

**THINKSPACE AT UNIVERSITY COLLEGE LONDON
FOOD LECTURE SERIES IN 3 PARTS**

PART 3: TASTE WARPS 19 JUNE 2018

**HOW WOULD I APPROACH THE DESIGN OF A RESTAURANT?
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HOW WOULD I APPROACH THE DESIGN OF A RESTAURANT?
THE WAY I APPROACH EVERY PROJECT - ASK QUESTIONS AND DO RESEARCH.
You have to create the potential of the perfect meal

I shall look at some things we know about the brain and food, then the table from which we eat, then the space.

It is structured loosely around the four seasons.

SPRING

"First we eat, then we do everything else." MFK Fisher

THE SPRING IN YOUR STEP, THAT TELLS YOU ABOUT THE VITALITY OF A SPACE.
THE SPACE IS ABOUT GETTING PEOPLE READY - INTO A STATE OF BEING READY TO INDULGE.
CREATING THE PRE-ATMOSPHERE

Humans everywhere devote much sophisticated emotional and cognitive brain processing to the acquisition, preparation and consumption of food - far more than is objectively necessary.

In fact, the scientific study of pleasure (*hedonia research*) has shown that food, sex and social interactions are so fundamental to our survival and well-being that they take priority when our physical and neurological resources are allocated.

And flavour is one of the most complex and powerful of all human sensations that give us pleasure. Eating engages all of our senses, and our senses are inextricably linked to our cognitive systems: memory, emotion, abstract thinking and language. These evoke their own sensations and affect our perceptions of flavours in interrelated feedback systems whose neurological complexity we have only recently begun to understand.

The five traditional human senses - sight, hearing, smell, taste and touch - are not distinct pathways into consciousness. They are intertwined, in some cases physiologically, in others psychologically, and work not in isolation but in concert with each other and with our other senses.

These are called crossmodal interactions. Scientists have recently uncovered so many sensory overlaps - between flavour and sound, sound and smell, smell and sight, sight and touch - that it "appears likely that crossmodal correspondences exist between *all* possible pairings of sensory modalities." (*Charles Spence, Oxford University*)

Eating is a physiological and a psychological act. The flavours we experience are constructed by our minds and are influenced by surrounding stimuli. This is crucial to understanding how we experience the act of eating and how we design restaurants: the multi-sensory properties of the environment in which we eat our food alters our perception of the foods we eat, and these outside cues can direct our sensory experiences in specific, predictable, and measurable ways - and so can our expectations and emotions.

Humans have a tendency to associate certain colours with certain flavours: redness and sweetness, for example.

So much of our perception of the flavour of a food is determined by the colour, that if a lemon flavoured drink is coloured green, it's harder for people to distinguish the flavour.

Changing the shape or texture of a food, or the plate from which it is eaten, changes the way we perceive its taste. We have a tendency to match certain sounds, shapes and flavours: sweet or soft foods are associated with rounded shapes and melodic music, and rounded shapes enhance the sweetness and softness of foods. Savoury, sharp and acid flavours are associated with angular shapes, harsher sounds, and these in turn enhance our perception of those flavours.

Anticipation: When we see food, or smell or hear food being prepared we feel a sense of anticipation - we become hungry, and our bodies prepare for a meal. There are good reasons why street food is so popular worldwide, and pop-up food vans have become a feature in London's business districts.

Many Continental restaurants display food at the entrance or in the foyer where one waits to be seated: fish and crustaceans on ice outside fish restaurants in seaports; piles of ceps in the autumn, garnished with bunches of the herbs used while grilling them; sausages and hams, hanging in trattorias; the grill situated near the entrance of the restaurant, so one sees/hears/smells food being prepared.

Eating: The act of eating is as sensual as sex

Taste/smell - so closely linked they are inseparable;

Hearing/touch - crunch/crackle; touch (mouth-feel) - creamy, crisp, yielding/resistant

Salt/sweet/bitter/sharp: salt on lips, the bite of chilli and pepper

Temperature: the sensation of drinking when we are thirsty, the spreading internal warmth of soup or cocoa

Vision: the delight of a well-plated dish, watching each other eat

Satisfaction: the rush of sensual pleasure as anticipation is rewarded; feelings of satiety - a full stomach, raised blood sugar

SUMMER

“There is communion of more than our bodies when bread is broken and wine drunk.” Ibid.

