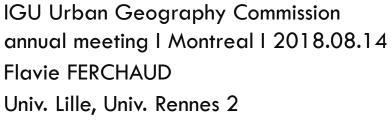


FABLABS AND HACKERSPACES IN CITIES: ROLE & INTEGRATION WITH EXISTING ENVIRONMENT (FRANCE, BELGIUM)















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# EMBLEMATIC PLACES OF THE "MAKE "MOVEMENT

Continuum of places: digital fabrication, programming, hacking



Experimentation, prototyping, apprenticeship through test and error



What answer do these places and communities bring to the 'liquid society' theory (Bauman, 2000)?

What relations with their environment?

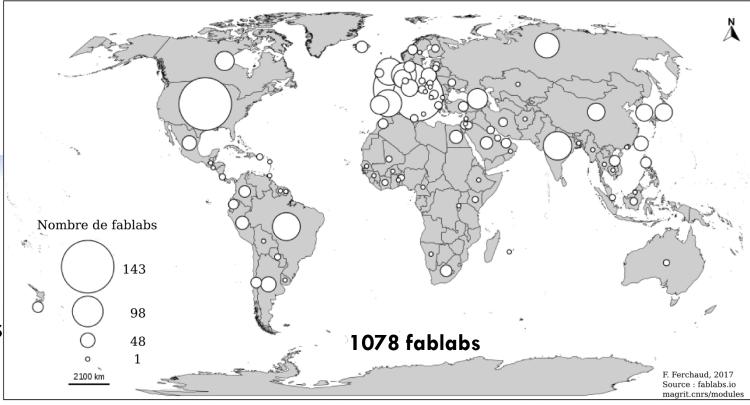
# FABLABS: LABELLED PLACES

- Massachussetts Institute of Technology (N. Gershenfeld)
- Course machines places
- Charter logo



 Diversity: orientations, business model, publics...
 (Bosqué, 2016; Troxler, 2010; Eychenne, 2012)

#### Fablabs in the world in 2017

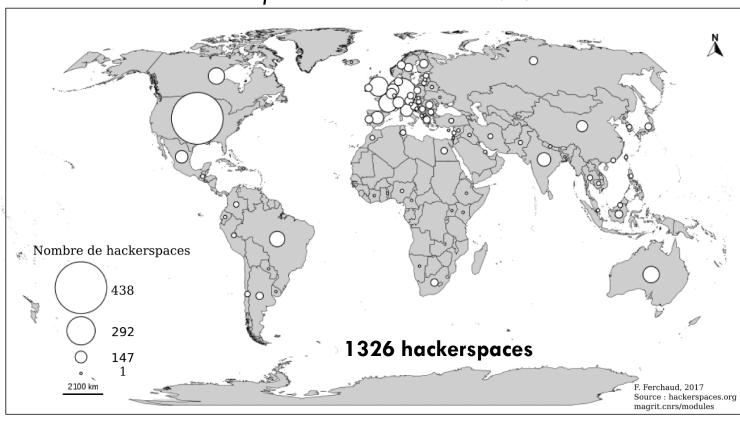


# HACKERSPACES: SELF-MANAGED PLACES

- Clubs
- Programming, hacking...
- Horizontality & selfmanagement (Lallement, 2015)



Hackerspaces in the world in 2017





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# INTERNET — TECHNOLOGIES & TERRITORY

Internet, digital technologies...

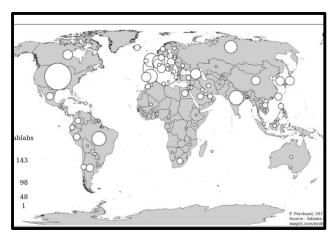


Globalization

The end of the territory?

(Virilio, 1984; etc.)

