At the intersection of cuisine, culture and cognition, eating food is a universal experience in which people gain the satiation that sustains human life while achieving gustatory pleasures that affirm both the ego and memberships in social groups.

An analysis of the ways in which chicken is cooked and eaten in China illustrates and typifies this intersection. As we learned while conducting a global food ethnography, consuming chicken in China involves an array of sensory experiences - visual, olfactory, gustatory and tactile - so profoundly different from Western experience that an understanding of chicken flavor cannot be understood without referencing Chinese culture as its source.

Focusing on practices characteristic of another culture brings both our own culturally-bound rules and norms as well as theirs into sharp relief. It highlights Franz Boas’ fundamental principles of cultural relativism: that the biological, linguistic and cultural traits of human groups are consequences of historical developments involving both cultural and non-cultural forces.

Cultural diversity is an essential human attribute, and individual behaviors within specific cultural environments follow their own forms on their own terms.

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To learn more about the role of scent, flavor and ritual in the preparation and consumption of chicken for its TasteEssentials program, Swiss sensory firm Givaudan conducted ethnographic research in China.
Cultural cues intersect with sensory experience at all stages of the life course to produce the pleasures associated with eating one’s native cuisine. Consequently, what we desire to see, smell and taste becomes rooted in our daily experiences. We become complicit in our own connivance when we gain pleasure through an acquired or created fragrance or flavor. When a young lady uses a heady scent to appear more sexy, desirable or mysterious than she really is, we are wise to such devices and love every minute of it.

This essential truth has given rise to the worldwide flavors and fragrances industry. One member of this industry, Zurich-headquartered Givaudan, was the client that sponsored the worldwide ethnographic study as a means for discovering new chicken flavors that could be profitably commercialized. This article is based on insights yielded by this ethnographic study.

Through thorough immersion into the contexts in which culturally-authentic flavors are created – the markets, kitchens and dining rooms of everyday homemakers in China, Indonesia, Brazil, Colombia, Mexico, Spain, France and the U.S. – the client sought to learn about the bases and techniques for the elaboration of flavors. Based on this research, Givaudan has created and launched the TasteEssentials chicken program, to let its food industry customers identify the precise chicken essence, signature and aroma they want to purchase.

**Associated with hospitality**

In people’s homes, certain odors are associated with hospitality and the host risks shame and embarrassment if other odors are evident. For example, when you visit a friend’s house, would you rather be greeted by the warm and cozy aromas of a vanilla-scented candle or by the ambient smells of the garlic he has just fried and his cat’s litter box?

Some consumer segments express a preference for “no fragrance at all,” particularly in categories such as laundry and cleaning products. Often, this perception is created through a synthetic “no smell” fragrance in much the same way that creating “white noise” reduces ambient noise.

Real-estate agents renting or selling a home always try to cheer it up by baking bread because when someone is in a buying mode, they prefer the warmth and hominess evoked by comfort food to the odors of four walls and a rug.
When we examine such a house we’re cheered by thoughts of a possible home, rather than being depressed by the financial implications of buying real estate.

Some airlines bake chocolate-chip cookies shortly before the plane lands and typically distribute them among premium passengers in the front of the aircraft. Even if calorie-counting executives decline the cookie, the smells wafting throughout the airliner provide comfort to all on board.

Similarly, when we offer, purchase and consume foods, we expect a certain sensory experience produced by the esters and other volatile flavor components released during the peeling, processing, combining of ingredients, cooking, dressing and cooling of foods to affect our emotions. These expectations are profoundly imprinted in the structures of our brains. Our eyes intersect with our gustatory receptors until a certain kind of visual experience becomes associated with the overall phenomenology of eating and drinking.

The role of packaging illustrates the importance of the visual dimension. When we see product images on packages we are not disturbed, and in fact are delighted, by their having been photographed with the assistance of stylists who do things like placing marbles at the bottom of soup bowls and painting vegetables to make them look more sumptuous.

**Deep emotional memories**

Meals of the past become associated with one’s sense of self and feelings of security. Olfactory memory is associated with deep emotional memories because they are all resident in the limbic system and its associated components such as the hippocampus and amygdala. These parts of the brain are connected with primal individual emotions such as self-protection, maternal love, care of children, sexual desire and satisfaction of hunger. There is little consensus about the precise biochemical process by which these connections occur and it is clear that olfactory memories may be inaccurate as well as based on context and subsequent experience. Nevertheless, they produce powerful emotional associations.

