

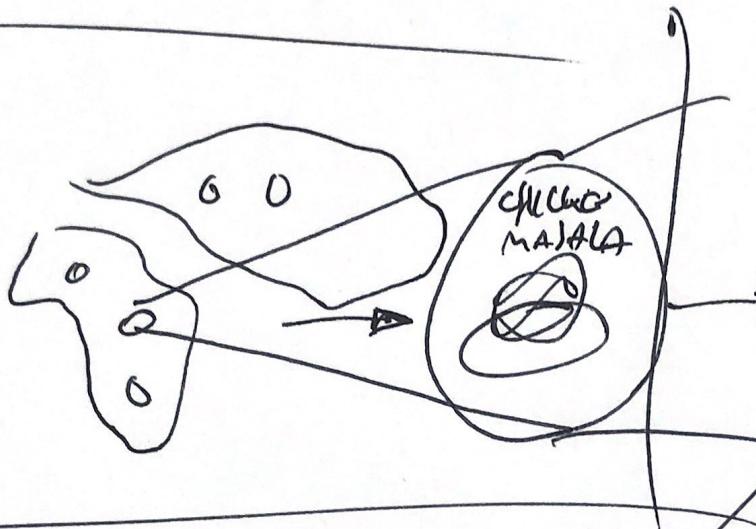
2018

C2: Design Ideation

FOOD FOR THOUGHT

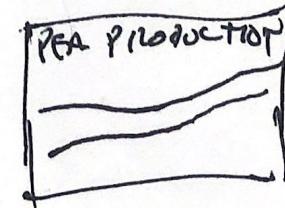
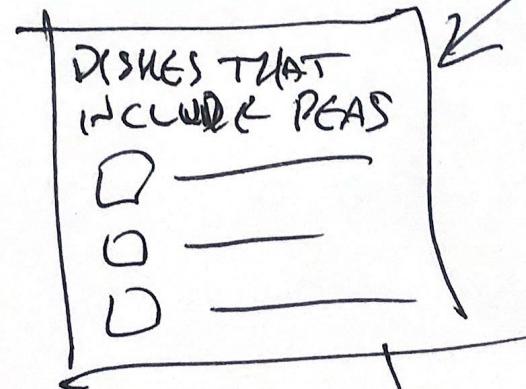
SUMAN BHAGAVATHULA, MONIQUE BI, IAN L PAGE-ECHOLS,
ANKIT TANDON, YEVA TYNKOVA

Brainstorming Sketches



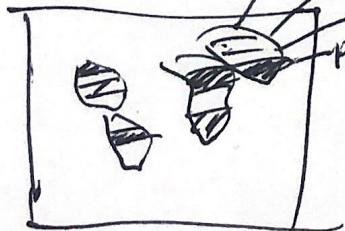
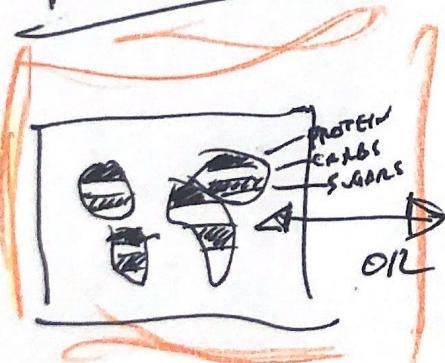
47% PROTEIN
25% CARBS
10% SUGARS

CHICKEN
CARROTS
PEAS

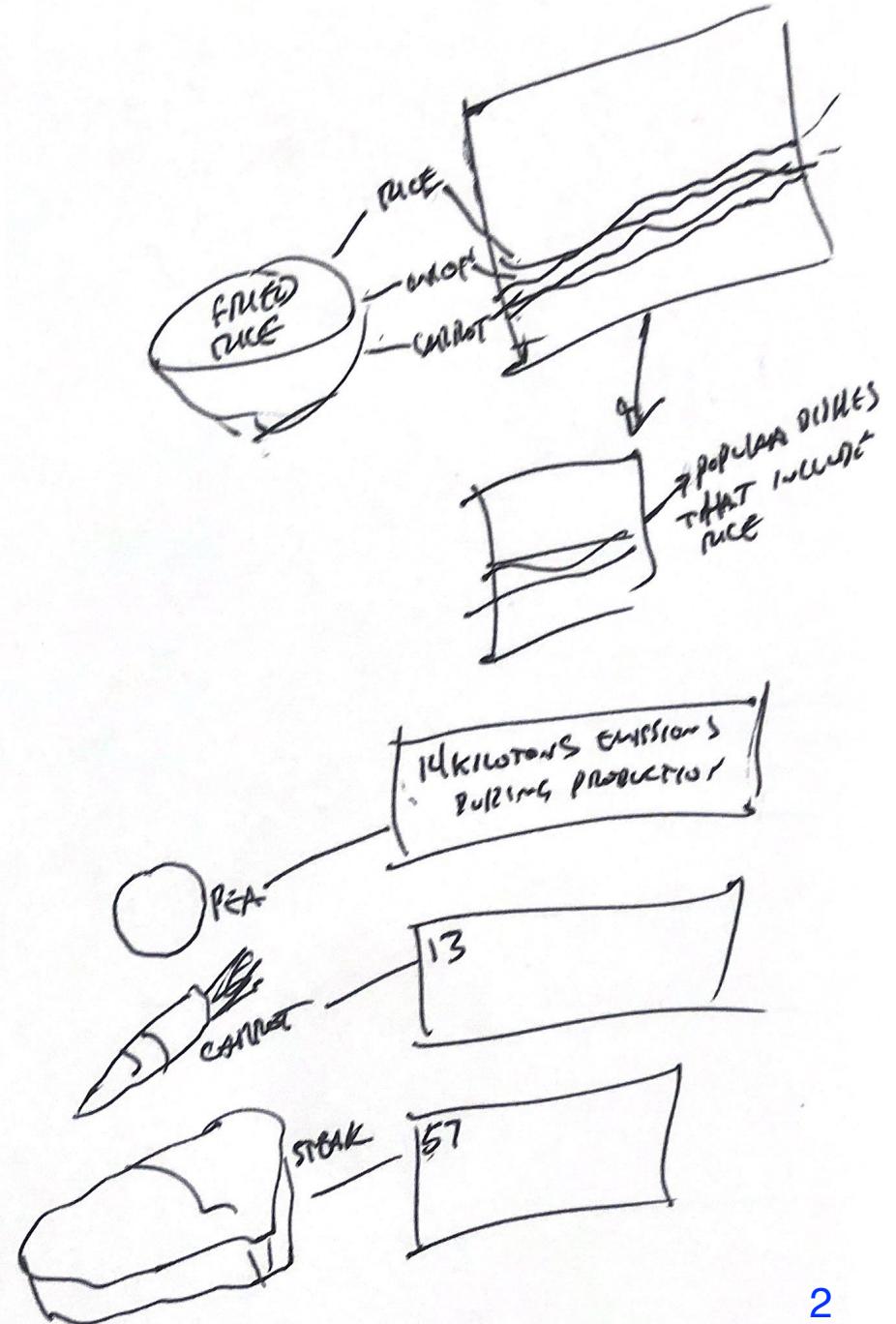
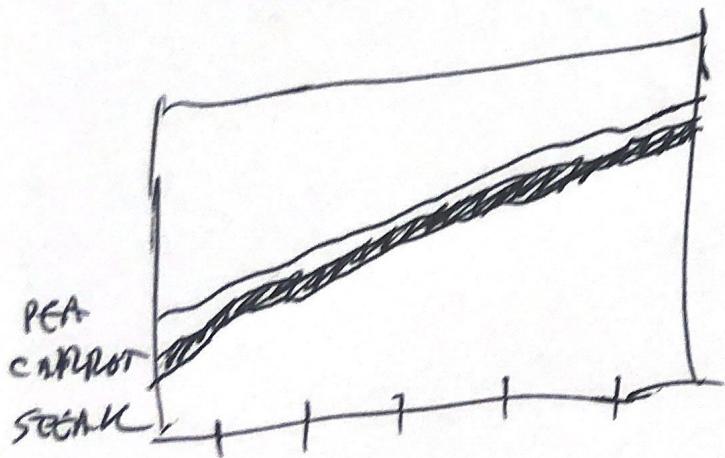


