

Ecological Foodways

Day 1: Overview and How to Taste

Ecological Foodways Overview

- Food is the most important topic concerning humans
 - Food is essential to health
 - Food born illnesses, malnutrition, obesity, diabetes all impact society as a whole
 - Food production has large environmental impacts
 - Food production contributes to soil loss, water depletion, overfishing, forest loss, grassland loss and climate change
 - Food has a landscape context (e.g., cattle production consumes 41% or two fifths of US lands)
 - Humans have become more distant from the origins of their food
- *Ecological Foodways*: aspects of food that connect people to nature.
 - Ecology comes from the Greek word *oikos* meaning home
 - The study of foodways is the documentation of the cultural dimensions of food and eating
- The Primary basis for the course is *The Third Plate* by Dan Barber
 - Dan Barber
 - Head Chef, Blue Hill at Stone Barns
 - Blue Hill Farm family farm in MA
 - Stone Barns Education Center (Rockefeller)
 - Synthesizes the multidimensional aspects of food issues
 - Focuses on the importance of flavor

*I am reminded that truly flavorful food involves a recipe more complex than anything I can conceive in the kitchen. A bowl of polenta that warms your senses and lingers in your memory becomes as straightforward as a mound of corn and as complex as the system that makes it run. It speaks to something beyond the crop, the cook, or the farmer – to the entirety of the landscape, and how it fits together. It can best be expressed in places where good farming and delicious food are inseparable. **Dan Barber***



Figure 1 Time magazine article featuring Dan Barber's "Third Plate".

Exploring Flavor

- Although flavor is important, it's study has been overlooked
- Recently, the field of neurogastronomy, which uses neurology to study the experience of flavor, has opened the way to explaining many aspects of food and eating
- We will use two primary sources to understand key concepts from neurogastronomy to better understand flavor and how we can use it to explore our world
 - *Neurogastronomy* by Gordon Shepherd (Columbia University)
 - *Taste What You're Missing* by Barb Stuckey (Mattson Foods)
- I strongly recommend using journaling as a tool for documenting and honing your explorations
 - See the *Journaling Basics* handout for more details

Structure of the Class

- The class will be a combination of:
 - Short lectures examining different aspects of ecological foodways
 - Longer labs that are aimed at exploring flavor and different culinary topics and developing tasting skills
 - Readings conducted outside of class about 1 hour depending on how fast folks read
- See the syllabus for more details

Lab 1: Exploring with Taste

- What is flavor?
 - Multiple sensory inputs
 - Hearing (e.g. food freshness, hot vs cold coffee)
 - Sight (e.g. white vs red wine)
 - Smell > 1,000,000,000,000 odors
 - Smell, rather than taste, is the dominant sense in flavor
 - Touch (e.g. carbonation, tongue sensations)
 - Taste is sweet, sour, salty, bitter, savory
 - Smell (again) because we smell both exterior aromas (ortho-nasal) and aromas that pass from into our nasal cavity via our throats (retro-nasal)
 - Flavor is the *synthesis* of all of these sensory inputs **and** our past experiences

