Design Ethnography Report August 2021 Sumeet Singh UG4\_PD



An ethnographic case study on vegetable vendors.

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ethnography /εθ'nɒgrəfi/ noun

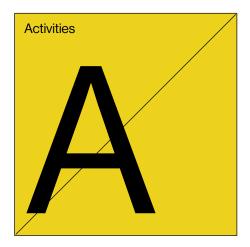
- the scientific description of peoples and cultures with their customs, habits, and mutual differences.
- 2. is the recording and analysis of a culture or society, usually based on participant-observation and resulting in a written account of a people, place or institution.

Ethnography as a research method entails personal interaction. It is investigative, locally specific, intimate, and uncontrollable; it uses inductive, interactive and recursive data collection and analytic strategies to build local cultural theories.

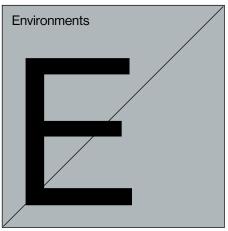
In this class project, we were asked to take an environment or occupation in and around the neighborhood to learn ethnography research. We went out to understand the demographic of people we were researching within the context of "Vegetable vendors".

It was a group project, and all of us used observational research methods and interviews to gather quantitative and qualitative data. This data helped us to answer our research topic, shown below.

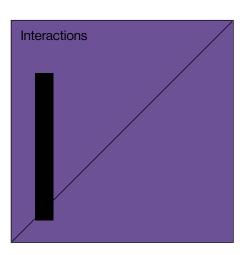
"Our research team's focus is to understand the role of both the social and cultural values in a life of a vegetable vendor in two entirely different geopolitical boundaries."



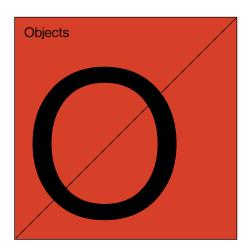
Activities are goal-directed sets of actions. What are the pathways that people take toward the things they want to accomplish, including specific actions and processes? How long do they spend doing something? Who are they doing it with?



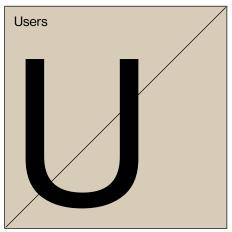
Environments include the entire arena where activities take place. For example, what describes the atmosphere and function of the context, including individual and shared spaces?



Interactions are between a person and someone or something else and are the building blocks of activities. What is the nature of routine and special interactions between people, between people and objects in their environment, and across distances?



Objects are the building blocks of the environment, key elements sometimes put to complex or even unintended uses, possibly changing their function, meaning and context. For example, what are the objects and devices people have in their environments, and how do these relate to their activities?



Users are the people whose behaviors, preferences, and needs are being observed. Who is present? What are their roles and rel relationships? What are their values and prejudices?

# Case study A



Manju Devi

58 years

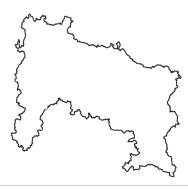
Female

Vegetable vendor

4th Standard

Lower Middle Class

#### Ranchi, Jharkhand



#### Meet Manju Devi

Manju Devi is the sole earner of the house. Last 6 months of covid have been the most difficult times to run a business. The place where the vegetables are sold, was once a coaching class run by her son. Due to covid the classes had to be shut down, which lead to a huge void in the family's earning.

To overcome this void Manju's challenged the odds and setup a vegetable stall inside the coaching cubical. This has led to a very awkward situation with her son. Both are equally dependent on each other as he helps her to carry vegetables from the wholesale market and she earns for the family. Her son feels ashamed of their current business and try to stay away from the business.



# **General observations**

- 1. Provides a basket to the customer in order to choose, carry and weigh the produces.
- 2. Bargaining for best price.
- 3. Continuously sprinkles water to keep them fresh.
- 4. Keeps the produces in a decorative manner to attract customers.

