

Cultural and historical trends and influences of food, nutrition and cuisine on health and development

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The distinctive qualities of the cuisine of Hangzhou are the result of its geographical situation, which provided good soils, reliable rainfall, a lake that has been a water source and renowned beauty spot for centuries. The rich water-sources facilitated the development of gastronomy, agriculture, trade and administration, especially after it became the capital of the Southern Sung Dynasty. Hangzhou's food sources are especially diverse, notably for fish, green vegetables, fungi, and tofu, and have been since early records. As capital, it became a leader in cuisine, and in the development of the restaurant industry. The strength of food traditions has been reinforced constantly by the cultural, medicinal, nutritional, and social values of food and cooking, by the interest of Chinese scholars in food and wine, and by the narrative that accompanies specific dishes.

Key Words: Hangzhou history, restaurants, traditions, gastronomy, trade, cuisine, culture

Hangzhou and Zhejiang: culture and history, the basis for successful agriculture, horticulture and aquaculture in the Zhejiang region

*"Geography...helps us to discover the slow unfolding of structural realities, to see things in the perspective of the very long term."*¹

History starts with geography. Others will identify the characteristics of the cuisine, but this is primarily a view of why the food of Hangzhou and Zhejiang are as they are. How did the cooking of Hangzhou and surrounding area come to be as they are? Life expectancy in this area is higher than the Chinese average: about 75 for men, even higher in particular places, such as Huzhou. In the so-called longevity villages, an absence of certain diseases – notably cancer – has been noted, along with increased life expectancy. Why should this be so? Is it something in the food?

The geography of Hangzhou is crucial. Hangzhou itself means "the city reached by water", and it would be hard to overestimate the importance of water in this Eastern province. Water for Hangzhou in particular and Zhejiang in general means more than access, more than a way of reaching the city and traversing the province. The roles of water might be thus classified as outlined below.

Human use: hygiene, cooking

Without reliable water supplies, there can be no city life. The West Lake was a source of drinking water in the southern Sun Dynasty, fed by reservoirs known as the Six Wells. Until comparatively recently, in a number of cities in Zhejiang, canals served the same purpose that well water served in many European cities. For example, springs were channelled into fountains in many French towns – in the 1970s, I saw villagers using the fountain to wash food and dishes in Provence. In May, I watched a woman rinsing out the wooden lavatory pot in a canal in Suzhou. In past

times, canals were used for washing vegetables. Their use has been restricted by water pollution, which I was told had come with modern detergents, and also from the use of agricultural chemicals. In any case, before water was piped into houses, the availability of reasonably clean water for cooking and washing was essential for an ongoing community.

Agricultural use: for agriculture and horticulture; aquaculture

The dense agricultural use of land – particularly for rice cultivation – needs good water supplies. Rain may provide much of it – and dryland agriculture is common in other countries – but for rice and green leafy crops, abundant water is essential.

Water also provides the basis for another food source – fish. A report in *The Economist*² named China as the world's biggest supplier of fish, and certainly the largest producer of farmed fish, with an estimated 70% of the world's farmed fish and aquatic plants. That report said: "As people get richer, they eat more fish." However, in many cities and areas of Zhejiang, and most notably Huzhou, fish has been a staple for the rich and poor alike. Marco Polo commented in amazement on the fish markets: "Anyone who should see the supply of fish in the market would suppose it impossible that such a quantity should ever be sold; and yet in a few hours the whole shall be cleared away; so great is the number of inhabitants who are accustomed to delicate living."³

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Transport (including military and commercial)

The canal system was essential for Hangzhou's growth. The Grand Canal, in particular, which was lengthened in the Sui Dynasty of the 7th century, and in the Yuan Dynasty of the 13th century, was the major transport artery between the north and south during three dynasties (Yuan, Ming and Qing) and enabled cultural and economic exchange. The Grand Canal is particularly important as the connector between north and south – in China the rivers flow west to east. The Canal runs from Beijing to Hangzhou, about 1800 kms, and connects five rivers. Its importance remained until the railway system developed during the 19th century. In addition to that were smaller canals that ran through the city, and linked with other neighboring cities – enabling the supply of all commodities.