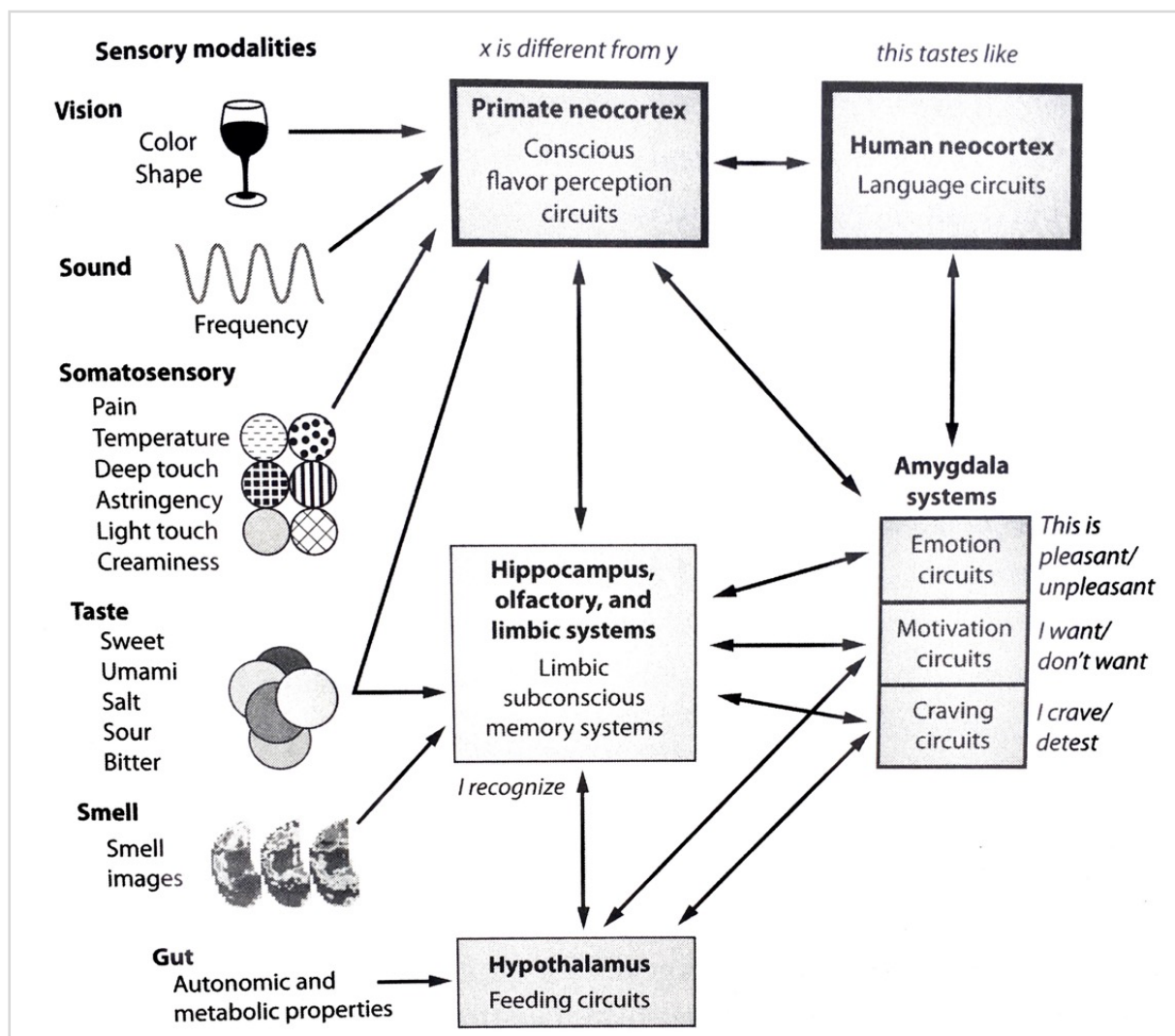


Figure 2 Diagram of the synthetic, multi-sensory experience of flavor, including the neurological pathways that are involved (Source: *Neurogastronomy* Gordon Shepherd).

- Tasting Basics handout
- Break!

- Hands-on Activities
 - **Activity 1: The 5 Tastes**
 - *Purpose:* Get to know the basic tastes in isolation
 - 5 liquids (salt, sugar, gentian, glutamic acid, ascorbic acid)
 - Taste in order making sure to swish and cover your tongue
 - Determine what the taste is and write it down
 - **Activity 2: Jelly Bean Quiz Time**
 - *Purpose:* separate taste from smell and observe ortho- vs retro-nasal olfaction
 - Hold your nose (either with your fingers or muscularly), the point is to not breath out while you're doing the next step
 - Take one half of a jelly bean in your mouth and chew
 - Still not breathing out, try to determine what flavor it is
 - Write down your decision
 - Now, breath out, paying attention to the smell you get
 - Try to figure out what flavor it is
 - Write down your decision
 - Repeat with the remaining jelly beans

Readings for next week

- Barber 1-22
- Shepherd 11-32 and 109-127
- Kurlansky 80-84

Weekly Forage: Sassafras (*Sassafras albidum*)

- Shrub to tree with broad leaves that have four hand-like leaf shapes (with a thumb on the left, the right, both sides and no thumbs) with no teeth on the edges, with a citrus-y, rootbeer-y smell
- Deciduous, bears leaves from spring to fall, brilliantly colored in the fall
- Tends to occur at the margins of forests, look for it along trails
- Leaves can be used as a seasoning (filé), roots can be used for flavoring beverages (sarsaparilla and root beer), and bark twigs can be used for syrup
- See also:
 - [VIDEO: Sassafras – Eat The Weeds by Green Deene](#)
 - [Sassafras: Root Beer Rat Killer – Eat The Weeds by Green Deene](#)
 - [VIDEO: Foraging for Wild Sassafras with Russ Cohen](#)

