

Pepper to Sea Cucumbers

Chinese Gustatory Revolution in Global History, 900-1840

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Summary

This dissertation addresses a long-standing question in Southeast Asian historiography, namely: Why did two seemingly irrelevant edibles, pepper and sea cucumbers, feature so prominently in Southeast Asian exports to China in the early modern period? It approaches this question through an intersection of Chinese cultural history and Asian maritime history. It argues that pepper and sea cucumbers were two of the most important edible exotics in Chinese food history and represented two distinct food cultures. These two cultures became important in two different stages and were associated with two broader worlds. Pepper became a popular hot spice in Chinese cuisine during the Mongol Yuan period, when the Mongol Conquest of China and Persia created a trans-Indian Ocean empire and facilitated the circulation of pepper from South India to China through a trans-Indian Ocean trading network. Sea cucumbers became a coveted sea delicacy in Chinese high cuisine in a much later stage, roughly from the late sixteenth through the eighteenth centuries. During this period, a cross-China Seas world of sea cucumbers emerged in association with the Manchu Conquest of China and the Dutch and British expansions in Southeast Asia.

Connecting these two worlds, this dissertation contends that there was a Chinese gustatory revolution in between. That revolution mainly took place from the fourteenth through the seventeenth centuries and was energised by theoretical debates in Chinese medicine. These debates began with criticisms from a prominent physician, Zhu Zhenheng (1281-1358), who favoured cooling agents and discredited the mainstream medical culture of his age which preferred warming exotics like aromatics and spices. Zhu criticised the supposed fire and hot nature of pepper and developed deep concerns over its popularity as a condiment. Zhu's teachings became influential among elite physicians in China from the fifteenth century thanks to the wide-spread publications of his works, one of which eventually influenced Li Shizhen (1518-1593) in the sixteenth century, leading him to abandon his

own appetite for pepper and to redefine pepper in a very negative way in his authoritative *Systematic Materia Medica*. These criticisms gradually undermined the position of pepper in Chinese dietary practices and caused its retreat from Chinese high cuisine.

Yet, the popularity of Zhu's teachings, which were in some cases over-simplified by his followers, also induced a revisionist movement. From the early sixteenth century, some "warming and replenishing physicians" began to revisit the cooling culture. They argued for mildly warm and sweet medicines, such as ginseng, to balance the strong side-effects of cooling agents. Along with this movement, sea cucumbers, known as sea ginseng, appeared in Chinese high cuisine from the late sixteenth century. They were constructed as extraordinary ginseng from the sea that was at once warming and replenishing and able to nourish the water and yin of the kidneys. The former was essential for the warming culture and the latter addressed a major concern of the cooling culture as the water and yin of the kidneys were considered as most essential for balancing internal fire and yang in Zhu Zhenheng's medical theory. As a result, sea cucumbers arose as a perfect therapeutic amid these debates.

These medical debates had further manifestation in the change of Chinese taste-scape. Zhu Zhenheng extended his criticisms of spices and aromatics to all condiments with a strong flavour. This aversion to strong flavours was welcomed by Chinese literati who viewed blandness a key aesthetic value. Pepper for its strong hot spiciness was, therefore, rarely mentioned in literati-styled recipe collections which began to define Chinese high cuisine from the late sixteenth century. Into the seventeenth century, the pursuit of blandness was however subject to an important revision, as some literati-turned gourmets distinguished a subtle flavour, *xian* (鮮), as an aestheticised flavour more desirable than blandness. They suggested to use broths to store and transmit this elusive flavour. Along with this change, a select group of delicacies supposedly from the sea, including sea cucumbers, edible

bird's nests, shark fins, and abalones, became perfect food ingredients, because they were all deeply dried and had either gelatinous or fibrous texture to generously absorb *xian* flavour-rich broths.