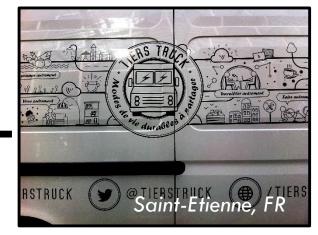
- Interactions (Eveno, 2004; Beaude, 2012)
- Persistence of local anchorages (Venard, 2008)



Global scale



Practices on-line and off-line



Physical places, trucks, events, workshops...

AIM

To bring inputs to the analysis of the territory's changes

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## SOCIAL INNOVATION

- Third places, fablabs, hackerspaces...
- = "social innovations"

Nedjar-Guerre et Gagnebien, 2015; Bosqué, 2016; Cléach, Deruelle, Metzger, 2015...

- Positive and optimistic discourse
- → How to distinguish promesses and realities?



Social innovation can be understood through its representations and hopes that it is bringing (Evers, 2015)

## **AIMS**

To decrypt representations and hopes about these places
To understand the scope of these representations on public action
To put into perspective representations and realities

## DISSEMINATION PROCESS

3 types of social innovation's dissemination process (Richez-Battesti, 2015)

- Informal
- Territorial (institutionnal)
- Based on network

SME, innovation and digital economy's Minister of France in 2012



Yes, we want #fablab everywhere in France. And no worries, @nodesign, design will have a special place;)

Twitter, 2012

AIM

To characterize logics of dissemination processes according to the type of the place (fablab, hackerspace) and the context where they emerge

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# PUBLIC ACTION: TWO APPROACHES



- 1) Collective characteristic of public action (Hasseunteufel, 2008)
- Institutionnalization
- Instrumentation (Lascoumes et Le Galès, 2004)
- Context of neo-liberalism (Dardot et Laval, 2009)

2) Local public spheres: discussion of procedures, aims and objectives of public authorities (Ion, 2001; Mélé, 2009)

### AIMS

To analyse the relation of these places with public action according to their type and their existing environment

To study the scope of this relation on makerspaces's dynamics

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## URBAN CHANGES

- Urban neo-liberalism (Peck, Theodore, Brenner, 2009)
- = knowledge economy, innovation, entrepreneurship, creativity



### Fablabs, hackerspaces...

- → Kits of the "creative city" (Landry, 2012)?
- "Urban commons"? (Festa, 2016, 2017;
  Nicolas-Le Strat, 2016)





To understand the role of these places towards urban neo-liberalism. Do they come from it? Do they nurture it? Are they contesting it?

## HYPOTHESIS

#### **De-territorialization**

Places influenced by international norms

#### **Territorialization**

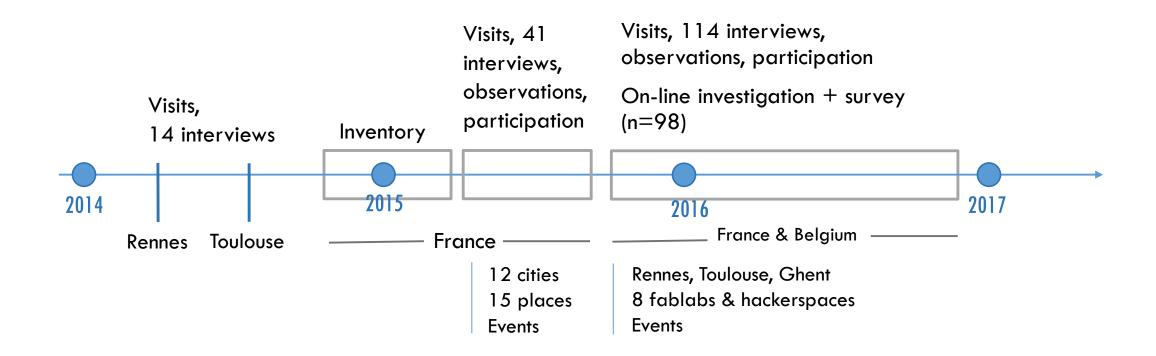
Progressive integration to the local context

#### Re-territorialization

Depending on diverse variables, places become resources for the territory

Time

## **METHODOLOGY**



155 interviews with individuals from fablabs, hackerspaces...; elected people; civil servants, city planners...

