

EPISTEMOLOGIES OF THE KITCHEN:
ART, SCIENCE, AND NINETEENTH-CENTURY BRITISH CULINARY WRITING

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Bonnie Shishko

Epistemologies of the Kitchen:

Art, Science, and Nineteenth-Century British Culinary Writing

“Epistemologies of the Kitchen” traces the evolving and often fraught history of the recipe as a vehicle for culinary reform in nineteenth-century England. I focus in particular on what celebrity cookbook writer Eliza Acton called the “improved system[s] of practical domestic cookery,” or the plethora of culinary genres developed and revised in response to the growing desire to reform working- and middle-class culinary practices. I argue that we can best trace these cultural and culinary-literary reforms through a study of the ways in which the recipe gets remediated across three genres: the scientific treatise, as it appeared in popular textbooks and later in women’s magazines from the 1820s to the 1850s; the “plain” cookbook written for working- and middle-class women, especially from the 1850s to the 1870s; and the aesthetic essay of the 1890s. Scholars of this Victorian reformist movement have done much to uncover efforts in these genres and others to raise cookery from a domestic “craft” to a scientific or aesthetic pursuit. They have done so, however, with limited attention to issues of genre and narrative. This project tracks the formal developments in culinary instruction that I argue accompanied—and shaped—this changing epistemological landscape. As I progress across this range of genres, I call attention to the ways in which these texts work to refashion the technical recipe into a mode of writing that narratively engaged theoretical scientific and aesthetic knowledge. I unpack this argument by isolating three reformist models of cookery, which I call “experimental,” “principled,” and “visual.” Designed to unsettle traditional representations of cookery as a learned skill or practice, each of these

models offers instead a type of culinary knowledge built on, respectively, chemical analysis, the nutritional “principles” of food, and the “subjective” mode of art criticism prominent in the *fin de siècle*. By tracing the ways in which these culinary writers embed, reshape, or work to displace the recipe from their genres altogether, I illuminate the extent to which engagement with the recipe became a central means through which they revised culinary knowledge throughout the nineteenth century. A sustained attention to the recipe’s formal developments within these culinary genres, I argue, allows us to see that the Victorian desire to elevate domestic practice ultimately transformed both the cookbook genre and the recipe as dominant modes of culinary instruction.

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1. Original copperplate frontispiece from Friedrich Accum's 1821

Culinary Chemistry

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Introduction

In April of 1873, the commissioners of the Great Exhibition of 1851 launched another International Exhibition, “the third in a series of ten to be held annually in South Kensington.”¹ On April 8th, a week before the Exhibition was scheduled to open, an article in *The Times* offered readers a peek into its galleries. After touring the handicrafts, works of visual art, textiles, “scientific inventions,” and machinery on display, the article closes by noting a new addition to the exhibition grounds: “a school of cookery,” featuring “daily lectures” and “actual dishes” prepared during live demonstrations and available for tasting “for a small fee.”² This school, the article surmises, “will probably prove very attractive.”

The Times was right. Three weeks later, on April 25th, 1873, the paper ran an article focused exclusively on “Cooking at the International.” Pointing to the “closely-packed chairs” and “the crowds who daily throng the kitchen,” the piece declared the “Popular School of Cookery” to be “one of the most attractive features” of the Exhibition.³ By May 12th, the paper reported that not only was the demonstration room itself “densely crowded,” but “large numbers” of “anxious learners” were “daily turned away from the doors of the School of Cookery.” “If a stranger were required to declare what was the most fashionable pursuit at this moment in London,” the article concludes, “he would probably answer ‘cooking’ if he had visited the International.”⁴ Indeed, during the six months of the “popular school of cookery’s” tenure at the Exhibition, the school’s

¹ “The International Exhibition,” *Routledge’s Popular Guide to London*, (London: England) 1873.

² “The International Exhibition,” *The Times* [London, England] Apr. 8 1873; pg. 8.

³ “Cooking at the International,” *The Times* [London, England] Friday, April 25, 1873; pg. 4.

⁴ “Popular Cookery.” *The Times* [London, England], Monday, May 12, 1873; pg. 9.

sole lecturer, John Charles Buckmaster, gave three hundred and eighty-seven lectures to over 65,000 exhibition attendees.⁵ During this time, audiences ranging from enfeebled pensioners to “stout middle-class housekeepers” to “fashionable ladies”⁶ to Queen Victoria jostled for seats in his lectures.⁷

The plethora of publishing around cookery that emerged throughout the Victorian era demonstrates that the Exhibition’s “School of Cookery” was not an anomaly, but representative of a larger Victorian interest in learning about and forging a public discourse that treated culinary instruction. Although the Exhibition’s organizers were taken aback by the overwhelming response to their “school”—*The Times* notes the Exhibition secretary’s unsuccessful attempts to accommodate the crowds,⁸—they should not have been surprised by its success, for the Victorian era saw an unprecedented demand for culinary instruction. Beginning around mid-century, hundreds of cookbooks and household manuals directed to aspiring middle-class women began appearing, including two of the century’s most widely-read works: Eliza Acton’s 1845 *Modern Cookery* and Isabella Beeton’s 1861 *Book of Household Management*.⁹ Although such

⁵ John Buckmaster, *Buckmaster’s Cookery: Being an Abridgement of Some of the Lectures Delivered in the Cookery School at The International Exhibition for 1873 and 1874: Together with a Collection of Approved Recipes and Menus* (London: George Routledge and Sons, 1874), 278.

⁶ “Cooking at the International” 2.

⁷ Buckmaster identifies his lecture entitled “The Preparation of Omelettes” as one “delivered before her majesty at the school of cookery.” *Buckmaster’s Cookery* 185. Reflecting the socioeconomic diversity of his audience, Buckmaster by turn addresses middle-class women and girls, hired cooks, servants, and the working poor.

⁸ “Popular Cookery” 3.

⁹ As the many bibliographies on the subject attest, it’s difficult to pin down just how many books of culinary instruction were published in nineteenth-century Britain. Three seminal bibliographies, however, give us some idea of the depth and breadth of the nineteenth-century culinary publishing phenomenon. Dena Attar’s *A Bibliography of Household Books Published in Britain 1800-1914* (London: Prospect Books, 1987) lists one thousand, seven hundred and one household books; Elizabeth Driver’s *A Bibliography of Cookery Books Published in Britain, 1875-1914* (London: Prospect Books, 1989), lists three thousand, two hundred and forty-four works on cookery; and Arnold Whitaker Oxford’s *English Cookery Books to the Year 1850* (London, 1913) lists one hundred and fifty-four culinary works published

works at times addressed both middle-class women and their servants,¹⁰ cookbooks were also increasingly produced specifically for the urban working classes. Beginning in the 1860s, for example, Isabella Beeton began mining culinary instructions from *Book of Household Management*, repackaging them in cheap booklets bearing titles such as *Mrs. Beeton's Shilling Cookery Book* and *Beeton's Penny Cookery Book*.¹¹ Perhaps the most concentrated efforts to offer culinary instruction to the poor came from celebrity chef Alexis Soyer, who not only created inexpensive recipes for soup (samples of which he offered at his soup kitchen in Leicester square), but also published cookbooks such as *Soyer's Charitable Cookery: or, the Poor Man's Regenerator* (1848) and *A Shilling Cookery for the People* (1855).¹²

For the Victorian reader, this rising interest in cookery went beyond the cookbook genre, encompassing a wider sphere of print venues. The expansion of the press in nineteenth-century England meant that, beyond a steep rise in the number of cookbooks

between 1800 and 1871. More recently, the University of California, Davis, has begun an ambitious project that seeks to create a searchable database categorizing and citing works of cookery from 1475 to 1914; it draws on several of the above bibliographies. <http://householdbooks.ucdavis.edu/>.

¹⁰ Nicola Humble notes that while many nineteenth-century cookbook writers of the second half of the century aimed their work primarily at middle-class urban women, such texts were often directed at other members of the middle-class household as well, including the cook, upper servants and possibly even husbands. Nicola Humble, *Culinary Pleasures: Cook Books and the Transformation of British Food* (London: Faber and Faber, 2005), 16. Some cookbooks of the mid-to late-century, however, assumed a more homogeneous middle-class reader, although they intended their instruction to be passed down directly from mistress to cook. Mary Anne Barker's popular 1886 *First Lessons on the Principles of Cookery*, for example, explicitly instructs her middle-class reader to use the book as a kind of textbook for training the cook. Such "trickle-down" reception appears to have been not uncommon. Articles appearing in *The Englishwoman's Domestic Magazine* (1861, 1876) and *The Ladies' Treasury* (1871, 1881), among others, delineate such a textual relationship between mistress and cook. Margaret Beetham points out that this relationship could also have been predicated on literacy, which, although increasing, was not universal. See "Of Recipe Books and Reading in the Nineteenth Century: Mrs Beeton and her Cultural Consequences," *The Recipe Reader: Narratives Contexts, Traditions*, Janet Floyd and Laurel Forster, eds. (Lincoln: University of Nebraska Press, 2003), 21.

¹¹ Beetham 19.

¹² For more on Soyer and the astonishing breadth of his culinary career as a chef, an inventor of culinary apparatus, and a cookery writer, see Stephen Mennell, *All Manners of Food: Eating and Taste in England and France from the Middle Ages to the Present* (Urbana: Univ. of Illinois Press, 1996), esp. 151-153.

published in the second half of the century, Victorian readers also encountered culinary material in an increasingly wide range of popular journalism.¹³ Beginning around mid-century, general illustrated women's magazines such as *The British Mothers' Magazine* (1845-1864), *The Ladies' Treasury* (1858-1895) and Samuel and Isabella's Beeton's *The Englishwoman's Domestic Magazine* (1852-1879) began appearing, offering middle-class readers both recipes and longer articles on cookery and household management.¹⁴ While more expensive publications targeted at upper-class readers—such as the drawing-room journal *Victoria Magazine* (1863-1880)—typically included essays on cookery rather than practical advice, hands-on culinary instruction also appeared in penny dailies and other widely-available cheap print forms (Beetham 17).

If, as *The Times* suggested, cooking might be declared “the most fashionable pursuit at this moment in London,” it was not one without internal conflict and tension. At the same time the Victorian appetite for material on the culinary grew markedly, the period also witnessed an increasing discomfort with working- and middle-class culinary practices. Around mid-century, complaints began to bubble up in a variety of arenas about the state of English cookery, with writers arguing that ignorant middle-class housewives and untrained servants produced unwholesome food that threatened the home and, therefore, the nation. Eliza Acton, whose 1845 cookbook *Modern Cookery* proved an enormous hit, argued in a new 1851 edition “that an improved system of practical

¹³ Beetham gives a helpful account of the growth and diversity of culinary instruction in the nineteenth-century in relation to the general rise in literacy and the expansion of the press. See esp. pp. 16-21.

¹⁴ While scholars have identified *The Englishwoman's Domestic Magazine* as the first successful woman's magazine of its kind, *The Ladies' Treasury* enjoyed a longer run than did Isabella and Samuel Beeton's magazine. *Victorian Women's Magazines: an Anthology*, Margaret Beetham and Kay Boardman, eds. (Manchester: Manchester UP, 2001), 32, 38.

domestic cookery, and a better knowledge of its first principles, are still much needed in this country; where, from ignorance or mismanagement in their preparation, the daily waste of excellent provisions almost exceeds belief” (vii).¹⁵ While she laments the waste “in itself” as “a very serious evil,” she argues that “a greater evil still” is “the amount of *positive disease* which is caused amongst us by improper food, or by food rendered unwholesome by a bad mode of cooking it” (vii).

The parallel Acton draws between “practical domestic cookery” and the “evil” of waste and disease in the nation became a common refrain throughout the culinary culture in the second half of the century, and writers routinely called for more—and better—cookery instruction for middle- and working-class women. Gaining particular currency was the notion that what women in fact required was training in “first principles,” or the chemistry of food. Magazines aimed at middle-class women increasingly clamored for such instruction. In the 1860s, an article in Samuel and Isabella Beeton’s magazine *The Englishwoman’s Domestic Magazine* bemoaned the “unwholesome diet and irregular hours of eating” practiced by working- and middle-class men and women.¹⁶ These practices, the article declared, “have produced indigestion, disordered stomachs, [and] diseased livers.” The writer lauds chemical education as the solution. “No one ought to be ignorant of the various nutritious properties of meat, fish, fruit, and vegetables, nor in

¹⁵ Eliza Acton, *Modern Cookery, for Private Families* (London: Longmans, Green, Reader, and Dyer, 1851), i

¹⁶ “Wanted, a Plain Cook,” *The Englishwoman’s Domestic Magazine* (London, c.1860). Launched in 1851, Isabella and Samuel Beeton’s *The Englishwoman’s Domestic Magazine* was the first long-running women’s magazine aimed specifically at middle-class women. Samuel Beeton adopted the format of the drawing-room journal, a journal for ladies with roots in the eighteenth century, reworking it to address the concerns of the middle-class Victorian housewife. As Beetham argues, the magazine is particularly characterized by the link it drew between domestic work and femininity. See also *Victorian Women’s Magazines: an Anthology*, Margaret Beetham and Kay Boardman, eds. (Manchester: Manchester UP, 2001).

what proportions is it safe and wholesome to partake of them, solely or together.” Showcasing the growing belief that the cookery question was a woman question, the article narrows the scope of its criticism from “No one” to women. “Every female” should possess “[s]ufficient theoretical knowledge . . . to judge correctly of what quantity and quality the food of a healthy human being should be.”

Punctuating these complaints was – as this dissertation reveals – an increasing discomfort with the cookbook genre and the ways that it packaged and represented culinary knowledge. From 1845 to 1854, for example, Acton produced no fewer than fourteen editions of her popular cookbook, *Modern Cookery*,¹⁷ arguing in the 1851 edition that the nation needed both “an improved system of practical domestic cookery,” and “a better knowledge of its first principles.”¹⁸ The cookbook genre, in other words, needed to change; to improve its instruction in two areas: practical cookery and culinary “first principles.”

The article in *The Englishwoman's Domestic Magazine* concurred: “we doubt whether the number of cookery books constantly put forth for their instruction have done, or are calculated to do, the good they were intended.” Like Acton, the article points to the need for greater treatment of both practical and theoretical culinary knowledge. “Cookery books,” the article states, “in general . . . rush into the practice before imparting the theory,” or what Acton refers to as “first principles.” This kind of knowledge, the article argues, “should first be imparted—should be instilled as the foundation or groundwork.” The piece goes on to define its version of culinary “theory” through a list of questions:

¹⁷ Caroline Lieffers, “The Present Time is Eminently Scientific’: The Science of Cookery in Nineteenth-Century Britain. *Journal of Social History*, 45:2 (2012), pp. 936-959; 947.

¹⁸ Acton i.

“What are the nourishing or medicinal properties of various vegetables? . . . in what degree the different modes of cooking—*i.e.*, roasting, boiling baking &c.,--increase or diminish the wholesomeness of meat or fish?” Ultimately, the piece concludes that “the choice, use, and preparation of food should be made a branch of education” for “every female.”¹⁹ In 1872, an article in *The Ladies’ Treasury* likewise criticized traditional methods of culinary instruction, arguing that “[i]n most directions to beginners in cookery a very important element in instruction is the omission of one or more of the little matters upon which all success hangs.”²⁰ While domestic servants are “given written or printed rules,”—or recipes—they are not taught the reasons “why” certain foods are prepared in certain ways. “Ask a girl why meat or puddings should be put in boiling water, she does not know,” the writer complains, “but once give her a reason for it, the probability is she never forgets it.”²¹

By the time John Buckmaster took the stage at the “cookery school” of the 1873 Exhibition, his message reflected an attitude towards cookery that had become significantly more self-reflective about its nature as a technical or intellectual pursuit. The exhibit, conceived and organized by Exhibition commissioner Henry Cole, was not designed to teach the techniques of cookery alone.²² Rather, it sought to define and teach

¹⁹ “Wanted, a Plain Cook,” *The Englishwoman’s Domestic Magazine*, Date unknown. Although this article is undated, its emphasis on a need for nutritional theories to accompany practical instruction and its argument that such cookery outranks “plain cookery” instruction places it in line with the language of other cookbooks and culinary miscellany emerging in the 1850s and 1860s. It certainly was published before 1873, however, for by that date, as I discuss later, formal schools of cookery, which the article calls for, were indeed being organized and founded.

²⁰ Unknown, “The ‘Why’ in Cookery,” *The Ladies’ Treasury* (1872).

²¹ Unknown, “Social Science,” *The Ladies’ Treasury*. (London: England. Wednesday, November 01, 1871). pg. 62.

²² Helen Sillitoe, *A History of the Teaching of Domestic Subjects* (London: Methuen & Co. Ltd., 1933), 24. For a more recent account of the Exhibition’s “school,” its so-called “demonstration method,” and its cultural aftereffects, see Dena Attar, *Wasting Girls’ Time: the History and Politics of Home Economics* (London: Virago Press, 1990), 43.

a more rigorous approach to cooking by bringing “the practical application of scientific principles to cookery.”²³ Consequently, Cole chose John Buckmaster, a chemist and physicist who lectured in the Science and Art Department, as the exhibit’s primary lecturer. In his talks, Buckmaster argued that “cooking must be taught as you would teach chemistry, or any other experimental science; for cookery, rightly understood is an experimental science. . . .What you have to think about and understand is always associated with something which you have to do” (112, 145). Arguing that “[a]ny system of culinary education” that did not address both “the theory and the practice of cooking” is “defective,” Buckmaster laid out plans designed by the Exhibition commissioners for the establishment of a national school of cookery, pointing out that “[a] cookery school . . . is a place where the theory and the practice of cooking are taught” both by “lecture” and by “practical work” (253, 270).²⁴

As we can see from these passages, the character of culinary knowledge—as an epistemology, not merely as a learned skill or practice—came under growing scrutiny in the second half of the nineteenth century, with writers increasingly locating two sets of understanding at work in the execution of the culinary: handicraft, or technical skill, and theoretical, particularly chemical, knowledge. Indeed, a common conceit in articles such as those surveyed above was to attempt to establish a set of terms that described culinary knowledge in all its facets. Such articles insist, again and again, that cookery was

²³ Sillitoe 24.

²⁴ On April 16th, 1880, *The Times* ran an article entitled “Schools of Cookery,” wherein it explains that “[t]he lectures on food and its various technical arts which were delivered at the International Exhibitions of 1874 led to the establishment of [the National],” or The National Training School of Cookery. “Schools of Cookery,” *The Times* (London, England) Apr. 16 1880; pg. 10. For more on the development of The National and its effects on the establishment of cookery schools across Great Britain, see Yoxall, Sillitoe, esp. Ch. 3, and Attar 41.

“certainly both” “an art” and “a science.”²⁵ While “art” for modern readers has come to signify the fine arts, these nineteenth-century culinary writers employed it in its ancient Greek sense as denoting a technical craft.²⁶ In a series of lectures given first in 1855 and again to the Society of Arts in the 1880s on “The Chemistry of Cookery,” for example, chemist William Mattieu Williams argued that cookery could be defined as both “technical,” or “an art, trade, or profession,”—which he derives from the Greek noun *technē*—and “technological,” or “the science of the philosophy of anything,” which he derives from the Greek root *logos* (3).²⁷

The archive of cookbooks, popular magazines, and popular lectures I have been assembling here isolate two interrelated struggles that increasingly dominated the Victorian culinary discourse of the 1840s and beyond: the struggle to revise and unsettle

²⁵ See, for example, “The Englishwoman’s Economist,” *The Englishwoman’s Domestic Magazine* (London: England,) 1876; “A School of Cookery,” *The Ladies’ Treasury* (London: England), 1873; E.M. King, “The Science of Domestic Economy,” *Victoria Magazine* (London: England), 1875; and Helen Blackburn, “Article IV,” *The Englishwoman’s Review* (London: England), Issue LII, 1887.

²⁶ Culinary writers were not alone in their attempt to bring scientific explanations to bear on craft practices; this impulse fits into the larger intellectual culture of the Victorian era, particularly after 1850. As historians of science have noted, the professionalization of science in the nineteenth-century was intimately tied to its relationship to technology, or the “mechanical arts.” In the article “The General Bearing of the Great Exhibition on the Progress of Art and Science,” commissioned by Prince Albert, scientist William Whewell explains what he and other leaders of the Great Exhibition perceived as the benefits of “joining the insight of science to the instinct of art.” Whewell describes a sequential history of knowledge, a “natural and general succession of science to art.” While “earlier generations did,” he writes, “the later explained that it had been possible to do. Art was the mother of Science: the vigorous and comely mother of a daughter of far loftier and serener beauty” (x). William Whewell, “The General Bearing of the Great Exhibition on the Progress of Art and Science,” *Lectures on the Results of the Great Exhibition of 1851* (London: 1852), x. For a further discussion of the professionalization of chemistry in relation to manufacturing or the mechanical arts, see Everett Mendelsohn, “The Emergence of Science as Profession in 19th Century Europe,” *The Management of Scientists*, Karl Hill, ed. 1963. Soon after Whewell’s lecture, as historian Helen Sillitoe records, “a Science division was added to the Department of Practical Art,” and the very first “Department of Science and Art” took shape with Henry Cole and Lyon Playfair sharing a joint secretaryship. Helen Sillitoe, *A History of the Teaching of Domestic Subjects*, (London: Methuen & Co. Ltd. 1933), 21.

²⁷ The above quotes are taken from the following print edition of Williams’ lectures: *The Chemistry of Cookery* (New York: D. Appleton and company, 1904), 2-3. In 1883, *The Times* offered a report of Williams’ lectures. See “The Scientific Basis of Cookery.” *The Times* (London: England) Tuesday, Dec. 18, 1883. Sillitoe also offers a chronology of the lectures, placing them within an account of various nineteenth-century men of science who offered public lectures on the science of cookery. Sillitoe 24.

received notions of cookery itself, and the struggle to construct new definitions of culinary knowledge that could mitigate the “danger” posed by domestic ignorance. I argue that what these texts reveal to us is a growing sense of what Michael McKeon, in his work on the novel, has called an “epistemological crisis,” or a shift in beliefs about methods of representation and the “truths,” or knowledges they signify.²⁸ A host of writers during these decades, as we have just seen, attempted to illuminate a new facet of the culinary by bringing to it rhetoric and knowledge taken from another realm of inquiry: chemistry. Cookery, in these texts, becomes transmuted from its status as an “art” into the less-well-defined, more intellectual “science,” a task comprising not practical work alone but understanding of its chemical “principles.”

