AESOP – Sustainable Food Planning Spring
Webinar Series

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https://www.foodscapes.fr/
Why focus on foodscapes?

• Global issues:
  • The living environment (e.g. built, social, and food) may affect health and well-being (HLPE 2017, Goenka et al. 2016)
  • Rising concerns about social and spatial inequalities in public health and food access
  • Living in ‘food deserts’, i.e. in areas where physical access to grocery stores and supermarkets is limited, could be a health issue (Beaulac et al. 2009, Walker et al, 2010)
  • Growing literature on food environments, foodscapes, food deserts - mirages – swamps - oases ...

• In France:
  • Very few studies, foodscapes show both « fast food » and « slow (local) food » trends
  • Their impacts on food styles are unknown, results vary (Casey et al. 2012, Chaix et al. 2012, Drewnowski et al. 2014, Pinho et al. 2019)
The FOODSCAPES project

Impacts of urban foodscapes on foodstyles

- Food outlets, restaurants
- Farming areas: urban farms and community gardens
- Food messages (TV, media, advertisements)

Shopping
Cooking
Eating, etc.

- Food practices
- Nutrition
- Representations

Literature focuses on:
Fruits & vegetables
fast foods & fats, ...

(Sacks et al. 2019)

Obesity, overweight

Individual factors (socio-démographics)
The FOODSCAPES project

• **Objectives:**
  - Understand the **impacts of foodscapes on peoples’ food styles** in the Montpellier city-region
  - Provide local authorities **operational levers for improving food accessibility and sustainability**

• **Interdisciplinary team:** geography, GIS, marketing, nutrition, public health, sociology
Foodscape: a scoping review
Vonthron, Perrin et Soulard, 2020 *Plos One*

**Spatial approaches – GIS, stats, impacts on diets**

**Physical access to food outlets**
**City or neighborhood scales**
**Public health issue - maps**

**Social & cultural approaches of food procurement practices**

Access is multidimensional
Structural inequalities – food justice issues
People, neighborhood, city scales

**Behavioral approaches – consumer perceptions in food outlets or canteens**

**Systemic approaches of food systems**

Institutional, economic, cultural & political landscape
Contest the global corporate food regime
Promote local ethical AFN – sustainability issue

**Consumption behaviors**
**Food education issue**
**In-door micro-scales, individual**


Goodman et al. 2010, Morgan et al. 2010, Fraser 2017, Sonnino 2013, Carolan 2017
4 dimensions to understand the foodscape

Vonthron, Perrin et Soulard, 2020 *Plos One*

- **Food environment** (external to individual)
- **Social practices** (lived space, food procurement routines)
- **Perceptions** (representational space: imagination, visions)
- **Policies, discourses,** (conceived space – intellect: urban, landscape & food plans & design)

FOODSCAPE is a social construct

inspired by Henri Lefebvre’s *Production of space* 1976

inspired by Arjun Appadurai’s *Modernity At Large: Cultural Dimensions of Globalization* 1996

[Image of Henri Lefebvre]
[Image of Arjun Appadurai]
Mapping the foodscapes of Montpellier
Pedestrian access to fruits and vegetables

- Commercial food outlets
  - Types of outlets, restaurants
  - Access by means of transportation
  - Identify potential food deserts/food swamps

- A metropolitan observatory of food outlets?
Mapping the foodscapes of Montpellier

Diverse types of foodcapes

• Food outlets availability (number, density, diversity indicators)
• Built environment (height, density)

Paysages alimentaires
- Quartiers urbains denses où l’offre alimentaire est abondante et diversifiée
- Quartiers urbains et bourgs de communes périurbaines où l’offre alimentaire est limitée et dominée par les fastfoods
- Espaces périurbains ouverts où l’offre alimentaire est peu abondante mais diversifiée et "saine"
- Quartiers résidentiels où l’offre alimentaire est quasi-nulle
- Zones d’activités commerciales

Sources : Répertoire SIRENE au 01/01/2019, relevés terrain, Open Street Map, Google Maps, Google Street View, Fiksofi 2014, Recensement Insee 2015, Fond : BD TOPO 2017 - IGN
Vonthron S. 2020, UMR Innovation, INRAE
Trace foodscapes’ transformations

- Fast turn over of food outlets
- Growth and diversity of online purchases, which are linked to other supply methods (e.g. CSA and supermarkets)
- Levers of action in the hands of local authorities (public spaces, commercial spaces, food markets/halls, transportation policies)

A new small periurban shopping center...

has replaced the old bakery and grocery store

Evolution of a commercial storefront in 10 years
Perception of foodscapes by city dwellers
E. Cheyns

- Methods: in-depth interviews, visual auto-ethnography (native image making, photo elicitation), drawings, commented walks
  - food procurement practices, routes and routines are related to other social practices
  - Shopping is not just about "buying". It is also about the atmosphere of a place

- People speak of efficiency, but also of ease, flanerie, exploration
- Proximity or price are not the only criteria to choose food stores: also information, familiarity with the place, opportunity to meet people
- Sensitive dimensions of foodscape: noise, smells, cleanliness, etc.

