

was well before the Enlightenment. Attacks on money lending at interest go back even earlier than Jesus on the temple steps. Recall Aquinas's ideas about the "just price." One mustn't forget Shakespeare's Shylock, either. Tax collecting for kings and emperors requires economic management skills, but no one likes to pay taxes. In a prize-winning book (*1*), William Coleman showed how over the centuries the very idea of economics has been loathed by left, right, and center; Christian, Jew, and anti-Semite; pope and communist dictator; lawyer and business mogul; and scientist and humanist.

In this same tradition of anti-economics, Marglin sees the future of the field as bleak, with the current generation of economics students avoiding large questions in their search for career advancement. And the problems that economics creates will only get worse, he claims, because globalization will make the national community as obsolete as the market has made the local community.

I note in closing that the lead dust-jacket blurb for this volume was provided by the noted economist and social theorist Bianca Jagger (sic). Whatever was Harvard University Press thinking?

Reference

1. W. O. Coleman, *Economics and Its Enemies: Two Centuries of Anti-Economics* (Palgrave Macmillan, New York, 2002).

10.1126/science.1157088

PHYSIOLOGY

Toward the Dominance of Vision?

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If we want to know the time, we look at a clock; if we want to find out whether the milk is still fresh, we check the expiration date printed on the carton. Mark M. Smith's *Sensing the Past: Seeing, Hearing, Smelling, Tasting, and Touching in History* reminds us it has not always been like that. There was a time when the ring of a bell signified the hour and we decided whether the milk has soured by sniffing or tasting it. *Sensing the Past* traces how the relevance of the individual senses has changed through the years. Smith's reading of

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Fragrant rose. "Rosa graeca" (Dutch, late 16th century).

the extensive historical and anthropological literatures leads him to challenge the theory, championed by the pioneers in sensory history (*1, 2*), that around the time the printing press was invented vision began to replace taste, smell, touch, and hearing. Smith (a historian at the University of South Carolina) argues that nonvisual senses continue to be relevant in the modern world.

Consequently, the book examines the historical and present-day use of each of the five senses in equal depth and stresses the importance of interactions among them. The author collects his examples from different historical periods and includes studies from around the globe, although the dominance of primary literature dealing with Western history makes a truly balanced account impossible.

Some studies support the notion that there is a tendency toward an increasing importance for vision. For example, roses were once primarily prized for their scents. Since the Enlightenment, cultivators have selected roses for their looks, which has led to the big, beautiful, but scentless blooms on long stems that we now buy on Valentine's Day. Other observations support Smith's suspicion that this trend toward vision is not universal. Taste, smell, and touch gained in importance relative to vision in American supermarkets. In place of "don't touch" signs that were ubiquitous in the early 20th century, we now find customers squeezing and sniffing the displayed fruits. The parallel rise of international trade and the importance of taste offers another instance of

a nonvisual sense gaining importance. In Europe, trade introduced sugar, potatoes, coffee, cacao, tea, peppers, and exotic fruits into the diet on a large scale—which led to eating habits no longer based on availability but on, well, taste. With the increase in options, taste was elevated to a sense of social, cultural, and political importance.

Cases like this, in which sensory perception is of social and political significance, make up most of the book. For example, Smith points to the "stench of the working class" and the almost entirely social meaning of the "lowest of the senses" (touch), which is intimately associated with ownership and therefore with power. Slaves could be touched and beaten at will by slaveholders, and men did "push women, rub against, hit, and sexually assault them in private and public." Touching served to reaffirm status and assert authority. The book's most detailed discussions concern slavery and race in the American South, the topics of earlier books by Smith. He retells the fascinating story of a "visually 'white' 'black' man" in Louisiana who was refused a seat in a car for white

passengers on the train—the *Plessy v. Ferguson* case (1896) through which the U.S. Supreme Court enshrined the "separate but equal" doctrine. Illustrating the arbitrariness of the alleged dominance of vision over the other senses, Louisiana's attorney explained that "I might not be able to see that he is black, but I can certainly smell his racial identity."

With its overview of recent studies, *Sensing the Past* offers an informative and entertaining introduction to the underappreciated field of sensory history. The extensive bibliography makes it a valuable resource for readers who wish to further explore historical changes in the relative importance of the senses. For a neuroscientist like myself, this short book is an important reminder that "sensory perception is a cultural, as well as a physical act." How something looks, smells, feels, tastes, or sounds depends on the physical properties of the stimulus, on the workings of the brain, and on the cultural context.

References

1. M. McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Univ. of Toronto Press, Toronto, 1962).
2. W. J. Ong, *Orality and Literacy: The Technologizing of the World* (Routledge, New York, 1982).

10.1126/science.1157191

Sensing the Past

Seeing, Hearing, Smelling, Tasting, and Touching in History

by Mark M. Smith

University of California Press, Berkeley, 2008. 190 pp. \$55. ISBN 9780520254954. Paper, \$19.95. ISBN 9780520254961.