

‘Emplaced’ waste: A content analysis of food waste household surveys

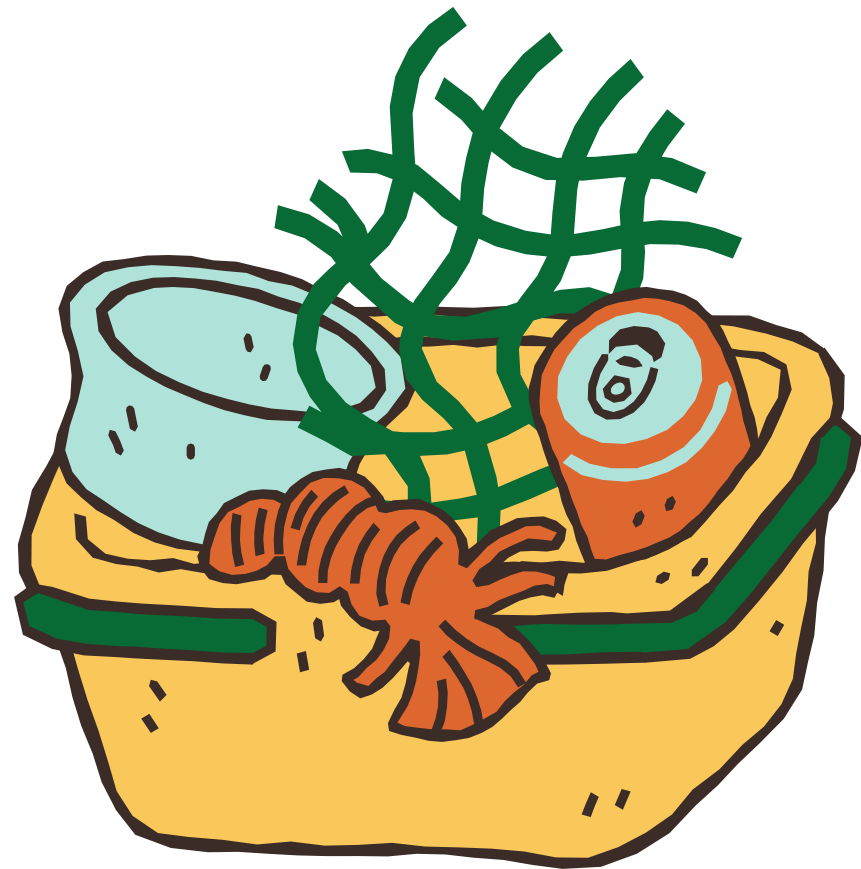


Hazlett Henderson
Dept. of Geography & Atmo. Science

PALOOZA!
April 14, 2024

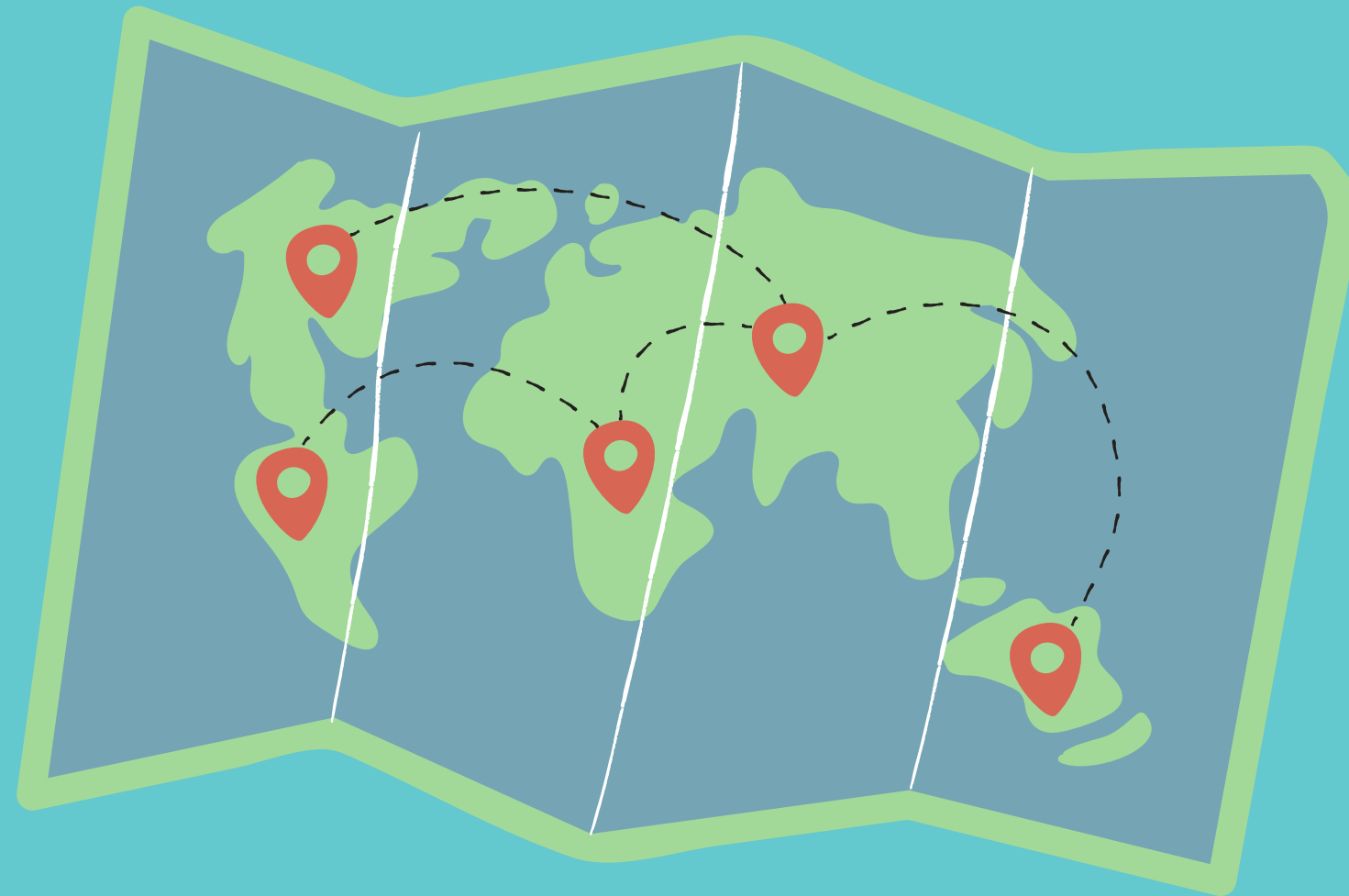


Structure of presentation



- **Framework/background**
- **Questions, methods & findings**
- **Connections**

Introduction: Geography?



Introduction: Geography?



study of the relationship
between *people and place*

How does *waste* fit into *geography*?



Waste is less a specific material than a condition.





Research Article

“EMPLACED” WASTE: A CONTENT ANALYSIS OF FOOD WASTE HOUSEHOLD SURVEYS

Hazlett Henderson 

Published online: 09 Apr 2024

 Cite this article

 <https://doi.org/10.1080/00167428.2024.2329604>

 Check for updates

 Full Article

 Figures & data

 References

 Citations

 Metrics

 Reprints & Permissions

Read this article



Any time

Since 2024

Since 2023

Since 2020

Custom range...

Sort by relevance

Sort by date

Any type

Review articles

include patents

include citations

Create alert

[HTML] **Food waste matters-A systematic review of household food waste practices and their policy implications**

[HTML] sciencedirect.com

[K Schanes](#), [K Dobernig](#), [B Gözet](#) - *Journal of cleaner production*, 2018 - Elsevier

... of consumer **food waste** by systematically reviewing empirical studies on **food waste** practices as well as distilling factors that foster and impede the generation of **food waste** on the ...

☆ Save [Cite](#) Cited by 1295 [Related articles](#) [All 11 versions](#)

Consumer-related food waste: Causes and potential for action

[PDF] mdpi.com

[J Aschemann-Witzel](#), [I De Hooge](#), [P Amani...](#) - *Sustainability*, 2015 - mdpi.com

... included consumer research reports on **food waste** and articles providing a review of a specific **food waste** issue in the supply chain or an overview of the **food waste** topic overall. The ...