Most of the memories we bring to mature adulthood, which we associate with who we are, seem to take place between the ages of 15 and 30, when the influence of verbal expression, imagery and music are strongest. Among Baby Boomers, hearing a few lines of a Beatles song, for example, may prompt a completion of the verse and a quick association with a time and place in which the song was heard in the past.

Smell and taste memories go back to an earlier time in the life cycle and are deeper and more emotional in their processing. The smell of your grandmother’s chicken soup or *arroz con pollo*, the scents of Christmas – pine, egg nog, cinnamon – or the smells of lilacs in your spring garden evoke a personal relationship from your past.

Several years ago, while one of the authors was conducting ethnographic studies of home cleaning, we tried to understand the visual, olfactory and possibly other sensory cues that produce a sense of satisfaction with operational results. Interestingly, we found that to perceive one’s home as clean, it also had to smell clean and there were ethnic variations that were a consequence of early social learning. For example, among Hispanic-Americans, there was a preference for the smell of pine as a signal of “clean” – a component of one of our client’s major brands that their mothers and grandmothers had always used for house cleaning. We quickly realized that the mention of a pine scent was a compelling way of communicating about cleanliness with the U.S. Hispanic market.

Smells, as a stimulus, work at a deeper level because they bypass much of our cognitive brains. However, if this is so, isn’t there an element of invasiveness going on here? Is it actually “fair” to use smells as a marketing tool? The answer: Most appeals to emotion struggle to bypass our cognitive processing. It is certainly no more or less manipulative to use smells than to use sexually suggestive imagery or sentimental music as part of marketing.

These associations between culture and sensory experience were consistently demonstrated in the ethnographic study we conducted for Givaudan. The case study below illustrates how flavor notes are created during a culturally-bound performance that proceeds from purchase to presentation at mealtime.

**Note:** This case study represents a composite of several respondents whom we encountered during fieldwork in China. Similar procedures were followed in each market throughout the study.

**Buying chicken in China**

The process of chicken flavor creation begins with the chicken species and varieties chosen for processing into saleable creatures, how they are raised (i.e., the conditions of housing, feeding and storage) and how they are presented, selected and prepared at the point of sale.

We met up with Mrs. Wu, a smiling woman in her early 40s, outside of her apartment building in a relatively new housing development in northeastern Guangzhou, historically also known in the West as Canton. This neighborhood, constructed along a main road leading out of the city from its center, is filled with huge apartment blocks developed over the last decade. Mrs. Wu’s is typical: six 28-story buildings constructed around a small central courtyard area in which older people relax while children play. A uniformed guard who pompously salutes us as we enter and leave officiously maintains the entrance to the housing block.

The main road is a cacophony of lighted signs and garish billboards advertising local restaurants and businesses, Western fast-food franchises, the latest local and international films and a range of brands and products, from hand soaps to electronic games. Red banners with large yellow-gold letters offer...
public proclamations. The ambiance is decidedly middle-class and achievement-oriented.

One of the neighborhood’s large stall markets is entered through a narrow corridor on a side street about 50 meters from the main street. Even though an impressive outpost of the French supermarket chain Carrefour sits a block and a half away, most shoppers prefer to purchase fresh goods and locally-branded products from their favorite market stalls.

The market’s interior space encompasses about 100 x 50 meters sectioned off by produce type, fish mongers, tofu makers, herbs, fruits and vegetables. Sellers of frogs, crocodile and other unidentifiable meats appear disconcerted by a Westerner’s curiosity. It is loud and crowded for a weekday afternoon; the cries of the stall-keepers mix with the shouts of haggling shoppers, cackling animals and static-riddled music coming from cheap radios.

Mrs. Wu’s favorite fowl and poultry stall is located against a back wall of the market area. Chinese homemakers prefer to buy their birds alive and as close to the actual cooking time as possible. Large advertising banners surrounding the stall illustrate chickens happily pecking away in a field – reinforcing that these are free-range birds (zou di ji) from a well-known farming region close to Guangzhou. In contrast, the hens, ducks and geese at the stall are momentarily resting in metal and bamboo cages, pecking at dried corn. The air is redolent with the scents of burned meats appearing disconcerted by a Westerner’s curiosity. It is loud and crowded for a weekday afternoon; the cries of the stall-keepers mix with the shouts of haggling shoppers, cackling animals and static-riddled music coming from cheap radios.