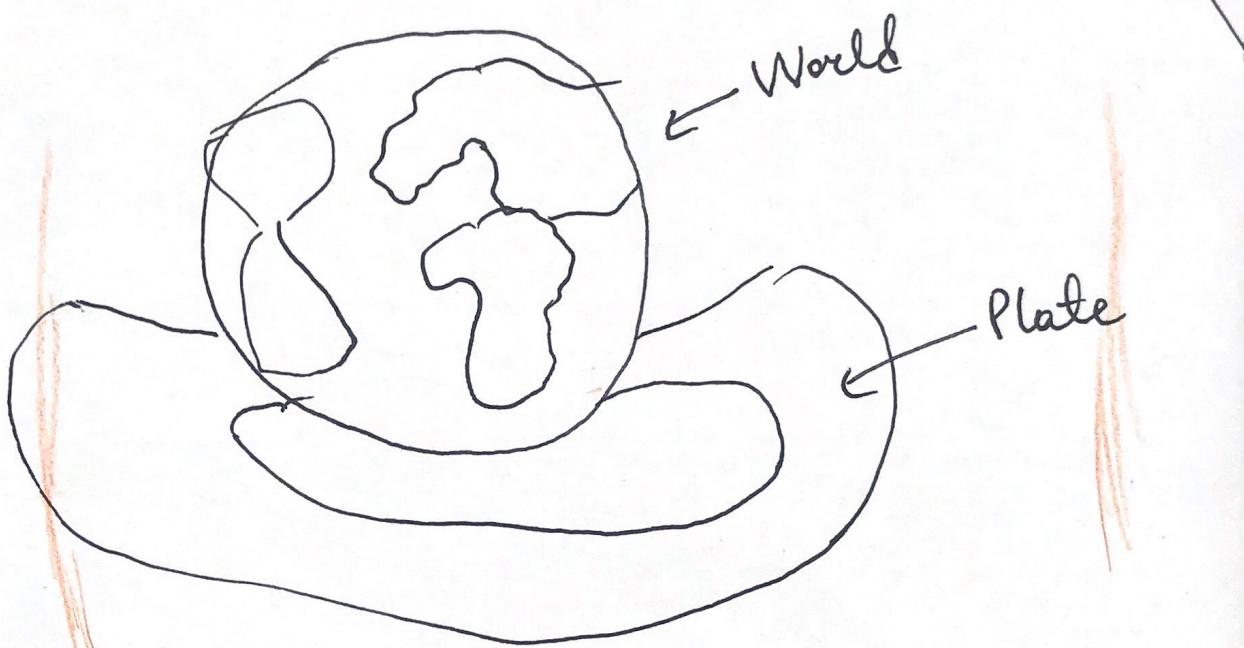
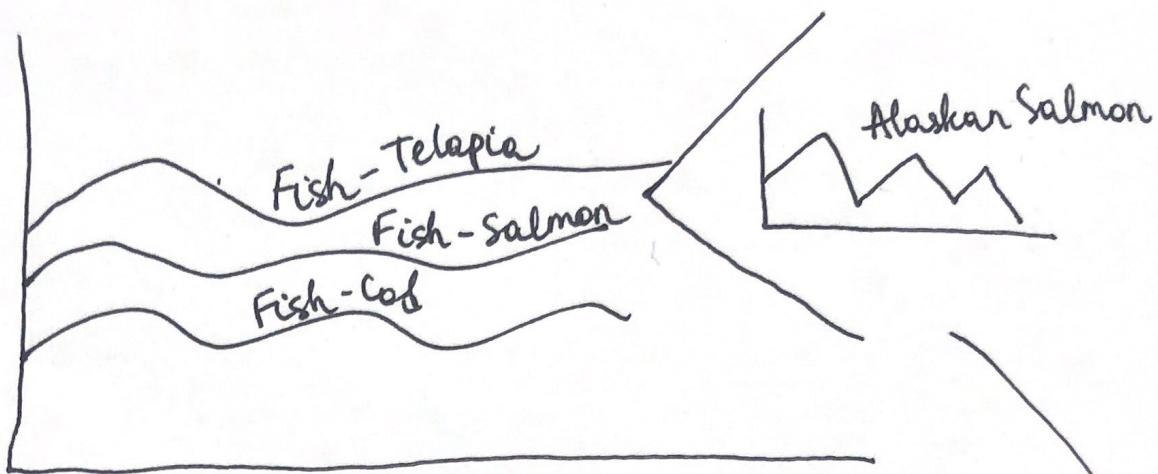
WHEAT
RICE
CARROTS
PEAS
MAYON
CROPS