Cultural use: leisure and beauty

It would be hard to overestimate the importance of the West Lake, both as a water source and a source of aesthetic pleasure. Aesthetic appeal is integral to Chinese life. There are many West Lakes, but Hangzhou's is reputed to be the best. Originally no more than a shallow inlet, this section of the Qiantang river was dredged and dammed off in the eighth century to form the lake that exists today. It was also at this time that the lake's design was enriched with the picturesque north-south Su causeway and the east-west Bai Di causeway. The western shore was first landscaped in the Southern Sung Dynasty, extended in 1978, and again this year. West Lake is credited with no less than 10 spots of great beauty, and is so important an attraction that water is being diverted in a major project that comprises a water pipeline network and two water processing plants (daily capacity of 300,000 and 100,000 cubic meters respectively), which will pump water from the Qiantang River and send it to the lake.

Manufacturing

Essential now, for the manufacture of wine, soft drinks, and other foods and textiles. Equally, in the past, essential for the manufacture of wine, many food technologies, and textiles. That Hangzhou was a rich water-source may account for its special place in gastronomy, agriculture, trade, and administration, since it facilitates all of them. It is in a particularly favored location, as are many of the cities of Zhejiang, with their network of rivers, lakes and canals. A well-favored location – one with good access, reliable water supplies, and good soils – is likely to be very successful in terms of sustaining a population. It is also likely to be highly desirable to others, which is why there are invasions and migratory hordes.

Hangzhou has always been well favored, and has been so preceived especially from the time of the Southern Sung dynasty. It is a very fertile area – and as far as we know, tea and rice cultivation started here very early. It's likely that tea was grown around Huzhou during the Han Dynasty; certainly by the Tang Dynasty, (770AD) the Emperor Tang Daizong established a tea processing base in Changxing in Zhejiang.⁴ The history of rice is a paper in itself; the important thing is that tea and rice have a long cultivation history in Zhejiang.

Both have great cultural as well as nutritional importance – and the two crops are probably indicators. That is to say, if tea and rice can be cultivated, many other things will be, too. Both tea and rice require concerted cultivation and harvesting, and a real labour force. Tea and rice are also credited with being two of the staples for family life – the others being firewood, oil, salt, soy, and vinegar.

The connection between the development of the food culture and Hangzhou as a seat of government during and after the Southern Sung dynasty

Hangzhou's greatest flowering was during its time as capital of the southern Sung dynasty, and that period was probably decisive for Chinese cooking. The capital had been Kaifeng until 1126, when the barbarian Ju-chen horsemen took that city. Hangzhou was a provincial capital, but not greatly significant, because it was off the main commercial highways. According to one writer⁵, it was surrounded by lakes and muddy rice-fields – not at all good for horsemen, which would have been a great attraction in the search for a city that could be protected from the Ju-chen. From that we may also deduce the importance of rice cultivation around Hangzhou in the 12th century.

Its other virtue, as candidate for imperial capital, was its beauty: This is a 13th century description: "Green mountains surround on all sides the still waters of the lake. Pavilions and towers in hues of gold and azure rise here and there. One would say, a landscape composed by a painter."⁶ Geography, again, determining history – although the landscape had been partly man-made from the 6th century onwards.

The relocation of the imperial court meant that Hangzhou's importance increased massively – it was a major administrative city as well as becoming an important trade centre. By the end of the 13th century, about 1270, this was said to be the richest and most populous city in the world, with a population estimated by some sources to be one million.⁷ This had a significant impact on its food history. Food writer Ken Hom believes that Chinese cuisine "crystallised into its distinctive, enduring form" during the Sung Dynasties (960-1279).

"Over these three hundred years, her [i.e. China's] cooks, food writers, nutritionists, elite customers, merchants, and food vendors deliberately created a style of cooking and eating. They established and applied a set of attitudes about food and its place in society to an abundant and varied supply of ingredients. By the end of the Sung era, China had established a cuisine of great sophistication. Its high standards maintained tradition but nonetheless allowed for experimentation and innovation, demanding only that the new dishes were appealing to the eye and the palate."⁸

Food carries a much greater weight in China than it does in most European (or European-derived) countries. It has cultural, medicinal, nutritional, ceremonial and social values. Its closest European counterpart is France, in terms of its place in the cultural life of the country. Certainly, too, the two styles of cuisine rely heavily on technical skills, and draw their inspirations from varying social culinary traditions. That is to say, peasant cooking can be

incorporated into *haute cuisine*. What's more, an interest in food is not the province of any particular social class.