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Mrs. Wu points to a bird in one of the cages; the stall-keeper yanks it out and hands it to her for closer inspection. Gripping the squawking creature tightly, she examines the shine and cleanliness of the feathers, examines its claws to check that they are thin, listens for the strength of its cries. She also focuses on its cloaca, the posterior opening that serves its reproductive, intestinal and urinary tracts. Chinese shoppers prefer young castrated cockerels or small and young hens, before they have begun to lay eggs (qai hang), and a tight cloaca is evidence for this trait. She approvingly hands the bird back to the stall-keeper, who quickly passes it to an assistant behind the counter.

The shop assistant instantly folds back the bird’s head with a finger and slices its throat with a sharpened blade; its blood is squeezed into a pail at his side. He then hands the bird off to another assistant standing next to vats of steaming water who plunges the bird into the liquid before pulling off its feathers. Mrs. Wu, whose attention has been diverted during the processing by some vegetables in a neighboring stall, returns to pay for and collect the still-warm bird in a black plastic bag. We rush back to her apartment after she purchases vegetables and several pieces of fish to complement her meal.

All of these purchase routines and rituals have yielded elements that are important for flavor production. The free-range chicken’s relative youth, its quick processing and minimal handling, the need to cook the bird within the hour without freezing or even refrigeration, all produce flavor notes critical to the final product.

**Cooking chicken in China**

Mrs. Wu brings the meal fixings back to her 18th floor two-bedroom apartment. Her husband, employed by an export company, is still at work. Her two children, a boy aged 12 and a 14-year-old daughter, are attending after-school cram classes to improve their math and English skills. Her mother, who occupies a section of the children’s room and maintains the household when Mrs. Wu is away at her part-time job at a department store, shyly remains in her room after quick introductions when we enter.

The visiting observer team, including our local ethnographer and product development and marketing executives from the Beijing office of Givaudan, sit in the ample living room sipping tea, hastily served by the hostess when we enter. We have all accommodated ourselves during the shopping excursion to speaking in a combination of Cantonese, Mandarin and English so that everyone understands everyone else.

The living room’s comfortable plush leather sofas are bracketed by a picture window affording views of the nearby skyline at one end and the dining area at the other end. A lacquered, black wood breakfront sits at the edge of the space, stocked with bottles of vintage French cognac that Mrs. Wu’s husband keeps as an “investment.” The breakfront is also decorated with bric-a-brac and a small Buddhist altar featuring lit candles, incense and offerings of fruit.

The kitchen is located behind a glassed window at the far end of the dining area. Facing back to the dining and living areas is a small stove with a wok at its center. The cooking area has small but relatively new and well-designed white appliances.

Chicken plays an important dietary role in Guangzhou; there is a popular proverb: “It isn’t a dinner if there is no chicken.” It plays an important role in daily meals as well as special occasions. During the winter, chicken soup (qing bu liang bai ji) is popular, but during the summer cooks prefer dishes like bai qie ji (chicken with garlic and ginger sauce). Chicken is a very important part of meals during festivals, or if there are visitors in the home; it is also believed to have medicinal properties.

A skilled cook, Mrs. Wu likes to deconstruct and then cook dishes she encounters outside the home. Her children appreciate the “chicken nuggets” that she has copied from meals they eat at McDonald’s. Today, the signature dish she is preparing for the observers is a chicken with peanut sauce that she first tasted at a local restaurant.

She uses a small cleaver, her principal tool, to cut the carcass in half, discarding the tail but keeping the head, which is not eaten but retained to decorate the final dish. She allows the large pieces, along...
with the liver, to sizzle in the dry heated wok. She explains that this step removes any traces of blood and bad or “fishy” smells that may have been created during the walk back from the market.

This step also has the effect of sealing in the flavors while the chicken steams in its own moisture. Chinese cooks believe that it is important to preserve the natural flavors of their meats; consequently, they rely upon quick cooking processes and minimal use of seasonings. Recipe ingredients are added late in the preparation process and are applied to enhance and highlight rather than to modify or alter the meat’s natural flavor.