FOR WHOM AM I DESIGNING THE RESTAURANT?
FOR THE RESTAURATEUR OR THE CUSTOMER OR THE COOKS?
SUMMER IS BEING OUT-OF-DOORS
THE PICNIC

One of the chief pleasures of picnics is their simplicity: the delights of lounging about on the grass, sand or a sun-warmed rock and feeling at one with nature. Food tastes better in the open air. Come summer, we migrate like birds to the outdoors:

Lunch in a garden under a pergola or grapevine; evenings drinking wine on the beach, sounds of water lapping, glowing embers of a dying fire. Tables and chairs sprout like mushrooms in front of restaurants (even in London) and pubs with gardens are full to bursting.

There is a particular delight to gathering around a barbecue or campfire to watch raw things being transformed into the food we eat. All animals eat, but we are the only animal that cooks. According to the anthropologist Claude Lévi-Strauss, cooking is a defining human activity and has been since we discovered the use of fire - it is the act with which culture begins. In ancient Greece, the word for “cook,” “butcher,” and ‘priest’ was the same - *mageiros*.

There is an element of ritual as well as spectacle when we watch food being cooked, and it is no coincidence that many restaurants have kitchens open to the view of their customers. And cooking also gave us mealtimes at which people come together, because in all cultures food is almost always shared. Food becomes a focus of sociality and of our place in our societies. Eating is an occasion for sharing and giving, whether between parents and children, host and guests, or anyone with visitors and strangers.

On many levels, the message being delivered is that if we care about someone, we share food with them, preparing it for them, serving it, or eating with them. This holds true even in restaurants. Although eating in a restaurant is a market transaction, in which food is a commodity, it also has a place within the tradition of host/guest relationships, and restaurants and customers collude to de-commodify the experience - giving it an added social and cultural dimension.

Cooks who see their customers’ appreciation produce better food and are happier. When cooks and customers can both see each other, satisfaction for both is even greater because there’s a human connection between them. Customers who feel a positive connection with restaurant staff are also more likely to return because they feel ‘at home’. When we choose a restaurant we are taking a risk, unless it’s familiar. This is one reason why many millennials will actively use Instagram to research where they plan to eat out and what they are going to order when they get there. ‘Risk and Reward’ is the basis of nearly all decisions we take. This is a subject about which Peter Dayan, a world renowned theoretical neuroscientist, has written a great deal.

AUTUMN

“One of the very nicest things about life is the way we must regularly stop whatever it is we are doing and devote our attention to eating”. Luciano Pavarotti

**WHAT IS THE CLIMATE, WHAT IS THE CULTURE?
SLOWLY BEING FORCED INDOORS
THE WARMTH OF FIRE AND THE IDEA OF LIGHTING
FROM HERE THE FURTHER NORTH THE WARMER THE LIGHT
FURTHER SOUTH, THE COOLER THE LIGHT**

Our bodies respond in subtle ways to our surroundings, usually at an unconscious level and the way we experience the pleasure of food is critically dependent on the surrounding sensory attributes.

Warm lighting and colours make a room feel smaller than it actually is, as do dimmer light and darker colours. They can create a comfortable and relaxing atmosphere, or a luxurious one.

Cool white light and bright colours can help create a friendly and ‘buzzy’ atmosphere. Cool lighting opens up a space and increases stimulation and activity - and encourages the turnover rate. But in hot climates people prefer cool lighting because it offers relaxation and respite from the heat.

Hard surfaces reflect sound, and in a noisy environment sweet tastes are inhibited, and savoury tastes enhanced. Perhaps that is the reason tomato juice is a popular drink on airplanes.

Colour affects our perceptions of salty and sweet, the perceived size of a serving, and quality of a dish. A greater contrast between the colour of the plate and the colour of the dish makes portion sizes appear bigger and more intensely flavoured and delicious.

People rated oysters as more delicious when they listened to 'sea sounds' - squawking gulls and waves. This led to a signature dish at the restaurant (*The Fat Duck - Heston Blumenthal*) in which diners are presented with a plate of food that is reminiscent of a beach (with foam, seaweed, and 'sand' all visible on the plate). The dish also comes with a mini iPod hidden inside a sea-shell, with the earphones poking out - to hear the 'Sounds of the Sea' soundtrack, before starting to eat.

Studies have shown that the weight, colour, size, and even shape of cutlery impacts how diners taste and perceive the value of food. Heavy cutlery makes most food taste better, look better - and people are willing to pay more for it.

One designer collaborated with a chef to develop a new kind of spoon. The project began with a question: What is the greatest compliment you can receive as a chef?

The answer was, for someone to lick their plate. The glass spoon - shaped like an abstract finger - is reported to greatly enhance the flavour of soft foods by recreating the experience of licking one's fingers.

