ?

- Consultation - concertation – décision – Collaboration ?
- Le cadrage des actions
- Les effets de seuil
- L'accessibilité des dispositifs et le non-recours
- Penser le proche et le lointain
- La transition vers la participation



# Les enjeux humains ... et éthiques

- Des espaces dissuasifs aux espaces incitatifs
- Rationalité, libre arbitre, choix... Manipulation et empowerment
- Soutenir et développer les ressources psychosociales
- Plutôt qu'imposer des comportements, proposer des expériences
- Le temps long et l'accompagnement
- La richesse interdisciplinaire

Merci

**Nicolas Fieulaine**

Chercheur en Psychologie Sociale

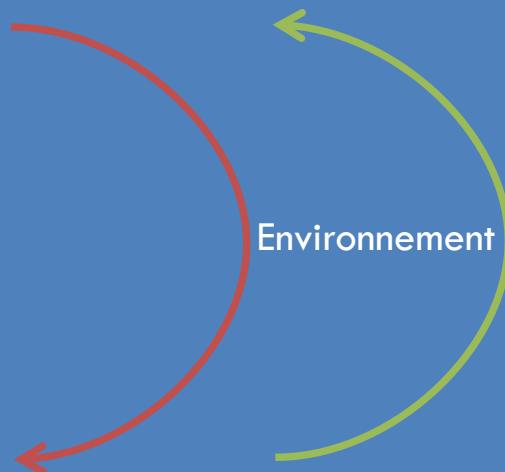
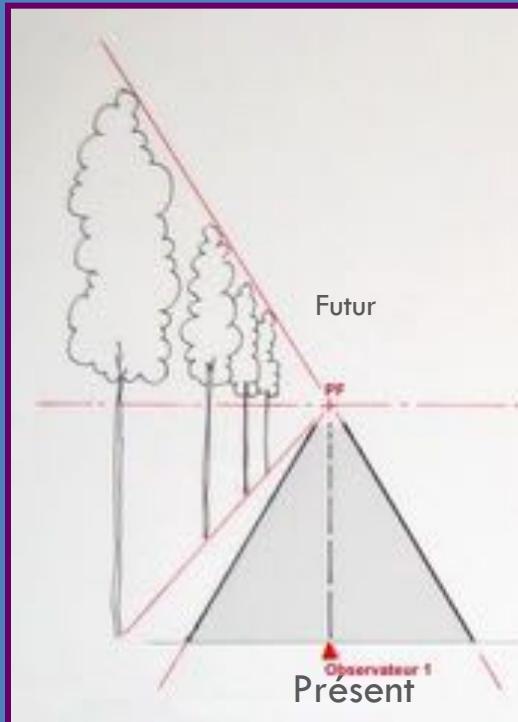
Université de Lyon

[Nicolas.fieulaine@univ-lyon2.fr](mailto:Nicolas.fieulaine@univ-lyon2.fr)

# Le processus de travail

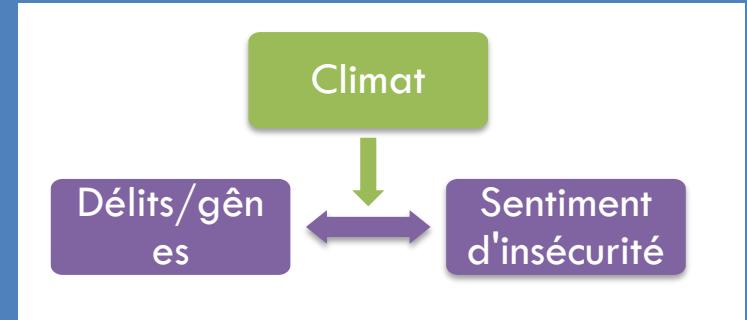
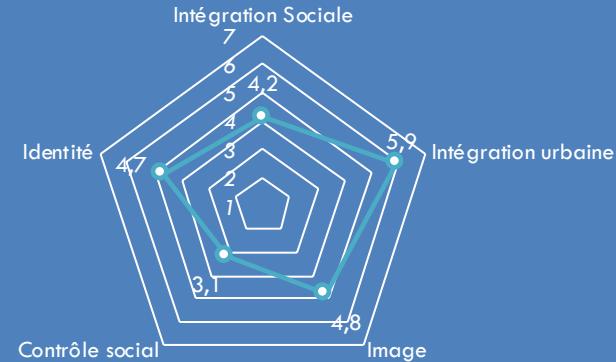
				