☆ Save [Cite](#) Cited by 931 [Related articles](#) [All 23 versions](#) [»](#)

[HTML] **Food waste generation and industrial uses: A review**

[HTML] sciencedirect.com

[F Girotto](#), [L Alibardi](#), [R Cossu](#) - *Waste management*, 2015 - Elsevier

... on the magnitude of **food waste** generation, the strategies for **food waste** reduction and the possibilities reported and discussed in scientific literature for industrial uses of **food waste**. ...

☆ Save [Cite](#) Cited by 828 [Related articles](#) [All 20 versions](#)

[HTML] **The food waste hierarchy as a framework for the management of food surplus and food waste**

[HTML] sciencedirect.com

[E Papargyropoulou](#), [R Lozano](#), [JK Steinberger...](#) - *Journal of cleaner ...*, 2014 - Elsevier

... The unprecedented scale of **food waste** in ... with **food waste** specialists, this study construes the boundaries between food surplus and **food waste**, avoidable and unavoidable **food waste**...

☆ Save [Cite](#) Cited by 1573 [Related articles](#) [All 14 versions](#)

Related searches

household "food waste"

"food waste" restaurants

"food waste" anaerobic digestion

"food waste" biogas

reducing "food waste"

"food waste" losses

"food waste" composting

fao "food waste"

[PDF] **Food waste**

[PDF] academia.edu

[C Alexander](#), [N Gregson](#), [Z Gille](#) - *The handbook of food research*, 2013 - academia.edu

... How then might we think about **food waste**? To answer this, we position **food waste** within three ... of **food waste** connects with the political economy of **food waste** through the rise of new ...

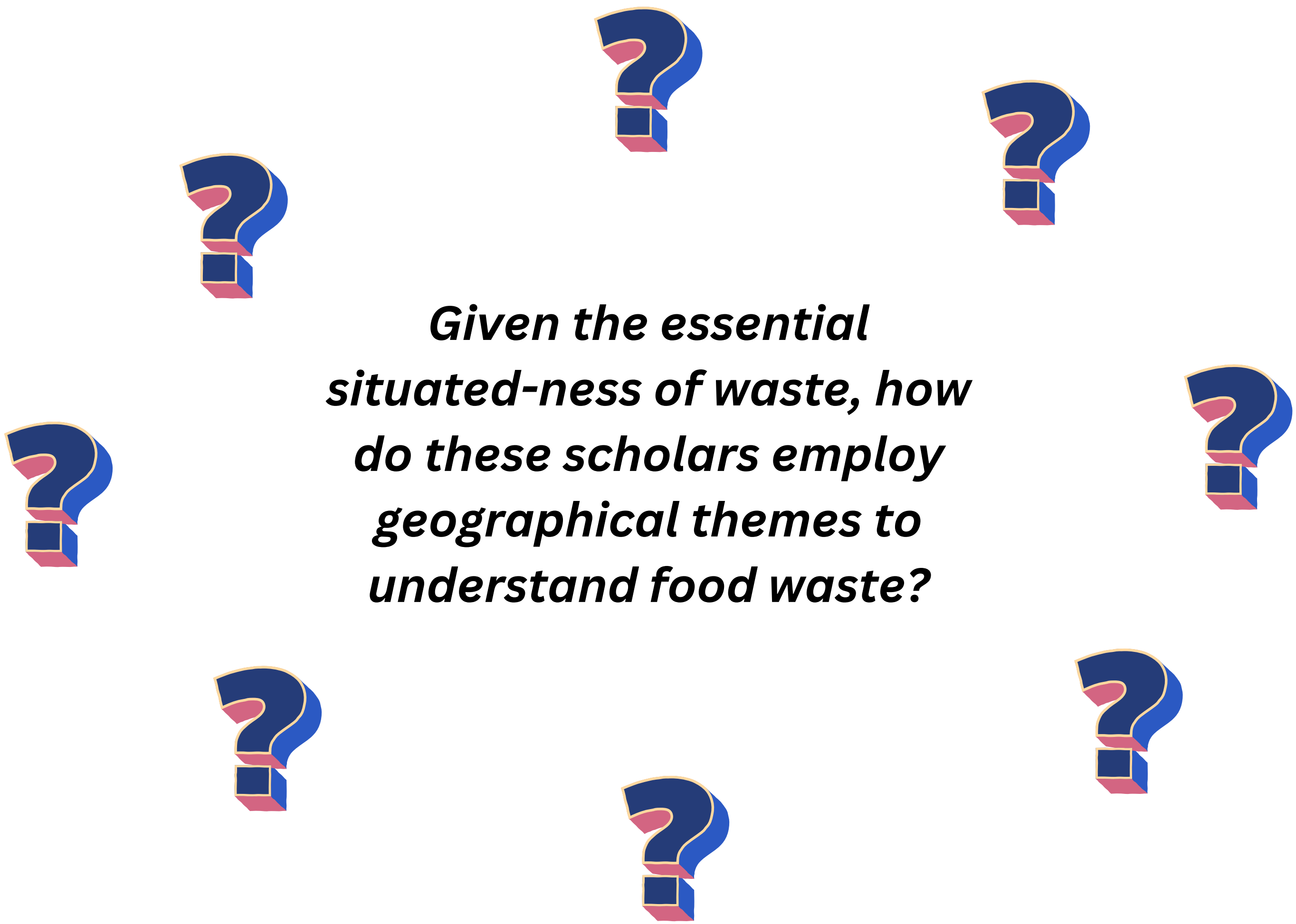
☆ Save [Cite](#) Cited by 101 [Related articles](#) [All 4 versions](#) [»](#)