After two to three minutes, some peanut oil and black bean oil are introduced and the chicken halves are permitted to sizzle until coated. After approximately two minutes, a small amount of unsweetened peanut butter is added; then, soy sauce is poured to coat the chicken. Finally, chopped ginger, salt, sugar, and rice wine are added; the ingredients are stirred together for two or three minutes over a high flame. Then, a lid is placed on the dish, and the flame is turned to “gentle.”

Two to three minutes later, Mrs. Wu removes the covering and turns the chicken over again while adding some soy sauce and sugar. The cover is replaced. The chicken is checked and stirred three to four minutes later and then occasionally. After low simmering for about 40 minutes, when the meat of chicken “bursts,” Mrs. Wu takes the chicken out of the wok and places it onto a large plate.

While the chicken is cooking Mrs. Wu prepares bok choy leaves in simple soy sauce and ginger and steamed bitter gourd stuffed with fish pieces, which will accompany the chicken dish. The side dishes have been selected for both their nutritional value and to highlight the sweet nuttiness of the chicken dish. Some additional peanut butter is stirred into the juices left in the wok in order to thicken the sauce a bit. After cooling the chicken for a while, Mrs. Wu puts on an apron, asks the visitors to leave the kitchen and, using her cleaver, chops the chicken into bite-size pieces, about 3–4 square centimeters (inch-and-a-half squares). Then, all of the pieces are arranged on a metal serving plate in the approximate location of their “live” appearance and topped by the cooked chicken head. The additional sauce is poured to coat all the chicken pieces.

**Eating chicken in China**

By the time the meal is eaten, the children have returned from school and are delighted to practice their English lessons with an American visitor in their home. Mrs. Wu beams with pride at her children’s confidence and ability. Her mother joins us at the table but her husband has called to say that he will be home late, again.

As the dish is presented, the American guest, gaining the most honor or “face”, at the table, is encouraged to take what is considered to be the most delectable piece—the chicken wing.

Each piece of the dish includes skin, a layer of fat, soft bone, ample tendon typical of young birds along with the meat. The flavor experience includes each of these components. Chinese people like to masticate their foods thoroughly and continuously suck the juices produced by the chewing. Thick tendons amplify the gristliness that Chinese consumers find highly desirable across all meat categories. The sweet/salty nuttiness spiced with ginger enhances the gamy chicken and gives it a light and creamy mouth feel.

In China, chicken bones are discarded by being casually spat onto the plate or table cloth with no rudeness implied. In fact, it is considered polite to make certain that only the toughest, meatless bones are left behind. One of the authors learned of this custom several years ago while out drinking with several business acquaintances at a karaoke bar in Beijing and was served China’s second most popular accompaniment to beer, after peanuts: cooked chicken feet.

Mrs. Wu seems typical of many modern urban Chinese homemakers – open to innovation and the advances of modernity, curious about and eager to try “foreign” flavors. For example, she confessed to an interest in preparing Mexican dishes after trying that cuisine at a restaurant. Nevertheless, she is deeply rooted in her own culture and her tastes are defined by cooking rituals and routines that she learned as a child.

**Hardly comparable**

It is apparent that when purchase preferences, preparation techniques and cooking methods are considered, eating chicken in China is hardly comparable to its counterpart in America. Here, we prefer the chicken breast to the disadvantage of remaining parts. We discard skin and fat due to health concerns without consideration of what we are giving up in terms of flavor. Eating tendons and soft bones is alien to our expectations. We crave a light chicken flavor enhanced by a range of oils and spices appropriate to the dishes being cooked. When the final flavors are compared, it is hard to believe that we are indulging in the same species as the Chinese.

The implications of these findings are clear for flavorists, restaurateurs, chefs and other food developers: The sensory experiences afforded during eating and drinking foods and beverages cannot be divorced from the conditions of their cultural production. To do so risks missing an understanding of how important flavor components affect perceptions of authenticity and, ultimately, satisfaction with the final product. Product developers like Givaudan have recognized that a proper understanding of flavor must include an appreciation of the culturally-based expectations and perceptions in which they are grounded. | Q

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