EXPLORATION	STRATÉGIE	IDÉATION	CRÉATION	EXPÉRIMENTATION
ANALYSE DES DONNÉES EXISTANTES	ANALYSE DE LA LITTÉRATURE SCIENTIFIQUE	WORKSHOP CREATIF	ACCOMPAGNEMENT DE LA PHASE CRÉATION	PILOTAGE DE LA PHASE DE TESTS
ENTRETIENS	BENCHMARKS		FEEDBACKS SUR LES PROPOSITIONS	ÉLABORATION DE LA MÉTHODE D'EXPÉRIMENTATION
OBSERVATIONS COMPORTEMENTALES	ANALYSE DES DYNAMIQUES PSYCHOSOCIALES	SÉLECTION ET FINALISATION DES IDÉES PRODUITES	SUIVI DE L'IMPLANTATION	CONSTRUCTION DES MESURES
DIAGNOSTIC DE LA SITUATION ET DU CONTEXTE / IDENTIFICATION DES FREINS ET DES LEVIERS	ÉLABORATION DES AXES D'EXPÉRIMENTATION	IDIÉES D'INTERVENTION PRÈTES À ÊTRE PROTOTYPÉES	CAHIERS TECHNIQUES POUR FABRICATION ET POSÉ	RECUEIL ET ANALYSE DES DONNÉES
	STRATÉGIE DE CHANGEMENT COMPORTEMENTAL ET DEFINITION DES AXES D'INTERVENTION			RÉSULTATS PROUVÉS SCIENTIFIQUEMENT

# L'espace psychologique

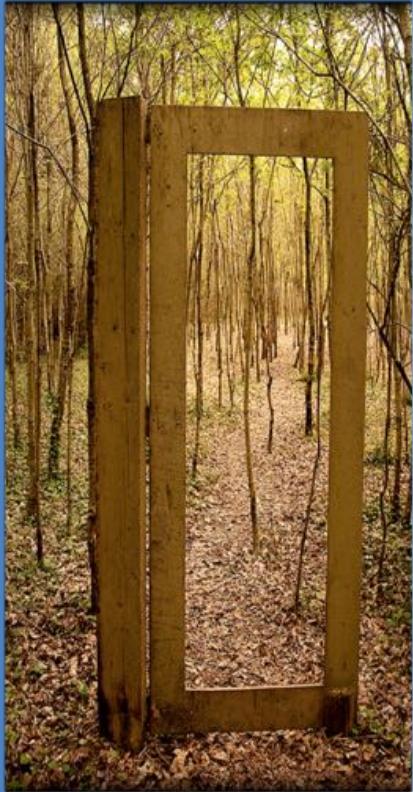


Near	Far
here, now, me, us; important; <b>warm, red</b> ; taste, touch; slang, grunts; voices, pictures; fear, sad; disliked, low mood; sex, tempted; conformity, support authority; low power/status, via acts; math/logic analysis, case-based comparable how con reasons; uncertain, theory/trend-breaking, common likely real local events; <b>concrete</b> , context-dependent, detailed, incidental features; <b>narrow</b> categories; <b>familiar task/event</b> ; feasible safe acts; money, buying; conflicted secondary local practical concerns, means; <b>strong motive/</b> <b>emotion</b> ; socially close folks w/ unstable traits in small groups	there, then, them; unimportant, <b>cold</b> , <b>blue</b> ; see, hear; polite speech, words, faces; anger, guilt, shame, pride, anxiety, regret; liked, high mood; <b>love</b> , self-control; trust, support underdogs; high power/status, via associates; creative analogy, feature-based unique why pro reasons; over-confident; theory/trend-following, rare unlikely unreal global events; <b>abstract</b> , schematic, context-free, core, coarse, goal-related features; <b>broad</b> categories; <b>novel task/event</b> ; desirable risky acts; satisfaction, selling; coherent central global symbolic ideal moral concerns, ends; <b>weak motive/</b> <b>emotion</b> ; socially distant folks w/ <b>stable</b> traits in big groups

# Les "climats" urbain



# La force des jardins



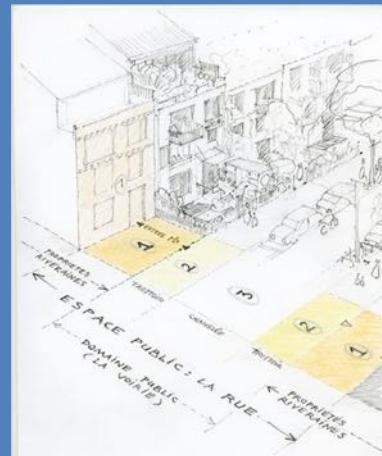
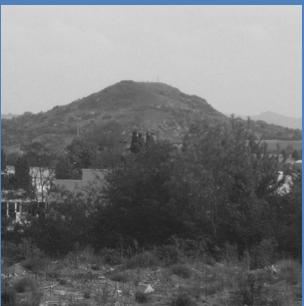
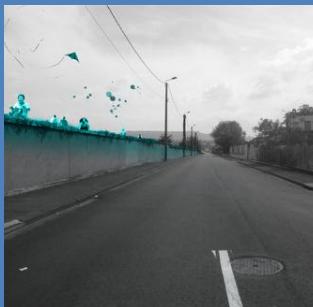
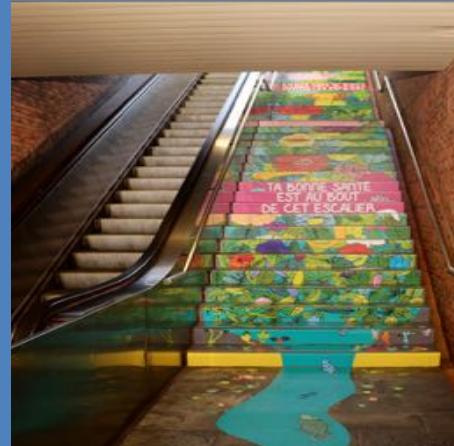
## WHAT MAKES A **GREAT PLACE?**