[HTML] **Determinants of consumer food waste behaviour: Two routes to food waste**

[HTML] sciencedirect.com

[V Stancu](#), [P Haugaard](#), [L Lähteenmäki](#) - *Appetite*, 2016 - Elsevier

... of food waste, little is known about consumer behaviour towards food waste, and the

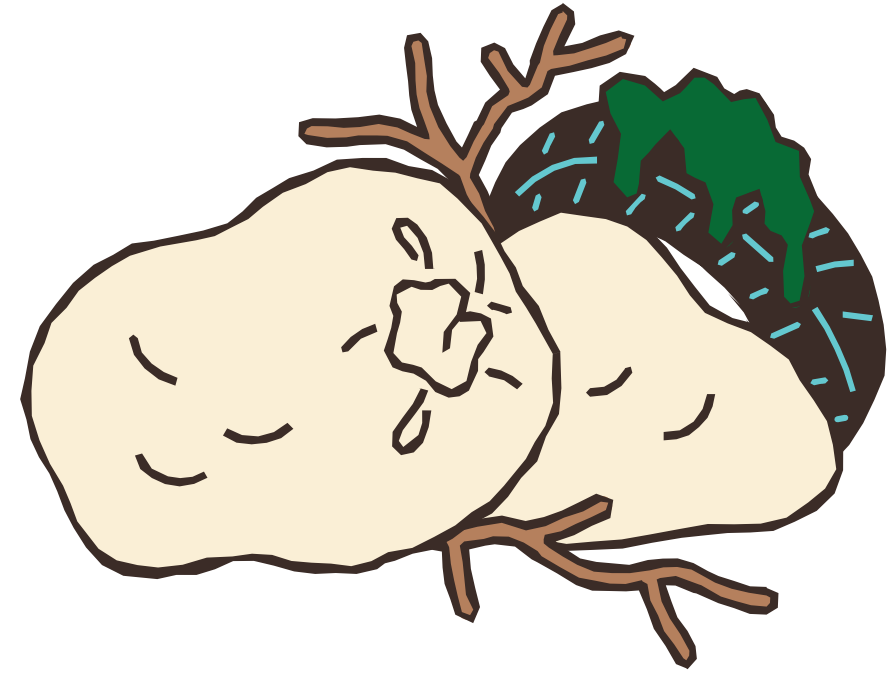


***Given the essential
situated-ness of waste, how
do these scholars employ
geographical themes to
understand food waste?***