# Visual summary of activities









# General impressions of the theme, style, materials & atmosphere

- 1. The shop is at an elevation with 6 other shops in a row arrangement.
- 2. Has the vegetables at the front veranda opening of the store.
- 3. The vegetables are kept in a plastic basket on a stepped up surface where people can easily access it.
- 4. She understands her customers needs hence has provided metallic shade at the front of the shop.
- 5. The walls of her store has a combination of materials ranging from slake lime paint on unplastered walls, hard concrete flooring, and furniture made up of wood & metal.

#### Elements, features & special notes

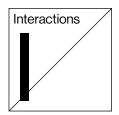
- 1. The elevated surface allows the customer to access the vegetables easily without bending and the offers informal area to keep excess belongings.
- 2. The store is enclosed by ropes ensures that the shop can only be access by the shopkeeper herself.
- 3. The hard unfinished walls and flooring gives a very rustic look to the shop ensuring that in the process of lifting and keeping objects in and out of the store.
- 4. The metallic shade provided ensures the protection of the produce resulting in keeping the shop open for longer hours.

# **Scenes**









# **General Observations**

- Her choice of language was Hindi, but also communicated with the local language(Kurmali)
   She always made sure that she collected money with the right hand.
- 2. The popular nouns used are 'Chachi' 'Kaki' 'Aunty'.
- 3. Always polite with her costumer.

#### Elements, features & special notes

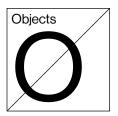
- 1. She uses local measuring terms like 'Pau" 'dozen' 'adha'.
- 2. People prefer to choose their own produce which they are buying.
- 3. She likes to address regular customers by their name Brought up in a Hindu family, she tense to believe that wealth should be received by the right hand to welcome Goddess Lakshmi.
- 4. She is well aware of the government rules and norms (curfews/social distancing).

#### Scenes of interactions









# General impressions of the theme, style, materials & atmosphere

- 1. She has a analog weighing scale.
- 2. She has Plastic Baskets to display vegetables Avoids using plastic bags.
- 3. She has a hanging bulb over the vegetable counter She has an open shelf to display packaged commodities/ store.
- 4. She has a fridge to keep her veggies fresh overnight to increase their longevity.

# Visual inventory of key objects



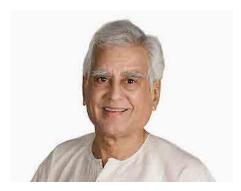




# General impressions of people in this context

- Regular Customers
   Customers age from 14-70
   Budget Conscious customers.
- 2. Customers generally ask for the rate followed by the quantity.
- 3. Regular customers prefers to carry thier own cloth bag The customer and the seller prefer to get vegetables of same value instead of loose change.
- 4. The regular customers usually tend to strike a conversation with the seller.
- 5. Regular Customers get a 'pay later' option.

# Visual inventory of people





# Case study B



**Nilesh Lohire** 

38 years

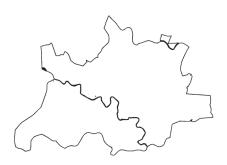
Male

Vegetable vendor

7th Standard

Lower Middle Class

# Pimpri, Maharashtra



# **Meet Nilesh Lohire**

Nilesh started his business by selling sugarcane juice and has been able to open a vegetable shop near a residential complex where people are ready to pay anything asked which was sensed by Nilesh has been able to transform his business from a mere shop to a multidiverse food outlet.

His constant motivation is his family and the birth of his one and only son which has pushed him to build a thriving business and provider for the last 10 years.



# **General observations**

- 1. Arranges empty baskets on the entry of the store.
- 2. Provides door to door vegetable delivery Collects wholesale vegetables at 7am from a known vendor through van.
- 3. Segregates fruits and vegetables in a neat manner Sells seasonal vegetables/fruit.