PREVALENCE OF THIS DISH
PREDOMINANCE OF THE SAME INGREDIENTS



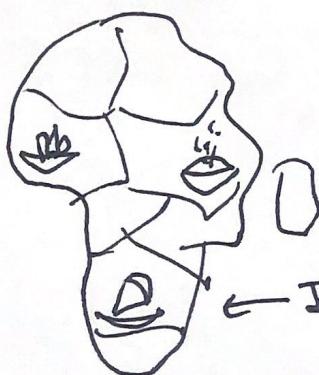
EMISSIONS





Zoom on
a continent

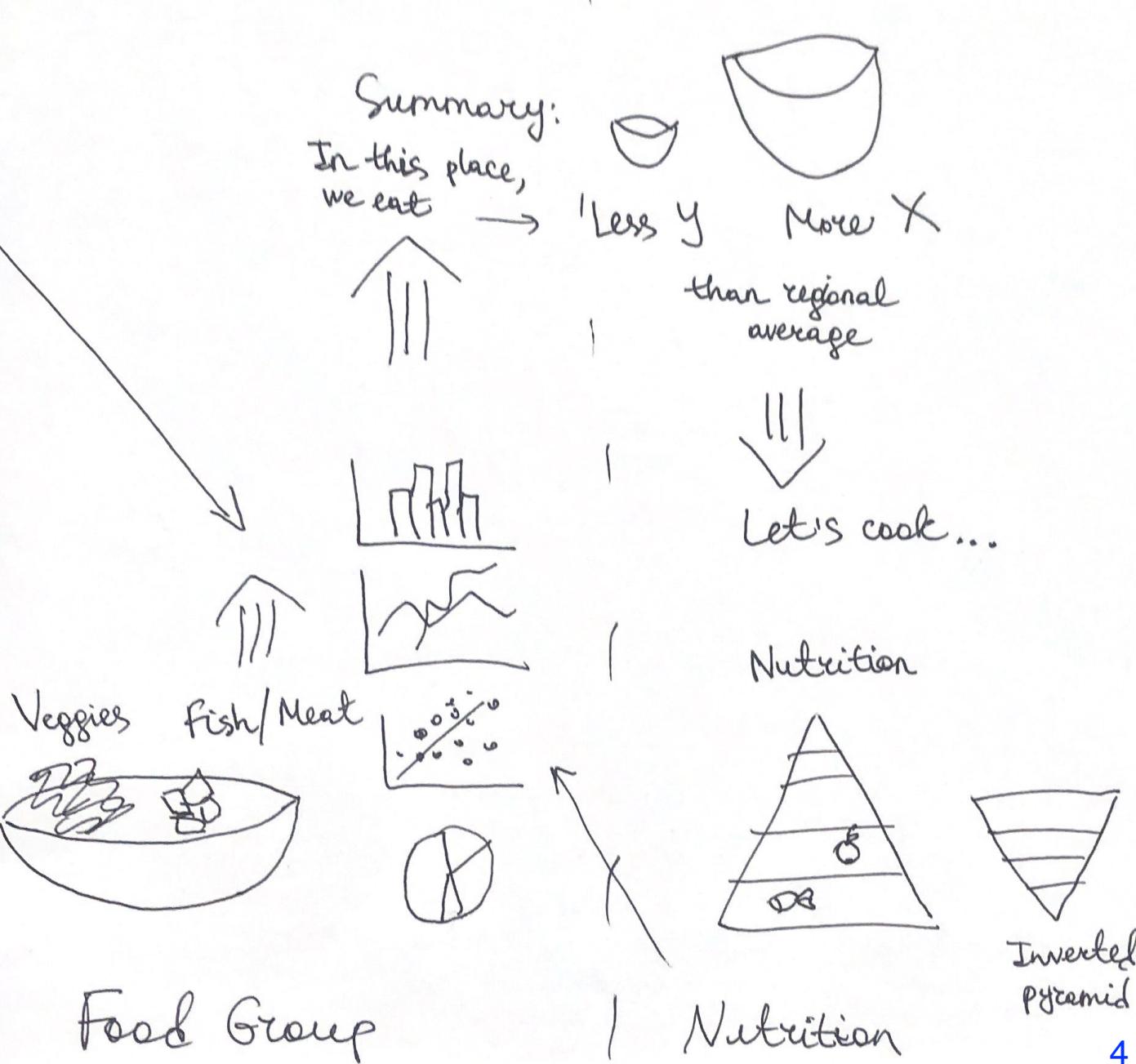
Africa



Zoom
on a plate

Country

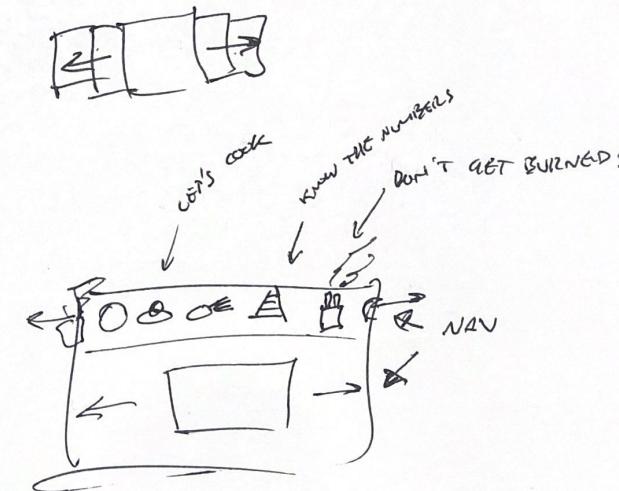
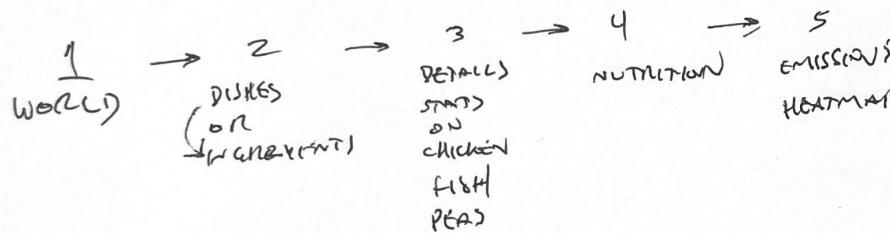
Food for Thought: The World on a Plate