The restaurant industry, in a form recognisable to modern diners, developed in Hangzhou. Records are very detailed¹, and it is possible to recreate restaurants (including their management style, décor, and menus) from records. There were five distinct styles of eating place, according to the records, including wineshops and teahouses. The categories still exist – though I'm not suggesting the tradition was unbroken.

What did they eat, what did they drink? From all accounts, there was an enormous range. The imperial banquets lasted for days. According to Mr Yu, the director of Lou Wailou restaurant, the royal households of the Southern Sung Dynasty all had their own chefs, from the south, who used locally available ingredients – of which there was an especially wide selection.

The interesting point about cuisine during that period was that it was not only driven by the emperor. Those distinct styles of eating places catered for all kinds of people within the most populous city in the world – bureaucrats, merchants, artisans, professionals.

Restaurants and tea-houses occupy a particular importance in China. They provide cooking and entertaining facilities not usually found in private homes. At the time of the Southern Sung Dynasty, across the world in medieval Europe, lavish entertaining was possible only in palaces. For most people, cooking was done in a fireplace. There were certainly taverns in 14th Century London, and we have records of complex food laws, as well as laws to prevent water pollution. At that time, and until the Reformation, food consumption was also defined by religious strictures (feast days and fast days) and there was a strong sense of the medical nature of foodstuffs.¹⁰

English cuisine has lost more than Chinese cuisine has. It has lost the religious calendar, and a sense of the medicinal nature of food that was so apparent in earlier centuries. The medicalisation of food is a slightly different matter from the enumeration of medicinal virtues. In England and other European countries, and also in Australia, especially in the more recent generation or two of prosperity, the expectation is that the best food is served in a private house. In China, restaurant entertaining is still pre-eminent, no doubt because large restaurants have a remarkable range of facilities, and also because of the limited size of private housing.

There was another factor in Hangzhou's growth – an increasing merchant class, thanks to a growth in sea trade. China's maritime power was immense,¹¹ and at this time, around the 13th century, trade seems to have shifted from the Silk Routes to sea routes. The merchants described by Marco Polo and other travellers, the archeological relics of seawrecks and their cargoes, are evidence of a teeming commercial life.

In world terms, the more varied the diet, the more nutritious, and the healthier the populations. The food of Hangzhou is extremely varied – most especially in terms of fish and vegetables. For non-Chinese, and for an Australian in particular, the range is quite remarkable. The fish banquet that Huzhou recently proposed (100 different fish dishes) as a touring banquet to show its gastronomic strengths would be unthinkable in Australia.

Especially in the time of the Southern Sung dynasty, the foods were varied: "Eighteen different kinds of haricot and soya beans were cultivated, nine kinds of rice, eleven kinds of apricots, eight of pears, and there was hardly a vegetable or fruit that did not have a large number of different varieties."¹²

What was true then is true now. Hangzhou's situation means it has fish from rivers and lakes, easy access to fish from the sea, vegetables from the gardens, rice from the plains, geese and ducks from the lakes, and pigs from farms in the vicinity. There's no mention of chicken, although it seems to be a reasonably common food in Zhejiang, more common than duck. Hangzhou also has the benefits of any commercial zone – new foods and ideas always coming in.