# Elements, features & special notes

- 1. He tries to live like methodological individual, he prefers to keep his veggies segregated than keeping them piled up.
- 2. He is ready to adapt to the present situations and act in favor of his business.
- 3. His 10+ years selling vegetables, he has made several connections which aid in smooth operation for his business.
- 4. Prefers to get his wholesale veggies delivered rather than going by himself, which saves time.

#### Visual summary of activities









# General impressions of the theme, style, materials & atmosphere

- The shop has a concrete flooring, which provides foundation to the metal frame work of the store The shopkeeper has used cloth to covers all the sides other than the front to protect the veggies from rain and winds.
- 2. The shop is a square store surrounded by a tea center and a general store.
- The vegetables are kept in a plastic basket on a staircased frame where people can easily access them.
   Allows the customer to enter the store and take a look onto the veggies.
- 4. Changes the layout of the shop in February to accommodate the Sugar Cane crusher.
- 5. Has his shop named after his son 'Daksh'

#### Elements, features & special notes

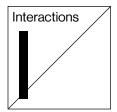
- 1. The elements used inside the shop are very makeshift to accommodate his seasonal business.
- 2. Being the only vegetable store in the area, people are ready to pay more. Thus, he has a hike in his prices than the ones in the 'Mandi'.
- 3. Because of the diversity in vendors around, the business have a symbiotic relation with each other.

#### **Scenes**









# **General Observations**

- 1. His choice of language is Marathi, but also communicated using hind.
- 2. Addressed female customers with noun 'tai' 'kaki' and male with 'dada' 'bhau'.
- 3. Provided the final cost of the vegetables without bifurcation.
- 4. Loves interacting with regular customers.
- 5. The interaction between the shopkeeper and the customer is not only restricted with in shop boundaries (offers home delivery).

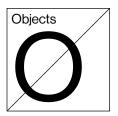
# Elements, features & special notes

- 1. Instead of throwing the waste veggies, he feeds it to the cows/bulls on the road.
- 2. He also frequently interacts with them on calls and goes to their home.

#### **Scenes of interactions**







# General impressions of the theme, style, materials & atmosphere

- 1. He has a manual counter weighing scale.
- 2. Has a drawer "Galla" right beneath the weighing scale, to store money and keep his accounting book.
- 3. Plastic stool to sit, agarbati
- 4. Smartphone
- 5. Jute and Plastic baskets to keep vegetables.
- 6. Opened jute bag is used as a cover over the surface where all the baskets are displayed.

#### Elements, features & special notes

- Installs a Sugar Cane Crusher once a year with seatings to provide fresh juice.
- 2. Allows customers to text their order through what sapp.
- 3. The analogous weighing is being used since the time it was purchased, "if it's not broke don't buy new" attitude.
- 4. Provides chair to elderly

# Visual inventory of key objects









# General impressions of people in this context

- Regular Customers
   Customers age from 14-70
   Budget Conscious customers
- 2. Customers generally ask for the rate followed by the quantity.
- 3. Customers tend to take plastic bags from him.
- 4. The customer and the seller prefer to get vegetables of same value instead of loose change.
- 5. The regular customer usually tend to strike a conversation with the seller.
- 6. Regular Customers can only pay through cash and no other payment option.
- 7. The customers tend to what sapp him the order.

# Visual inventory of people





# Case study C



Mahesh Shinde

28 years

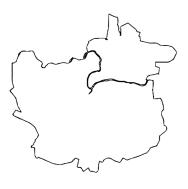
Male

Vegetable vendor

12th Standard

Lower Middle Class

Pune, Maharashtra





#### **General observations**

- 1. Provides a basket to the customer in order to choose, carry and weigh the produces.
- 2. Bargaining for best price.
- 3. Keeps the produces in a decorative manner to attract customers.
- 4. Collects vegetable at 3am in night and sets up cart till 6am.
- 5. Segregates each vegetable in different plastic basket and stores empty basket underneath the cart.
- 6. He uses his tempo for transportation of all his produce.