As McKeon’s foundational work on the novel makes clear, shifts in belief accompany shifts in the representation of that belief. The form of the cookbook, the recipe, and other such vehicles of representation for and transmission of culinary knowledge, this dissertation argues, register the larger theoretical shifts taking place in the field of culinary discourse. Even as Victorian cookery writers became more certain about *what* cookbooks should teach, they increasingly disagreed, or became increasingly uncertain, about *how* it should teach—whether to impart theory before practice, how to illuminate the “why” as much as the “how,” and so on. What this dissertation thus seeks to understand are the ways in which these questions of epistemology became for Victorian writers questions of representation, as challenges to defining culinary knowledge challenged, in turn, the traditional ways culinary genres taught cookery.

²⁸ Michael McKeon, “Generic Transformation and Social Change: Rethinking the Rise of the Novel,” Michael McKeon, ed. (Baltimore: Johns Hopkins UP, 2000), 383.

Some of the narrative I have rehearsed thus far of the shift in Victorian perceptions of culinary knowledge and the concomitant fear of the “evil” of domestic practices is not new. Historians of education and feminist historians have widely explored the changing understandings of culinary knowledge in mid-to late Victorian England, often as they occurred within the broader context of the home economics movement. This social movement, which began to stir in the 1850s but rapidly grew in the last decades of the century, sought to intellectualize domestic work and improve working-and middle-class English cookery by applying the “laws of science” to the home (Attar 101). Proponents of home economics, a disparate group comprised of men of science, middle class women, physicians, and journalists, aimed their reforming efforts at both middle- and working -class women, arguing, as we have seen, that traditional, “unscientific” ways of cooking lead to drunkenness, malnutrition, waste, and discontented husbands (Attar 45-46).²⁹ Home economics advocates believed the solution to these social ills lay in reforming culinary education through the establishment of cookery schools for middle- and working-class women and the development of domestic courses in government schools (Attar 41-42). (Buckmaster himself, in his lectures, made such an argument: “We want this cookery [school] to grow into a part of our national education, so that no woman in future shall waste her husband’s substance from ignorance.”)³⁰

²⁹ An 1871 article in *The Ladies’ Treasury* encapsulates this widespread argument: “a knowledge of cookery was an intellectual faculty. . . . One who is ignorant of such knowledge, or of the scientific application of a few simple rules, in her blind efforts produces waste, ‘villanous compounds,’ sickness, and misery, because she did not use her intellect—she worked without thought.” “Social Science,” *The Ladies’ Treasury* (London, 1871).

³⁰ Buckmaster 268.

Through studies of government school textbooks and the curricula of the cookery schools, these scholars have begun to explore the questions of gender and social class underlying attempts, particularly by men of science, to replace traditional domestic knowledge and “folkways” with masculine “scientific principles.”³¹ In particular, what these studies have shown us is that while the movement to redefine cookery as “scientific” probably had little effect on how working-and middle-class women carried out everyday practices in the home, it deeply shaped the education of girls in Victorian England (Attar 45, 100-105).³² School textbooks, these scholars argue, register the ways in which the home economics movement created separate spheres in the educational arena by working to present schoolgirls with “a study of home and family as their means to scientific understanding” (Attar 98). Despite an outwardly unified educational philosophy, however, educators in fact waged fierce debates over “the natural connection between science and certain of the domestic arts,” including cookery.³³ As scholars such as Catherine Manthorpe and Liz Rohan have shown, science and domestic arts teachers

³¹ Megan J. Elias, *Stir it Up: Home Economics in American Culture* (Philadelphia: University of Pennsylvania Press, 2008), 12. Lieffers 938.

³² For excellent comprehensive accounts of the domestic science movement as it unfolded in nineteenth- and twentieth-century Britain, see Attar, Sillitoe and Yoxall. Cookbook historian Stephen Mennell offers a brief overview of the movement in Britain. Mennell 230-231. For an in-depth discussion of debates over definitions of domestic work and cookery as an “art” or a “science” see Attar, esp. Ch. 5 and Catherine Manthorpe, “Science or Domestic Science? The Struggle to Define an Appropriate Science Education for Girls in Early Twentieth-Century England,” *History of Education* 15 (1986): 195-213, both important works for this project. Other helpful studies of the movement and its debate over domestic knowledge as technical or theoretical as it occurred in America include Margaret Middlemas and D.H. Fry, “The Identity of Home Economics,” *Housecraft*, November 1973; Emma Seifrit Weigley, “It Might Have Been Euthenics: The Lake Placid Conferences and the Home Economics Movement” (*American Quarterly* 26 (March 1974): 79-96; *Rethinking Home Economics: Women and the History of a Profession*, Sarah Stage and Virginia B. Vincenti, eds. 1997, and Liz Rohan, “A Material Pedagogy: Lessons from Early Twentieth-Century Domestic Arts Curricula.” *Pedagogy*. 6.1, 2006. pp79-101.

³³ Manthorpe 195-199 and 208-209.

alike resisted merging these knowledges in practice, with each camp arguing that to do so would compromise the pedagogical integrity of her subject and syllabus.

This body of scholars has done much to uncover the discussion of culinary knowledge as it occurred in mid-to- late Victorian England educational curricula. Historians of the cookbook have further widened the scope of this discussion. Scholars such as Nicola Humble and Margaret Beetham have documented the increasing presence of what Humble calls “the scientific discourse” in cookbooks of the same period, noting in particular Isabella Beeton’s inclusion of information on the chemical “properties of food” and their “implications for cooking methods.”³⁴ More recently, scholars such as Caroline Lieffers have begun to further parse the specific kinds of scientific knowledge that cookbook writers throughout the nineteenth century absorbed into the genre, such as quantification, analysis, and categorization. Through the inclusion of these kinds of scientific methods and knowledge, she argues, “domestic art,” traditionally feminine work, was “recast” as the more rational, masculine “domestic science.”³⁵

These critics have opened an exciting field of food-related studies in the Victorian era. Like these scholars, I share an investment in tracing the changing face of culinary knowledge as it appeared in mid-to-late Victorian England culinary literature. What I hope to add, however, is a sustained attention to the formal developments in culinary instruction that I argue accompanied this changing epistemological landscape. What is missing from our critical understanding of these historical changes is a reckoning with

³⁴ Nicola Humble, *Culinary Pleasures: Cookbooks and the Transformation of British Food* (London: Faber and Faber Limited, 2005), 26-28. See also Nicola Humble “Introduction,” *Mrs. Beeton’s Book of Household Management*, Nicola Humble, ed. (Oxford: Oxford UP), vii-xxxii. Margaret Beetham, too, notes the general tendency in Victorian England to attach “traditional practices . . . to formal methods of learning,” and like Humble, discusses Isabella Beeton in relation to the “science of domestic economy” (22).

³⁵ Lieffers 936-959; 938.

how the growing belief in the inferiority of domestic practice ultimately transformed both the cookbook genre and the recipe as dominant modes of culinary representation. While cookery schools and school courses became an increasingly prevalent method of “scientific” culinary instruction in the second half of the century, the genre of the cookbook was not supplanted by these new methods of oral instruction.³⁶ Indeed, as we saw earlier, the cookbook in fact enjoyed an increasing presence at the vanguard of culinary education during this period, a position it occupied since its emergence during the rise of print culture in the seventeenth- and eighteenth- centuries.³⁷

In my own examination of the Victorian culinary landscape, then, one way I work to understand the ways in which forms of culinary instruction transformed in light of changing notions of culinary knowledge is through a study of the “plain” cookbooks written for working- and middle-class women from the period of 1850 to 1875. In particular, I attend to the ways in which these works responded to but also—and significantly—participated in the development of new definitions of culinary knowledge meant to reform working-and middle-class cookery. What we will find in these works, I argue, is that the interrogation of culinary epistemology in fact became an investigation of the cookbook genre itself. Questions about the “scientific” nature of cookery, that is, often became indistinguishable from concerns about the cookbook’s formal properties

³⁶ Attar and Sillitoe both offer excellent accounts of the rise of live culinary education in the last several decades of the century. See Attar, Ch. 2 and 5, and Sillitoe, Ch. 3.

³⁷ For an account of the attempts by seventeenth- and eighteenth-century cookbook writers to supplant traditional oral cookery instruction with print, see Sandra Sherman, *Invention of the Modern Cookbook* (Santa Barbara: Greenwood Press, 2010). Lieffers likewise notes that domestic manuscripts “over time became less personal and relied increasingly on printed authority” (938). Margaret Beetham has pointed out that while the transformation from oral to print cookery instruction happened unevenly over the course of the nineteenth century, print instruction became around mid-century “increasingly important even for those who could not or did not read” (21). Stephen Mennell addresses the tension between oral and print culinary instruction in Victorian and modern contexts. See p. 232.

and the representational possibilities and limitations of those elements. Such questions in turn were bound up in questions of gender and social class, as cookbook writers and chemists increasingly sought to dictate the way Victorian working-and middle-class women used their cookbooks.

We have begun to see some evidence of this concern with the cookbook as a genre surface already across a variety of print arenas. In the 1860s, as we saw earlier, *The Englishwoman's Domestic Magazine* criticized the genre's failure to appropriately sequence "theory" and "practice," pointing out those cookbooks for the middle-classes that "rush into the practice . . . before imparting the theory." In 1872, *The Ladies' Treasury* pointed to "written or printed rules," or the recipe, the cookbook genre's staple pedagogical device, as the culprit behind working women's poor cookery. Recipes, the article argues, teach only "rules," not the "reasons why," or the chemistry behind the processes of cookery.³⁸ In 1873, Buckmaster contrasted the possibilities offered by live culinary education with skepticism towards the cookbook genre. "My idea of a Cookery Book is," he explained, "is that it should teach, as far as a book can teach, the theory and practice of Cookery" (145). Even as he articulates a vision for the cookbook to engage what he calls "educated cooking," or practical cookery informed by a knowledge of the chemistry of food, that vision takes shape as a critique of the genre's pedagogical abilities. In 1881, *The Ladies' Treasury* again criticized the cookbook genre's omission of theoretical chemical content: "The multitude of modern cookery books need not be enlarged on," the article reads, "but there is not one that treats of the chemical action of

³⁸ This concern, as Attar and Manthorpe have shown, was one that also appears in school textbooks aiming to teach "scientific" cookery.

one ingredient upon another.” Cookbooks instead facilitate “practice” alone. As such, the article complains, “why? is rarely understood.”³⁹

In 1886, Mary Anne Barker, the first female superintendant of The National Training School of Cookery,⁴⁰ attempted to solve the issue of how to represent culinary “theory” by departing from the cookbook genre altogether. In *First Lessons in the Principles of Cooking*, a work pitched to middle-and upper-class women, Barker describes her text as “not exactly a Cookery Book.” Rather, the text, “laying other details aside,” is meant to fill in the gap left by cookbooks by explaining “the reasons why” certain dishes were best prepared certain ways.⁴¹ In offering theoretical material to the exclusion of recipes, Barker explicitly classes culinary knowledge. While she instructs her readers to “go down into her kitchen and insist on a good use being made of sundry scraps and bones,” she does not instruct that reader to cook (7). The recipe, as we will see, becomes during this cultural moment a narrative element freighted with implications of social class.⁴²

What quickly becomes apparent when considering these passages is that, despite the diversity of texts surveyed, each writer displays uncertainty about the cookbook genre’s ability to effectively fuse both theoretical and practical forms of culinary knowledge. What I want us to notice especially is that each writer, either implicitly or

³⁹ “The Chemistry of Cookery,” *The Ladies’ Treasury* (London: England), 1881.

⁴⁰ Sillitoe 26.

⁴¹ Lady Mary Anne Barker, *First Lessons in the Principles of Cooking* (London: Macmillan and Co. 1886), 4.

⁴² Although I addressed the issue of reception earlier, it is worth repeating that while many cookbooks of the period, including Barker’s, frame their discussions as information to be passed from mistress to cook, many of these “modern housewives,” as Victorian writer Hartelaw Reid put it, likely performed their own cookery. For further discussion of audience and reception in relation to middle-class English cookbooks, see Mennell pp. 213-214 and Humble 17. “Practical” versus theoretical domestic art and domestic science school courses likewise became classed. See Manthorpe and Attar.

explicitly, locates that generic limitation within one particular formal element of the cookbook: the recipe. Recipes, these writers suggest, push readers towards the material labor of cookery—culinary “art”—rather than training their focus on the “theory,” or “science” of cookery. These critiques of the recipe’s narrative capacities, offered in such a range of print contexts, helps sketch for us the extent to which questions about the cookbook genre and its narrative elements studded the discussion of culinary epistemology. But such critiques came not only from those writing outside the bounds of the genre. Rather, I develop my argument—that shifts in the definition of culinary knowledge are tied to larger generic transformations in the Victorian “plain” cookbook—by spotlighting the many mid-to- late-century cookery writers who, writing in the face of rising calls to render cookery “scientific,” grappled with the epistemological limitations of the recipe and its tie to culinary “art.”

I begin this work in Chapter Two, where I survey cookbooks published between 1850 and 1875, the period when, as we have seen, scattered calls to reform culinary instruction for working-and middle-class women gradually thickened into organized and official efforts and movements. I focus in this chapter on cookbooks offering instruction in “plain cookery” for lower-middle and middle-class housewives, for it was this figure who was most often addressed, (both in these cookbooks and in the writings of home economists), as the figure responsible for improving English cookery.⁴³ As a number of scholars have noted, the middle-class “plain” cookbook absorbed many specific types of scientific knowledge. Most of the calls for the inclusion of culinary “theory” surfacing in

⁴³ Attar discusses the role of the middle-class woman in the context of the home economics movement, which sought in particular to improve cookery in working-class families through the philanthropy, education, and efforts of middle-class women. See p. 42

this period, however, homed in on one particular kind of scientific knowledge believed most connected to the practical work of making a meal: chemical “principles,” or the chemical constituents of foodstuffs. I thus focus in particular in this chapter on those writers who structured, and even revised, their cookbooks in an effort to offer a more intellectual program of cookery that I call “principled cookery,” or practical methods of preparing a dish derived from an understanding of its chemical constituents, or “principles.” What we find, I argue, is that for these writers, integrating “principles” into culinary practice entailed more than simply adding content, as other scholars have noted.⁴⁴ Rather, what becomes clear is that cookbook writers during this period increasingly felt that the scientization of cookery by way of chemical “principles” relied on their ability to transcend the genre’s formal staple: the recipe. In this chapter I thus explore the textual models these writers developed to teach principle-based plain cookery.

I begin the chapter with the Victorian era’s first best-selling cookbook: Eliza Acton’s *Modern Cookery for Private Families*.⁴⁵ Originally published in 1845, Acton’s significant culinary popularity rested on her invention of plain, easy-to-follow recipes, a description of which she gives pride of place in her opening preface.⁴⁶ In 1851, however, Acton released a new edition which she opens not by puffing the book’s recipes but with a manifesto on the necessity of integrating the chemical principles of nutrition discovered by the well-known German chemist Justus Liebig into culinary instruction. This shift in Acton’s marketing strategy—the transition from recipes to principles as the cookbook’s

⁴⁴ Humble; Attar 99; Lieffers 943-948.

⁴⁵ Mennell labels Acton’s text “the most distinguished book of the period,” although many scholars offer that accolade to Beeton’s *Book of Household Management* (Mennell 213).

⁴⁶ For an account of Acton’s innovations in the recipe form, see Humble 10.

primary selling point—is not only, as Lieffers has argued, a sign of “[t]he public’s devotion to chemical ideals” (946).⁴⁷ It also can be read, I argue, as a testament to Victorian cookbook writers’ sense that the recipe itself no longer offered the kinds of culinary knowledge readers—both working-and middle-class—wanted or needed to receive (946).

While Acton’s 1851 edition is perhaps the most famous example of a midcentury cookbook revision, in this chapter I spotlight two c. 1850 manuscripts, *Dissertations on Cookery* and *The Science of Cookery*, that illuminate broader efforts at mid-century to literally revise the genre by revising an already-published work. Co-written by Mary Ellen Meredith, her father, Thomas Love Peacock, and her husband, poet George Meredith, from around 1850-1855, these manuscripts consist of efforts to revise a cookbook from the Regency era -- William Kitchiner’s hugely popular 1817 *Cook’s Oracle* -- because “nearly all the cookery books written” since then were only “collections of receipts.”⁴⁸ In their manuscripts, these writers confront the epistemological limitations the recipe imposed on the cookbook by challenging the very definition of the genre itself. In *Dissertations*, Mary Ellen Meredith takes pains to distinguish between a “mere collection of receipts” and a “Cookery Book,” arguing that a work of culinary instruction achieves the status of a “cookery book” only when constructed in a particular formal arrangement, its recipes textually embedded within narrative explanations of chemical “principles.” Textually tying recipes to chemical explanations, she argues, helps

⁴⁷ For a discussion of Acton’s revision and its reception, see Lieffers 948.

⁴⁸ Both manuscripts are held by the New York Public Library. *Dissertations* is indexed as MS 16 in the Whitney Collection of the Manuscripts and Archives Division, and *The Science of Cookery* as T.L.P. 65 in the Carl H. Pforzheimer Collection. For a history of the Meredith/Peacock cookbook project, see Anne Mendelson, “The Peacock-Meredith Cookbook Project: Long-sundered Manuscripts and Unanswered Questions,” *Biblion: The Bulletin of The New York Public Library*, 2.1 Fall 1993, pp. 77-99.

the “young housewife” understand the “science” behind her work, thus leading to an improved system of domestic economy. I include these 1850 manuscripts, which were almost certainly written in the same time Acton was revising her own best-selling work in preparation for its release in 1851, to illustrate the growing sense at mid-century that principled cookery challenged the representational capacity of the Victorian cookbook, particularly the recipe.

Indeed, in 1853, Hartelaw Reid argued in the preface to his *Cookery, Rational, Practical and Economical, Treated in Connexion with the Chemistry of Food*, that “[h]itherto cookery-books have been generally little else than long and often ill-arranged lists of receipts for expensive dishes.”⁴⁹ The “economically disposed housewife” requires instead a knowledge of “those general principles upon which all good cookery depends” (3). While Reid’s rhetoric here is not unusual, what is striking are the formal innovations he takes to transform the cookbook into something beyond a “list of receipts.” The work, remarkably short for the era—Acton’s 1851 *Modern Cookery* exceeds six hundred pages—is arranged in a complicated structure of cross references designed to textually weave together the table of contents, explanations of chemical principles, and recipes. Like Meredith and Peacock, then, Reid renders cookery “principled” by embedding his recipes within a larger textual apparatus consisting of narrative descriptions of the chemical knowledge underlying the recipes themselves.

⁴⁹ Hartelaw Reid, *Cookery, Rational, Practical and Economical, Treated in Connexion with the Chemistry of Food* (Edinburg: John Menzies, 61 Prince’s Street. London: W.S. Orr & Co., 1853), ii-iii.

I conclude the chapter⁵⁰ with a study of *Cassell's Dictionary of Cookery* (1875), a work that parallels Acton's in its status as a blockbuster text; Mennell calls it the "representative cookbook" of the last quarter of the century.⁵¹ While the structure of earlier cookbooks were developed to direct readers towards certain recipes, clustering together explanations of "principles" with the pertinent recipe, *Dictionary* moves away from such prescriptive reading—and culinary—practices. Rather than pre-group recipes and principles together, as other texts do, *Dictionary* renders cookery "principled" through its two-part structure: a curriculum on "The Principles of Cookery," followed by, as its title suggests, a dictionary of recipes. By detaching its recipes from its scientific or "principled" context, *Dictionary* pushes its cook to choose her own recipe, guided not by the text but by her understanding of the "principles of cookery" offered in the preface. Such culinary "freedom," however, is explicitly tied in the text to domestic duty. Aimed at lower-and middle-class women, *Dictionary* cultivates this "creative" mode of principled cookery in the service of the home, training cooks and housewives to better suit her cooking to the needs and requirements of her family.

Thus far I have focused on the period from 1850 to 1875 because it is during these decades that I argue we can see the most concentrated efforts by Victorian cookbook writers to revise the genre into something capable of imparting a system of "principled cookery." Following historians of education and cookbook scholars, I have likewise

⁵⁰ For the sake of space, my archive in this chapter is necessarily limited to only a few pointed examples. Other cookbooks of the period that treat the issue of scientific principles extensively include those such as Alexis Soyer's *The Modern Housewife* (London: 1851), physician J.H. Walsh's *The English Cookery Book, Receipts Collected by a Committee of Ladies, and Ed. by J.H. Walsh* (London: 1856), Buckmaster's revision of his lectures into a print cookbook, released as *Buckmaster's Cookery* the year after his stint at the 1873 Exhibition's "Popular School of Cookery," and Mary Barker's *First Lessons in the Principles of Cookery* (London: 1886). For a discussion of Walsh in relation to the issue of chemical principles, see Lieffers p. 948.

⁵¹ Mennell 214.

described these decades as the heyday of larger Victorian efforts to transform the popular conception of cookery as an “art” to cookery as “a science and an art,” as *The Ladies’ Treasury* put it in 1873. Historians of education tend to focus on these decades as their starting point not only because the 1870 Education Act opened the door to domestic art and domestic science courses in schools, but because it was during this time that men of science, particularly chemists, began to involve themselves in the development of school curricula that aimed to formalize the connection between domestic cookery and scientific “principles” of nutrition.⁵² As these historians have shown, such efforts in fact only increased after 1870; the last decades of the century saw chemists work to transform home economics from a movement to a full-fledged system of education that persevered well into the twentieth century.