What I did

(1) Systematic literature review

(2) Content analysis



	Relationality	Scale and scope	Regional membership	Imperialism / hegemony	Heterogeneity	Cultural practices; what do people do?	Sites of production and disposal
1	Comparisons between places						
2	1. In Finnish households, the use of water, the causes of waste were missing (20%), expiration (19%), leftovers (14%), and making too much food (13%).						
3	2. The percentage of responses confirming such behavior among Polish and British respondents was similar (22.2% and 22%, respectively) (12)						
4	3. According to the WRAP report [45], the most frequently wasted products in the UK were fruit and vegetables (32.5%), beverages (17%), followed by bread and cakes (13.3%), dairy products and eggs (12%), and uneaten food leftovers (12)						
5	4. A survey of 1000 Austrians over 15 years of age showed that 2/3 of respondents bought bread every other day and 78% rated freshness as its most important attribute (12)						
6	5. Less food is wasted in households that buy more often [51], as more frequent shopping helps to adapt it to current needs. Different observations were made in the WRAP Report [23], which shows that daily, spontaneous shopping can lead to more waste. (12)						
7	6. Most of the food thrown away in Finnish households were vegetables and potatoes and the leftovers of cooked food [44]. Similarly, in Tehran households, seven product groups (bread, cooked rice, fresh fruit, cooked pasta, fresh vegetables and salads, and milk and dairy products) accounted for more than 72% of wasted food [39]. In about 40% of UK households, waste was caused by preparing too much food [38]. (12-13)	1. The universal globalization of food markets (1)	1. According to the FUSIONS report "Food waste data set for EU-28" the 28 EU countries generated ca. 87.6 million tonnes of food waste in 2012 (413.7 million tonnes), of which households are responsible for approximately 53% (1)	1. Although the number of studies of food waste at the household stage has increased in recent years, e.g., in Europe as well as in the United States, to date, there have been no studies on this subject conducted on a representative sample in Poland. (2)	1. On the other hand, the highest percentage of residents of cities with over 500,000 inhabitants declared that they missed the expiry date. Food wasted due to preparing too much of it was the most common among residents of cities of between 200,000 and 500,000 residents (4)	1. Arranging products in a refrigerator or cabinet according to expiry date, e.g., those with the nearest date closest to the door is not commonly practiced in Polish households. (6)	1. We have established a correlation according to the expiry date and mismanagement of food waste (1)
8	7. Japourouy, F., & Chamhuri, N. (2017). Consumers' awareness and knowledge about food waste in Selangor, Malaysia. International Journal of Business and Economic Affairs, 2(2), 91-97. https://doi.org/10.24088/IJBEA.2017-22092						
9	1. with 71% of Australians believing that they almost never or at least occasionally buy products that they end up wasting (92)						
10	2. Households in UK spend 10 billion on food that gets wasted, while Jones (2006), saw that households in the U.S. spend \$48.3 billion and Hamilton et al. 2005 saw \$5.3 billion for Australia. (92)						
11	1. Numerous factors that contribute to food waste generation cannot be presented as standard provisions or norms due to regional differences and social, cultural, and demographic backgrounds [3, 17, 19]. As a result, it is clear that sociologists in both developing and developed countries are responsible for establishing a consensus on food waste reduction by understanding general household members' perceptions and behavioral intentions as well as the influential local generators of food waste. (2)						
12	2. Food waste collection [in Korea] was stopped in 1996 in landfills that received most of the food waste in Seoul and neighboring districts, and the Ministry of Environment banned direct landfilling for food waste in 2005. The Seoul, Korea's capital city, has faced a huge social issue to dispose of food waste since then (2)						
13	3. It has been suggested that this may be due to Koreans' tradition of enjoying side dishes such as kimchi that are typically disposed of after every meal when left over (2)						
14	4. Evans [27] claims that surplus food results from material, cultural, and social conditions in the community where food is wasted, rather than from individual choices, attitudes, and behaviors (3)						
15	1. Utilizing food waste for livestock feed is considered one major way to manage food waste in Vietnam. In Ho Chi Minh City, as much as 70% of the total food waste is used for livestock feeding (2)						
16	2. Similarly, the population of Ho Chi Minh City was about eight times larger than that of Da Nang, but the food waste generation rate per capita was only about 48% higher than that of Da Nang. This can be attributed to differences in lifestyles, solid waste management (food waste demand and disposal), people's attitudes, and local people's knowledge in Da Nang compared to other cities. (5)						