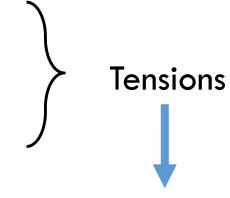
# FINDINGS #REPRESENTATIONS #DISSEMINATION PROCESS

• About knowledge, technologies, social, economic & political scope

• Contradictions

Links with counter-culture et digital utopianism (Turner, 2006)

Dissemination process related to institutions or private companies







- In fablab's and hackerspaces's groups
- Between fablabs and hackerspaces
- In their relations with the territoriy

# FINDINGS #SOCIAL DYNAMICS

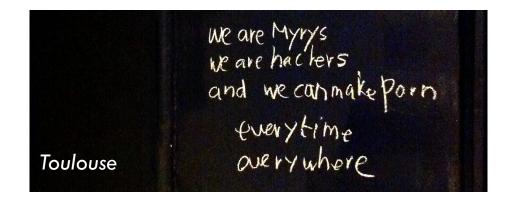
#### **REPRESENTATIONS**

**Openness** 

Sharing

Community

Collective practices and collaborations



### **FINDINGS**

- "Social capital" (Granovetter, 1973)
- Social homogeneity
- Social codes
- Like to stay between themselves
- But flows between fablabs and hackerspaces
- Communing under controlled conditions
- Governance: power relations

# FINDINGS #URBAN DYNAMICS

#### **REPRESENTATIONS**

Smart city

Urban anchorage

Creative city

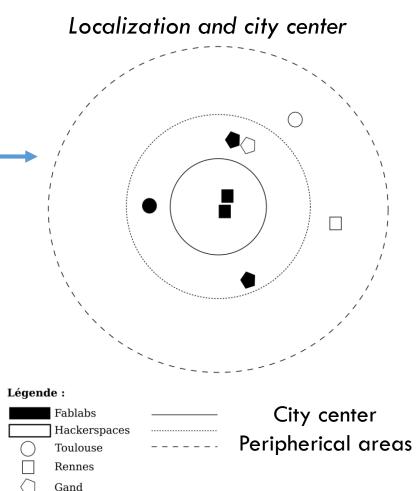
Creativity & innovation

### **FINDINGS**

- Productions: a limited scope on urban space
- Limited urban anchorage
- Localization: diversity
- A majority of former vacant buildings
- Few collaborations with creative neighbours







## DIMOC

## DISCUSSION #THEORETICAL AIMS VS. FINDINGS

#### THEORETICAL AIMS

Internet, technologies & territory

Social innovation

Dissemination process

Public action

**Urban changes** 

### **FINDINGS**

- Off-line and on-line practices: independance & complementarity
- Diverse and contradictory representations
- Combination of dissemination processes, different according to the type of places (fablabs, hackerspaces...)
- Central role of institutions: to answer demands, ask for support or to avoid them
- Places related to urban changes but few contestation
- "Urban commons" (Festa, 2016...)?
- Theories being questioned: proximity, creative city

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# DISCUSSION #HYPOTHESIS VS. FINDINGS

#### **HYPOTHESIS**

De-territorialization  $\rightarrow$  Territorialization  $\rightarrow$  Re-territorialization

- Representations unrelated to the territory
- Process of dissemination & localization dynamics in relation with the territory
- Places related to global urban changes
- Places in relation with historic, social, economic, political and urban context
- Resources which scope is limited for the territories

1 > 2 > 3 > 4 > 5 > 6 > 7 > 8

# A RESEARCH TO BE CONTINUED...

- New analysis using existing data
- To work more on the individual's scale
- To compare at different scales:
  - Rural spaces
  - Bigger cities and peripherical urban spaces (Berger et al., 2014)
- Fabcity concept: what effects?