But as scholars such as Sillitoe, Lieffers, and Melanie Keene have noted, these mid-to late-century chemists were not the first men of science to train Victorian middle-class readers to perceive connections between the domestic labor of cookery and theoretical chemical discoveries.⁵³ Rather, as I discuss in Chapter One, chemists began as early as 1821 to circulate to middle-class readers the notion that food could be chemically analyzed to determine its “principles.” They did so, as I show, to make the case that these chemical discoveries could—and, they increasingly argued, should—inform middle-class culinary practices. Such texts, as Keene has identified, exist as part of a larger genre of popular textbooks emerging in the late eighteenth- and early-nineteenth centuries that

⁵² Attar, esp. ch. 2 and 5. Manthorpe also discusses the efforts by prominent chemists to support and encourage the spread of domestic science courses.

⁵³ Melanie Keene, “Domestic science: making chemistry your cup of tea.” *Endeavour* 32.1, 2004. pp16-19. I am indebted to Keene’s article, which first brought these early popular textbooks to my attention.

aimed to make chemistry accessible to middle-class audiences by revealing the science behind everyday processes and ordinary objects.

Although Friedrich Accum's 1821 text *Culinary Chemistry* is one of the earliest of such works, others soon emerged, such as Charles Gower's *The Scientific Phenomena of Daily Life* (1847) and Albert Bernays' *Household Chemistry* (1853). While these earlier texts assumed a middle-class audience that included men, women, and children,⁵⁴ after mid-century chemists increasingly began targeting women through publications in popular women's magazines. In 1861, for example, physician Robert Bakewell published in *The British Mothers' Journal* a four-part series bearing the title "On the Chemistry of Cookery."⁵⁵ In 1855, William Mattieu Williams—whose definitions of "technical" and "technological" cookery I cited earlier—delivered the first of his lectures on "The Chemistry of Cookery," and in 1881, *The Girls' Own Paper*, a widely-read popular magazine for middle-class girls and young women,⁵⁶ ran a similar series by physician John Grey entitled "The Chemistry of Cookery."

I survey this discourse in Chapter One in order to establish the roots of the Victorian discussion of culinary knowledge as something more than an "art," a discussion I argue begins in these popular textbooks and gets taken up by the cookbook at mid-century. Yet what we find in these textbooks, I argue, is not only the origins of the philosophy of "principled cookery," but the origins of the debate I illuminate in Chapter

⁵⁴ As Jan Golinski notes, chemistry textbooks such as these were written for an audience that included women. Jan Golinski, *Science as Public Culture: Chemistry and Enlightenment in Britain, 1760-1820* (Cambridge: Cambridge UP, 1992), 261.

⁵⁵ Robert Bakewell, "The Chemistry of Cookery," (London: England, *The British Mothers' Journal*, 1861).

⁵⁶ *Victorian Women's Magazines: an Anthology*, Margaret Beetham and Kay Boardman, eds. (Manchester: Manchester UP, 2001), 71.

Two about the recipe's ability to represent the chemistry latent in cookery. The genre of the popular scientific, or what I call "domestic chemistry" textbooks, as I argue in Chapter One, at times functions indistinguishably from a cookbook, explicitly merging traditional domestic recipes with elements of the scientific experiment.⁵⁷ Early texts, such as Accum's 1821 *Culinary Chemistry*, I argue, use this hybrid domestic-chemical recipe form to engage the reader in a model of cookery I call "experimental cookery," or cookery that doubles as a kind of scientific experiment in its processes and intellectual aims. Through the domestic recipe, then, Accum merges the processes of domestic cookery and experimental chemistry, creating intellectual and narrative commerce between these gendered realms.

As chemistry became increasingly professionalized, however, the domestic chemistry textbook genre began to detach itself from the feminine modes of writing found in earlier textbooks. From the late 1840s and beyond, as I show in this chapter, the domestic recipe gradually disappears from the genre, as chemists increasingly turned to lecture-based narrative modes commonly deployed by professional men of science seeking to popularize their work. While some texts at this moment retain the recipe, chemists replace the domestic recipe with professional "Prescriptions"; other texts, in contrast, elide the recipe altogether.

Indeed, in his 1861 four-part series for *The British Mothers' Journal*, for example, physician Bakewell formally separates domestic cookery from chemical knowledge. "I

⁵⁷ I take the term "domestic chemistry" from an 1876 article in the Samuel and Isabella Beeton's magazine, *The Englishwoman's Domestic Magazine*, in which the writer, one "A.B.," urged women to "take a book of domestic chemistry" into their hands, "and go down into her kitchen. She will be in a far higher region of romance than Miss Braddon can take her into. She will learn that it is her province to renew her husband physically and mentally by dexterously depositing the right kind of nutriment upon the inward, invisible frame. The wonders of science shall superseded, then, for her the wonders of romance." A.B., "The Englishwoman's Economist," *The Englishwoman's Domestic Magazine* (London, England), 1876.

need hardly say that I do not profess to deal in any way with the *art* of cookery,” he writes. “[A]ll I shall attempt in these paper will be to explain the theory or principles on which all nutritive substances must be prepared for human food, and to show which are the modes in common use best adapted for producing wholesome and nourishing aliments.” While early texts thus relied on domestic labor by way of the domestic recipe as a means of producing chemical knowledge, later works espoused a more passive consumer model of learning, one increasingly meant to showcase the ineffective culinary practices of middle-class women. The shift from domestic to professional modes of writing thus, as I show, signifies a concomitant shift change in belief about the nature of the relationship between the laboratory and the kitchen, between the processes of experimental chemistry and domestic cookery, and between culinary and chemical modes of writing.⁵⁸

Beyond illuminating our understanding of the tensions between masculine and feminine forms of knowledge that characterized the textual merging of domestic cookery and experimental chemistry, attention to the changing forms of these midcentury textbooks—particularly, their gradual move away from the domestic recipe—can also help us better understand the intellectual atmosphere in which the mid-century cookbook writers I survey in Chapter Two worked.⁵⁹ Written in the same cultural moment that Acton, Meredith, Reid and others labored on their cookbook projects, chemists’

⁵⁸ Although many men of science wrote textbooks for government schools and the national schools of cookery, particularly in the last quarter of the nineteenth century, I focus in Chapter One exclusively on those textbooks belonging to the specific tradition developing at the beginning of the nineteenth century that focused on popularizing scientific knowledge rather than integrating it into school curricula. For more on the textbooks chemists developed for schools, see Attar Ch. 5.

⁵⁹ As I noted earlier, there is a robust scholarly discussion that considers the ways in which the scientization of cookery in Victorian England was also a means of further gendering certain kinds of knowledges. See in particular Attar, Ch. 2 and Ch. 5, Manthorpe, and also Lieffers. I engage this discussion throughout Chapters One and Two.

increasing elision of the recipe and their inattention to the “art” of cookery casts light on “plain” cookbook writers’ growing sense of the inferiority of the recipe as a culinary representational mode. What I thus aim to chronicle through Chapters One and Two are the changes in the kinds of knowledge chemists and cookery writers alike claimed for the recipe. What I also seek to show are the ways in which those changes contributed to the growing belief that domestic cookery, and thus the cookbook genre itself, was not in fact inherently scientific—as earlier writers such as Accum had claimed—but rather had to be *rendered* scientific through formal revision.

Thus far I have argued that the cookbook genre and the domestic recipe came under increasing scrutiny and revision particularly from the period of 1850 to 1875, as chemists and cookbook writers sought to remedy the “evil” of working- and middle-class cookery practices by reshaping understandings of culinary knowledge. Yet we cannot understand the full story of shifts in Victorian belief about the character of culinary knowledge and the accompanying formal shifts in culinary instruction by attending only to rhetoric and knowledge imported into the literatures of cookery from chemistry. Chapter Three of this dissertation thus expands the scope of this story by turning to a text at the end of the century that sought to explode the notion propagated through the domestic chemistry genre and the “plain” cookbook that culinary—and thus national—salvation lay in reforming cookery into “principled” cookery. In the early 1890s, a cultural moment that saw an increasing saturation of scientific epistemologies of cookery, art critic and aesthetic writer Elizabeth Robins Pennell published a series of enormously popular essays, “The Feasts of Autolycus,” for the *Pall Mall Gazette*. Later republished in book form as *Delights of Delicate Eating*, Pennell uses the platform of her cookery

column to stridently resist the union of science and cookery.⁶⁰ Arguing that approaching cookery through quantification and “principles” has turned the nation into “thoughtless” “Philistines,” Pennell, as I show, embeds her formally radical recipes not in chemical explanations but in ekphrastic descriptions of food. Rather than a cookbook, or traditional recipes—which she argues produce “nauseous concoctions”—Pennell presents a “Guide” in which she trains readers to cook by analyzing not the chemical but the visual aesthetic qualities, or what she calls the “Beauty” and “Poetry,” of food.⁶¹

What I want in particular to show in this chapter is that while Pennell seeks to illuminate an entirely different facet of culinary knowledge—one meant to counter the scientization of cookery through an attention to its visual aesthetic elements—she, like the writers I survey in Chapters One and Two, does so through a revision of the domestic recipe and the construction of a new kind of culinary writing. The growing body of scholarship on Pennell has worked to make sense of the strange form of *Delights*, which Pennell herself presents as “not a Cook’s Manual,” but a “Guide” (8). What sparks particular discussion amongst scholars are its recipes, which at times offer precise instructions and at times are deliberately oblique.⁶² As Talia Schaffer has convincingly argued, such formal fluidity enables Pennell to bring together the (feminine) language of

⁶⁰ Pennell’s columns first appeared in the *Pall Mall Gazette* column “The Ware of Autolykus,” a column featuring the work of other prominent women writers such as Alice Meynell, Violet Hunt, and Rosamund Marriott Watson. For more discussion of Pennell’s column, its origins, and its publication history as a book, see Jacqueline Block Williams, “Introduction,” *Delights of Delicate Eating* (Urbana and Chicago: Univ. of Illinois Press, 2000), xvi-xvii.

⁶¹ Elizabeth Robins Pennell, *Delights of Delicate Eating* (Urbana and Chicago: Univ. of Illinois Press, 2000), 8.

⁶² See, for example, Jamie Horrocks, “To Court Perfection, Rely Upon Mushrooms”: Camping in the Kitchen of Elizabeth Robins Pennell’s *Delights*.” “The Gospels of Aestheticism,” Diss. (Bloomington: Indiana University, 2010), and Alice McLean, *Aesthetic Pleasure in Twentieth-Century Women’s Food Writing: the Innovative Appetites of M.F.K. Fisher, Alice B. Toklas, and Elizabeth David* (New York: Routledge, 2012), esp. Ch. 1.

cookery with the (masculine) language of aestheticism, producing a work that is part cookbook, part critique.⁶³

This chapter expands the scholarly discussion of the connection between the form of *Delights* and the gender ideologies of its aestheticizing, cultivating mission by drawing attention to the ways in which Pennell utilizes the narrative structure of the domestic recipe as a means of cultivating readers' aesthetic eye. In particular, I examine how Pennell, rather than offering content found in traditional recipes, fuses the structure of the domestic recipe with the narrative technique of ekphrasis from the genre of art writing, engaging her readers in a mode of food preparation I call "visual cookery." By utilizing the recipe's imperative structure, its call to readerly action,⁶⁴ Pennell deploys culinary "art" in the service of both creating and critiquing visual Art. In so doing, I argue, Pennell establishes the material processes of cookery as a necessary component of an imaginative—and therefore, intellectual—act: the visual contemplation of a material work of culinary art.

By putting *Delights* into conversation with the domestic chemistry textbook and the mid-Victorian "plain" cookbook, I seek to illuminate the extent to which engagement with the recipe became in the nineteenth century a means through which domestic knowledge, particularly cookery, came under revision. By embedding it, reshaping it, drawing on it, or working to displace it from their genres, chemists and cookbook writers

⁶³ Talia Schaffer, "The Importance of Being Greedy: Connoisseurship and Domesticity in the Writings of Elizabeth Robins Pennell," *The Recipe Reader: Narratives, Contexts, Traditions*, ed. Janet Floyd and Laurel Forster (Lincoln: University of Nebraska Press, 2003), 105-126; 110.

⁶⁴ The *OED* defines "recipe" as borrowed from the Latin imperative *recipere*, or "take," implying a command to action. recipe, v. *OED Online*. Oxford University Press, September 2016. Web. 9 September 2016. Traditions of recipe writing in medicine, alchemy, and cookery thus began recipes with a similar imperative, often the original "take." See, for example, William Eamon, *Science and the Secrets of Nature: Books of Secrets in Early Medieval and Early Modern Culture* (Princeton: Princeton UP, 1994), 131.

alike unsettled traditional notions of cookery, constructing instead new culinary programs built through an amalgamation of disciplinary textual forms. For all of these writers, as we have seen, approached culinary reform through an external body of knowledge. Chemists, plain cookbook writers, and Pennell, that is, sought to revise cookery—and thus the intellect of the cook—by importing knowledge into the culinary from an external, masculine realm. As Schaffer has argued, one of Pennell’s central purposes in *Delights* was to elevate women’s work, bringing to domestic labor the rhetoric and respect of a more masculine Art.⁶⁵ Advocates of “principled” cookery articulated similar goals. In his 1873 lectures, Buckmaster explained that his purpose “is to dignify, as far as I am able, the art of cookery, by making it more scientific” (112).

Ultimately, however, chemists and cookery writers imported aesthetic and chemical rhetoric and knowledges into their culinary instruction to serve very different ends. Pennell offers training in visual art response through ekphrastic recipes, engaging readers of the more elite *Pall Mall Gazette* in a mode of cookery meant to cultivate visual aesthetic taste.⁶⁶ “Visual” cookery, in *Delights*, offers domestic labor in service of the self. “Experimental” and “Principled” cookery, in contrast, sought to perpetuate working- and middle-class women’s labor in service of the family and the home.⁶⁷

⁶⁵ Schaffer 105-106.

⁶⁶ Launched in 1865, the *Pall Mall Gazette* pitched itself as “written by gentlemen for gentlemen,” and offered mostly upper-class readers reviews, social sketches, and notes by writers such as John Ruskin, Anthony Trollope, Leslie Stephen and Matthew Arnold. Except during a brief period in the 1880s when it dipped into New Journalism, the paper offered serious cultural fare and catered to an elite readership; the paper’s motto, “written by gentlemen for gentlemen,” was W.M. Thackeray’s, from *Pendennis*. Brake and Demoor 477-478 and also Horrocks 43-44.

⁶⁷ For a discussion of this domestic ideology within the realm of education and the discourses of school textbooks, see Dena Attar, *Wasting Girl’s Time: The History and Politics of Home Economics* (London: Virago Press Limited, 1990).

The story I tell in this dissertation of the recipe's evolving and often fraught history in the Victorian genres of culinary instruction is perhaps surprising. For modern readers, the recipe has become perhaps the central marker of culinary instruction, one we expect to encounter when turning to cookbook or other genres of culinary instruction. Our expectation that cookbooks will teach us to cook through recipes is, in fact, an expectation culinary genres themselves have cultivated. As historians of the cookbook such as Sandra Sherman have argued, the development of the cookbook as a modern genre cannot be separated from the development of the recipe form. As culinary instruction increasingly transitioned from oral to print in the seventeenth- and eighteenth-centuries, Sherman argues, cookbook writers were deeply aware and "at times uncomfortable with themselves and with the limits of print to communicate directly."⁶⁸ At the heart of this discomfort, she explains, was "the ultimate question" of what kind of knowledge they were attempting to package into print (172). Was cookery "Theory," "a body" of "abstract principles"? Or was it "art," or "practical, complete advice"? (55, 172). The question of "what cookery is," Sherman argues, directly affected the shape the genre ultimately assumed as it developed throughout the eighteenth century. "If cookery is a matter of following directions," she explains, then it qualified as "the type of knowledge that a book can represent" (172).⁶⁹ Nineteenth century cookery writers, as we

⁶⁸ Sherman xii.

⁶⁹ Sherman's study of the cookbook as a *genre*—her consideration of its generic properties, its efforts to "communicate" with readers, its formal evolutions, its questions of culinary knowledge—is pioneering in studies of the cookbook, and has deeply informed my own understanding of and approach to the formal and epistemological concerns evident in much nineteenth-century culinary writing. While Sherman ultimately connects the eighteenth-century cookbook's formal evolutions to its efforts to become a marketable, pedagogically-sufficient genre for newly urban audiences, I attempt in this dissertation to explore the ways in which emerging scientific and aesthetic theories put pressure on the cookbook genre's representational strategies. In considering how the formal developments within nineteenth-century culinary writing are intrinsically linked to its efforts to communicate new kinds of culinary knowledge to its readers, I thus draw on and add to the genre studies approach to and theory of the cookbook Sherman has established.

can see, were thus not the first to question the recipe's competence as a narrative form nor were they the first to challenge it in the light of questions about "the nature of culinary knowledge," as Sherman puts it (41).

As the eighteenth century progressed, cookbooks most gained what Sherman calls "pedagogic competence" through the gradual development of the "intelligible recipe," a recipe form characterized by "a rhetoric of detail," or minute technique instructions (6). Writers such as Hannah Glasse (*The Art of Cookery*, 1747), Sherman argues, "learned . . . that imparting technique is an intrinsic part of culinary instruction," and began integrating such technique both within the recipe and in surrounding material (107).

Scholars of the nineteenth-century cookbook have likewise located the recipe's textual advances as a primary index of the stabilization of the genre into its dominant modern form. Humble and Beetham both point to Isabella Beeton and her revision of Acton's newly detailed recipe form as a key moment in the rise of a culinary genre focused "exclusively" on cooking (Humble 9; Beetham 17). In Beeton's recipes, Humble explains, "[e]ach dish is approached from the perspective of the novice rather than the expert, with every stage in its construction painstakingly described" (10). While earlier writers such as Hannah Glasse had already begun to "[b]reak new ground in terms of explaining how to perform basic kitchen operations," offering a new level of detail in culinary technique or "Method," as Sherman notes, Beeton trumped both Glasse and Acton in the exquisite level of organization she brought to the genre of culinary instruction.⁷⁰

⁷⁰ Most Beeton scholars cite her organizational work as key to Beeton's enduring fame (Humble 9).

Scholarship on the history of the cookbook genre thus suggests that the history of the cookbook is predicated on the history of the development and codification of the recipe as its dominant narrative mode. I want to offer in this dissertation a slightly different account of the formal development of the cookbook and other genres of Victorian culinary writing. What I want to suggest is that the transformation of the genres of culinary writing throughout the Victorian era cannot be distinguished from the history of their *relationship* to the recipe. Indeed, as scholars of the recipe have argued, recipes are inherently *embedded* forms; they gain narrative meaning in conjunction with their surrounding discourses. In her seminal article “Recipes for Reading: Summer Past, Lobster á la Riseholme, and Key Lime Pie,” Susan J. Leonardi first introduced this understanding of the recipe as an “embedded” narrative form, arguing that the recipe’s nature as a list renders it “useless, even for a fairly experienced cook” (342, 340).⁷¹ Recipes, she argues, need “a recommendation, a context, a point, a reason to be” (350). They need, that is, a discursive frame: some other kind of information to fill in the gaps, to give impetus and meaning to the bare list form. “A recipe is, then, an embedded discourse,” Leonardi argues, “and like other embedded discourses, it can have a variety of relationships with its frame” (341). Sherman, too, argues that modern “[c]ookbooks are not just bare collections of recipes. They are about the recipes—how to judge ingredients, how to master required techniques” (73). “Modern cookbooks,” she writes,

⁷¹ Susan J. Leonardi, “Recipes for Reading: Summer Past, Lobster á la Riseholme, and Key Lime Pie,” *PMLA*, 104.3 (May, 1989), pp. 340-347. Leonardi’s argument for the recipe as an embedded form has been hugely formative for scholarly considerations of the purpose and meaning of this textual form. Sherman, for example, uses Leonardi’s theory to consider the role of culinary authority in the transition from domestic manuscript to print cookbook. (See esp. Chs 1-2). In “Consuming Prose: The Delectable Rhetoric of Food Writing,” *College English*, 70.4, Special Focus: Food (Mar. 2008), pp346-362, Lynn Z. Bloom positions Leonardi’s consideration of the “embedded” nature of the recipe to argue for the necessity of scholarly considerations of the “rhetorical issues in food writing” (349).

“tend to surround their recipes,” providing “information to help readers understand the recipes and how to prepare them” (76).⁷²

As I have begun to argue, a central feature of the culinary genres in this dissertation is this very embeddedness, or the tendency in these works to redefine culinary knowledge by embedding traditional forms of culinary writing -- namely, the recipe -- within textual “frames” comprised of other, intellectual material: chemical principles, ekphrasis, descriptions of the physiology of cookery, and so forth. I thus argue that those genres developed to teach cookery in the nineteenth century transformed during the period I have laid out through a process of engagement with and opposition to the recipe.

Historically, scholars studying the scientization of cookery throughout the nineteenth century have tended to focus their attention on the recipe as its own object of study. Victorian recipes, as these scholars show, index the culinary’s gradual integration of scientific values such as quantification and fact.⁷³ In exploring the recipe’s embeddedness within its particular discursive “frame,” I widen our gaze from the recipe itself, bringing into focus instead its dynamic relationship to the materials in which it is embedded. By exploring recipes not alone but rather vis-à-vis their relationship to their frame, I illuminate the ways in which external bodies of scientific and aesthetic knowledge deeply shaped the genres and forms of culinary writing in the Victorian era. I unpack this argument through three chapters, each of which illuminates a different

⁷² For a discussion of the kinds of “complementary material” eighteenth-century cookbooks employed in order to “surround their recipes,” see Sherman, esp. Ch. 3. Beetham likewise notes that Beeton herself “embedded” her “thousands of recipes” . . . “in a mass of other material,” although she draws no connection between that “mass” and the recipes themselves (18).

⁷³ Humble; Lieffers; Beetham

intellectual approach to cookery: “experimental,” “principled,” and “visual.” In these chapters I study the relationship between the recipe and its frame because I argue that it is through this relationship that culinary writers stitch together practical cookery with external forms of knowledge. It is through the fusion of chemical analysis and the domestic recipe that cookery becomes “experimental”; it is by yoking chemical description to recipes through ever-complex “frames” that cookery becomes “principled”; and it is through an amalgam of ekphrasis and the recipe structure that cookery becomes visually aesthetic. Each intellectual approach I identify thus is intimately bound up in the textual form through which it gets figured; form, I argue, becomes for these writers a central mechanism for constructing new understandings of culinary knowledge and thus new regimes of domestic cookery. The forms of these nineteenth-century culinary genres are thus both shaped by --and perpetuate-- agendas of domestic and thus culinary reform.

