

Sustainability of city-based food sharing

# Exploring Food Sharing through an Urban Ecosystem Frame

#### **Dr. Ferne Edwards**

Trinity College Dublin, Ireland

www.sharecity.ie @sharecityire



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### Purpose of the paper

- 1. Is it possible to conceptualise food sharing within an urban ecosystem frame?
- 2. What are the benefits, disadvantages or criticisms for doing so?
- 3. What would such an application involve?



# A Brief History of the Ecosystem

*"a community of living organisms in conjunction with the non-living components of their environment interacting as a system"* (Tansey 1935)

# Urban ecosystems differ to natural ones:

- Cities are highly disturbed differ in climate, soil, hydrology, species composition, population dynamics, and flows of energy and matter
- Cities are highly heterogeneous in space and time
- Cities lose an assumption of direction or balance



## **Characteristics of Urban Ecosystems**

Cities represent hybrid ecosystems that "emerge from complex interactions and feedbacks between the human, natural and technological system components of urban ecosystems". (Alberti 2008)

#### Cities are:

- *Complex*, open, non-linear;
- Changeable;
- Spatially heterogeneous;
- Incomplete;
- Social-ecologicaltechnological systems



Ecosystem dynamics conceptual framework (Alberti 2008: 13)



## Between food sharing practices and the city

| Production  | Experiential   | (Re)Distribution   |
|---|--|--|
| <b>3000 Acres:</b> We want to see more people growing more food in more places    | <b>Open Table:</b> To reduce food waste and meet the neighbours    |  |
|   | L'Aixada: Consumer coop. to distribute fresh food & run activities |  |
| <b>RipeNear.Me</b> : To increase<br>quantity of urban,<br>sustainably grown foods | EatWith: Join a communal table at someone's house                  | ASRC Food Justice Truck:<br>Discounted produce to people<br>seeking asylum |
| Can Masdeu: A proposal for collective cooperation and coexistence                 |  | <b>Espigoladors</b> : Imperfect produce for people in need                 |
|   |  |  |

# **Spatial heterogeneity**



In Barcelona there are:

- 59 consumer cooperatives
- Each group has 30-40 members > 3,500 people
- The district of Gracia has the most cooperatives (12)
- Between 2013 and 2015 the no. of groups grew by  $^{\sim}$  50%



## **Feedback loops**

We know we can go to, for instance, Dandenong, where 34% of people seeking asylum live. ... But with asylum seekers spending on average 20 dollars per head if I went there I would lose significant amount of money that I would need to offset with significantly more general public customers. And general public customers only spend on average 7 dollars per head. ... So it's that delicate balance of wanting to achieve the impact matched with you want to be financially viable and ongoing.



## Symbiotic relationship





# Overall symbiotic relationship providing environmental, social and economic benefits

**Cooperative** > ICT positive for social inclusion; builds skills; social inclusion. Benefits can be generative (giving keeps giving)

**Mutualism** > Shared spaces (com. kitchens, gardens); builds solidarity amongst FS on similar issues

**Competitive** > funding sources, dependence on volunteers, between food rescue orgs

**Predatory** > commercial meal-sharing platforms offer least benefit reduce diversity of activities; trust issues with ICT-activities; supermarkets over local markets



# **Urban resilience**

**Resilience:** amount of disturbance a system can tolerate before moving to another state. *Resilience in urban food sharing becomes apparent through the number and interaction between food sharing initiatives.* 

**Social Solidarity Economies (SSEs)**: a range of socio-economic initiatives that prioritize equity, solidarity, sustainability, participation, inclusion and community commitment above financial profit.

Barcelona is home to:

- 4,718 SSEs that exist in all sectors of the economy, including food
- 1,300 ventures contribute 10% of Barcelona's economy
- 2,400 third social sector organisations
- 1,197 worker-owned enterprises
- 861 cooperatives
- 260 community-economic initiatives.



## Between food sharing cities

**Cities** Resilient cities

# How to win back the city: the Barcelona en Comú guide to overthrowing the elite

A guide for world cities: how a 10-month-old community group took power from a political caste which had been in charge of Barcelona for four decades



"Fearless Cities" – a summit on the new municipalism, by Barcelona en Comú



Perhaps the most important step for Barcelona en Comú is to share their experience and support those in other cities that are looking to reclaim politics, helping to build citizens platforms across Europe and beyond. But the idea of a post-national network of citizens also allows us to dare to dream – of shared resources, shared politics and shared infrastructure – where it's not where you were born, but where you live, that determines your right to live.



## In summary

#### 1. Is it possible to conceptualise food sharing within an urban ecosystem?

- Yes, they represent "human, natural and technological system components";
- An overall symbiotic relationship with the city, providing points of connection & value;
- Beware feedback loops that could invert FS intentions and goals.

#### 2. What are the benefits, disadvantages or criticisms for doing so?

- Acknowledges how material, socio-economic, historical and technological factors shape actual and potential state of food sharing in the city;
- Acknowledges heterogeneity and spatial distributions of activities;
- Visualizes quantity and value of food sharing and SSEs and their role for resilience;
- Approaches from one city can be replicated and applied to other cities;
- However, due to complexity, difficult to engage across scales with sufficient detail;
- Incorporating temporal heterogeneity would also enrich research outcomes.

#### 3. What would such an application involve?

- Mixed methods (qualitative and quantitative) to unite urban metabolic data within historical, social, political contexts
- A visual approach to map spatial and temporal diversity
- Assemblage or a 'follow-the-thing' approach could help illustrate complexity of relationships between activities.



#### Final thoughts: The city as a food sharing ecosystem?



Thank you!

The city as a food sharing ecosystem could:

- pursue a circular economy philosophy
- link initiatives along the food (sharing) chain
- embrace *potential* for integrative urban food sharing

An ecology for the city incorporates both an ecology in (terrestrial and aquatic patches) and of (biological, social and built components) the city and includes researchers' role in advancing the social goals of urban sustainability (Pickett et al. 2016)