17	3. These results are indicative of Vietnamese culture and traditions, with people usually eating lunch and dinner at home, four to five times a week. Conversely, more than half of the respondents reported that they rarely eat breakfast at home and prefer to eat out for breakfast. The survey results imply that Da Nang residents prefer to cook lunch and dinner at home rather than eating out. This trend is similar to Hanoi, indicating that most people tend to eat at home more often in both urban and rural areas (7)						
18	4. This result indicates the traditional practice of Vietnamese people, whereby locals prefer to go to traditional fresh markets to buy ingredients for preparing food, may suggest the potential burden of food waste generated by the markets, e.g., expired foods, uneaten parts of vegetables, fish, etc. (7)						
19	5. Compared to other large cities in Vietnam, a much higher percentage of food waste from households in Da Nang is used to feed pigs. This figure is comparable to other Asian countries, where there is a high demand for animal feed. For example, Japan and South Korea encourage reusing food waste to feed animals, with 33% and 81% of total food waste being used this way, respectively [45,46]. In contrast, the separation and collection of food waste are not practiced in many developing countries, and therefore almost all food waste is mixed with municipal solid waste (MSW), which is not then able to be purified and utilized for animal feed. The use of food waste to feed pigs is typical in Da Nang. (7)						
20	1. Like most developing countries in Asia, Vietnam still relies on open dumping as the main waste disposal method for waste management (2)						
21	2. Da Nang City is a port city located in central Vietnam. Da Nang is the fifth most populous city in the country, with a population of 1,080,700 as of 2018 and an area of 1283.4 km ² [25]. Da Nang is subdivided into eight districts: an urban district (Cam Le, Hai Chieu, Thanh Khe, Lien Chieu, Nguyen Chieu, Ngu Hanh Son, and Son Tra) and two rural districts (Hue Giang and Hoang Sa). It is further subdivided into one commune-level town, 14 communes, and 45 wards (3)						
22	1. Most studies on food waste are currently examining food waste in the context of developed economies. The per capita food waste in developed economies, such as in Europe and North America, is particularly high compared with other regions (2)						
23	1. On a global scale, it is estimated that about a third of the food produced for human consumption, or 1.3 billion tons, is lost at different stages of the food supply chain annually (1)						
24	1. In Malaysia, food waste is disposed on landfill because its knowledge is inexpensive and easy to apply. Furthermore, once landfill site has reached the maximum capacity of usage, it is becoming a serious problem in order to identify a suitable location for the new landfills. (1511)						
25	2. The RDH predicts that the spatial dispersion of food patches determines territory size, whereas patch richness dictates group size. Thus, where there is an abundant food source at a local location, wildlife may congregate and focus their daily activities around this food source and have larger group sizes... (1514)						
26	1. As stated by Patrino et al (2015) a suitable involvement to reduce household food waste need place-based and geographically sensitive analyses that take into consideration the specificities of local food and waste management system, also the cultural norms concerning food. (1510)						
27	2. for Participant 14 (Male,56 years), religion was the major factor for him not to wasting food (1517)						
28	1. Behaviour correlation with "Shopping Routines" was not statistically significant (p = 0.255), leading to the rejection of both H9 and H10. This is also in contrast to other studies [23-26] but may be the outcome of careful shopping routines well established widely to Greek customers, because of their relatively low purchasing power and the deep and long financial crisis experienced in the country. It is worth mentioning that the GDP of Greece has still not reached its pre-2009 levels. (9)						
29	1. As a consumption pattern, Turkish people's bread consumption is above the world average; however, bread is the most wasted product at a level of 5% of consumption (132)						
30	2. Products of this kind have high value in Turkey compared to other products in the model, so they cannot be easily bought and are unlikely to be wasted (133)						
31	3. Cultural differences produced different results. Planning routines were found to be important for Food waste behaviour among Romanian consumers but not for consumers in Northwest Turkey (136)						
32	4. We believe this result can be explained by the difference in cultures, with the main distinction in Turkey society being the Islamic Religion (138)						
33	5. The results showed that, even if many similarities were found, there are also important distinctions between different cultures. So culture remains an important factor in the food waste pattern (139)						
34	1. One-third of all the food produced (approximately 1.3 billion tonnes) for human consumption gets lost or wasted every year at different stages in the food supply chain. Ironically, 795 million people suffer from malnutrition worldwide (129)						
35	1. As a Mediterranean country, Turkey has a high potential to produce many kinds of fresh agricultural products. Data on agricultural production shows that food losses occur mainly at farm level (132)						
36	1. A study was undertaken on households in Kuching.						