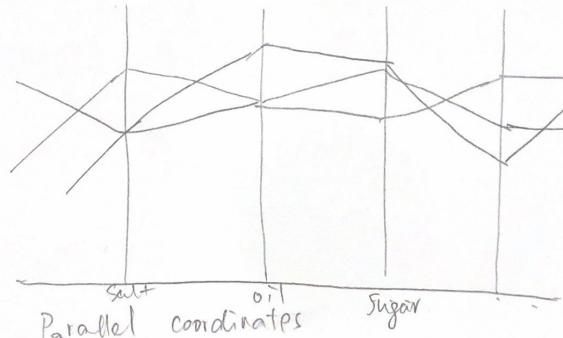
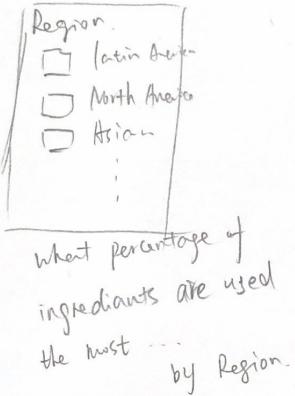
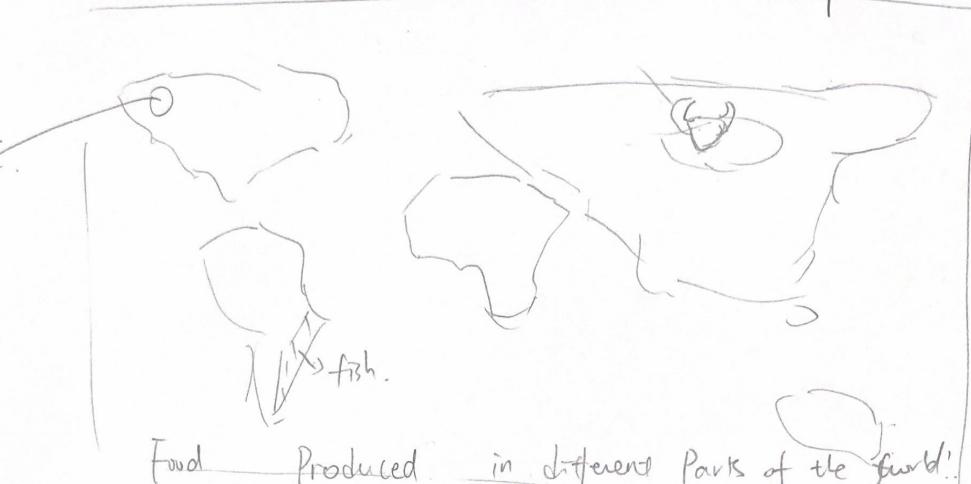
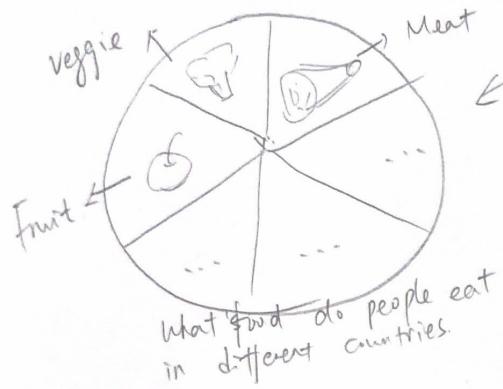
FLOW - WORLD → COUNTRY → DISH → INGREDIENTS → EMISSIONS
 SPIDER - COUNTRY SHOWING INGREDIENTS
 GLOBE at PLATE (ENTRY)

HEATMAP for EMISSIONS OF INGREDIENTS
 OIL DISHES

COUNTRY - EITHER POPULAR DISHES OR INGREDIENTS

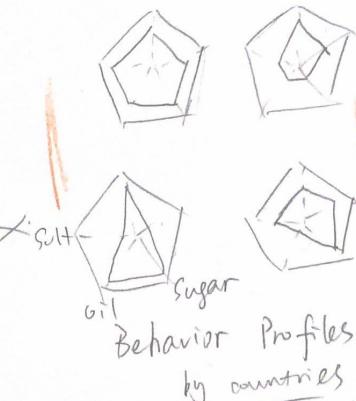
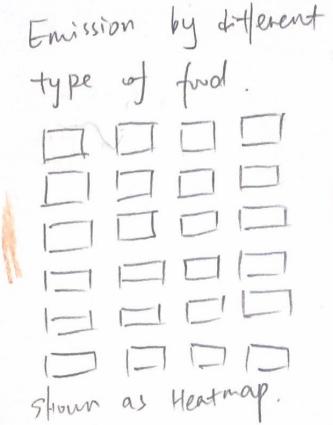