The intellectual approaches to cookery I chronicle in this dissertation developed in the face of specific changing currents of thought in the realms of science and art. As such, the texts I spotlight in each chapter are ones that emerged in a moment of intellectual significance within these realms. Chapter One, “Experimental Cookery,” considers the domestic recipe in relation to the gradual professionalization of the chemical enterprise. Chapter Two, “Principled Cookery,” explores how developments in nutrition science affected the cookbook’s construction of the “principled recipe” in the second half of the century. Chapter Three studies the rise in the *fin de siècle* of the so-called “subjective criticism” and the impact of this mode of aesthetic spectatorship on Pennell’s program of “visual cookery.” In many senses, then, the story I tell of the relationship between intellectual trends and the specific pressure writers felt to develop

new forms of culinary instruction that re-imagined the purpose of the recipe is thus a specifically Victorian story.

In the Coda, however, I turn to our contemporary moment in the cookbook and find a similar tension between changes in culinary knowledges and pressures of representational form. By reading these contemporary cookbooks alongside nineteenth-century culinary genres, what we learn is that the form of the cookbook in our moment continues to be shaped by the tension between the recipe and its frame. But while Victorian writers negotiated this tension by creating ever more complex ties between frame and recipe for the purpose of prescribing culinary and social regimes, in our contemporary moment we find a more concerted movement towards freeing readers from the recipe altogether.

By ending this investigation of the struggle over culinary formal elements at this modern vantage point, it allows us an oscillation between past and present that illuminates the singleness of purpose driving Victorian struggles to embed recipes within certain prescribed frames. While contemporary writers similarly labor to construct frames that embed recipes within larger bodies of knowledge, such frames ultimately aim to empower readers to construct their own culinary—and, crucially, social—identities. Considering the modern cookbook's diversity of frames and the possibilities those knowledges offer readers to imagine new social identities throws into stark contrast the prescriptive social identities Victorian culinary writers re-inscribed for their readers through experimental, principled, and visual cookery.

Chapter One:
Experimental Cookery:
the Recipe and the Experiment in Popular Chemistry Textbooks, 1821-1861

In 1821, Friedrich Accum, a German-born chemist whose lectures and writings on chemical experimentation enjoyed widespread popularity in London, published a new textbook. Accum, as Brian Dolan has pointed out, was one of London's more "prolific writer[s] on chemical experimentation," and as such, the appearance of another textbook is unremarkable.⁷⁴ Like his many other textbooks, such as the *Practical Essay on Analysis of Minerals* (1804), *Manual of Analytical Mineralogy* (1807), and *Practical Treatise on Chemical Tests* (1816), the new text continued Accum's successful tradition of introducing chemical techniques of analysis and experimentation to amateur middle-class audiences.⁷⁵

What *is* remarkable, however, is the content of the work. While Accum's analytical textbooks typically send readers out into the natural world to analyze stones and soil, the new textbook, *Culinary Chemistry*, sends readers to the kitchen to analyze food.⁷⁶ Indeed, immediately upon opening *Culinary Chemistry*, readers encounter a set of

⁷⁴ For a discussion of Accum's biography and popularity as a lecturer and writer, see Brian Dolan, "The Language of Experiment in Chemical Textbooks: Some Examples from Early Nineteenth-Century Britain," *Communicating Chemistry: Textbooks and their Audiences, 1789-1939*, ed. Anders Lundgren and Bernadette Bensaude-Vincent (Canton: MA, 2000), 141-164.

⁷⁵ For more on Accum's oeuvre and audience, see Dolan and also Golinski 241, 246; 282-283.

⁷⁶ For an exploration of the popular mineralogy textbook and the various sites of learning it incorporated, see Dolan 144, 151-152 and also Golinski, esp. Ch. 8. Accum was not the first man of science to turn his attention to the kitchen, although he was one of the first to write a popular work that sought to yoke analysis and cookery. In the 1790s, Benjamin Thompson "Count Rumford," one of the founders of the Royal Institution, famously conducted experiments on the use of heat in roasting and other culinary processes, disseminating his findings in demonstrations and published essays. In his c.1798 essay "On the Construction of Kitchen Fireplaces, together with remarks and observations relating to the various processes of cookery and proposals for improving that most useful art," Rumford issued a call for further scientific investigation into the "science" of cooking, *Collected Works*, Vol. III, 57-384.

images, originally copperplates, of a kitchen.⁷⁷ The images feature familiar cooking implements: strainers to make coffee, a steam boiler, a Dutch oven, a steam preserving pan. Also displayed are the materials to be analyzed: a pot of some foodstuff on the stove, coffee, and a chicken. Yet rather than depict a real kitchen, the kitchen in *Culinary Chemistry* is figured as a laboratory, its implements labeled and flattened in the manner of a scientific diagram.

This chapter explores the tradition of early-to mid- nineteenth-century popular science textbooks that applied the evolving scientific methods of analysis onto the materials and processes of the domestic kitchen. As historians of science such as Jan Golinski have demonstrated, the first half of the nineteenth century saw a growing demand for scientific, and particularly chemical, education (237). In the late eighteenth century, a growing culture of public lectures and demonstrations sparked widespread enthusiasm for chemical instruction. By the time *Culinary Chemistry* emerged in 1821, chemistry was enjoying its status as “the most spectacularly successful science of recent times” (Golinski 236).

As Golinski and other scholars such as Dolan have shown, a central factor in chemistry’s rising popularity in the first decades of the nineteenth century were the ongoing efforts by men of science to “communicate” chemical developments to an increasingly diverse audience (Dolan 142). Chemists, including Accum, offered a buffet of educational opportunities meant to “introduce[e] a middle-class public to new aspects of applied chemistry” (Golinski 246). While lectures continued as a staple of public

⁷⁷ Friedrich Accum, *Culinary Chemistry: Exhibiting the Scientific Principles of Cookery, with Concise Instructions for Preparing Good and Wholesome Pickles, Vinegar, Conserves, Fruit Jellies, Marmalades, and Various Other Alimentary Substances Employed in Domestic Economy, With Observations on the Chemical Constitution and Nutritive Qualities of Different Kinds of Food* (London, 1821), i.

education, chemists increasingly facilitated hands-on learning, publishing field guides, laboratory manuals, and other practical handbooks. “Thus equipped,” Dolan argues, “the consumers were encouraged to think of themselves as participants in the production of scientific knowledge” (150).

What these scholars have illuminated are the ways in which many chemists of the early nineteenth century sought, through the kinds of instruction they offered, to keep alive the spirit of egalitarianism that characterized the chemical pursuit of the eighteenth century. What they have also pointed out, however, is that the culture of science in the first half of the nineteenth century was in fact characterized by a tension between those who espoused “Enlightenment notions of science as an activity in the public realm” and those who advocated for a more professional, elite realm (Golinski 270). Dolan and Golinski track this debate through a study of the methods and instruments of chemical analysis. On the one hand, they argue, increasingly expensive instrumentation and complicated methods of measurement threatened to push the “chemical enterprise” towards the domain of the elite. On the other hand, even as methods and practices became increasingly sophisticated, many chemists “strove to communicate these techniques to public audiences” in order to keep analysis accessible (Golinski 282). Accum, among others, offered lectures on the technical work involved in chemical analysis, and published accompanying textbooks containing directions and explanations that allowed readers to practice chemical analysis in the field (Golinski 282, Dolan 151). Because “[m]ethods of mineral analysis were communicated” in these particular ways, Golinski argues, the chemical analysis of natural materials remained in the early

nineteenth century “an activity poised between the realms of specialist expertise and public science” (283).

Scholars have thus mapped the ways in which the tension between amateur and expert played into the “language of experiment,” or methods of communication, chemists developed to help early nineteenth-century middle-class readers analyze objects in the natural world (Dolan 143). What has been less well studied, however, are the ways in which this atmosphere shaped the textbooks constructed to help a similar audience analyze the objects in a different, traditionally feminine sphere: the kitchen. Around the time that instruction on mineral analysis began to flourish, as Melanie Keene has demonstrated, a “profusion of introductory texts” on the chemistry of the home likewise began to appear.⁷⁸ While a few texts such as John Aikin and Anna Laetitia Barbauld’s *Evenings at Home* (1796) appeared quite early, what I call “domestic chemistry” textbooks, or works specifically dedicated to instructing readers on the analysis of food, proliferated between the 1820s and the 1850s, although a few even persisted into the 1880s.⁷⁹ Such texts, Keen explains, “directed lessons into homes across Britain,” particularly the middle-class home (16). Chemists focused on “common objects such as coal, pebbles, feathers, candles, flowers, chalk and water” as well as everyday operations such as the making of tea in order to explain the relationship between chemical practices and the ordinary materials and processes of daily life (16).

⁷⁸ Melanie Keene, “Domestic science: making chemistry your cup of tea.” *Endeavour* 32.1, 2008. pp16-19.

⁷⁹As I noted in the Introduction, I take the term “domestic chemistry” from an 1876 article in the Samuel and Isabella Beeton’s magazine, *The Englishwoman’s Domestic Magazine*, in which the writer, one “A.B.,” urged women to “take a book of domestic chemistry” into their hands, “and go down into her kitchen. She will be in a far higher region of romance than Miss Braddon can take her into. She will learn that it is her province to renew her husband physically and mentally by dexterously depositing the right kind of nutriment upon the inward, invisible frame. The wonders of science shall superseded, then, for her the wonders of romance.” A.B., “The Englishwoman’s Economist,” *The Englishwoman’s Domestic Magazine* (London, England), 1876.

While Keene reads the emergence of the domestic chemistry genre as evidence of the ongoing egalitarian scientific tradition that invited all to participate in chemical research, a closer look illuminates a more complicated relationship between amateur and expert. In this chapter I build on the work begun by Golinski, Dolan, and Keene by exploring the textual “language of experiment,” or narrative strategies, nineteenth-century chemists developed to “communicate” the chemical analysis of food to their readers.⁸⁰ Michael McKeon, in his work on the rise of the English novel, argues that the novel genre emerged in the eighteenth century through “a dialectical process” of “recapitulation and negation”—of reprocessing certain aspects of traditional genres (in his case, the romance), while replacing others with new formal strategies.⁸¹ We can trace a similar dialectic in the domestic chemistry genre, which I argue exists at the intersection of two textual traditions: the domestic manual/cookbook and the popular scientific textbook. The forms of these genres in fact share roots. As Allison Kavey has argued, the “two disciplines” of alchemy—the predecessor to experimental chemistry—and cookery “shar[e] the recipe as a form of communicating information about preparing specific substances, and the belief that recipes when performed correctly dependably produce the same results.”⁸² As Dolan has shown, such replicability was central to the continued perceived accessibility of chemical analysis in the early decades of the nineteenth century. The “languages of experiment” in popular textbooks, he argues, were

⁸⁰ For more on the specific textual strategies chemists developed to inscribe and convey experimental chemistry, particularly analysis, see Dolan 141-164 and Golinski, esp. Ch. 8.

⁸¹ Michael McKeon, *Origins of the English Novel, 1600-1740* (Baltimore: Johns Hopkins UP, 1987), 13, 267.

⁸² Allison Kavey, *Books of Secrets* (Champaign: University of Illinois Press, 2007), 99. We can trace a generic and thematic lineage from the books of secrets to the domestic chemistry genre. Books of secrets served as the textual record of alchemist’s experiments, a textual tradition that chemists from Bacon onward would continue. See Carolyn Merchant, “The Violence of Impediments”: Francis Bacon and the Origins of Experimentation.” *Isis* 99.4 December 2008, pp731-760, Golinski, esp. pp 60-90).

often “fashioned as languages of instruction: the prescribed directions ostensibly guided readers actions” in the practices of analysis (155).

The narrative element of the recipe, in other words, bridges the spaces of the laboratory and the kitchen, and the processes of domestic cookery and experimental science. In this chapter I thus focus, in particular, on the ways in which early-to mid-nineteenth-century chemists leveraged the recipe as a narrative tool to both facilitate an exchange of knowledge between the kitchen and the laboratory and, conversely, to highlight distinctions between the knowledges and practices of chemical analysis and everyday cookery.

I begin with Accum’s 1821 *Culinary Chemistry*, a text that incorporates traditional culinary recipes in order to facilitate what I call “experimental cookery,” or a mode of domestic cooking wherein preparing a dish doubles as an experiment in chemical analysis. Through the textual element of the recipe, the process of everyday cooking becomes in *Culinary Chemistry* a chemical method, a means of constructing scientific knowledge. Keene notes that one of the central purposes of the domestic chemistry genre was to show audiences that “[t]here was no clear divide between the kind of experiments that could be conducted with everyday commodities or with the contents of a chemical cabinet” (19). A favorite demonstration in many domestic chemistry texts, for example, was to transform the routine of making tea “into an instructive experiment” (16). *Culinary Chemistry*, however, does not merely deploy the commodities of the middle-class home as objects for “home experiments” or chemical amusement. Through sections of recipes for canning, preserving, frying, stewing, and boiling, rather, *Culinary*

Chemistry positions its readers in the repeated labor of everyday cookery, a domestic labor it equates with scientific production.⁸³

I next turn to a wave of texts produced beginning in 1847 that treat the chemistry of the home. These include monographs such as Charles Gower's 1847 *The Scientific Phenomena of Domestic Life* and Alfred Bernays's 1853 *Household Chemistry*, as well as a series of articles in the popular press. In the early 1850s, Charles Dickens published Michael Faraday's lectures on "domestic philosophy" as "Conversations on Chemistry" in *Household Words*.⁸⁴ In January of 1861, physician Robert Bakewell issued the first of a four-part series entitled "On the Chemistry of Cookery" in *The British Mothers' Journal and Domestic Magazine*, a magazine for middle-class women.⁸⁵ In 1886, chemist William Mattieu Williams published *The Chemistry of Cookery*, a work that expanded his lectures

⁸³ Defining readership in *Culinary Chemistry* is slippery, and plays into issues of gender and social class. Historically, as Keene, Golinski, and Dolan have argued, Accum tapped into "the market for polite chemical education in the metropolis," writing his works for middle-class London audiences (Dolan 147). Such urban audiences would have comprised both men and women; middle-class London women frequently attended lectures and otherwise involved themselves in "polite" chemical instruction (Golinski 261). Given its content and implication in the household manual genre, *Culinary Chemistry* almost certainly, as I discuss throughout, likewise presumes a female audience. At times, however, Accum seems to address a rural rather than an urban audience, as when he begins a recipe for barberry jam by instructing readers to pick the fruit "from the stalk," although the processes of preserving he describes do not necessarily dictate a rural home (*Culinary Chemistry* 33). Accum's text also commands the reader to perform the labor herself, with little mention of servants. This does not necessarily solve the question of the social class of his intended audience, however. Many Victorian household manuals aimed at middle-class women readers employ the rhetorical conceit of ascribing labor to a cook when in fact middle-class women often did much of the housework themselves. For more on readership of the mid-Victorian household manual, see Beetham 15-30.

⁸⁴ James Hamilton, *A Life of Discovery: Michael Faraday, Giant of the Scientific Revolution*. (New York: Random House, 2002), and Wayne Melville, "Michael Faraday's Popular Science Lectures, Percival Leigh, and Charles Dickens: Science for the Masses in *Household Words* (1850-1851)". *Victorian Web* <<http://www.victorianweb.org/authors/dickens/faraday2.html> > 3 September 2016. Web.

⁸⁵ Robert Bakewell, "On the Chemistry of Cookery," *The British Mothers' Journal and Domestic Magazine* (London, England), January 1, 1861.

on “Household Philosophy” and “The Chemistry of Cookery,” first offered at the Birmingham and Midland Institute around 1855.⁸⁶

Structurally organized around the spaces of the home and the activities of everyday life, the domestic chemistry genre retains, at mid-century and beyond, a narrative structure that positions the home as a site for analysis. But whereas Accum’s domestic recipes worked to, as Keene notes, “sugges[t] that a familiar *activity* was already scientific,” these later texts, as I show, began to replace the productive model of chemical education with a more passive consumer model of learning, one targeted increasingly to women.⁸⁷ I track this transformation from the production to the consumption of chemical knowledge through the shift in the genre from domestic recipes towards narrative strategies rooted in traditions of scientific writing (16). In particular, as I show, domestic recipes give way to the lecture format commonly used by men of science in their public instruction. Recipes, too, transform in these later works into professionally-created “prescriptions,” or reports of experiments in chemical analysis. The prescription, as we will see, maintains the textual form of a recipe but evacuates any domestic content in favor of professionally-derived chemical knowledge presented as “fact.” This shift from domestic to professional content and forms, I argue, signifies a declining role for the amateur in the productive processes of new chemical knowledge and a concomitant decline in the notion that domestic cookery and chemical analysis were synonymous practices.

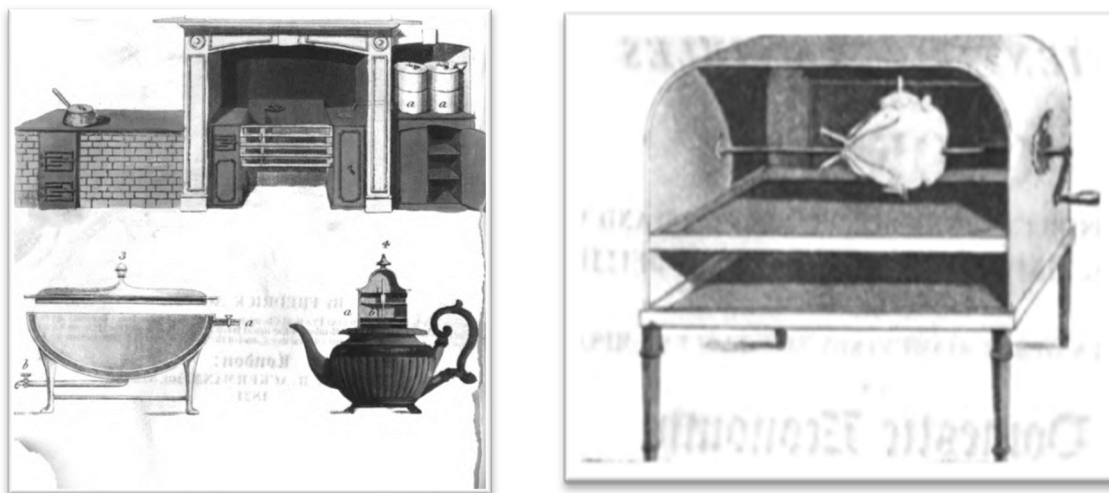
⁸⁶ William Mattieu Williams, *The Chemistry of Cookery* (New York, D. Appleton and Company, 1904), v. In its December 18th, 1883 issue, *The Times* described a lecture Williams offered to the Society of Arts the previous evening. “The Scientific Basis of Cookery,” *The Times* (London, England) Tuesday, December 18th, 1883. Helen Sillitoe identified Williams’ audience as women. See Helen Sillitoe, *A History of the Teaching of Domestic Subjects* (London, Methuen & Co. LTD), 23.

⁸⁷ Emphasis mine.

What this chapter thus seeks to draw attention to through this survey are the ways in which the domestic chemistry genre displays two interrelated tensions: the tension in the early nineteenth-century chemical community between egalitarian and professional conceptions of chemistry, and a tension between traditional domestic and scientific forms of knowledge. While scholars have begun to map this tension between masculine scientific and feminine domestic knowledges in other textual arenas, such as books of secrets, school textbooks, and the cookbook, I extend our understanding of the intellectual and textual exchanges between these realms by considering the transformation of the domestic chemistry textbook and its related literatures from 1821 to 1861.⁸⁸ In this chapter I thus trace the specific ways in which the domestic chemistry genre emerged and changed, both in form and content, from its origins in the 1820s as a hands-on laboratory/domestic manual organized around the spaces of the home to its transition into a purely descriptive text. I focus in particular on the recipe because it tells us much not only about the kinds of analytical work in which chemists sought to involve lay audiences, but because it also illuminates the evolving relationship between the laboratory and the kitchen, between the processes of analysis and domestic cookery, and between culinary and chemical modes of writing.

⁸⁸ For a discussion of the construction of femininity in early modern books of secrets, see Kavey, esp. Ch. 4, “Secrets Gendered: Femininity and Feminine Knowledge in Books of Secrets.” This genre, as Kavey argues, “negotiated”—to use Lieffer’s term—gendered knowledge and forms, particularly through their use of the recipe. For a discussion of the “negotiation” between Victorian women and chemical knowledge and the “uneasy” infiltration of analysis, quantification, and other “scientific modes of thought” into nineteenth-century domestic culture and its texts, see Lieffers, 939, and also Humble and Attar. I am interested in the way the developments within the culinary-analytical textbook genre register chemists’ concerns over the nature of their pursuit as a professional or amateur endeavor.

PART I: COOKING CHEMISTRY



I began this chapter by referencing these images, which appear on the frontispiece of Friedrich Accum’s 1821 *Culinary Chemistry*. As we can see, the images, originally copperplates, feature common items of the home: a coffee press, a chicken, a range. The scientific form of the image—what naturalists referred to as a “type” or an “ideal image”—however, reconfigures the domestic space of the kitchen into a laboratory.⁸⁹

Accum’s conflation of the space of the kitchen with the space of the laboratory is not unusual. In his exploration of the role of the home in the history of the laboratory,

⁸⁹ For a discussion of the history of the ideal image as a scientific representational practice, see Lorraine Daston and Peter Gallison, *Objectivity* (New York: Zone Books, 2008), 60. Although naturalists and chemists used composite images in their textbooks, composite diagrams were also common in a range of non-scientific nineteenth-century texts, appearing in genres such as the garden atlas and the cookbook.