The transition from pepper to sea cucumbers should not be isolated from the broader world in which these two edible exotics were situated. Without the large-scale circulation of pepper from the Indian Ocean World to China in the wake of the Mongol Conquest, there was likely no such strong concern from Zhu Zhenheng against the wide-spread use of pepper as a popular condiment in Chinese cuisine. Likewise, without the emergence of the cross-China Seas world, sea cucumbers might not have become available to Chinese consumers in such abundance and diversity. In any sense, the planting, fishing, and processing technologies developed by non-Chinese communities at the margins of these two food-defined worlds mattered to the gustatory experience of eating pepper and sea cucumbers in China no less than Chinese cooking technologies and Chinese cultural interpretation of their medical efficacies. Taking these issues into consideration, I believe that the Chinese gustatory revolution not only connected the trans-Indian Ocean world of pepper and the cross-China Seas world of sea cucumbers, but could not take place without them.

These arguments are presented in four long chapters. Chapter one focuses on why pepper was initially received in China in a positive way. It shows that pepper was appropriated by Chinese medicine from Ayurveda from the seventh century together with a group of warming exotics. From the seventh through the eleventh centuries, they became increasingly used in a popular therapy known as “warming the centre” for taking care of the two paired viscera supposedly responsible for digestion, namely, the spleen and the stomach. That practice created a close connection between pepper and food intake.

Chapter two further explains why out of these warming exotics, only pepper became a popular condiment. It shows that pepper was special for its lack of remarkable aroma and its idiosyncratic hot spiciness. It therefore assumed no function in Chinese smell culture but was strongly associated with

food. The Mongol Conquest further provided a major spur to the popularity of pepper as a daily-used condiment, as it led to a trans-Indian Ocean world, making pepper unprecedentedly available to the Chinese consumer market. This change, however, also aroused criticisms from Zhu Zhenheng and induced pepper's retreat from Chinese high cuisine in the coming centuries.

Chapter three moves to sea cucumbers. It shows that the rise of sea cucumbers should be understood as a final stage in a chain of major changes in Chinese perceptions of seafood. These changes turned a group of preserved food ingredients supposedly from the sea, including sea cucumbers, edible bird's nests, shark fins, and abalones, into top sea delicacies. Among them, the rise of sea cucumbers and edible nests was especially related to the retreat of pepper, because they all drew on theories from the same medical debates.

Chapter four discusses how a cross-China Seas world of sea cucumbers emerged from the late sixteenth through the eighteenth centuries. It shows that Chinese consumers originally only appreciated sea cucumbers from the temperate waters of the North China Sea and the Japan Sea because their northern origin and black surface manifested perfect affinities with the theory of nourishing the water and yin of the kidneys in Chinese medicine. However, from the end of the seventeenth century, the fishing and trading communities in the eastern Indonesian Archipelago began to challenge that gustatory hierarchy by proposing increasingly diversified and deep-processed tropical varieties. Throughout the eighteenth century, their strategies gradually worked and caused the rise of tropical sea cucumbers in Chinese cuisine, which in turn induced a southward expansion of the world of sea cucumbers to northern Australia.

In conclusion, although Chinese consumption of pepper and sea cucumbers seems to be a topic too trivial to deserve attention from researchers living in the age of COVID-19, it provides a different angle to understand how the modern world as we know today emerged. Students of global history are surely familiar with a powerful narrative that European pursuit of spices, sugar, and tea was crucial for

the early modern globalisation and the rise of the modern world economies. What is much less discussed is how non-European societies' taste for edible exotics also mattered to the same processes. This study, through addressing why pepper and sea cucumbers became so important in early modern Southeast Asian exports to China, reveals at least three points: 1) Chinese society developed strong demand for edible exotics represented by pepper and sea cucumbers; 2) That demand was dynamically changing over time, as manifested in the gustatory revolution from pepper to sea cucumbers; 3) That change had close connections with the rise of empires and networks in maritime Asia, such as the Mongol, Ming, Dutch, Manchu, and British empires and the Chinese, Bugis, and Sulu's networks.