In regional terms, this is fish and rice country – but in Zhejiang, there is the full range of soy products, bamboo shoots, funghi, and green vegetables. Significantly, there is little change in the seasonings: pepper, ginger, pimento, soya sauce, oil, salt and vinegar. Sugar is not there, which is interesting, because the use of sugar is very characteristic of Zhejiang cooking. How it came to be used may be a very long story – although the Chinese took sugar cane from Papua New Guinea, its native home, we don't know whether they processed the cane juice into sugar. That was certainly a technique known by the Arabs, and since they were an important part of trade from about the 10th century, it's possible they brought sugar as refined product.¹³

Wine, raisins and dates were imported into Hangzhou during the Sung dynasty. Records show that Arab merchants offered dates to honoured guests. The trading routes, whether by the Silk Route or by sea, are of immense importance. They brought people and ideas – even Buddhism – and wealth. Certainly there were Muslim and Jewish communities – Jews were sometimes known as blue-capped Moslems – in Hangzhou when it was capital. There was certainly a considerable Jewish community in Kaifung, perhaps even as early as the 3rd century, but certainly from the 10th or 11th, and they came south after the invasion. Jews were among the most important traders from about the 8th century, their trading routes extending from Spain to Egypt, India, Malaya, and to China.¹⁴

After the Mongols, Hangzhou never really lost its importance. It was always known as a city of commerce, of learning, and of silk manufacture. Commerce and silk – not to mention tea and rice – are guarantees of trade. Trade ensures new ideas, and new technologies. It is possible that Hangzhou's eminence as a city is one region why its cuisine is not much known outside China: most emigrants have been Cantonese, and they have taken their style of cooking with them to other countries.

Food is very much part of the Chinese package. What differentiates China from many European countries is that those with learning – the scholars and the poets – showed interest in food and wine. In many European countries, the rich and the powerful showed interest, because certain foods or styles of eating are status symbols. So they are in China, too, but the difference is that non-Chinese philosophers and poets are, for the most part, unlikely to devote themselves to food matters.

As Jean-Francois Revel says: “There exists in China a vast gastronomical literature....Although a man of letters in the West, and particularly in France, is not looked down upon if he manifests an interest in gastronomy, it would nonetheless not be considered a serious endeavour were he to write a treatise on cuisine....China, on the contrary, is perhaps the only country in the world in which scholars, philosophers, moralists, political thinkers, and poets have personally written treatises on food and put together collections of recipes.”¹⁵

Add to that powerful alliance of intellect and food the further bond of food with medicine, and we see that food (including tea and wine) occupies a position that is unassailable. We come back to the cultural, medicinal, nutritional, and social values of food. Chinese culture is conservative – that is, it conserves what it values. The value placed on ancestors is a powerful tool of conservatism. This does not mean that the Chinese are slow to embrace new technology – indeed, in centuries past, they invented much of it. But we can observe in all the Chinese herbalists and traditional Chinese medicine practitioners a strong link to past knowledge and customs. For all these reasons, Chinese cooking has maintained its dishes – even through the turmoil of the Cultural Revolution, of the Japanese invasion, and of countless other trials.

In 1969, one influential publication prematurely announced the death of Chinese cooking. The Time-Life series, *Foods of the World*, included a volume on *The Cooking of China*.¹⁶ “Chinese cooking has been destroyed in China, and would be dead today if it were not for the many custodians of its secrets who got out in time, taking with them priceless knowledge....Chinese cuisine, surviving the nation that created it, has become the most distinguished exile in history.” The author of that, Emily Hahn, may have been right at the time, but she underestimated the power, and the staying power, of Chinese cooking.

Regional culinary societies and local restaurants have played a large part in reviving dishes. They have been able to rely on all the written records – “textually anchored memory”¹⁷ – as well as the skills of chefs and home cooks.

There’s another interesting factor in the transmission of Chinese cooking. Dishes have stories. Once upon a time there was a scholar, once upon a time there was a beautiful girl, in this dynasty there was a poor woman, in that dynasty there was a man... time and again we eat banquet dishes that recall the people of the past. Another striking thing about these dishes – whose stories are sometimes reflected in their presentation – is that they present a powerful message: good cooking is not the province of the rich and powerful. A poor girl may please an emperor with her cooking, and an ugly grandmother may give generations of delight. Food in China often seems to have the same importance as religious art in Italy – a means of transmitting values.

Dishes also have distinguished names. Ken Hom includes Tung Po Pork in one of his books: “This delicious dish is named for Su Dongpo, a famous poet, statesman, and gourmet of the Sung Dynasty, a combination of talents not uncommon in China. I certainly admire him for his many culinary skills and also for inventing this delicious dish.”¹⁸ The same man gave his name to the Su Causeway

of the West Lake.