Graeme Gooday writes that historically, “[t]he laboratory was not . . . necessarily a ‘building set apart.’”⁹⁰ Rather, laboratory practice often occurred in the spaces of the home, “in close juxtaposition to ordinary domestic life.” In particular, he writes, the kitchen, has “since the Renaissance, . . . been most closely linked with the laboratory” (790). Early men of science—both gentlemen and “professionals” such as Lyon Playfair—used home laboratories and kitchens to pursue early experiments, bolstering a sense that, as Keir Waddington puts it, “laboratories were in some senses familiar places.”⁹¹ The composite images on the frontispiece of *Culinary Chemistry* thus reflect a long-held belief that laboratories could exist in everyday spaces, and that they, furthermore, could ably serve as what Gooday calls a “venue of experimental epistemology.”⁹²

Despite the sense that kitchens could function as laboratories, however, the public laboratory and its practices, as Golinski points out, largely “remain[e]d a male preserve” (261). While women were free to attend public lectures, passively receiving chemical instruction, participation in chemical practice, or what popular author Jane Marcet described as “the minute details of practical chemistry,” remained a masculine enterprise.⁹³ Women might “perform a few simple experiments at home,” Golinski explains, but were not to engage in the experimental processes of the laboratory (261).

⁹⁰ Graeme Gooday, “Placing or Replacing the Laboratory in the History of Science? *Isis*, Vol. 99 No. 4 (December 2008), pp783-795, 790.

⁹¹ Goody 790. Kier Waddington, “More like Cooking than Science: Narrating the Inside of the British Medical Laboratory, 1880-1914.” *Journal of Literature and Science* 3.1 (2010), 50-70.

⁹² Gooday 785. Keene and Lieffers have also Accum’s conflation of the kitchen and laboratory; Keene 16, Lieffers 945.

⁹³ Jane Marcet, *Conversations on Chemistry, in which the Elements of that Science are Familiarly Explained and Illustrated by Experiments*, 2 vols. (London: Longman, Hurst, Rees, Orme and Brown). qtd in Golinski 261.

Although Accum never explicitly identifies his audience, the recipes, household hints, and elaborate instructions for preserving and canning that fill his text suggest that he envisioned an audience of women. In some senses, *Culinary Chemistry* thus retains the gendered demarcation of public laboratory and private kitchen-laboratory; the laboratory in which he visually immerses the reader in the text's opening pages is domestic, not public. While *Culinary Chemistry* maintains the public-private spatial divide, however, it takes pains to frame the kitchen as “a venue of experimental epistemology,” to use Gooday's phrase. The composite rendering of the kitchen, in its flatness and lack of precise detail, makes visual Accum's claim in the opening paragraphs that the “kitchen is, in fact, a chemical laboratory; the boilers, stew-pans, and cradle spit of the cook, correspond to the digestors, the evaporating basins, and the crucibles of the chemist.”⁹⁴ Above each image floats a small label (not pictured above): “Fig. 1” above the oven, “2” above the range, “3” above the “steam preserving-pan”, and “4” above the coffee press. Another layer of labels further subdivides each image: two steam boilers bear the small letter *a*, indicating that they are two of a type; one end of the steam line on the steam preserving-pan is *a*; the other is *b*. The image cross-sections the coffee press, furthermore, with each component labeled *a* (“cylindrical vessel”) and *b* (“the presses”).

Accum's argument is thus not only that experimental science *can* be done in the kitchen, but rather that the space of the domestic kitchen itself is intrinsically scientific. Furthermore, the visual hybridity of the image—scientific apparatus put to use for basic cooking—mixes together not only domestic and scientific *spaces*, but also suggests that

⁹⁴ Friedrich Accum, *Culinary Chemistry, Exhibiting the Scientific Principles of Cookery* (London: R. Ackermann), 1821. All quotations are from this edition of the text and will subsequently be included parenthetically.

the physical actions involved in chemical experimentation and food preparation are inextricable from one another.⁹⁵ In reframing cooking equipment as the instruments of scientific practice, Accum positions women in an active site of experimental labor. The tools of everyday life are poised for scientific practice; in *Culinary Chemistry*, women readers produce, not consume, chemical knowledge. But they also, the images suggest, produce food. While the cooking implements are labeled as experimental apparatus, the outcome and purpose of the experiments are domestic. The coffee press will produce coffee; the spitted chicken, in the process of roasting, suggests recently completed food preparation. The reader, according to the images, will actually be experimenting for the purposes of producing material foods, not merely for the purpose of obtaining theoretical scientific knowledge.

Culinary Chemistry thus, as its title suggests, aims to teach chemistry *and* cookery, which it argues are one and the same. It does so, I argue, by bringing together elements of two genres: the popular scientific textbook, a genre in which Accum regularly worked, as we have seen, and a domestic genre, the household manual. Under the heading “Cookery is a Branch of Chemical Science,” Accum explains that “Cookery, or the art of preparing good and wholesome food, and of preserving all sorts of alimentary substances in a state fit for human sustenance . . . is, strictly speaking, a branch of chemistry” (1). Yet cooking, he argues, “is one of the least cultivated branches of the science.” In its aim to illuminate the relationship between experimental chemistry

⁹⁵ Keene likewise notes the “similarity between household activities and chemical experiments,” although her point in exploring this link is to show how scientists created this connection in order to “conquer fears about learning the subject” (19). I am interested in the intellectual exchange Accum creates between these gendered spaces.

and cookery, *Culinary Chemistry* operates as a classic example of the popular scientific textbook geared towards, as Keene explains, showing educated but nonetheless non-professional audiences “that a familiar activity was already scientific.”⁹⁶

Yet Accum exposes this relationship not only to, as Keene puts it, “open the eyes” to “the wondrous world of science,” but, secondly, in order to help women, or, as he puts it, “those to whom the performance of such tasks is committed,” with a full range of household tasks, including cookery (Keene 17). Accum makes the productive bent of his work clear early on:

The culinary processes of roasting, boiling, baking, stewing, frying, broiling, the art of preserving meats, bacon and hams; the preparations of sauces, pickles, and other condiments; the conserving of fruits, the care and keeping of vegetables; the making of jellies, jams, and marmalades, are all founded upon the principles of this science, and much waste of the materials, as well as labour to the parties might often be spared, were those to whom the performance of such tasks is committed, made acquainted with simple chemical truths which would invariably lead to certain results. (1)

Like the copperplate images, this quotation from the opening section immediately foregrounds traditional culinary labor. Culinary action verbs drive the passage: preparing, preserving, rendering, curing, conserving, making. But *Culinary Chemistry* also offers in-depth treatment of other rural domestic tasks: instructions for when to slaughter and how to behead, skin, and preserve animals, how to feed an animal so as to produce the most nutritious and tasty meat, and how to store meat to preserve its shelf life all appear in the text.

Such household instructions, I argue, align *Culinary Chemistry* with a second genre—the household manual, a culinary genre that emerged to help women handle what

⁹⁶ Keene 17.

Robert Appelbaum calls “the pragmatics of household management.”⁹⁷ Besides its content, the overall structure of *Culinary Chemistry* solidifies this generic link. “The concept of household management in printed texts,” as Sherman explains in her history of the genre, “extends beyond kitchen, smokehouse, and stillroom to encompass earthy areas,” including “the barnyard and garden.”⁹⁸ Such texts, she writes, “assume readers’ involvement with the economy of nature,” covering material related to “the entire year’s garden/barnyard/table operations” (18). *Culinary Chemistry* similarly invades nearly every space of the rural home, moving linearly from the kitchen to the dining room, and then progressing to the external world of the household: the cellar, the meat shed, and so forth. The text, furthermore, treats all spaces as rife for chemical investigation—a move common in the domestic chemistry genre.

In addition to the copperplate images of the kitchen-laboratory and a structure that progresses through the spaces of the home, the central textual feature that illuminates *Culinary Chemistry*’s efforts to bridge chemical and culinary genres and practices is its reliance on the recipe as one the central narrative modes of the text. Experimental chemists and domestic cooks, as Kavey notes, valued the recipe for its ability to “dependably” transmit instructions for completion because the recipe’s very structure creates an emphasis on future labor. A recipe, as Appelbaum explains, is “framed as . . . an imperative,” a call to future action (13).

Indeed, the call to readerly participation as a mode of learning is embedded in the etymology of the word “recipe” itself. William Eamon, in his history of early modern

⁹⁷ Robert Appelbaum, “Rhetoric and Epistemology in Early Printed Recipe Collections,” *Journal for Early Modern Cultural Studies*, 3.2 Fall/Winter 2003, 1-35, 7.

⁹⁸ Sherman 15.

books of secrets, explains that “[r]ecipere is the Latin imperative ‘take.’”⁹⁹ “Because it prescribes an action, a means for accomplishing some specific end, the recipe’s ‘completion’ is the trial itself.” “A recipe,” he writes, is a prescription for an experiment, a ‘trying out.’” The recipe as a genre thus “implies a contract between the reader and the text.” Kyla Tomkins refers to this characteristic as the “‘doingness’ of the recipe.”¹⁰⁰ “The imperative tense” characterizing the recipe form, she argues, “implies both an ‘I’—the speaker or author of the recipe—and a ‘you’—the reader—while the imperative tone exists without the social lubrication of the polite invitation. The recipe thus exists as an ongoing command—‘you: do this’—implying a hierarchical relationship in which the past—invoked as an eternal present tense—may command the future” (439).¹⁰¹ Recipes, she argues, “demand to be *done*, to be *experienced*” (442).

Sherman has argued that since the eighteenth-century, domestic writing relied on this call to future action as a central feature of its epistemological project. Early print domestic writers, she explains, argued that the genre’s purpose lay not in helping readers successfully execute an isolated recipe once, but rather in teaching them an entire system of cookery and household management. As such, the household text was not simply “a conduit of immediately useful knowledge”; it relied on readers actually proceeding through the text, laboring for hours to perfect increasingly complex technical skills (57). In order to “make reading participatory rather than merely a passive act for absorbing information,” she explains, eighteenth-century domestic writers thus constructed the

⁹⁹ Eamon 131. Eamon, like Kavey, discusses the use of the recipe as a textual method in early modern books of secrets. See esp. pp. 131-132.

¹⁰⁰ Kyla Tomkins, “Consider the Recipe.” *J19: The Journal of Nineteenth-Century Americanists*, 1.2 Fall 2013, pp. 439-445.

¹⁰¹ Like Eamon, Tomkins understands the recipe through its etymology, arguing that “we understand a recipe to be something that is written down and passed on—that is *received* by someone else, as the Latin roots of the word itself imply” (442).

“intelligible recipe,” or recipes rendered into “reader-friendly explicitness” (x, xvii, 64). Such recipes engage the reader in a “pedagogic transaction” with the domestic text, “hold[ing] them jointly responsible in a project to reproduce knowledge” (52, 174). “Trial,” she argues, “is crucial to the text’s epistemology” (182).

Popular textbooks on analysis, too, relied on the recipe’s call to hands-on, step-by-step labor as a means of conveying the technical processes of chemical analysis to amateur audiences. Chemists such as Accum, whom Dolan describes as “a popular lecturer and prolific writer on chemical experimentation,” thus often produced user-driven laboratory manuals featuring simple step-by-step instructions in the manner of a recipe. “Accum’s books,” Dolan argues, “demanded reader interaction.” Indeed, the number of writings he published in this vein, Dolan argues, “not only attest[s] to the popularity of his work but imply the commitment of his audience to learn to follow his instructions” (147). In other writings, Accum openly urged hands-on practice as the most effective method of learning analysis, arguing in 1804 that “[t]he only effectual means of facilitating the study of that science consists of applying hands to the experimental part . . . to become familiar with the nature, manipulations, and practice use of the chemical apparatus. This however cannot be done in PUBLIC LECTURES, not at a distance from the chemical furnaces. He must for that purpose have access to the laboratory of the operative chemists.”¹⁰² That same year Accum instituted private laboratory lessons intended, as Dolan explains, “to familiarize students with experimental practices involved in chemical analysis” and to provide “demonstrations of experiments which the audience could later perform for themselves” (147).

¹⁰² Dolan 147. Friedrich Accum, *A Practical Essay on the Analysis of Minerals*, (London: for the author, 1804), ii. qtd. in Golinski 260.

The recipe, with its built-in imperative and shared textual roots in domestic and chemical writing thus offers Accum in *Culinary Chemistry* a narrative mode already familiar to both domestic cooks and chemists—two audiences he consistently invokes in the text, as we will see. As such, it offers a mode well situated to help readers leverage chemical analysis as a means of constructing effective methods of household management. Accum works out this dual purpose in the two largest sections of the book: “General Operations of Cookery,” and a second section that addresses preserving raw and uncooked food.

While both sections primarily consist of domestic recipes, the form and purpose of the recipe in each varies. The first, “General Operations of Cookery,” explains methods of cooking: roasting, boiling, broiling, frying, stewing. Each of these operations is subdivided into two parts: the first part consists of a recipe; immediately following each recipe is what Accum titles a “*Rationale*,” or an explanation of the chemical changes that occur to the constituents of the meat or vegetable when cooked in the manner described in the recipe. Through this recipe + *Rationale* form, I argue, Accum uses the process of everyday cooking to engender an act of scientific experimentation. Consider, for example, the recipe for “Broiling.” He begins with a definition of broiling, followed by a claim for the outcome or purpose of the experiment: “Another process in which meat is subjected to the immediate of fire is broiling, which at first sight seems not to differ from roasting. The effect on the meat is, however, considerably different” (12). Accum does not go on to explain or narrate the effect; rather, he gives directions in the form of a recipe for the reader to follow so that she can perceive this effect herself and learn to distinguish it from the effects produced by roasting meat:

The process consists in laying chops or slices of meat on clear burning coals, or a gridiron placed over a clear fire. It is indispensable that the chops or slices be moderately thin, otherwise the outside will be scorched to a cinder before they are cooked within; from one to three fourths of an inch is a proper thickness. It is also necessary that the fire be moderately brisk, without smoke or flame, lest the meat should acquire a smoky taste. When a gridiron is used it ought to be thoroughly heated before the slices or chops are laid on it, to prevent them from sticking to the bars. In order to broil them equally, they must be turned from time to time till the cook can easily pierce them with a fork or sharp skewer, which is the test of them being sufficiently cooked. (12)

As soon as the cook has finished the above process, she encounters the “*Rationale*”:

The heat being very quickly and directly applied, not gradually as in roasting and baking, the surface of the meat is speedily freed from its watery juices, and the fibres become corrugated, forming a firm and crisp incrustation of fibre and fat. This crust effectually prevents the escape of the juices from within; namely, the gelatin, and the osmazome, which are more rapidly expanded by the heat than in roasting. . . . Accordingly, it is found that broiled meat is more sapid, and contains more liquid albumen, gelatin, and free osmazome, than the same meat would do if broiled or roasted. It is this greater degree of juiciness, sapidity, and tenderness, that constitutes the peculiarity and perfection of this mode of booking, compared with roasting, baking, or frying in a pan. (12-13)

Through the recipe + *Rationale* textual arrangement, Accum engages the reader in one of the oldest forms of scientific experiment: the Baconian model of manipulating nature in order to extract her “secrets,” or as Carolyn Merchant puts it, “reveal the properties of matter and shape it into new forms.”¹⁰³ More specifically, through her transformation of the raw food material into cooked, the cook engages in an act of chemical analysis—the isolation and identification of the chemical “principles” of the food product. She has not only analyzed the individual chemical “principles” of the meat—gelatin, osmazome, etc.—but has learned how the process of broiling has affected these principles. The recipe

¹⁰³ Carolyn Merchant, “The Violence of Impediments”: Francis Bacon and the Origins of Experimentation.” *Isis* 99.4 December 2008, pp731-760, 756. Keene also notes that domestic chemistry texts utilized hands-on, everyday activities such as tea-making that resembled “introductory” chemical experiments. See pp. 16-19.

+ *Rationale* textual form thus works to create a conditional relationship between the technical process of the recipe and the chemical analysis it brings about: if the reader follows the culinary recipe, she learns, via the glossing “Rationale,” that her manual actions have created the appropriate conditions for the heat to then extract the constituents of “gelatin and osmazome” from the meat (14). In leveraging everyday cookery as a means of engaging cooks in hands-on chemical analysis, Accum maintains the egalitarian ethos of his disciplinary moment. (Indeed, the opening copperplate images of the kitchen underscore the ready availability and familiarity of the chemical instruments necessary for readers of *Culinary Chemistry*: not everyone could enroll themselves in Accum’s private laboratory lessons or purchase special equipment, but the kitchen is a nearly universally-accessible space.)

But the purpose of the recipe + *Rationale* section is not to teach women how to perform chemical analysis merely for the sake of, as the subtitle articulates, “Exhibiting the Scientific Principles of Cookery.” Rather, the purpose of completing the recipe and exhibiting the “principles” is for the cook to learn which methods of cooking are best suited to which types of meat or vegetables, based on how the cooking methods affect the constituents or “principles” of the food source. Once the reader has completed the recipe for “Broiling,” for example, the *Rationale* explains that “every sort of meat, however, is not fit for broiling. The chemistry of the process will point out the sorts best adapted for it. The flesh, for example, of old animals, which is deficient in gelatin and albumen, would be too much dried by roasting. The larger muscles, also, which abound in fibrous substance, such as the rump of beef, are well fitted for broiling” (12).

Here, Accum positions chemistry in the service of the home, or to help women in “the pragmatics of household management,” to borrow Applebaum’s phrase.¹⁰⁴ “The chemistry of the process,” or the chemical analysis activated through following the recipe, is meant to affect daily cooking habits, guiding the cook’s future food and cooking process selections. The notion that chemical analysis, by revealing the “principles” of food, could improve domestic practice is one that, by the 1850s, would gain currency beyond the domestic chemistry genre. As I discuss in Chapter Two, the language of “principles” and what Humble describes as “their implications for cooking methods” began to gain ground in popular cookbooks around 1850.¹⁰⁵ Many cookbook writers from the 1850s through the 1870s, as we will see, felt such pressure to develop systems of cooking based on these principles that they revised and reworked the cookbook form. In the 1870s and beyond, as historians of the home economics movement have argued, the nutritional implications of chemical principles began to deeply shape Victorian culinary instruction outside the confines of the cookbook. The home economics movements, the establishment of national cookery schools, and the rise of cookery courses in government schools were all, as these scholars have documented, predicated on the belief that chemical knowledge could eradicate wasteful domestic practice.¹⁰⁶

In 1821, then, we can begin to see the roots of a connection between chemical analysis and domestic work that would fully blossom much later in the century. Through the recipe + *Rationale* narrative conceit, that is, Accum walks readers through the process of analysis; discovering the “principles” of food, the text argues, offers insight into her

¹⁰⁴ Appelbaum 7.

¹⁰⁵ Humble, esp. Ch. 1

¹⁰⁶ See Attar, esp. Chs. 2 and 5, and Manthorpe.

daily practices. What we do not yet see, at least in this section of the text, however, is the notion that chemical knowledge *supersedes* domestic knowledge. As scholars such as Lieffers and Attar have shown, chemical analysis and other scientific knowledges were frequently positioned, particularly in the second half of the nineteenth century, as a means of overturning traditional practices and understanding gained through everyday domestic experience. Indeed, Lieffers argues that nineteenth-century women operated under a “scientific prerogative” created by men of science equal to the more well-known “moral prerogative in the home” (937). Men of science, she argues, produced a new “culinary authority” meant to challenge “customary, regional, familiar, or simply experiential habits” (951). As I show in Chapter Two, chemical knowledge would, after mid-century, likewise put pressure on the traditional representational forms of the cookbook genre, as cookbook writers increasingly believed the domestic recipe could no longer fully represent the processes of cookery.

In 1821, however, *Culinary Chemistry* registers greater ambivalence about a hierarchy between domestic and chemical knowledge than would later texts. The structure of the “Recipe + *Rationale*” section makes clear that Accum, in this section at least, does not indict or overturn domestic practice, but rather positions it as integral to the process of chemical analysis that he hopes will in turn benefit cooks in their daily work. Indeed, the textual construction *embeds* domestic recipes within chemical explanations; those explanations in turn are embedded in and rely on the domestic recipe. Leonardi has argued that the recipe is an “embedded discourse”—that it makes meaning only through a relationship with its surrounding material, or “frame.”¹⁰⁷ In the case of the

¹⁰⁷ Leonardi 340.

recipe + *Rationale*, both textual parts rely on the other to make meaning. The relationship is textually and epistemologically symbiotic rather than hierarchical, or top down.

Customary domestic practice, furthermore, works alongside chemical knowledge in the text as a basis for experimental authority. A simple example of the way in which Accum deploys tradition as authority can be found in his recipes that cite the “common practice” of a particular region as the rationale for their appearance in his text. For example, at the beginning of a recipe for making bacon, he writes that “the following is the method of making bacon in Hampshire and Somersetshire” (24). Elsewhere he writes that “The method of curing bacon and hams in Westphalia (in Germany) is as follows” (25).

Besides regional custom, Accum frequently borrows directly from domestic cooks for his experiment directions, explicitly positioning culinary tradition as a source of authority. In the recipe for “Stewing,” for example, he writes that “the general rule of the best cooks is to allow from 20 to 30 minutes slow simmering to a pound of meat, reckoning from the time the pot begins to boil. . . . Cooks often put a trevet, or plate, on the bottom of the boiling pot, to prevent the boiled substance sticking to the pot” (15). Indeed, in the *Rationale* for “Boiling,” Accum uses domestic experiential knowledge as direct evidence against a chemical theory as to the structure of raw meat fibre: “It is this, rather than any softening of the fibres themselves, which seems to be the real effect produced [on the meat by boiling], unless, with some, we consider the fibres as nothing more than minute and close-set bundles of blood vessels. This doctrine, however, the experience of every cook will disprove, for if the boiling be long continued, the fibres of the meat will alone remain” (15).

Both within and beyond the “General Operations of Cookery” section, Accum continues to rely on the habits of both everyday cooks and published culinary sources to fill in ingredients, the amount of each ingredient, the types of flavouring to add, and even to dictate the process of the experiment itself. In a recipe for “Broth,” for example, he writes that “Cooks usually allow for good broth, one pound of muscular meat, to two quarts of water, and they suffer the fluid to simmer till reduced, by evaporation, to one pint, or one pint and a half Cooks consider it essential that the broth be clear; the scum, or albumen of the meat, which becomes coagulated and rises to the surface during the boiling, must therefore be removed from time to time.