# L'effet du/des Espaces

- L'ouverture des perspectives
- Le relations sociales induites
- La distance interpersonnelles
- Rythmes et vitesse
- L'ouverture des champs
- Penser l'espace de demain
- Affordances et nudges



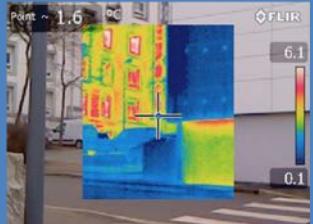


# Les leviers du changement

L'information  
Alerte  
Sensibilisation  
Accompagnement



Les signes  
Visibilisation  
Conséquences  
Partage



Les situations  
Les objets  
Les lieux  
Les interactions



## THE BENEFITS OF GREAT PLACES



# L'espace psychologique

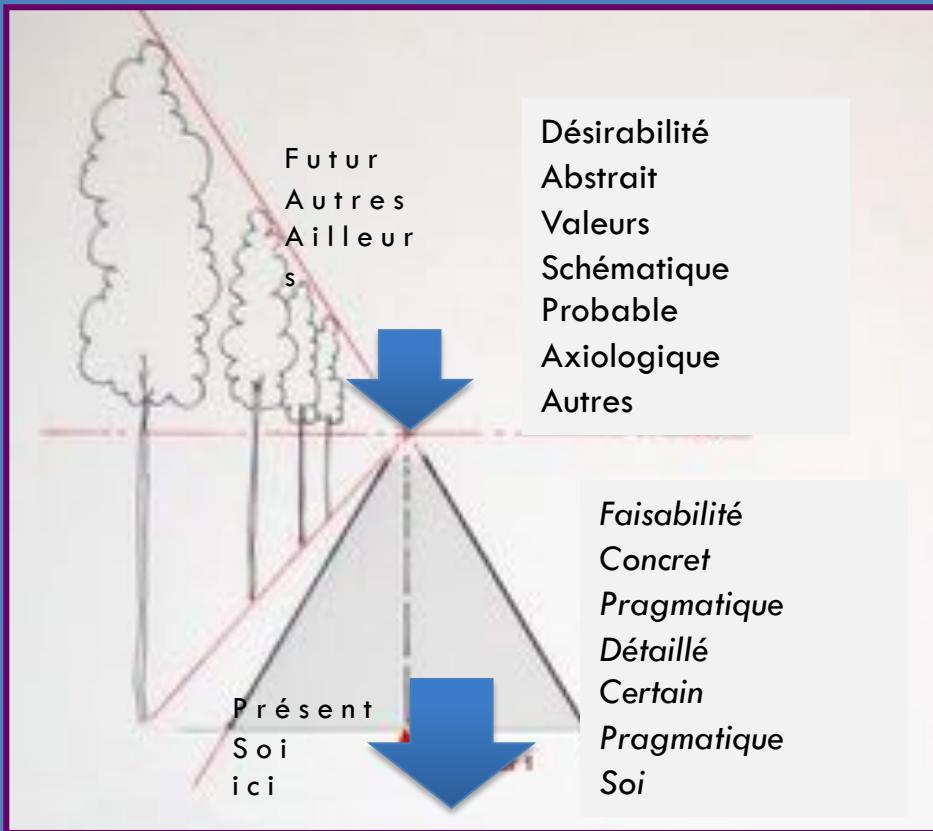
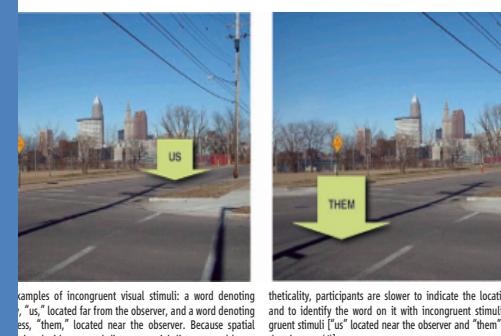


Fig. 3. Items from the Gestalt Completion Test (12). Identifying the pictures (from top-right to bottom left: a boat, a rider on a horse, a rabbit, a baby) requires visual abstraction. Participants were better at identifying pictures that they believed were sample items of a more distant future task (12) or a less likely task (13).



samples of incongruent visual stimuli: a word denoting "us," located far from the observer, and a word denoting "them," located near the observer. Because spatiality, participants are slower to indicate the location and to identify the word on it with incongruent stimuli than with temporal distance, social distance, and hypo-

theticality.

# Les types de nudge