Elements, features & special notes

- 1. He tries to live like methodological individual, he prefers to keep his veggies segregated than keeping them piled up.
- 2. He is ready to adapt to the present situations and act in favor of his business.
- 3. His 2+ years selling vegetables, he business has recently affected due to pandemic and irregular weather conditions.
- 4. He uses Digital Scale for weighing of vegetables and Digital payment methods.

#### Visual summary of activities









# $\label{eq:General impressions} \textbf{General impressions of the theme, style, materials \& atmosphere$

- 1. His vegetable cart is located on the side of the main road.
- 2. He has different baskets to display different vegetables
- 3. He is surround by other carts thus increasing the competition.
- 4. He keeps all the waste material at the backside of the cart
- 5. Being on road side more customers pass by instead of waiting around for them.
- 6. He has a cart which also allows him to switch locations if he experiences loss in his business.

# Elements, features & special notes

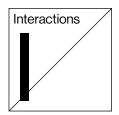
- The cart is supported on tiles to make it stable and stop from moving around.
- 2. He chose this particular location as it is a busy street.

#### **Scenes**









# **General Observations**

- 1. His choice of language is Marathi.
- 2. He calls people passing by and asks them what are they looking for.
- 3. He uses popular nouns used are 'Kaka' 'Kaku' 'Bhaiya' 'Saheb' 'Vahini'.
- 4. He is polite and quick in meeting the customers needs
- 5. For more clearer interaction he has provided digital scale with less error and QR code for making payments.
- 6. He gives basket to people to fill it with items of their choice.

# Elements, features & special notes

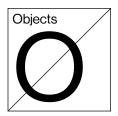
- He uses local measuring terms like 'Pau kilo" 'dozen' 'Ardha Kilo'.
- 2. People prefer to choose thier own produce which they are buying.
- 3. He is also well aware of the covid norms and uses mask as a precaution.

#### **Scenes of interactions**









# General impressions of the theme, style, materials & atmosphere

- 1. He has a analog Digital scale
- 2. He has Plastic Baskets to display vegetables
- 3. Provides plastic bags
- 4. Provides e-payment QR code Stand for faster payment method.
- 5. Provides basket to customers to choose items.
- 6. Has a separate table covered in jute bag for chopping in different quantities.

# Elements, features & special notes

- 1. As he has a cart to sell vegetables he takes time to pack it up all before leaving.
- 2. He even carries an umbrella in case of rain fall.

# Visual inventory of key objects









# General impressions of people in this context

- 1. Surplus Customers due to pandemic and irregular weather conditions.
- 2. Customers age from 14-70
- 3. Customers generally ask for the rate followed by the quantity and bargains the final price.
- 4. Regular customers prefers to carry their own cloth bag but seller also offers plastic bags.
- 5. The customer and the seller carry change in order to settle payments
- 6. The regular customer usually tend to strike a conversation with the seller.
- Customers get a digital as well as cash option for payment.

#### Visual inventory of people





#### Persona 1



#### **About**

Indumati Kaushal Vegetable Store Owner Married , Mother of 3 55 Ranchi

Conservative

#### **Background**

Indumati studied till 7th std after which she got busy in house chores and eventually married at an early age.

Her husband works as a security guard for a residential society and she has managed to setup a small vegetable shop in the market. She tries to support the family and her children's education through her shop.

#### **Brands and apps**

- Jio
- Amul
- Patanjali
- Parachute

#### Related technology

- Feature phone
- Television
- Manual counter
- Weighing scale
- Fridge

#### **Related frustrations**

- Dependant on male accompany for traveling and logistics.
- Has to keep decent amount of change in cash so that she doesn't lose any customer.
- Uncertain about lock-downs and govt norms which may result in paying hefty fines.

# Goals

- She wants to support her family.
- She wants to connect with her customers.
- She wants to compete neck to neck among the neighboring shops.

#### Persona 2



#### **About**

Shailesh Kamble Married, Father of 2 38

Pune Neophile

#### **Background**

Shailesh completed his studies till 10th std and due to financial problems he couldn't pursue education further.