Similarly, in his recipe for “Gravy” he explains that “if the gravy be intended for made dishes, it is customary to give it the consistency of cream, by means of *thickening paste*. . . . It is therefore covered with water and suffered to simmer for about one hour, or till the fluid is reduced to one half its bulk” (20). By explicitly invoking traditional domestic practice, Accum positions feminine experiential knowledge as a source not only of culinary but also of chemical authority; the suggestion here is that neither the knowledge nor process of analytical chemistry supersedes traditional domestic practice. Rather, the two organically fit into and rely on one another.

Furthermore, domestic knowledge holds credibility precisely *because* it is customary, because it has accumulated over time and through many repetitions. Words such as “customary,” “often,” and “usually” dot the recipes throughout *Culinary Chemistry*: “Pastry cooks usually allow from ten to twelve ounces of butter to one pound of flour for making a light puff paste”; “It is then usually seasoned”; “Flavouring

vegetables are often added, and fried with the meat, such as sliced onions, carrots or celery, till they tender, together with some spices and the usual condiments.”

Such words typically accompany a passive sentence construction, which suggests a history of such processes. “Eggs are often fried”; “It is then usually seasoned.” Beyond these individual passive phrases, Accum constructs many of the recipes themselves in the “recipe + *Rationale*” section in the passive voice. In the recipe for “Roasting,” for example, he writes that “[i]t is a general practice to move the spit back when the meat is half done The meat is deemed sufficiently roasted when the steam puffs out of the joint in jets towards the fire. To facilitate the process of roasting, a metal screen consisting of a shallow concave reflector is placed behind the meat” (11).

By constructing these recipes in the passive voice, Accum offers experiments for analysis wherein the passive step-by-step directions double as instruction for future action *and* invocation of established practice. As we have seen, the recipes in this section function as instructions for the reader to take action. Specifically, through the recipe + *Rationale* construction, the process of everyday cooking becomes a process of chemical analysis. This process of cooking-experimentation, or what I call “experimental cookery,” relies on the recipe’s intrinsic imperative, its call to action. Yet only the first part of this recipe for roasting describes a process to be completed in the future (“the meat should be gradually turned before the fire”; “it should be placed at some distance”). The second half of the recipe slips into passive voice, reading more like a record of actions that have been completed in the past (“To facilitate the process of roasting, a metal screen consisting of a shallow concave reflector is placed behind the meat”). We see this same passive recipe construction elsewhere in the section: “Roasting on a String .

. . is usually performed by means of the useful contrivance called a *bottle jack*, a well-known machine, so named from its form When the meat is half done, the lower extremity of the joint is turned uppermost, and affixed to the string, so that the gravy flows over the joint the reverse way it did before” (11).

These are actions that are reliable, the text implies, because they have been completed many times before. Female domestic cookery becomes a “given,” a body of culture that can be presumed to exist; knowledge that, in fact, precedes the chemical knowledge on offer. Completing a recipe in *Culinary Chemistry* thus brings the chemist-cook into what Sherman calls “an authorizing body of voices,” a body of knowledge established by other domestic cooks, as she performs culinary tasks the text explicitly marks as part of a long-standing domestic tradition (4).

In leveraging traditional practice into textual authority, Accum legitimizes his recipes, or gains readerly trust, in a way that readers of household manuals would recognize. Recipes in the domestic manual genre, as Sherman has argued, are “authorized by transmission in a community” (4). Culinary writers gained textual authority, in other words, by presenting their recipes as recipes “that originate in a community,” that have been tried and validated by others (4). What Sherman calls “shared expertise” becomes in *Culinary Chemistry*, as in the domestic manual genre, a means of validating the recipes on offer. Through the passive construction of the recipe and its subsequent *Rationale*, however, Accum redirects “shared expertise”; domestic experience and chemical knowledge work together in a system of intellectual exchange, wherein prior domestic practice and new chemical knowledge together produce a superior food product.

Culinary tradition is not the only source of authority in *Culinary Chemistry*, however; rather, the text ultimately mingles domestic experience with the scientific authority of professional chemists. In the second section of recipes featured in his work, Accum largely replaces domestic experience with a source of authority rooted in the scientific textbook tradition: reports of the discoveries of professional chemists, pharmacists, industrialists or government agents.¹⁰⁸ The shift in textual authority accompanies a shift in content. While “The General Operations of Cookery” section offered recipes for everyday cooking, the entire second half of *Culinary Chemistry* is devoted nearly exclusively to helping the cook preserve food for the future: meat, fish, vegetables, fruits. These recipes continue the work of the household manual, taking the reader beyond the kitchen into the larder, pantry, and “meat safe.”

Accum switches from domestic practice to professional experiment as a mode of authority in this section because, he argues, traditional practices for preservation have been unable to accommodate changes wrought by “the progress of society”:

As the supply of food is always subject to irregularities, the preservation of the excess, obtained at one time, to meet the deficiency of another, would soon engage the attention of mankind. At first this method would be simple and natural, and derived from a very limited observation, but in the progress of society, the wants and occupations of mankind would lead them to invent means, by which the more perishable alimentary substances of one season, might be reserved for the consumption of another, or the superfluous productions of distant countries might be transported to others where they are more needed. (23)

In the section on preserving Accum thus presents recipes that reflect the findings of experiments performed by experts. For example, he prefaces the recipes for “Pickled Mackerel,” “Pickled Salmon,” and “Collard Eels” with accounts of two experiments: the

¹⁰⁸ For a discussion of this longstanding textual tradition amongst men of science, see Golinski p. 257.

first, an “account of the preservative quality of pyre-ligneous acid exhibited in a memoir by Dr. Wilkinson to the Bath Society,” which he deems “highly important”; the second, a complicated experiment involving specialized apparatus performed by “Mr. London.” While he does not offer any recipes for preserving food via “pyre-ligneous acid”—the account of the experiments stands alone—Accum recounts London’s experiment in detail. After recounting the experiment, which contains both analysis of and technical directions for preparing brine in which to preserve fish, Accum immediately includes the three recipes for “Pickled Mackerel,” “Pickled Salmon,” and “Collard Eels.” Importantly, Accum does not offer directions for the brine in the recipes themselves, but simply commands, “After splitting the fish, and having taken off their heads and part of the skin of the belly, let them be laid in brine about three or four hours” (26). Notice the passive voice has disappeared from the text, replaced by an active command. This is not a repetition of prior domestic actions but rather new actions derived from chemically-produced knowledge. The reader should, by reading London’s experiment, be able to prepare the brine without further instructions, and, furthermore, to accept this method of brine-making and fish-preserving as superior to other methods.

Indeed, Accum frequently introduces these preserving practices as the “Best” or “unquestionably the best,” as in the section “Best Method of Preserving All Kinds of Cooked Butcher’s Meat, Fish, or Poultry,” wherein he recounts the experiments three different professionals conducted on preserving food by canning. While the techniques for canning lay beyond the reach of the domestic cook, Accum follows his accounts of these experiments in canning with recipes for the “Preservation of Meat by Potting,” a

similar process to canning in that it entails closely packing food into a container and heating it to an extremely high temperature.

What these examples show us is that, in the section on preserving, Accum sources both technical directions and chemical rationale from chemical experts rather than domestic cooks. Throughout this section, furthermore, knowledge generated by male experts begins to shape and even correct domestic practice, a contrast to earlier sections of the text where Accum frequently invokes the practices of domestic cooks, invoking chemists only in the explanatory *Rationale* (such as in the *Rationale* for roasting, where he explains that “Chemists prove that the peculiar odour and taste of roasted meat depends on the development of the principle which has been called *osmazome*”) (12).

The shift in culinary-chemical authority likewise affects the way in which knowledge gets shared between cooks and chemists. The domestic recipes in “The General Operations of Cookery”—“Roasting on a String,” “Roasting on a Spit,”—and so forth, came *before* the “*Rationale*.” The *Rationale* thus glossed the culinary recipe, offering analytical descriptions of the processes of standard cookery practices. Chemical explanation, that is, followed domestic tradition, creating an intellectual commerce between chemist and cook.

The recipes in the preserving sections, on the other hand, *follow* the recitation of experiments created by professionals. Completing the culinary recipe in this section enables—and, arguably, compels—the domestic cook to replicate the experiments produced by professionals, rather than following her own practices and discovering the chemistry that lurked beneath. (These recipes, like those for preserving meat, begin with imperative verbs: “Take,” “Squeeze,” “Strain,” mandating action on the part of the

reader.) Before giving the recipes for fruit syrups, for example, Accum explains that “[a] weak syrup has a tendency to ferment and quickly become sour if kept in a temperate degree of heat; it is therefore not calculated to prevent the natural fermentation of vegetable juices, which always increase its tendency to corrupt” (33). He thus begins by pointing out a culinary problem—“weak syrups,” suggesting that traditional method of preserving fruits is incapable of containing nature’s inevitable and “natural” progression towards decay. “Pharmacutists,” however, have discovered a remedy, “ascertain[ing] that a solution, prepared by dissolving two parts of double refined sugar in one of water, or any watery fluid . . . forms a syrup, which neither ferments nor crystallizes; and this proportion may be considered as the basis of all syrups” (33). The recipes for “Lemon Syrup,” “Orange Syrup” and “Mulberry Syrup” that follow indeed use “this proportion” for “the basis” for each syrup. In this section, the culinary recipe thus changes as a narrative mode. Previously, it served as a textual vehicle for chemical analysis; here it reflects and replicates the knowledge produced through an external chemical experiment.

Ultimately, in these final sections of the text, Accum uses the culinary recipe as a method for readers to apply the discoveries chemists and other professionals have made on processes for containing the abundance and decay of the natural world. In utilizing chemical knowledge to address these spaces of the home, we again see *Culinary Chemistry* bridge the two textual traditions of the chemical textbook and the domestic manual, both of which turned to the recipe, or textual “rules,” as a means of enabling readers to exert control over the natural world. Early nineteenth-century chemists attempting to enable the public to perform their own chemical analyses on materials of the natural world, as Dolan explains, wrote textbooks “with the aim of demonstrating

how following instructions could allow the reader to identify minerals” and other natural phenomena. “Reducing experimental practices to textual rules,” he writes, thus “helped create the appearance that scientific practices were rule-bound, undeviating, and coherent” (148).

Domestic management texts, as Sherman explains, likewise “offer readers a relation to nature through a superimposition of rules, such that food production and preparation emerge as deliberately, minutely constructed through a textual regime” (24). Such texts “implicat[e] readers in a domesticity that is both immersed in heaving, breathing, changing phenomena and constructed by external impositions” (24). Eighteenth-century domestic management writers, that is, presented their recipes as the antidote to the uncertainties of the natural world, ultimately positioning themselves as an authoritative and much-needed buffer between the reader and the disorderly natural world. Kavey identifies a similar pattern in early modern domestic management texts, writing that “[t]he recipes in these books present steps to be performed in temporal order, and they introduce a model of the world in which following the instructions with the listed ingredients will also produce the same outcome” (99). Such replicable recipes, she writes, “were thus powerful tools for rendering the natural world predictable and manageable” (99).

Culinary Chemistry, as we have seen, likewise commands readers to split heads, break bones, remove skin, “[p]ick the barberries from the stalks, and mash them” (33). As the readers follow these commands and complete the rules, both in the section on preserving and in “General Operations of Cookery” the text engages them in two communities of experts—both everyday cooks and professional chemists.

PART II: CONSUMING CHEMISTRY

Two decades after *Culinary Chemistry*, a wave of other popular monographs and periodical articles on the chemical analysis of everyday food began emerging, such as Charles Gower's 1847 *The Scientific Phenomena of Domestic Life* and Albert Bernays's 1852 *Household Chemistry*. Chemists also propagated their theories in the popular press, an important auxiliary to the domestic chemistry genre. In 1850, Charles Dickens's journal *Household Words* published a series, "Conversations on Chemistry," that revised Michael Faraday's lectures on "domestic philosophy" into a series of conversations held in a middle-class home. Chemists also began targeting women's journals specifically, increasing the sense that women, in particular, needed to hear their teachings. In January of 1861, *The British Mother's Journal and Domestic Magazine*, a morally-inflected magazine for middle-class women readers, published a four-part series by physician Robert Bakewell entitled "On the Chemistry of Cookery," and in 1885 chemist William Mattieu Williams published *The Chemistry of Cookery*, an expanded version of a series of lectures he first gave to a group of women in Birmingham.¹⁰⁹

In the following section I survey many of these texts, which I argue register a growing tension in the chemical community between the expert and the public and between domestic and chemical forms of knowledge. While this tension, as I discussed earlier, has been documented by historians of science as it appears in popular textbooks on mineral analysis, I trace the continuously evolving shape and function of the recipe within the domestic chemistry genre in order to illuminate how this tension affected the

¹⁰⁹ Sillietoe 22.

relationship between chemistry and domestic forms of knowledge as chemistry evolved into an increasingly codified discipline.

Although not nearly as prolific a writer as Accum, Albert Bernays was likewise well read by the public. In 1852 he published *Household Chemistry*; by 1869 it had reached its seventh edition. Born in London, Bernays studied chemistry first at King's College and later with the "father of organic chemistry," Justus Liebig, at Giessen, Germany. Upon his return to England, Bernays served as a juror in the 1851 Great Exhibition, lectured at the Chemical Laboratory in Derby and later at St. Mary's Hospital.

At first glance, *Household Chemistry*, published in 1852, appears to continue the egalitarian tradition evident in *Culinary Chemistry*. In the Preface, Bernays explains that he chose *Household Chemistry* as a title because it "reminds one of 'Household Words'; and I cannot forego the pleasure I feel in commending it to the attention of young and old The 'Conversations on Chemistry' are beautifully written; and had I not had the first part of my book in print when they appeared, I think I should have given up the idea altogether."¹¹⁰ Here Bernays refers to *Household Words*' series "Household Chemistry," which featured articles based on Michael Faraday's lectures on "domestic philosophy" given in 1850 at the Royal Institute. As James Hamilton and Wayne Melville explain, Charles Dickens, hoping to add some scientific heft to *Household Words*, wrote to Faraday and requested permission to reprint several of his lectures. Faraday complied, sending Dickens his hand-written lecture notes. Dickens recruited staff-writer and physician Percival Leigh to rework the talks into a series of amusing, accessible articles.

¹¹⁰ Albert J. Bernays, *Household Chemistry, or, Rudiments of the Science Applied to Every-Day Life* (London: Sampson Low, 1852), xv.

Leigh complied, transforming Faraday's talks into a series of conversations held by a fictional middle-class family in their home.¹¹¹

The link Bernays draws between the nature of the *Household Words* articles and his own text helps give us a fuller sense of the domestic chemistry genre at mid-century. Bernays wrote *Household Chemistry*, he explains, not for "regular students of Chemistry. For such, the excellent introductions by Graham, Fownes, Brande, Liebig, Turner, and Gmelin, &C., are all-sufficient." Instead, he explains that he has written "chiefly for the young, and for those . . . of general education" who are nonetheless ignorant of "those great laws" ruling the universe. Bernays, like Dickens, thus sought to offer materials that deliberately hovered between serious and popular science. The structure of both works enabled this liminal position. In "The Mysteries of a Tea-Kettle," one of the articles in the *Household Words* series, the article begins by lauding its source material, Michael Faraday's lectures. "At one of Mr. Bagges' small scientific tea-parties," the article reads, "Mr. Harry Wilkinson delivered to the worthy gentleman a lecture, based principally on reminiscences of the Royal Institution, and of a series of lectures delivered there, by Professor Faraday address to children and young people."¹¹² In its opening paragraph, "The Mysteries of a Tea-Kettle" aims for scientific legitimacy and prestige. But by repackaging Faraday's lectures into a fictional conversation, the magazine simultaneously positions the lectures as an ordinary conversation amongst a middle-class family.¹¹³

¹¹¹ Hamilton and Melville, *Victorian Web*

<<http://www.victorianweb.org/authors/dickens/faraday2.html>>

¹¹² Percival Leigh, "The Mysteries of a Tea-Kettle," *Household Words* No. 34 (16 November 1850): 176-181.

¹¹³ The dialogue and question and answer form was one of the more common structures early nineteenth-century men of science used in the lectures and textbooks they wrote for popular audiences. See Dolan and also David Knight, "Communicating Chemistry: The Frontier between Popular Books and Textbooks in Britain during the First Half of the Nineteenth Century," *Communicating Chemistry: Textbooks and their*

Bernays, too, frames his work as both popular—linking the title to the *Household Words* articles—and also as a derivative of work by a celebrity scientist. “The titles of the several chapters,” Bernays explains, “are in imitation of Professor Liebig’s ‘Chemistry of Food;’ for . . . I first thought of lectures under such titles after reading that beautiful work” (xv). Like “The Mysteries of a Tea-Kettle,” Bernays ties *Household Chemistry* to a work by a chemist at the apex of the profession, in this case German chemist Justus Liebig. At mid-century, as David Knight notes, Liebig’s “English reputation was becoming very high,” due in large part to his 1847 *Researches on the Chemistry of Food*, which broke new ground in nutrition science and earned him the status of a household name.¹¹⁴

In his preface, Bernays continues to build the connection between his work and those of professional chemists, explaining that “I have naturally availed myself of the labour of my predecessors and contemporaries, as every one does, and must do, when he attempts to write on any science. I have even gone so far as to make use of the very words of others, if I thought I could gain nothing in precision and clearness in employing expressions on my own. I have, however, not failed to acknowledge the sources from which I have thus drawn” (xiv).¹¹⁵ In citing well-known chemists as both his direct sources and as further reading for his more advanced readers, Bernays rhetorically inserts

Audiences, 1789-1939, ed. Anders Lundgren and Bernadette Bensaude-Vincent (Canton: MA, 2000), 187-205. Keene also notes the conversational nature of the domestic chemistry genre. See p. 16.

¹¹⁴ Knight 201.

¹¹⁵ In citing the sources for his text, Bernays operates within contemporary conventions for scientific textbook authorship. Golinski explains that within the chemical community, conventions dictated that “[t]he writer of a didactic work . . . should appear as the humble compiler of the contributions of others” (257). Within the early cookbook, too, writers were expected to cite their sources. Sherman writes that “the convention of credit-giving in domestic manuscripts . . . underwrites the recipes’ authority, in effect assuring the user that they proven” (50).

his text—and himself—in a clearly defined, codified professional chemical community and discourse.

What the *Household Words* series and *Household Chemistry* begin to show us is that, at midcentury, the domestic chemistry genre was becoming increasingly concerned with the nature of the knowledge it presented. Whereas *Culinary Chemistry* integrated two communities, domestic cooks and professional chemists -- and thus two sets of knowledge, culinary and experimental-- later writers increasingly source the professional chemical community and the ideas formulated within that community as the basis for their textual authority.

Physician Charles Foote Gower's 1847 treatise, *The Scientific Phenomena of Domestic Life: Familiarly Explained* offers a somewhat amusing example of the growing faith in masculine (scientific) knowledge over domestic custom. Like *Household Chemistry* and the *Household Words* series, *Domestic Life* is structured around the spaces and objects of the home. In his chapter "The Kitchen," Gower recounts with some perplexity "the custom of placing an inverted cup in a fruit-pie."¹¹⁶ While Gower writes that "it appears" that "many of the operations of the kitchen [are] conducted on solid philosophical principles," this particular tradition has no "apparent" scientific basis. As such, Gower makes a suggestion for improvement. "If a small glass tumbler is inverted in the pie," he writes, "its contents can be examined into whist it is in the oven, and it will be found what has been advanced is correct" (60). Replacing the teacup with a clear glass tumbler, in other words, validates the cook's practice of placing a teacup in a pie in order to capture excess liquid. As proof of the superiority of his method, Gower relates a

¹¹⁶ Charles Foote Gower, *The Scientific Phenomena of Domestic life. Familiarly Explained* (London: Longman, Brown, Green, and Longmans, 1847), 66.

personal anecdote. “Our own cook,” he writes, “was very skeptical on this head till she tried this experiment” (67). While Gower makes no claims for the scientific validity of his substitution or method, his account offers a glimpse of the ways in which chemists increasingly felt comfortable invading the space of the kitchen—not for their own experiments, but rather to peer over the shoulder of the cook.

The dominant narrative form of the mid-century domestic chemistry text more fully underscores the genre’s increasing alignment with chemical rather than domestic knowledge, and, as a corollary, its alignment with chemical rather than domestic textual traditions. Bernays writes in his preface that “To such,”—meaning, his audience of “young people” and “people of general education”—“it was thought, a familiar explanation of these chemical phenomena, in a familiar form, such as is usually adopted in lectures, would prove most advantageous. It might explain and clear up many things, remove many errors, and often supply hints for doing some things better and more effectually than they are usually performed” (ixv). Gower likewise adopts this form; the subtitle of his work, addressed to middle-class parents and their children, is “Familiarly Explained.” Chemists publishing their domestic treatises in the popular press used similar language to describe their aims. Bakewell opens his 1861 series “On The Chemistry of Cookery” in *The British Mothers’ Journal* by noting that he plans to offer “a description of the chemistry of cookery.”¹¹⁷ Despite their repurposed conversation form, both “The Mysteries of a Tea-Kettle” (1850) and “The Chemistry of a Pint of Beer” (1850) nevertheless likewise define themselves as “Lectures” or “discourse.”¹¹⁸ In the 1885

¹¹⁷ Robert Bakewell, “On the Chemistry of Cookery,” (London, England), 1861.