Geographical themes

Comparisons between places

Scale and scope

Regional membership

Imperialism/hegemony

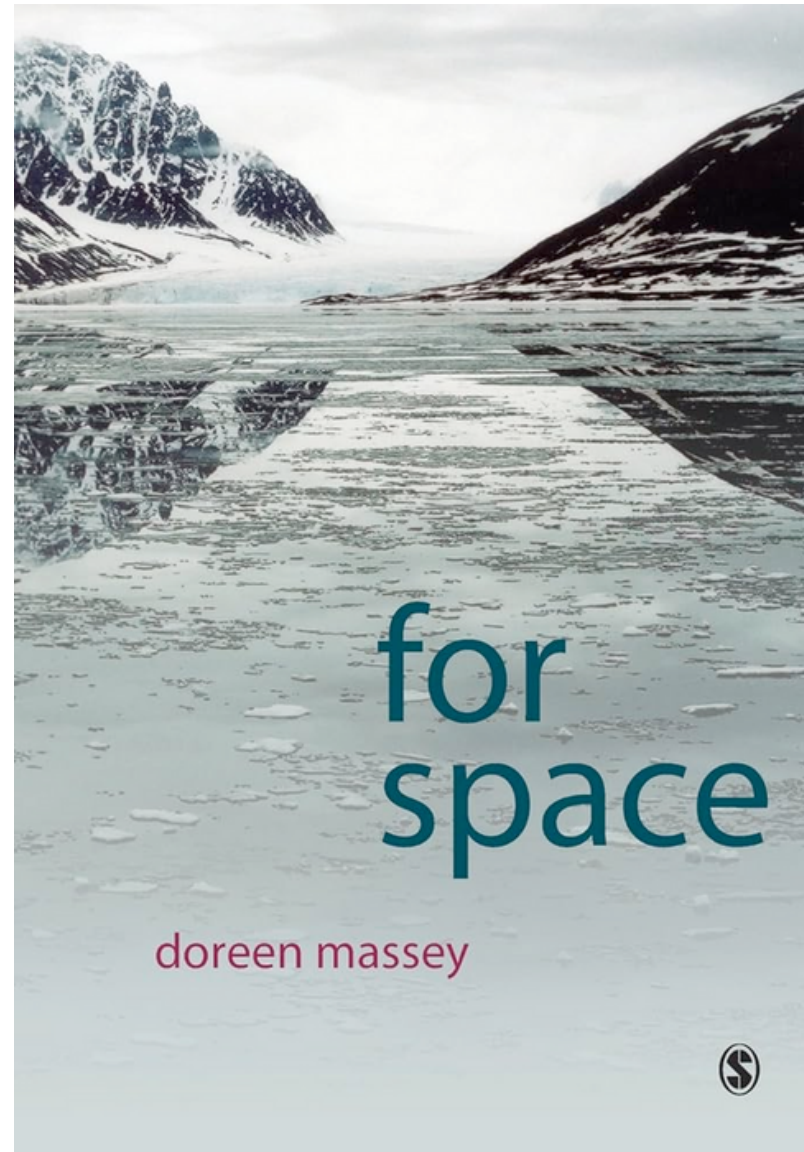
Qualities of place ('nature,'
spatial distribution)

Cultural practices

Seasonal temporalities



Doreen Massey (1944-2016)



relationality

heterogeneity

ongoingness

Geographical themes

Comparisons between places

Scale and scope

Regional membership

Imperialism/hegemony

Qualities of place ('nature,'
spatial distribution)

Cultural practices

Seasonal temporalities



Geographical themes

Comparisons between places

Scale and scope

Regional membership

Imperialism/hegemony

Qualities of place ('nature,'
spatial distribution)