When the environment of a restaurant reinforces a food 'theme', food tastes better and more intense: whiskey tastes 'woodier' in a wood-panelled room. Further, when environmental cues are congruent with each other, consumers are more satisfied and rate their environment more positively than when environmental cues are incongruent.

The crossmodal interactions between the ways we perceive food, the environment we eat it in and the utensils we use to eat it, fascinate modernist chefs as well neuroscientists and psychologists. They have led to a new kind of immersive restaurant concept called 'experimental dining'; in which what we know about crossmodal interactions is used to play with the ways we experience flavours.

In some cases, interiors are designed by famous chefs to reflect the kind of cuisine they produce. *'The type of cuisine we make is determined by the space - if we were, for example, surrounded by nature, we would cook entirely different dishes.'* In others, diners are guided through a multi-sensory dining experience which is accompanied by changing lights, projections and soundscapes. The environment is partly virtual: walls, tabletops, and ceilings change colour, show static and moving images which harmonise with or accentuate the food being eaten.

These are games - played with food and perception at a high level of sophistication and often for a breathtaking price - but the neurological insights which can be derived from this 'digital seasoning' are applicable in the ordinary world.

Beyond 5 senses

The world we experience is not the real world. It's a mental construction, filtered through our physical senses. Which raises the question: How would our world change if we had new and different senses? Could they expand our universe?

Technology has long been used to help people who have lost, or were born without, one of the five primary senses. More recently, researchers in the emerging field of "sensory enhancement" have begun developing tools to give people additional senses - ones that imitate those of other animals, or that add capabilities nature never imagined. Here's how such devices could work, and how they might change what it means to be human.

WINTER

"The pleasure of the table belongs to all ages, to all conditions, to all countries, and to all areas; it mingles with all other pleasures, and remains at last to console us for their departure." Brillat Savarin

"Good Food leads to Good Sex...as it should." Anthony Bourdain

INSIDE THE DOMAIN OF RESTAURANTS HOW IS THE BRAIN WORKING - ALL THE SENSES MEMORY AND MULTI-SENSORY BRAIN PROCESSES

The sensuality of food and its smell, especially, is a particularly intense and compelling medium for memory. This is not surprising - smell modulates approximately 85% of tastes we perceive.

This is a key to designing the 'smell of the restaurant' without the smell of architectural - building materials imposing an odour.

The tight connection between food, smell, emotion, and memory can be seen in the brain. First, evolution has seen to it that food may be a privileged target of memory in the brain. Secondly, the sense of smell is unique among our senses. While all the other senses are filtered through the limbic system, smell is mediated by olfactory neurons, which are only one synapse away from the structures responsible for emotion and memory. In our other senses there are 5 to 7 connections necessary before a similar endpoint is reached.

Food memories feel so nostalgic because they exist within the context of places, experiences and emotions. We recall and memorialise the past, using it to construct the present and future. Seasonal food cycles shape our 'memories of the future' as we look forward in reference to past events - the return of white asparagus in May, or pumpkin pie in autumn. Everyday habits - such as drinking a cup of coffee in the morning - in a sense freeze time by re-creating past occurrences.

Memories of food not only have personal dimensions, but culturally constructed meanings and perspectives which differ from person to person in a shifting relationship between the past, present and future.

Food becomes symbolic of other meanings. Ethnic identity is an arena in which food, memory and cultural memory are tied. The threat of homogenisation of national and cultural food differences during the process of integration within the EU has been especially important and a source of potential conflict.

One could argue that architecture interiors have become internationalised and thus neutered. Difference is vital.

The symbolic power of food and eating come from their dual nature as a nutritional source of life which intersects symbolic, sensuous, psychological and social lines of human meaning. It ties everyday life to broader cultural patterns and political, social and economic processes, in ways which are both conscious, formalised, and beyond the realm of consciousness.

A bit like architecture...

Designing a building creates a space to contain memories, and the memories it contains turn it into a place that we can imagine, hold in our minds and consider. Well designed places attract and hold embodied human memories - embodied because our memories are not simply cerebral but physical in their essence. This is particularly true of theatres and places of ritual and performance. Buildings which try too hard to be memorable, which try too hard to control the user's experience, often fail because they are resistant to the true engagement of the people who use and live within them.

Having researched and written, then the moment comes to imagine a desired environment.

Restaurant designers might try to direct the experience of eating, based on their customers' deepest emotional needs and motivations, to create specific outcomes - including emotions, meanings and memories?

END