¹¹⁸ Percival Leigh, “The Chemistry of a Pint of Beer,” *Household Words* No. 47 (15 February 1851): 498-502.

publication of his 1855 lectures, chemist William Mattieu Williams similarly writes that it is the chemistry of everyday culinary processes “that I shall endeavour to explain.”¹¹⁹

At mid-century, as we can see from these examples, the domestic chemistry genre increasingly “communicated chemistry” not through domestic recipes but through the more scientific lecture format. Indeed, men of science since the eighteenth century favored this narrative mode to convey scientific knowledge to the public.¹²⁰ The narrative lecture mode reflects a change not just in form, however, but in readers’ relationship to the text, and thus to the chemical enterprise itself. Rather than engaging readers in active labor, cutting heads off, slicing bodies open, canning, salting, and stewing, the lecture format transforms readers from producers to consumers of chemical knowledge. This shift from producer to consumer happens in part through the rhetorical structure of the lecture form itself. The traditional “I” and “you” of the lecture structure, that is, creates a hierarchy between speaker and reader. The reader occupies a passive role wherein they receive “explanations” rather than participate in the labor of knowledge production. In Bernays’s *Household Chemistry*, for example, the verbs throughout the text establish the role of the chemist as guide and the reader as follower. In his chapter “Chemistry of the Breakfast-table,” the first of the two chapters focusing on the chemistry of food, he writes:

I trust I have succeeded in conveying to you a clear idea, of all that is necessary for you to understand, of the nature of sugar and its manufacture. But there is another description of sugar, in addition to the treacle to which we have alluded, which we sometimes use to spread upon bread. You will of course understand me to speak of *honey*. I told you, that cane-sugar is found in the nectarines of flowers. This is collected by bees, and by them converted into *honey* and *wax*.” (x)

¹¹⁹ Williams 4.

¹²⁰ For more on the history of the lecture as a pedagogic mode, see Knight, esp. pp 150-190.

Bernays's "we" brings the audience together around a shared meal during which he will "convey" chemical knowledge. The shift from the kitchen-laboratory to the middle-class table as a rhetorical device further underscores readers' position as consumers (16). Throughout the chapter, Bernays leads the reader through items commonly found on a middle-class breakfast table: tea, coffee, cocoa, sugar, milk, and butter. Gower, too, in his chapter on "The Breakfast-Parlour," guides his readers into the breakfast room, directing their attention to its various objects. "Having entered the breakfast-parlour," he writes, "let us then examine the phenomena which present themselves the most worthy of observation. The first striking object will be the kettle boiling on the fire" (36). Gower structures the chapter by domestic objects, pointing to the "bright, silver tea-pot," a saucepan, a cup of tea. "The Mysteries of a Tea-Kettle," as the title suggests, likewise take an item of the home as its point of departure.¹²¹ Through the conceit of everyday objects, these texts create a connection between consumer practices and a consumer model of learning. In 1821, readers of *Culinary Chemistry* transformed food from raw to cooked as a means of analyzing domestic materials. Bernays's, Gower's, and Dickens's readers, however, are mid-Victorian middle-class consumers; the commodities of the home are ready-made objects of analysis awaiting "explanation," not transformation.

The shift to a consumer model of chemical education affects the experimental nature of the genre. Like Accum, Bernays carves out a series of common food items (tea, coffee, cocoa, sugar, milk, and butter) in order to illuminate their chemical constituents. Sprinkled throughout the chapter "Chemistry of the Breakfast-table" are experiments for

¹²¹ Keene also describes the emphasis in the genre on "everyday commodities" as a point of departure for chemical lectures, although she does so in service of an argument about chemists' efforts to render science "unthreatening" (16). I am interested in tracing the ways in which the conceit of the home and its objects plays into the text's consumer model of learning.

determining the chemical make-up of these food items. “If to a decoction of tea, you add a solution of a salt of iron,” Bernays explains, you will find it turn black as ink. This well-marked property is owing to a peculiar principle to which the name of *tannin* has been given” (5). Readers curious to know what the “lumps of sugar which we consume at our break-fast table . . . consist of,” moreover, learn that “chemistry offers this simple solution. Pure sugar is charcoal (carbon) combined with the elements of water” (12). To verify, readers “can take a lump of sugar, moisten it with hot water in a tea-cup, and pour some drops of oil of vitriol (sulphuric acid) upon it. It will immediately blacken and swell; great heat will be evolved, and the lumps of sugar resolved into a lump of *charcoal*. You must, however, be careful not to touch it with your fingers, until . . . all the acid removed from it” (13).

Such experiments engage the readers in hands-on experiments; readers, that is, are not entirely separated from the text. The experiments, however, offer little sense of the intellectual exchange embedded in Accum’s passive culinary recipes. In embedding domestic recipes and analytical answers into a combined recipe package, that is, *Culinary Chemistry* constructs a textual intellectual commerce between chemists and domestic cooks. In *Household Chemistry*, however, the lecture structure packages experimental knowledge as one-sided, passed from lecturer to reader rather than co-created. Indeed, Bernays ends the experiment by writing, “I trust I have succeeded in conveying to you a clear idea, of all that is necessary for you to understand, of the nature of sugar” (13).

This consumer model of learning, furthermore, reflects a change in the relationship chemists constructed in the genre between feminine domestic labor and the chemical pursuit. While the conceit of the home retains the domestic sphere as site of

chemical investigation, the move from the kitchen to the more neutral space of the table de-genders the genre, thus deemphasizing women's work as a mode of knowledge construction. Whereas the frontispiece of Accum's text visually established the kitchen as a site of chemical investigation through everyday cookery, that is, Bernays and Gower foreground eating, or food objects awaiting consumption, as a *repository* of chemical knowledge.

The kitchen—and cookery—does not entirely disappear from the genre at midcentury, however. In addition to his chapter on “The Breakfast-Parlour,” Gower's text contains a chapter on “The Kitchen.” Bakewell's series “The Chemistry of Cookery” and Williams' *The Chemistry of Cookery* likewise, as their titles suggest, retain a focus on the kitchen and the processes of cookery. Yet the rhetorical practices of these works bypass domestic labor. Like many chemists later in the century, Gower presents the kitchen as a “menial” space awaiting the entrance of “Philosophy.”¹²² Although he opens the chapter by framing the kitchen as a place of labor, pointing to “[t]he culinary art,” he offers readers not domestic recipes but a description of “[t]he manufacture of bread” performed by “bakers” (63). Gower, in other words, rhetorically takes readers into the domestic kitchen but references a more industrial process of food production. The structure of the lecture format further abstracts the labor involved in baking bread. Following the descriptive method chemists commonly employed to communicate the processes of an experiment to listening audiences, Gower writes that he will walk readers through the

¹²² John Buckmaster, chemist and lecturer at the Science and Art Department, explained in his 1873 cookery lectures at the Third International Exhibition that his aim was “to dignify” the “art” of cookery by making it “scientific.” John Buckmaster, *Buckmaster's Cookery: Being an Abridgement of Some of the Lectures Delivered in the Cookery School at The International Exhibition for 1873 and 1874: Together with a Collection of Approved Recipes and Menus* (London: George Routledge and Sons, 1874).

process of baking bread: “Let us see how the operation is proceeded with. A mixture is made, consisting of a portion of water, yeast, flour, and a little salt. After kneading it for a short time, it is placed before the fire to rise; it is afterwards transferred to the oven and baked, and the operation is finished” (64). The bare outlines of the technical process make it clear that Gower is not attempting to offer a recipe for readers to follow; rather, the description of baking bread functions as a set up for the chemical explanations of the constituents of flour and yeast that follow.

In Bakewell’s 1861 series “On The Chemistry of Cookery” and Williams’ 1855/1885 *The Chemistry of Cookery*, the processes of domestic cookery are entirely elided. Like Gower, Bakewell begins by emphasizing the labor of cookery, arguing that “the skill of the savage” and “the most elaborate processes” of cookery are alike in that they both “depend for their success on a few simple chemical facts, which may be easily learned and understood.” Bakewell goes on to clearly demarcate domestic labor and chemical knowledge. “I need hardly say that I do not profess to deal in any way with the *art* of cookery,” he writes. “[A]ll I shall attempt in these papers will be to explain the theory or principles on which all nutritive substances must be prepared for human food, and to show which are the modes in common use best adapted for producing wholesome and nourishing aliments.”

Williams offers a nearly identical statement in *The Chemistry of Cookery*, writing that “[t]he present work will be a contribution to the technology of cookery, or to the technological education of cooks, whose technical education is quite beyond my reach” (3). In these later works, the consumer model of domestic chemistry becomes emphatically gendered. Bakewell and Williams write specifically for a female

audience—Bakewell for a women’s magazine, and Williams for the “cook.” Williams’ 1855 version of this work, too, was geared towards an audience of women.¹²³ In omitting a discussion of practical cookery in favor of a discussion of its “principles,” both men not only code practical cookery as women’s work but suggest that such “art” is an entirely separate body of knowledge. Women, they suggest, may already grasp the “art” of cookery, but they need schooling in its “principles.” The lecture format drives the epistemological hierarchy home, as women read to learn rather than cook to understand.

As these texts suggest, domestic labor was increasingly perceived at midcentury and beyond as subsidiary rather than intrinsic to chemical analysis. This textual division of knowledge, I argue, signals changing perceptions of the definition of cookery and culinary knowledge. While Accum defined cookery as a pursuit that involved the same motions and intellectual work as analytical chemistry, Gower, Bakewell, and Williams define it as merely an “art,” or a technical process, contrasting this art to chemical “theory,” “philosophy” and “principles.” The lecture mode these writers employ bolsters this division of knowledge, replacing recipes for cooking with a recitation of chemical “facts.” Accompanying this textual division of knowledge is a shift in the purpose of the domestic chemistry genre. In 1821, while Accum established domestic custom as a legitimate form of knowledge, he likewise began, as we saw, to utilize the experiments of professional chemists as a means of improving domestic practice. Yet while *Culinary Chemistry* held domestic and professional knowledge in relationship with one another, domestic chemistry texts at mid-century and beyond increasingly functioned for the purposes of correcting the errors propagated through the traditional custom Accum

¹²³ Sillitoe 23.

legitimated. Bernays's title page hints at the separation of these two realms and sets of knowledges. Accum's subtitle, "*Culinary Chemistry: Exhibiting the Scientific Principles of Cookery*," makes clear his belief that cookery is already inherently scientific.

Bernays's title, "*Household Chemistry; or, Rudiments of the Science Applied to Everyday Life*" suggests that science can be *applied* to everyday life—not that the activities of everyday life are necessarily already scientific. Bernays thus utilizes the lecture form in order to "explain and clear up many things" and "remove many errors," while Bakewell seeks to wed culinary "art" to scientific "theory," and thus "to *show* which are the modes in common use best adapted for producing wholesome and nourishing aliments."¹²⁴

Gower, too, writes that "we find Philosophy entering even into our kitchens," explaining that this "philosophy" will prevent waste caused by "a bad manner of preparing food" (63).¹²⁵

Also driving the growing representation of a one-way commerce between the domestic kitchen and the professional laboratory was a rising emphasis on what Lieffers has described as the "language of numbers and facts" (936).¹²⁶ A recipe in Gower's *Domestic Life* reflects this shift in intellectual values. In *Culinary Chemistry*, as we have seen, Accum frequently invokes the language of custom: "customary," "often," and "usually" undergird many of the technical instructions in his recipes. The single recipe in Gower's chapter "The Kitchen" offers very different language. It begins, "One pint and a half of cold water, half an ounce (troy) sesqui-carbonate soda, five fluid drachms muriatic acid, two thirds of an ounce of salt, and three pounds of flour" (65). The recipe ends with

¹²⁴ Emphasis mine.

¹²⁵ As I discuss earlier, this notion of wasteful domestic practice and the need for chemical correction was gaining ground at this moment; in Chapter Two I explore this theme through a discussion of the cookbook.

¹²⁶ Lieffers tracks the rise of quantification in the cookbook genre. See esp. pp. 938-43.

precise instructions for baking: “bake it an hour and a half.” The language of “fact,” too, increasingly crops up throughout the genre as rationale for domestic practice. In *Household Chemistry*, Bernays offers recipes “based upon . . . fact” (23). In “The Chemistry of Cookery,” Bakewell argues that both “the savage” and the professional chef “depend for their success on a few simple chemical facts” (2). In 1855, Hartelaw Reid, whose cookbook *Cookery, Rational, Practical, and Economical* I treat in Chapter Two, covers the “Principles of Cookery,” which he likewise argues “now rank as facts of organic chemistry.”¹²⁷

Perhaps the most striking example of the increasing professionalization of analysis and the concomitant move away from traditional knowledge and domestic forms of writing in the genre can be seen in the recipes that appear Bernays’s *Household Chemistry*. In his text, Bernays includes directions for “white or flour” and “brown or meal” bread. These recipes, tucked amongst larger narrative passages, are less prevalent and less noticeable than those in *Culinary Chemistry*. They also read quite differently. As does Accum in his sections on preserving and canning, Bernays introduces his recipes, which he calls “Prescriptions,” as the product of an expert. “Owing to the fact that in the ordinary process of bread-making, considerable waste is occasioned (by the vinous fermentation),” he writes, “several methods have been suggested to prevent this. The one recommended by ‘a Physician’ is based upon the fact, that when carbonate of soda is mixed in the proper proportion with spirits of salt (hydrochloric acid), the common culinary salt is formed” (23).

¹²⁷ Hartelaw Reid, *Cookery, Rational, Practical, and Economical: Treated in Connexion with the Chemistry of Food* (London, 1853), 3.

Like Accum's recipes for preserving meats and fruits, here Bernays offers a professional rationale for his recipe. Yet what follows is not a culinary recipe. "To Make White or Flour Bread," he writes, "take of flour three pounds avoirdupois; bicarbonate of soda nine drachms; hydrochloric acid (specific gravity 1.16) eleven and three-quarter fluid drachms; water, about twenty-five fluid ounces." A "prescription" for "Brown or Meal Bread" reads similarly: "Take of wheat meal three pounds; bi-carbonate of soda, ten drachms; hydrochloric acid (specific gravity 1.16), thirteen fluid drachms; water, about twenty-eight fluid ounces" (24). Bernays begins with the recipe's classic imperative "take," suggesting that these are recipes to be completed, but the implements and language of the laboratory have entirely superseded the domestic. Whereas hands-on method instruction dominated Accum's recipes—"the slices of meat must be thin"—the directions in these recipes consist entirely of hyper-precise measurements denoted as "drachms." A term typically used for medicinal receipts, Bernays uses the vernacular not of the kitchen but of the apothecaries' shop.¹²⁸

In foregrounding precise measurement over culinary technique, Bernays's prescriptions reflect a new mode of chemical analysis that moved beyond qualitative analysis, or the identification of chemical properties, to quantitative analysis, or the measurement and weighing of a substance's constituent parts. An exceedingly complex and precise procedure, quantitative analysis required, as one contemporary reviewer wrote, "a complicated apparatus, much time and labour, and all the resources of the analytical chemist."¹²⁹ No cheaply-bought portable laboratory or basic kitchen could

¹²⁸ Lieffers 940.

¹²⁹ Review of Davy, *Elements of Agricultural Chemistry*, in *Edinburgh Review* 22 (Oct 1813-Jan 1814), 267. qtd. in Golinski 199.

produce the highly precise experimental measurements that constituted this more complex mode of analysis. These chemists instead relied on expensive, custom-made equipment far outside the purview of the layman practitioner.

The prevalence of “prescriptions” based in quantitative analysis in *Household Chemistry* illustrates not only a change in chemical methodology but also a change in the notion of chemistry as a “public” discipline. As Golinski explains, chemists in the early nineteenth-century “came to appreciate how debates about the facts are essentially debates as to how scientific practice is to be carried on”—what instruments should be used, who should use them, and in what form the knowledge produced should take. The tussle over qualitative versus quantitative models of chemistry, as Golinski puts it, was thus merely the symptom of a larger collision between two contrasting visions for chemistry. Those dedicated to the notion of public science resisted the exclusivity inherent in the quantitative methodology because it required costly instruments and techniques of mathematical calculation and measurement. Quantitative analysis, they argued, thwarted the reciprocal model of science wherein experts would “submit their discoveries to public validation” and audiences would, in turn, reproduce their experiments—the model we saw in *Culinary Chemistry*.

The methods and skills needed to conduct quantitative analysis, on the other hand, instituted a top-down form of chemistry wherein the expert alone possessed the technical skills and costly instruments to perform the complex mathematical calculations and measurements inherent to this mode of knowing. Knowledge produced via quantitative methods thus emerged not through an exchange between the chemist and cook through the embedded recipe + *Rationale* but rather through a one-way demonstration: “witnesses

would be assembled for demonstration experiments,” Golinski writes, and “the audience would be expected to accept the proposed implications of a declared experimental result,” thus precluding any verifying reproduction of their own.¹³⁰

Golinski and others such as Dolan have discussed how early textbooks, particularly those dedicated to mineralogy, register the debate over quantitative versus qualitative analysis. I suggest that the move from recipe and a productive model of chemical instruction to the prescription and the consumer-oriented lecture model in the domestic chemistry genre likewise reflects this tension because it showcases the move away from reader replication as a crucial part of the chemical enterprise. Whereas *Culinary Chemistry*'s traditional domestic recipes enabled the user to perform qualitative analysis, bringing the domestic to bear on the chemical and the chemical to bear on the domestic, the complexity of Bernays' quantitative prescriptions replace domestic textual forms with professional experiments. Indeed, Keene argues that many domestic chemistry texts utilized familiar domestic processes such as tea-making as a means of discovering the chemistry in a daily process, and we have seen how Accum accomplishes this through the culinary recipe. But here and throughout *Household Chemistry*, Bernays deploys the tools, methods, and language of the expert to analyze a domestic food item:

To the naked eye, milk appears to be a uniformly white solution. But this is an optical illusion. The microscope shows us, that milk holds in suspension an infinite number of globules of different dimensions, which, by reason of their lightness, tend to rise to the surface, where they collect. (14)

To explicate his claim that sensory knowledge is insufficient, Bernays breaks down

¹³⁰ Ibid 147.

cream, skimmed milk, and fresh cow milk in the following manner:

“Cream consists of

Butter -----	4.5s
Casein -----	3.5
Whey-----	92.0

	100.0

“Milk,” he continues, “when left to itself, as is well known, becomes sour and curdles.

This is owing to the fact, that *sugar of milk*, (*lactine*), which gives sweetness to it, becomes converted into an acid. This *lactic acid* combines with the soda, which holds the caseine in solution; and, as the latter is insoluble in water, the milk is converted into curds and whey. After the cream has been removed, there still remains a large per centage of cheese, as the following analysis of skimmed milk will show:

Skimmed Milk:

Water-----	92.87
Curd, with little butter -----	2.80
Sugar of milk-----	3.50
Ash-----	0.83

	100.00

“Skimmed milk will therefore likewise curdle on exposure to air. The whey still contains sugar of milk, a substance similar to white of egg, and various salts. The composition of fresh cow milk, according to Henry and Chevallier, is as follows:--

Fresh Cow Milk:

Caseine-----	4.48
Butter-----	3.13
Sugar of milk-----	4.77
Soda and salts-----	0.60
Water-----	87.02

	100.00 ¹³¹

The mere presence of quantitative analysis in *Household Chemistry* is not necessarily the point here. Indeed, Accum himself, twenty years before the publication of *Household*

¹³¹ This quantitative analysis appears on pp. 14-17.

Chemistry, includes a short section that employs quantification to ascertain the effects of cooking on meat's constituents. Like Bernays, Accum cites the work of an expert when reproducing the quantification. Writing that "we are indebted to Professor Wallace (of Edinburgh) for the detail of a very accurate and extensive experiment in a public establishment," he goes on to summarize the results of this experiment (17).

The significance of quantification in *Household Chemistry* thus comes not from the fact of its inclusion but rather from the way in which the narrative structure presents quantification as the inevitable resolution of the story about the chemistry of the domestic sphere. The opening chapter of "Chemistry of the Break-fast Table," for example, begins with qualitative analysis, identifying for the reader the constituents of common breakfast items such as tea, coffee, and cocoa. The text quickly turns to quantitative analysis, however, suggesting that mere identification is not the final knowledge to be pursued. Indeed, nearly the entire later chapter on "Dinner-Table Chemistry" is devoted almost exclusively to charting the weights and measurements of the constituents present in the foods commonly consumed in these meals.

The teleological progression towards quantitative analysis, together with the rhetorical conceit of the meal as a structuring practice, reiterates the idea suggested in the other texts we have surveyed that while chemistry can inform traditional practice, traditional practice has little to offer chemistry. Accum's readers, presented with a text that ultimately, in its form, is nearly indistinct from a cookbook, are immersed in a progressive narrative, with recipes framed to compel future action. Once readers understand the chemical changes that occur during certain cookery processes, they choose the most appropriate style of cooking for the particular cut of meat or type of

vegetable they plan to prepare. The food on Bernays' and Gower's tables, however, is static; readers *intellectually* partake of a "meal" the professional chemist has pre-selected. Bakewell, too, dictates future action: the purpose of his text, he writes is "to show which are the modes in common use best adapted for producing wholesome and nourishing aliments" (2). Perhaps the clearest embodiment of the rise of a professionally-constructed, consumer model of chemical learning is the single recipe that appears in Gower's chapter on "The Kitchen." The recipe, for a product to replace yeast, is dropped from the body of the text altogether, appearing only in a footnote.

The relationship between chemical knowledge and domestic practice continued to evolve throughout the second half of the nineteenth century. Chapter Two of this dissertation explores the ways in which the cookbook devoted to "plain cookery" for the middle classes responded to the growing body of work generated by analytical chemists on the "principles" of food and their implications for nutrition. In the late 1840s, Justus Liebig, a German chemist whom Walter Gratzer has called "the most powerful figure of his time" captured public interest in nutrition science.¹³² Liebig popularized his theories not only through textbooks such as his 1847 *Researches on the Chemistry of Food*, but through ready-made foods bearing his endorsement.¹³³ While the notion that food ought to be prepared "on the best scientific principles" was already in circulation before 1847, as we saw in *Culinary Chemistry*, Liebig's theories stoked public enthusiasm for what I call

¹³² Walter Gratzer, *Terrors of the Table: the Curious History of Nutrition* (Oxford: Oxford UP, 2005), 167, viii.

¹³³ Gratzer viii.

“principled cookery,” or the development of domestic cookery practices according to scientific “principle” (Grazter viii).

By surveying a range of cookbooks produced for the middle classes from 1850 up through 1875, what we will find is a body of domestic writing increasingly anxious about its status as a technical text. One of the central concerns of the plain cookery cookbook during these decades, as I show, was the genre’s tie to the recipe as a narrative mode. The recipe, cookbook writers increasingly argue, signified “art,” or technical work, offering no potential for representing cookery’s new-found principles. Chapter Two thus considers the ways in which cookbooks writers during these decades developed increasingly complex narrative strategies capable of transforming the “art” of cookery into a more theoretically-inflected pursuit.