In modern times, there is a secondary measure of the success of a cuisine: how attractive is the cuisine to others? That is an important question when tourism and culinary tourism are of importance to the economy. It also raises some other issues that have emerged in European countries that have been attractive to Americans and British. Tourists can destroy the thing they seek – the individual and distinctive qualities of a city and its cuisine are often threatened by tourists who want the familiar. Money matters: few restaurateurs will refuse to cook for people who will pay, even if the chefs have to cook things they don’t much care for. The *menu touristique* is, by and large, a disaster.

The renewed traditions of the past, accessible through text and storytelling, seem to be providing a way to the future. The cuisine of Hangzhou, the yellow wines of Shaoxing, the cuisine of Huzhou – and other cities – are powerful marketing tools for the cities and the region as a whole. Within the cuisine of Hangzhou must be included its tea houses, which provide a range of benefits. There are social benefits, there are tourism and thereby economic benefits, and there are almost certainly nutritional benefits through the flavonoids in tea.

The importance of Hanzhou did not end with the Mongolian invasion. An 1880 account has this to say: “Up to 1860, when it was laid in ruins by the Taipengs, Hangchow [sic] continued to maintain its position as one of the most flourishing cities in the empire, and although for a time it lay comparatively desolate, it has considerably recovered within recent years”.¹⁹

The historical trends in technological development and health in the Hangzhou region

Technology is not new to Chinese food production for millennia. Food technologies include those for tea, rice, wine-making, tofu. There are also food preservation technologies – salting fish, drying fungi. Agricultural technologies include those for irrigation and fertilisation.

Food technology has in recent years moved in different directions, with the growth of food manufacturing industries. All these are covered in subsequent papers. One thing to be noted is that there are continual advances. What this year’s SARS epidemic showed very clearly was Zhejiang’s ability to deal with a public health crisis of this magnitude. Within a startlingly short time, a number of measures were introduced: monitoring body temperatures, public education campaigns, and an insistence on hygiene in public places. The cleaning regimens that were introduced at that time have a major and ongoing role in public health.

The impact of changes in birth control technology – not only in China – have yet to be evaluated in nutritional terms. Smaller families (mother, father and one child) may eat differently from traditional extended family groups, since the number of dishes is likely to be reduced.

Cooking patterns are also likely to be altered in smaller family groups, since both parents are likely to be working outside the home, and, especially in the bigger cities, in line with other developed countries, more food will be eaten outside the home.

The trend in Zhejiang has been to embrace new technology – from the building of causeways on the West Lake, to rice and tea production, aquaculture and horticulture. The impact of newer food technologies (especially in the manufacture of snack foods and soft drinks) are still to be assessed.

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Food is central to the cultural and religious practices of most communities. For this reason, understanding and appreciating the food and food practices of another culture is part of building your own cultural competence. What people eat is also important to their long-term health. For readers who are involved in nutrition education, there is also a section on culturally appropriate ways to approach this.

1. Traditional greetings and etiquette. Social determinants of health and other influences. Poor English language skills may deter some Chinese migrants from using mainstream healthcare services. This group may also be at risk of poorer social and economic outcomes, which may further impact on their ability to access healthcare. For most people food is cultural, not nutritional. A plant or animal may be considered edible in one society and inedible in another. Acculturative and environmental change influences the food habits and health of transitional groups. Nutritional assessment may be complicated by cultural variation. The relationship between ethnicity and nutrition may be of evolutionary significance. Food beliefs may have beneficial or detrimental effects on health status. In parts of Africa, poor storage methods have resulted in the development of toxic elements in rice. In short, epidemiologists and public health workers who recognize a need for better nutrition must consider the traditional methods of growing and storing food. However, it is not enough merely to arrange to increase the available food supply. Cultural influences are however amenable to change: when moving to a new country individuals often adopt particular food habits of the local culture. With the majority of adult women and men in employment, the influence of work on health behaviours such as food choices is an important area of investigation.

1.4 Meal patterns.

People have many different eating occasions daily, the motivations for which will differ from one occasion to the next.