Buying food and eating out-of-home, i.e. navigating the foodscape, are ways of living in the city, of feeling integrated into it: ambiances, sensitive materialities of the place and social life dimensions to be taken into account in planning
Can community gardens promote more sustainable lifestyles?

- Novice gardeners mentioned several difficulties in getting involved in their community garden, which they visited irregularly. This could explain why ...

- No change in lifestyles after 1 year using a community garden

- Promote long-term integration and active participation of city dwellers in community gardens: location close to their homes, regular activities), = essential to enhancing lifestyle sustainability.

To know more: Tharrey M., Darmon N, 2021
Survey on food provisioning practices
Quantitative survey & qualitative interview 2018-2019

1. Web questionnaire
   (738 households)

2. Food purchase log & receipts
   (426 households)

3. Interviews

- **Reported practices:**
  - Activity space (home + 2 places)
  - Food outlets regularly used
  - Perceptions of foodscape

- **Actual food purchases** (1 month)
  - Location of food outlets used
  - Mean of transportation
  - Food items
  - Expenses

- **Food procurement strategies**
  - Logics of practice (how & why)
  - Perceptions of foodscape
Assess the impact of foodscapes on food purchases

GIS & geographical indicators
- Number; Presence; Absolute / relative density
- Of various types of food outlets

Use / non-use
- Frequency of use
- Share of expenses
- For various types of food outlets

Sustainability of purchases:
- Nutritional quality
- Cost
- Environmental impact

Body Mass Index
- Obesity (yes/no)
- Overweight (yes/no)

Tharrey et al. 2018
Perignon et al. 2021
Evaluation of the nutritional quality of households’ food purchases: revision and validation of the Healthy Purchase Index (r-HPI)

Vonthron 2021
Foodscape exposure of 462 households

Presence of food outlets

- **Supermarket**: 30.1% (500 m) - 77.5% (activity space)
- **Market**: 26.4% (500 m) - 65.4% (activity space)
- **Greengrocer**: 34.6% (500 m) - 77.7% (activity space)
- **Bakery**: 65.2% (500 m) - 93.3% (activity space)
- **Other Spec. Food Stores**: 43.7% (500 m) - 86.1% (activity space)
- **Small Grocery Store**: 50.2% (500 m) - 89% (activity space)

Vonthron, Recchia et al. 2021
Where do people buy food?

Where did households go to buy food in one month?

<table>
<thead>
<tr>
<th>Store Type</th>
<th>Share of Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMALL GROCERY STORE</td>
<td>51.7%</td>
</tr>
<tr>
<td>BAKERY</td>
<td>57.4%</td>
</tr>
<tr>
<td>MARKET</td>
<td>62.8%</td>
</tr>
<tr>
<td>GREENGROcer</td>
<td>73.8%</td>
</tr>
<tr>
<td>OTHER SPEC. FOOD STORES</td>
<td>74.7%</td>
</tr>
<tr>
<td>SUPERMARKET</td>
<td>98.9%</td>
</tr>
</tbody>
</table>

Share of expenses

- BAKERY: 2.2%
- GREENGROCER: 2.4%
- OTHER SPEC. FOOD STORES: 2.5%
- MARKET: 6%
- SMALL GROCERY STORE: 11%
- SUPERMARKET: 65%

Recchia et al. 2021
First results: impacts of foodscape exposure on nutritional quality of food purchases

To know more: watch the presentation given by D. Recchia on 26 March 2021

Daisy Recchia, Marlène Perignon, Pascaline Rollet, Simon Vonthron, Coline Perrin, Marion Tharrey, Nicole Darmon, Thierry Feuillet, Caroline Méjean
Conclusion

• Very stimulating interdisciplinary field of research between geography (GIS, food, retail, health, urban geographies), public health-nutrition, sociology and urban food planning

• More time required to produce robust quantitative results

• First recommendations for urban planning:
  • Create an observatory of food outlets to map foodscapes and adapt commercial policy to neighborhood foodscape profiles
  • Consider not only proximity to food outlets, but also price, quality, place atmosphere: sensitive, social, cultural and pleasure dimensions of foodscapes
    • Neighborhood meetings and/or urban walks to define the desired food landscape
    • Particularly in neighborhoods with few food stores, or before urban transformation projects
  • Support a more active participation of city dwellers in community gardens
To be continued!

To know more: https://www.foodscapes.fr/en

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