He took over his fathers vegetable business and moved to Pune to find more opportunities. He is very active on social platforms and tries to learn new technology with the help of Internet. His adaptiveness has set him apart from his competitors.

#### **Brands and apps**

- Whatsapp
- Facebook
- Paytm
- Google Pay
- Amazon.com

# **Related technology**

- Smartphone
- Debit Card
- Tempo
- E-Payment
- Digital Weighing Scale

### **Related frustrations**

- Finding wholesale vegetable supplier in the city.
- Has to pay tax for particular space where he sells.
- Crowd management during peak times. (During covid)
- Business is affected by lock down and irregular weather conditions.

# Goals

- To own a shop in the city.
- To give a better digital experience to the customers.
- To be treated as a respected citizen.

User Tasks	1. Wakes up at 4 am	2. Cooks food for he entire family and the house chores	3. Leaves the house at 5am to the wholesale market with her son	4. Finds a wholesaler with suitable rates and good quality veggies	5. Reaches the shop by 6:30am and cleans the shop before opening the shutter
Notes	-	Does breakfast, keeps lunch boxes ready.	They leave on her son's bike.	Buys only that much which will fit on sons bike.	Arranges the vegetable, her shop and keeps it ready.
Insights	Feels exhausted all the time.	The whole family is depended on her for food and money.	She is dependent on her son for commute.	The process is very humane in nature and is physically demanding.	The whole process is very manual and tiring.
Experience	<b>:</b>	<u>•</u>	<b>©</b>	<b>:</b>	٠

6. Shop opens at 7am	7. Has lunch at 12:30 -1 pm	8. Evening snack at 5pm	9. Closes the shop at 9:30 Her son comes to pick her up	10. Reaches house (10:30 pm) and cooks dinner for everyone	11. Sleeps by 11:30
Provides veggies and other things to daily customers	Keeps the shop open even during lunch time.	Invites people to the shop and offers tea.	After closing shop, she delivers milk and veggies to regular customers	Freshens up and enjoys family time after work.	Sets up an alarm and keeps her things ready for tomorrow.
-	Brings her tiffin an eats alone at the shop.	Tries to bring the monotony with a refreshment.	Long working hours.	Even if she is exhausted, she responsible for cooking for the whole family.	Falls asleep even before hitting the bed.
•	•	<b>:</b>	<u>e</u>	•	•

User Tasks	1. Wakes up at 2am	2. Leaves for market till 3 am	3. Meets with his wholesale supplier	4. Comes back from market till 5 am	5. Sets up his cart till 6 am
Notes	Freshens up	Gets his tempo ready.	Selects the appropriate amount of veggies.	With tempo stocked with fresh veggies.	Starts setting up cart with other sellers
Insights	Less Sleep	Strict schedule	Being late will cost in poor supply of veggies	-	More options for customers due to competitors
Experience	<u> </u>	<u>:</u>	<u>••</u>	<u>:</u>	•

6. Opens his cart till 6:45 am	7. Attends to his cart from 6am to 930 pm	8. Starts packing up the cart at 9:45pm	9. Reaches home till 10:15 am	10. Goes to sleep to 11pm
Starts inviting nearby ongoing people on the road.	Attends to daily and customers on the road while connecting with them.	Collects all the garbage from any leftovers in a bag. Takes fresh veggies back home.	Uses the leftover veggies for home. Freshens up, does dinner and keeps his things ready for tomorrow.	-
-	-	Food wastage (sometimes)	-	-
<b>:</b>	<b>:</b>	<b>©</b>	<u>e</u>	•