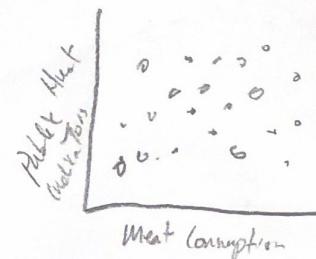
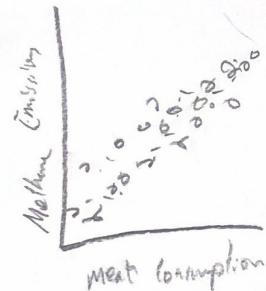
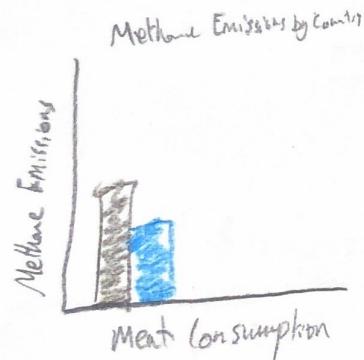
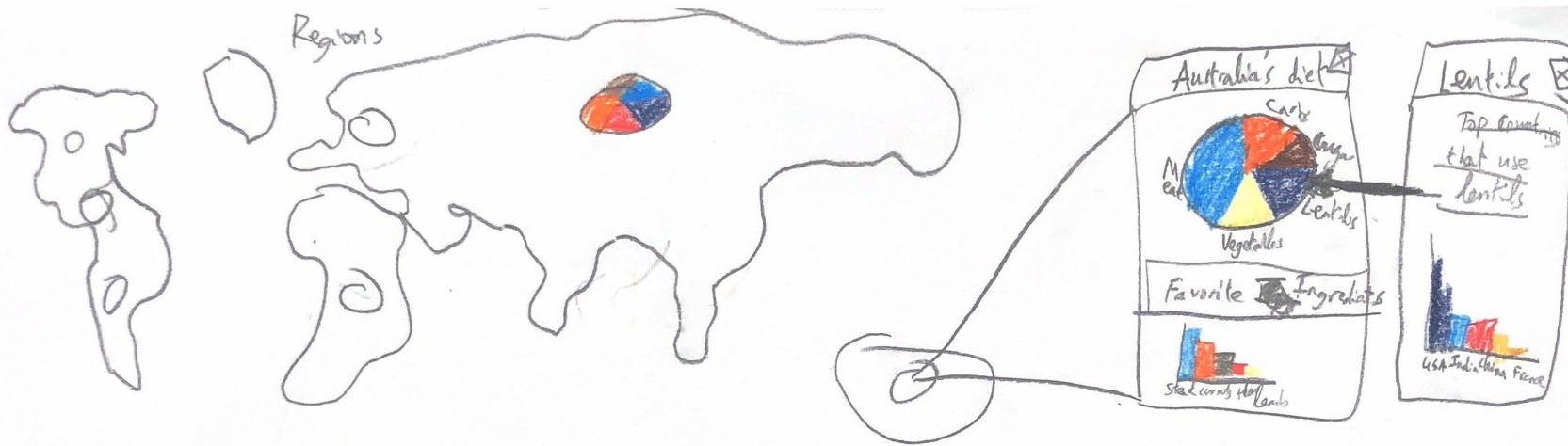
Food For Thoughts.



Show % of ingredients used by country.

Grouped by income level / Region



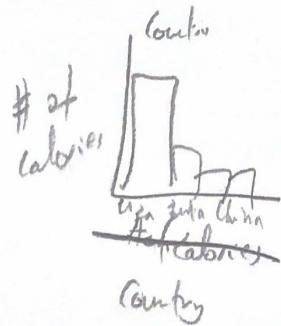
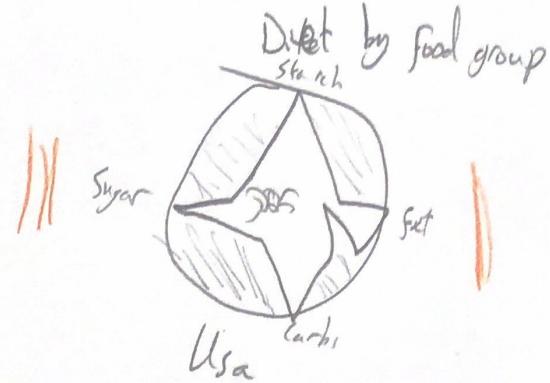
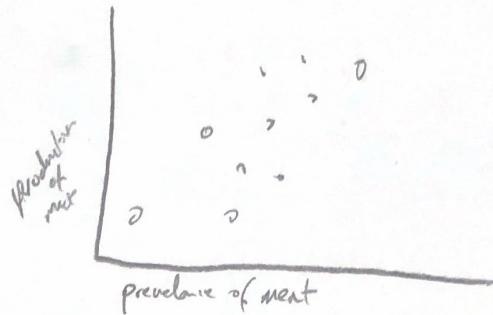


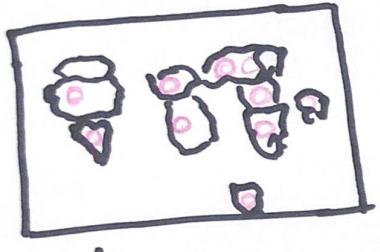
eggs cheese broiled meat
Ingredients



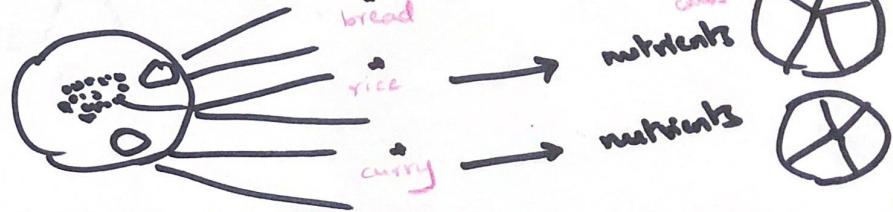
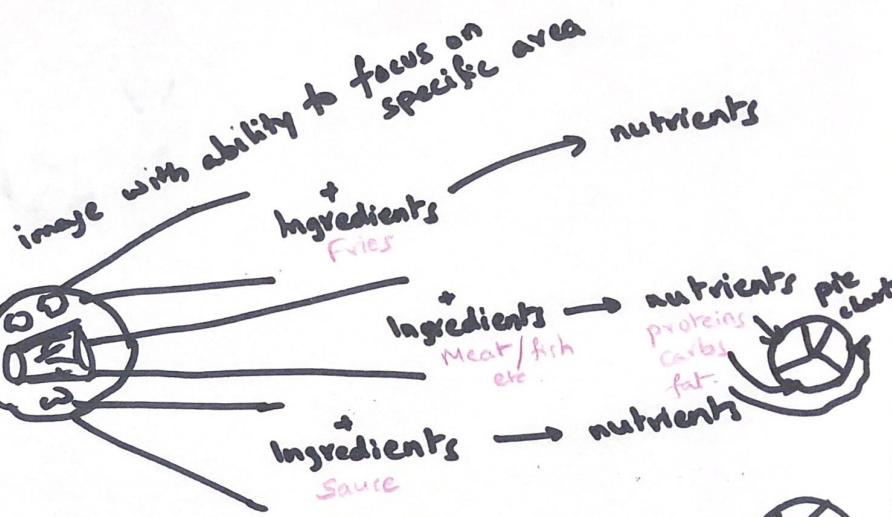
Carbs fat starch