Cultural practices

Seasonal temporalities



Geographical themes

Comparisons between places

Scale and scope

Regional membership

Imperialism/hegemony

**Qualities of place ('nature,'
spatial distribution)**

Cultural practices

Seasonal temporalities



Geographical themes

Comparisons between places

Scale and scope

Regional membership

Imperialism/hegemony

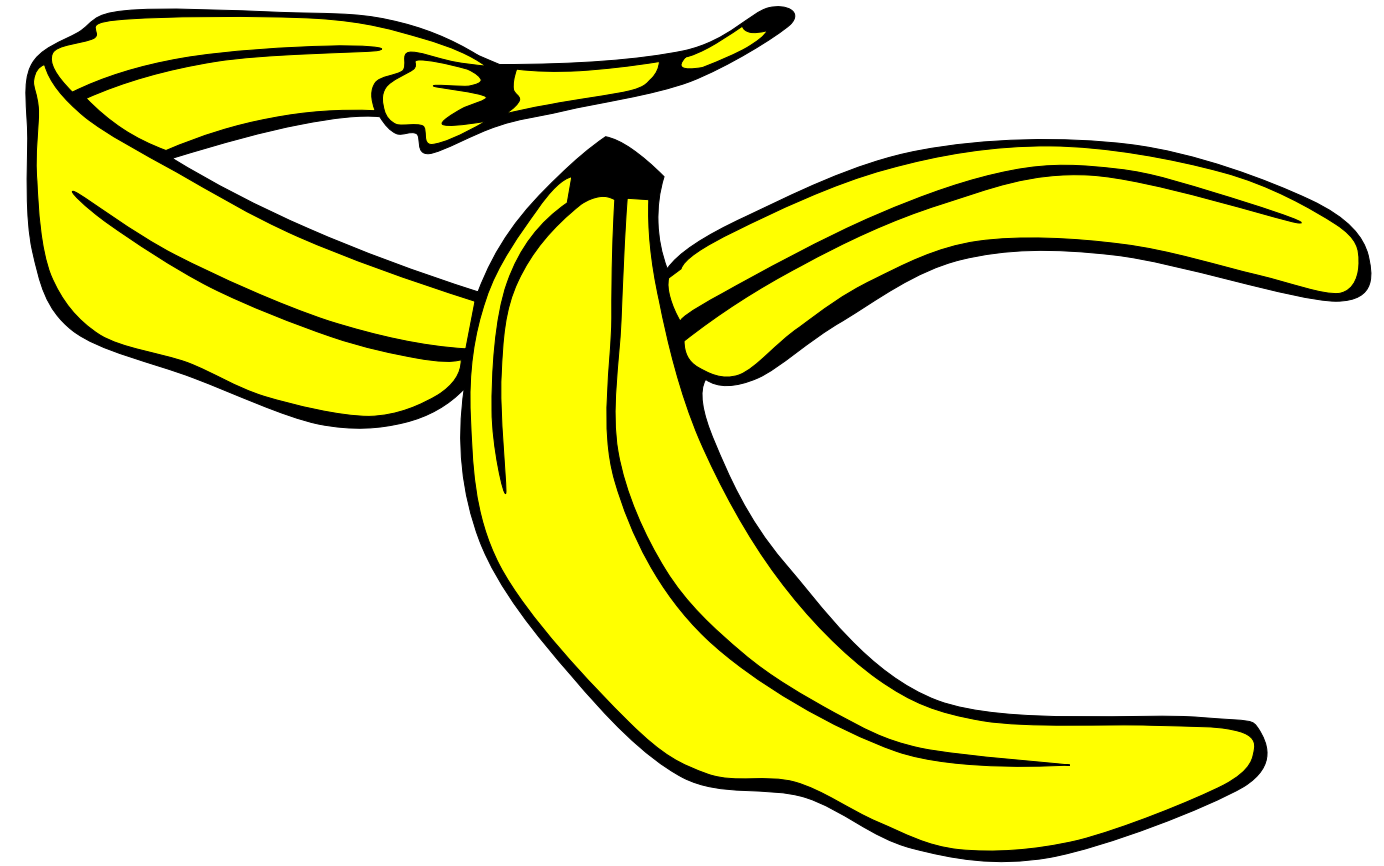
Qualities of place ('nature,'
spatial distribution)

Cultural practices

Seasonal temporalities



Connections?



Thank you!