Empathy Map Persona 1

Thinks	<ul> <li>Curious about technology but finds it difficult.</li> <li>I should sleep more.</li> <li>Should be independent in terms of traveling</li> </ul>
Feels	<ul> <li>She believes in karma and feels responsible for her customers.</li> <li>Motivated to compete with neighboring shops.</li> <li>Feels ill informed about the ever changing government rules and norms.</li> </ul>
	• Guilt, when she gives a plastic bag.
Does	<ul> <li>Checks the MRP and expiry date of products.</li> <li>Weights the vegetables.</li> <li>Delivers milk, daily groceries to regular customer.</li> <li>Keeps account of money earned on daily basis.</li> </ul>
Says	<ul> <li>"Change leke aao"</li> <li>"These tomatoes cost 20rs a kilo"</li> <li>"This product will expire after 2 days"</li> <li>"How have you been? How is Uncle ji?"</li> </ul>

Empathy Map Persona 2

Thinks	<ul><li>He wants to get his own shop in the future.</li><li>What can I do more to maximize my earnings?</li></ul>
	what carridomore to maximize my earnings:
Feels	He feels that pandemics has affected his business.
	<ul> <li>Feels helpless and frustrated as he is not able to give quality education to his son.</li> </ul>
	<ul> <li>He feels that he should invest more in expansion of his business.</li> </ul>
	He has lost hope in the ruling government.
Does	Customer satisfaction is my priority.
	• Keeps up to date with the trends in order to cater young.
Says	"Kiti Pahije Pau kilo, Ardha kilo?"
	"Scan karlo bhaiya"
	"Bhaiya cash bhi chalega"
	"Kaka, nehmiche pack karu ka?"

#### Insights

- 1. Daily wage earners feels uncertain and frustrated due to pandemic and unexpected lock-downs.
- 2. Due to non uniform money flow, planning for future is difficult.
- 3. Storing and keeping count of physical money is difficult. Lack of access in terms of using money.
- 4. Strict schedule results in health problems.
- 5. Lack of awareness due unreliable information sources. (forwarded messages)
- Muscular skeletal disorders arise which affect arms, shoulders and neck .Pushing the cart on inclines is a tough task.
- 7. Most stay within 4-5 km of the vending place and they would travel by walk or bike or bus or auto from their residence to work place.
- 8. Repeatedly sprinkle water on the vegetables on hot days.
- 9. Long hours of standing. No place to sit on, sometimes they sit on the cart itself to avoid it.
- 10. Come up with makeshift shades to protect from rain and heat territorial competition from other street vendors.
- Fear of eviction by municipality officials. Street vendors are usually associated with encroachment of public spaces, causes traffic congestion, in adequate hygiene, and poor waste disposal.
- 12. The vendors struggle with many issues in their day to day life, mainly but not limited to storage, weather conditions, proper maintenance of goods.
- 13. Lack of proper shade in the cart, which is very much needed in the times of rainy season or summers.

# How might we help vegetable vendor

- 1. HMW provide a support while sitting throughout the day without causing physical strain?
- 2. HMW reduce uncertainty and frustrations during pandemic and unexpected lock downs?
- 3. HMW generate/validate reliable information sources for vegetable vendors?
- 4. HMW eliminate over exertion caused due to musculoskeletal disorder while pushing a cart among vegetable vendors?
- 5. HMW provide reliable commute for vegetable vendors?
- 6. HMW stop police brutality and injustice against vegetable vendors?

# **Priority matrix**

Do now	<ul> <li>HMW generate/validate reliable information sources for vegetable vendors?</li> </ul>
Do next	<ul> <li>HMW eliminate over exertion caused due to musculoskeletal disorder while pushing a cart among vegetable vendors?</li> </ul>
	<ul> <li>HMW provide a support while sitting throughout the day without causing physical strain?</li> </ul>
	HMW provide reliable commute for vegetable vendors?
Do last	<ul> <li>HMW reduce uncertainty and frustrations during pandemic and unexpected lock-downs?</li> </ul>
	<ul> <li>HMW stop police brutality and injustice against vegetable vendors?</li> </ul>
Do never	• N.A

Design directions

"To generate/validate reliable information sources for vegetable vendors."