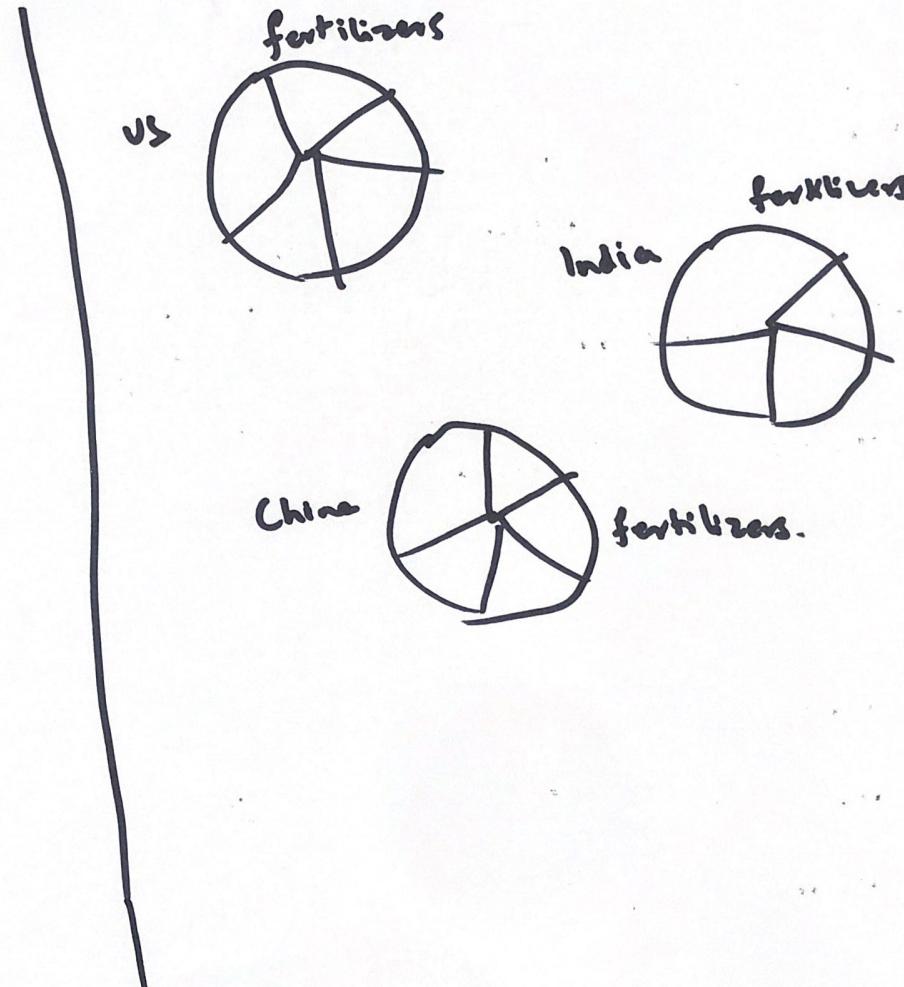
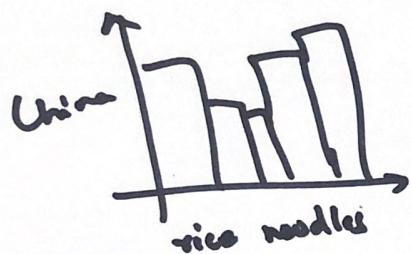
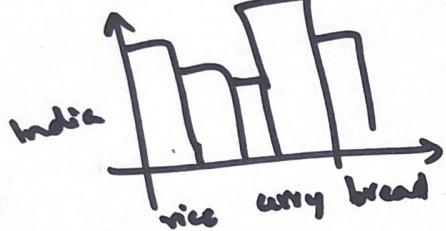
Prevalence of ingredients in recipes vs. production of ingredient





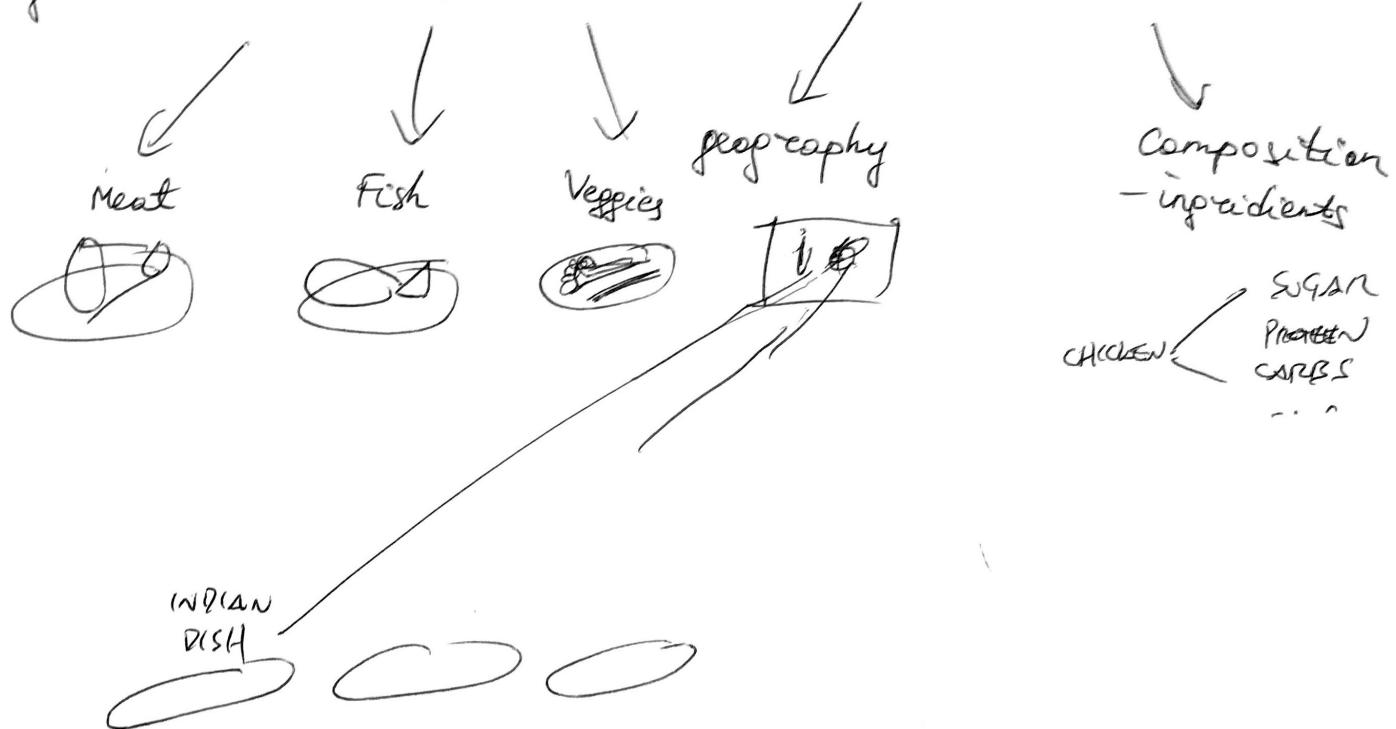
- + Americas
 - + Canada
 - + US
 - + Mexico
 - Latam
- + Europe/UK
- Russia
- + Africa
- + Asia
 - + India
 - + China
- + Australia





We mean what's for dinner?

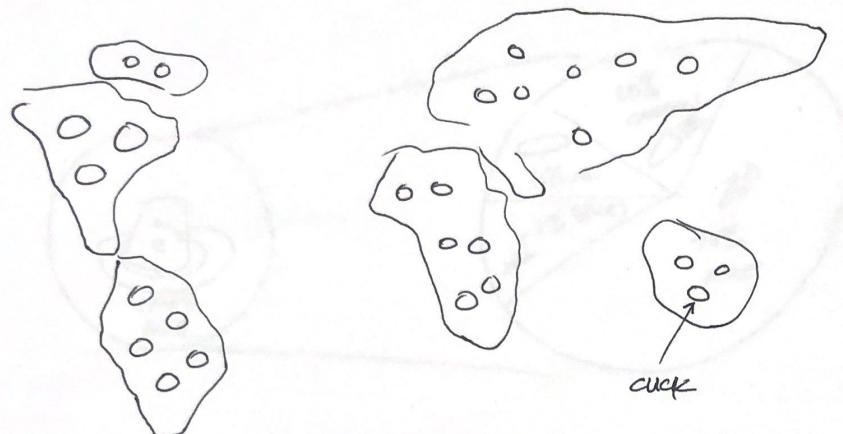
Food for thought: what's on your plate? Where does it come from?



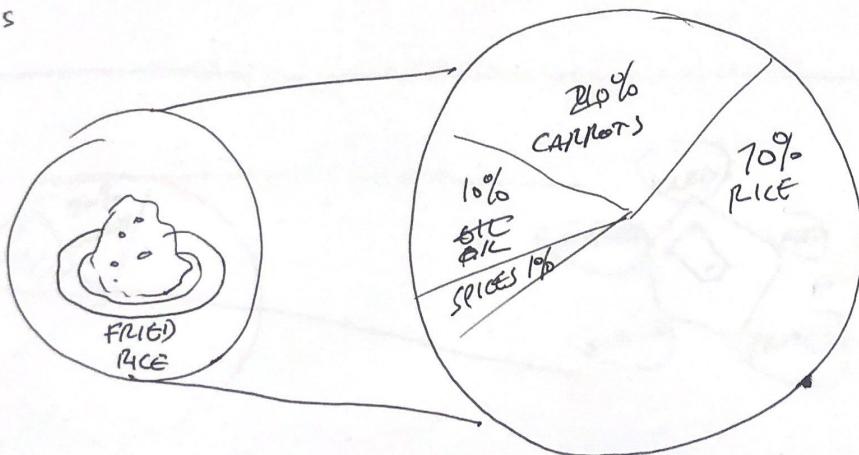
Design Sheets

Design Sheet 2

LAYOUT



Focus



TEAM : Feed for Thought

Sheet : 2

Task: Taking a user from the geographic overview to a specific dish and its ingredient breakdown

OPERATIONS / TASKS

SELECTING A DISH PREVALENT TO A REGION

- Click
- Zoom in/out
- Hover
- Pan
- Focus & context

All the above operations should help a user explore the ingredient-level components of a plate.

DISCUSSION / DATA / USE CASE TAKENAWAY

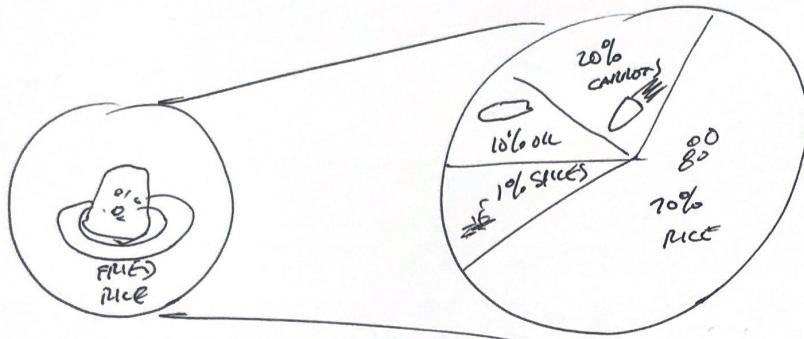
- Algorithms
- Math
- Conditional logic
- Lookups
- Filtering

More detailed understanding of ingredient composition of a dish + interactive exploration.

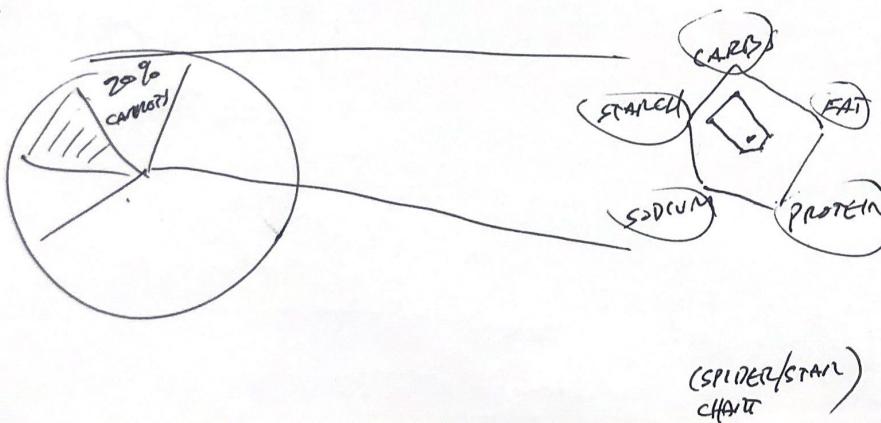
* Potential lack of data \Rightarrow filtering

Layout

Design Sheet 3



Focus



Team: Food for thought

Sheet: 3

Task: Drilling down from ingredient information to food groups.

Operations/tasks

Click on a specific part of the pie chart to drill down into a spider chart showing the food group view for the specific ingredient.

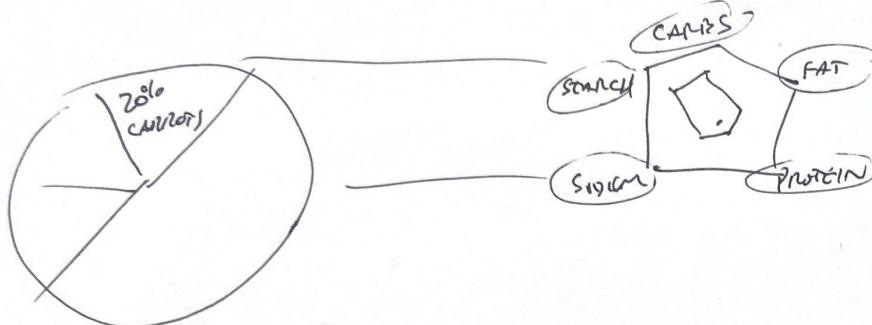
Detail/Discussion/User takeaway

x Potential lack of food group information at all ingredient levels.

x Potential lack of percentage information of each food group

Design Sheet 4

Layout



TEAM Food for Thought
SHEET 4

TASK: TAKING A USER FROM FOOD GROUP VIEW TO A GEOGRAPHIC DEPICTION OF FOOD PRODUCTION STATISTICS.

OPERATIONS

CLICK

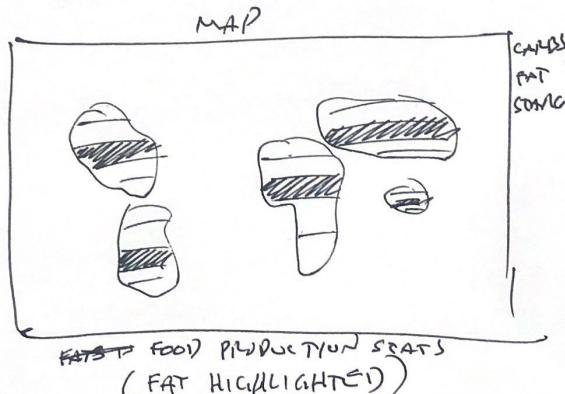
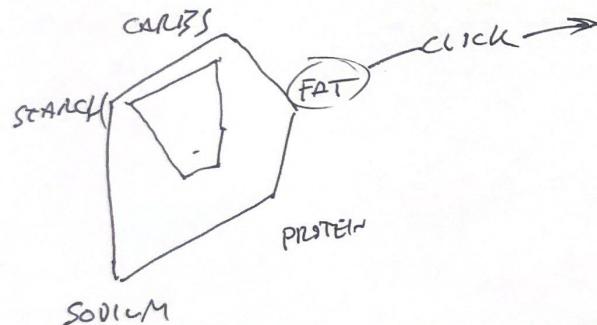
ZOOM IN/OUT

HOVER

PAN

FOCUS & CONTEXT

Focus



DETAIL / DISCUSSION / USER TAKEAWAY

- Algorithms

- Math

- Potential lack of data

- A user will explore global consumption patterns per food group.

- Avoiding redundancy in map representation.

Summary

Synopsis

The goal of our project *Food For Thought* is to tell a story through an interactive visualization that allows users to explore meal choices around the world, and learn more about the food components on a plate. We want to take users on a tour of what representative cultural dinners (e.g. signature dishes) look like in different parts of the world, to the analysis of the ingredients comprising a particular meal. This will be followed by a deeper dive into nutrition, which in turn will lead to an analysis of the environmental impact of the production of individual ingredients.

In totality, we want our visual representation to tell a meaningful story that both satisfies our users' curiosity as well as leads them to valuable insights related to food production and consumption. In order to enhance user experience, we will focus on user journeys when collecting and manipulating data, building personas, conducting usability tests, and designing, building, and refining our visualization.

Reflection

Our concept flow takes a top-down approach starting from a comprehensive overview of meal choices around the world and then diving deeper into individual ingredients, nutrients and environmental impact. We believe we have richly segmented multivariate data to support our concept and explore the food-related dimensions from the environmental, economic, geographic and cultural perspectives.

In *Interactive Dynamics For Visual Analysis*, Heer & Shneiderman provide a valuable set of guidelines that we can use to ensure our visualization is highly effective and interactive. Since we plan to leverage Tableau public for our final presentation, a lot of Heer & Schneiderman's tips have already been implemented and are present in the functionality of Tableau Public. For example, Tableau Public views can be manipulated, drilled into, and saved for posterity. As such, this seems to be an ideal tool to use for our final concept.