Chapter Two:

Principled Cookery: Chemistry and the Form of the Victorian Cookbook, 1850-1875

INTRODUCTION: THE “CRAZE” FOR SCIENTIFIC COOKERY

In 1851, Eliza Acton released a new edition of her successful cookbook, *Modern Cookery, In All Its Branches: Reduced To A System of Easy Practice, For the Use of Private Families*. Originally published in 1845, the first edition of Acton’s cookbook boasted a full “system” of “plain cookery.” Addressed to “any class of learners,” Acton, in her prior work, offers “explicit” and “minute instructions” for economical cookery. These recipes, she argues, fill a gap in the market for a cookbook “suited to the need of the totally inexperienced” (xxi).¹³⁴

Despite the popularity of her work, however—*Modern Cookery* reached fourteen editions by 1854—in the new 1851 edition, Acton expresses dissatisfaction with the state of culinary instruction in England, implicitly indicting her own early attempts to better it. ¹³⁵ “It cannot be denied,” she writes, “that an improved system of practical domestic cookery, and a better knowledge of its first principles, are still much needed in this country; where, from ignorance or mismanagement in their preparation, the daily waste of excellent provisions almost exceeds belief” (vii). Although she finds this waste “in itself” to be “a very serious evil,” she explains that “a greater evil still” is “the amount of

¹³⁴ Eliza Acton, *Modern Cookery, in All Its Branches: Reduced to a System of Easy Practice, for the Use of Private Families* (2nd ed. Philadelphia, 1845), xix.

¹³⁵ Charles Gower’s 1847 *The Scientific Phenomena of Domestic Life*, which I treat in Chapter One, contains an advertisement for a “New Edition, with Plates and Wood-cuts” for “Miss Acton’s Modern Cookery Book.” Lieffer notes that while scholars tend to attribute the new title to her 1855 edition, advertisements place it closer to 1851 (947). For Lieffer’s discussion of Acton’s revision, see pp. 947-948.

positive disease which is caused amongst us by improper food, or by food rendered unwholesome by a bad mode of cooking it” (vii).

Acton claims to have produced the new 1851 edition of her cookbook specifically as a solution to the “evil” created through bad cooking. “The impression produced on me by the discomfort and the suffering which have fallen under my own observation,” she explains, “has rendered me extremely anxious to aid in discovering an efficient remedy” (viii). The “remedy” Acton presents in the new edition is science; specifically, the most up-to-date breakthroughs in nutrition and dietetics.

The sub-title of her new edition articulates her revised method for culinary instruction. Whereas the subtitle of her first cookbook emphasized technical labor, boasting “*a Series of Receipts, Which Have Been Strictly Tested, and Are Given With the Most Minute Exactness,*” the new subtitle lists both “*Carefully Tested Receipts*” and “*The Principles of Baron Liebig and Other Eminent Writers*” as the book’s selling points. The new title, as Lieffers suggests, presents *Modern Cookery* not as an “ordinary collection of receipts, but a translation of chemical principles into domestic practice” (946). What the new title also suggests, I argue, is that “minute receipts” are insufficient as a method of instruction, and that they alone, no matter how clearly-wrought, have not managed to stem the tide of “waste” or disease. Rather, Acton’s new work positions both “receipts” and the “principles” of “eminent” men of science as two interconnected elements that make up her new “system” of cookery, one more capable of combating social ills.

Acton was not the first Victorian culinary writer to draw a connection between “practical domestic cookery” and the “evil” of waste and disease, nor was she the first to

propose that an understanding of chemical “principles” could serve as a solution to these issues. As I discussed in Chapter One, chemists and physicians began educating Victorian middle-class readers on the chemical or nutritive “principles” underlying common food objects at least as early as 1821. Revealing these principles, as chemist Friedrich Accum claimed in 1821, could help cooks preserve “waste” and “labor.”¹³⁶ At midcentury, chemists began to double down on the notion that a knowledge of food’s chemical makeup could improve domestic practice, producing a surge of writings that brought some of the newest chemical theories into the middle-class home. In 1847, two years after Acton first published *Modern Cookery*, physician Charles Gower wrote that “we find Philosophy entering even into our kitchens,” explaining that this “philosophy” will prevent waste caused by “a bad manner of preparing food.”¹³⁷ In 1853, chemist Albert Bernays described a “Prescription” by a “Physician” meant to remedy the wastefulness of traditional methods of baking bread. “Owing to the fact that in the ordinary process of bread-making, considerable waste is occasioned,” he explained, “several methods have been suggested to prevent this.”¹³⁸

Around this same time, as we saw in Chapter One, chemists took the argument that chemical principles ought to inform daily cookery to the popular press, targeting women’s journals, and thus women readers, in particular. As a corollary, the rhetoric of chemistry as a means of domestic correction began to heighten in these later works. In 1861, for example, physician Robert Bakewell published a series of articles in the

¹³⁶ Friedrich Accum, *Culinary Chemistry* (London, 1821), i.

¹³⁷ Charles Gower, *The Scientific Phenomena of Domestic Life, Familiarly Explained* (London: Longman, Brown, Green, and Longmans, 1847), 63.

¹³⁸ Albert Bernays, *Household Chemistry, or, Rudiments of the Science Applied to Every-Day Life* (London: Sampson Low, 1852), 23.

middle-class women's magazine *The British Mothers' Journal and Domestic Magazine* in which he aimed not to teach the "art" of cookery but rather "to explain the theory or principles on which all nutritive substances must be prepared for human food, and to show which are the modes in common use best adapted for producing wholesome and nourishing aliments."¹³⁹ Women, he implies, may understand how to materially manipulate food substances, but they are uninformed as to the "facts" behind their work. In April of 1882, physician John Gray published a similar series on "The Chemistry of Food and Cookery" in *The Girls' Own Paper*, a widely-read popular magazine written specifically for middle-class girls and young women.¹⁴⁰ Like Bakewell, Gray argues that "while many an intelligent young lady" may be "proficient enough in the practical preparation of food" she does not understand the chemistry behind her choices, and thus produces unwholesome food.

Throughout the second half of the nineteenth century, the notion that middle-class women—and their cooks—needed training in the chemical "principles" of cookery gained increasing currency in the popular press. Magazines aimed at middle-class women increasingly demanded instruction in domestic chemistry. In the 1860s, an article in Samuel and Isabella Beeton's magazine *The Englishwoman's Domestic Magazine* lamented the "unwholesome diet and irregular hours of eating" practiced by working- and

¹³⁹ Robert Bakewell, "On the Chemistry of Cookery," *The British Mothers' Journal and Domestic Magazine* (London, Jan. 1, 1861).

¹⁴⁰ John Gray, "The Chemistry of Food and Cookery," *The Girls' Own Paper* (London, 1882). *The Girls' Own Paper* changed the face of juvenile magazines. Launched in 1880 by the Religious Tract Society and addressed to middle-class girls and young women, the "enormously popular" magazine was, as Margaret Beetham and Kay Boardman have argued, the first to "focus on the life of the girl and specifically female accomplishments." See *Victorian Women's Magazines: an Anthology*, Margaret Beetham and Kay Boardman, eds. (Manchester: Manchester UP, 2001), 71.

middle-class men and women.¹⁴¹ These practices, the writer argues, “have produced indigestion, disordered stomachs, [and] diseased livers.” The solution, she argues, is chemical education. “No one ought to be ignorant of the various nutritious properties of meat, fish, fruit, and vegetables, nor in what proportions it is safe and wholesome to partake of them, solely or together.” The article explicitly indicts women, arguing that “every female” should possess “[s]ufficient theoretical knowledge . . . to judge correctly of what quantity and quality the food of a healthy human being should be.”

In 1871, an article in *The Ladies' Treasury*, the longest-running general illustrated women's magazine aimed at middle-class women, likewise argued that “[a] lady who understands the simple rules of cookery produces, by her careful and reasoning thought, a healthful, appetizing compound of simple and inexpensive aliment.”¹⁴² Women who are “ignorant of such knowledge, or of the scientific application of a few simple rules,” on the other hand, “in her blind efforts produces waste, ‘villanous compounds,’ sickness, and misery, because she did not use her intellect—she worked without thought.”¹⁴³ The magazine ran a nearly identical article in 1887, in which the author complained that “[t]here are innumerable ways in which cooking is done that should not be permitted. Indigestion is sure to follow bad cooking . . . [and] nutrition is stopped. Until cookery is

¹⁴¹ “Wanted, a Plain Cook,” *The Englishwoman's Domestic Magazine* (London, c.1860). Launched in 1851, Isabella and Samuel Beeton's *The Englishwoman's Domestic Magazine* was the first long-running women's magazine aimed specifically at middle-class women. Samuel Beeton adopted the format of the drawing-room journal, a journal for ladies with roots in the eighteenth century, reworking it to address the concerns of the middle-class Victorian housewife. As Beetham argues, the magazine is particularly characterized by the link it drew between domestic work and femininity. See Margaret Beetham, “Of Recipe Books and Reading in the Nineteenth Century: Mrs Beeton and her Cultural Consequences,” *The Recipe Reader: Narratives Contexts, Traditions*, Janet Floyd and Laurel Forster, eds. (Lincoln: University of Nebraska Press, 2003). See also *Victorian Women's Magazines: an Anthology*, Margaret Beetham and Kay Boardman, eds. (Manchester: Manchester UP, 2001).

¹⁴² For more on *The Ladies' Treasury* and its status as a general illustrated women's magazine, see Beetham and Boardman 38.

¹⁴³ “Social Science,” *The Ladies' Treasury* (London, 1871).

treated as a science, and the pupil is compelled to state for what reason such and such a process is observed, and why an opposite course should not be followed, there is little hope of improvement in this essentially necessary art.”¹⁴⁴ The solution, for this writer, is not mere chemical education, however. Women do not merely need schooling in chemistry, but rather, domestic practice *itself* needed a complete overhaul. “The first thing to be done,” the writer argues, “is to break up nearly all of the old systems.”

Joining the women’s magazines in their calls for domestic reform were advocates of the home economics, or domestic science movement, a movement that likewise emerged in the 1850s and 1860s and blossomed in the last three decades of the century. Arguing that “the laws of science operate within the home as well as outside it,” as Dena Attar explains, proponents of the home economics movement argued that domestic work was mired in “habit” and in desperate need of a scientific foundation (101).¹⁴⁵ Indeed, following Lauren Shapiro, Alice McLean argues that the “fundamental goal of the domestic science movement” was “the transformation of food preparation into an intellectual and moral pursuit.”¹⁴⁶ The morally-inflected language Acton used in her 1851 preface echoes the prevailing sensibility of the home economics movement. Driven by the belief that traditional cookery posed a danger to the nation’s physical, and thus moral

¹⁴⁴ “Cookery,” *The Ladies’ Treasury* (London, 1887)

¹⁴⁵ For more on the development of the domestic science movement, see Sillitoe and Dena Attar, *Wasting Girl’s Time: The History and Politics of Home Economics* (London: Virago Press Limited, 1990), Catherine Manthorpe, “Science or Domestic Science? The Struggle to Define an Appropriate Science Education for Girls in Early Twentieth-Century England,” *History of Education* 15 (1986): 195-213, and *Rethinking Home Economics: Women and the History of a Profession*, Sarah Stage and Virginia B. Bincenti, eds. (Ithaca: Cornell UP, 1997). For an account of the effect of science on culinary technology and the Victorian kitchen, see Kate Colquhoun, *Taste: the Story of Britain Through its Cooking* (New York: Bloomsbury USA, 2007), esp. pp. 275-287.

¹⁴⁶ McLean 49. McLean goes on to explain that nineteenth-century “cookbooks modeled and reproduced heteronormative domesticity, an ideological dynamic that defined a woman’s role as obtaining and keeping a husband, bearing his children, and nourishing the nation’s moral values” (16).

health, home economists advocated for the institution of domestic arts courses in schools and for the establishment of cookery schools for middle- and working-class women.

In 1873, the campaign to reform domestic cookery urged by chemists, writers in the popular press, and home economics advocates took an enormous step forward through the efforts of Henry Cole and other commissioners of the 1851 Great Exhibition. At the third of a series of ten annual International Exhibitions, Henry Cole arranged for John Buckmaster—chemist, physicist and current head of the Science and Art Department—to demonstrate “the general principles of cooking” to exhibition audiences, including Queen Victoria and the royal family.¹⁴⁷ Buckmaster’s goal, as he wrote later, was that he aimed for his lectures “to dignify, as far as I am able, the art of cooking, by making it more scientific.”¹⁴⁸ In his lectures Buckmaster, like Acton, directly tied (scientific) cookery to the nation’s progress (or lack thereof):

There has been progress from our fingers to steel forks, and from steel forks to silver forks and spoons; but there has not been progress in the same degree in our cooking. In some things a retrogression has taken place How much misery, and indigestion, and bad temper, arise from bad cooking! Cooking in its perfection becomes an experimental science, an intellectual exercise of the highest order; and if cooking had ever been studied as a science and practiced as an art . . . it would never have fallen to its present condition. (viii, 9)

Women’s work, Buckmaster implies, has not kept abreast of developments in material culture and in science. As such, the happiness and indeed, the very progress of the nation were in peril. Echoing Acton, Buckmaster adds a moral impetus to his argument for

¹⁴⁷ For a fuller account of the origins of the Third International Exhibition, see Sillitoe 23-25 and Alisa Yoxall, *A History of the Teaching of Domestic Economy. Written for the Association of Teachers of Domestic Subjects in Great Britain* (Bath: Cedric Chivers LTD, 1913), 8-10.

¹⁴⁸ John Buckmaster, *Buckmaster’s Cookery: Being an Abridgement of Some of the Lectures Delivered in the Cookery School at the International Exhibition for 1873 and 1874: Together with a Collection of Approved Recipes and Menus* (1874), 112.

scientifically-informed cooking: “Good cookery is required,” he argues, “because it has a great moral influence in every family. We want lightness, brightness, and laughter, and it is when these are united to good domestic cookery that families know how to dine and enjoy what God has provided” (271).¹⁴⁹ In her study of the scientization of nineteenth-century cookery, Lieffers has argued that middle-class women operated under a “scientific prerogative” that permeated the culture as deeply as her moral, domestic prerogative (937). Here, however, Buckmaster collapses the two: learning science for domestic purposes, he suggests, *was* in fact women’s moral duty. Three years later, an article in *The Englishwoman’s Domestic Magazine*, likewise frames scientific understanding in the kitchen as women’s moral obligation. “Artistic cookery derogatory! Why, it is a science, an art, as sure to follow a high state of civilisation as the fine arts do. . . . Truly,” the writer concludes, “I think that it is almost a sin for a housekeeper with all her senses to be ignorant of the laws of chemistry affecting food.”¹⁵⁰ Valorization of chemistry, in these articles, is conflated with a valorization of the angel and her hearth.¹⁵¹

Given the long runway of writings striving to connect chemical principles and everyday cookery, together with the increasingly moral overtones permeating the conversation, it is no surprise that Buckmaster’s 1873 demonstrations were hugely popular. Immediately after the Exhibition, a new wave of culinary instruction

¹⁴⁹ Historians of the home economics movement have explored the prevalence of the language of civilization and national peril threading the culinary culture at midcentury and beyond. See Sillitoe and Attar, and also Laura Shapiro, *Perfection Salad: Women and Cooking at the Turn of the Century* (Berkeley: University of California Press, 1986), esp. Ch. 1-2. Lieffers also notes the connection between food, civilization, and health in nineteenth-century cookbooks. See esp. 944-948.

¹⁵⁰ Anon., “The Englishwoman’s Economist,” *The Englishwoman’s Domestic Magazine* (London, England 1876).

¹⁵¹ For discussion of the use of chemistry to define women’s roles in relation to girls’ education, see Attar and also Manthorpe.

opportunities began emerging. Building on the popularity of Buckmaster's talks at the Third International Exhibition, Henry Cole, Buckmaster, and other Exhibition commissioners founded The National Training School of Cookery in 1873. The school initially targeted "fashionable" ladies (Attar 43). It soon turned its attentions to middle-class women, however, offering instruction in plain cookery.¹⁵² As cookery courses were instituted in Board schools beginning around 1875, the National once again expanded its focus, offering training courses for teachers. Other cookery schools across Britain soon opened, and learning to cook "scientifically" increased in the last quarter of the century into what historian Alisa Yoxall, writing in the early twentieth century, called "a fashionable craze."¹⁵³

Historians of the home economics movement have documented the rising tide of "scientific cookery" and its domestic ideologies from the 1850s through the end of the century, exploring in particular the ways in which it shaped school curricula and limited educational opportunities for working-and middle-class girls and women in mid-to-late Victorian England.¹⁵⁴ Cookbook scholars such as Humble, Mennell, and Lieffers have documented the increasing presence of this scientific language and knowledges in the cookbooks written for middle-class women and their servants. Likewise focusing on the period between 1850 through 1880 or so, these scholars track the scientization of the genre through the gradual quantification of the recipe and the inclusion of nutritional "facts" and chemical principles in popular cookbooks like Acton's *Modern Cookery* and

¹⁵² For more on the development of The National and the gradual institution of practical cookery and domestic arts courses in government schools, see Yoxall, Sillitoe, esp. Ch. 3, and Attar, Ch. 2.

¹⁵³ Yoxall 9. See also Humble, 27-28.

¹⁵⁴ See n. 9 and also Liz Rohan, A Material Pedagogy: Lessons from Early Twentieth-Century Domestic Arts Curricula." *Pedagogy*. 6.1, 2006. pp79-101, 87.

Isabella Beeton's 1865 *Book of Household Management*.¹⁵⁵ The presence of such knowledges, together with the invocation of eminent men of science, such as we saw in Acton's *Modern Cookery*, Lieffers argues, positioned the cookbook as a "scientific treatise" backed by scientific authority (947).

Yet what I want to draw our attention to in this chapter is the discomfort that many cookbook writers during this time felt about their genre and its ability to indeed become a "scientific treatise" for middle-class women and their cooks. The pressure on the genre to address the perceived problem of cookery was enormous, coming not only from the general culinary culture but from cookbook writers themselves. In their c.1850-1855 manuscript *Dissertations on Cookery*, written for the "young housewife," Mary Ellen and George Meredith, like Acton and Buckmaster, argued that "[w]e have made but little progress in the science and practice of cookery during the last thirty years. If we have not retrograded, which is by no means clear, we certainly have not advanced. We attempt more and know less how to get about it than our predecessors did."¹⁵⁶ In his 1853 *Cookery, Rational, Practical and Economical, Treated in Connexion with the Chemistry of Food*, a work directed at the "modern housewife," Hartelaw Reid similarly claimed

¹⁵⁵ The omission of Isabella Beeton in this chapter is somewhat surprising, given her status in Victorian culinary culture and her continued resonance in our contemporary moment as the representative figure of Victorian cookery. Beeton's interest in scientizing the genre lay primarily in two areas outside the consideration of this chapter: quantification and natural history. Beeton, as many scholars have shown, set out to rationalize the recipe into a form that reflected precise numbers and measurements. Secondly, rather than embedding her recipes within a framework of chemical principles, she often, as Humble and Beetham have noted, interpolates cooking directions within narratives of natural history. The textual context for daily food in Beeton is thus tied to the rhythms of the natural world, rather than to the discoveries of analytical chemists. In this chapter I have focused my attention on those works explicitly shaped by analytical chemistry, and as such, have chosen not to include a study of *Book of Household Management*.

¹⁵⁶ Mary Ellen Meredith, *Dissertations on Cookery*, indexed as MS16 in the Whitney Collection of the Manuscripts and Archives Division at the New York Public Library. Interestingly, Edith Nicholls Clarke, Mary Ellen Meredith's daughter from her first marriage, was appointed by Henry Cole as "Lady Superintendent" at The National in 1875 (Mendelson 81).

that “although the cookery of the citizen is certainly superior to that found sufficient for the peasant or the savage, still it is, in this country at least, very far from being what it ought to be; and hence dyspepsia and other derangements of the digestive organs are so prevalent. May it not be that the vast excess of the infant mortality . . . is occasioned as much by this dyspeptic habit of body[?]”¹⁵⁷

Twenty years later, the genre continued to operate on the idea that typical domestic cookery posed a threat to health, and thus, by implication, the nation. In 1875, two years into the heightened “craze” for scientific cookery driven, at least in part, by Buckmaster’s talks and the establishment of the National, the famous publishing house *Cassell & Co.* published what Stephen Mennell has called the “representative cookbook” of the last quarter of the century, *Cassell’s Dictionary of Cookery* (214).¹⁵⁸ *Dictionary*, like many of Cassell’s publications, teetered between a middle-class and working-class audience. In the preface, the anonymous author writes that “the strong point of good cookery is not its gratification of the palate, but its influence on health. This is a matter of far greater importance than is generally thought. It is no exaggeration to say the explanation of many fatal disorders is to be found in nothing but badly-cooked and ill-assorted viands.”¹⁵⁹ In the didactic nature typical of a Cassell’s publication, the writer goes on to argue that “[e]very housekeeper, then, will give the subject of eating and

¹⁵⁷ Reid 1.

¹⁵⁸ John Cassell launched the journalism arm of his tea and coffee company, Cassell & Co., on 2 March 1846, aiming through his publications to reach both working-class and middle-class families. Popular publications included *Working Man’s Friend and Family Instructor* (1856-1855), which promoted, as the paper put it, “the moral and social well-being of the working classes.” In all his publications, Cassell emphasized a combination of self-instruction and amusement. Cassell’s *Illustrated Family Paper* reached a middle-class as well as a working-class audience, while *Dictionary of Cookery* is representative of the illustrated popular educational text frequently produced by the firm. For more on the history of Cassell and Co. and the various publications it issued, see *Dictionary of Nineteenth-Century Journalism*, Laurel Brake and Barysa Demoore, eds. (London: The British Library & Gent: Academia Press), 52-58.

¹⁵⁹ Anon., *Cassell’s Dictionary of Cookery* (London: Cassell Peter & Galpin, 1875), iii.

drinking prominent place in her daily round of duties The directions have been put in the simplest form and the plainest language, so that the recipes may be . . . easily understood in the kitchen as their results are sure to be popular in the dining room” (iii). In its invocation of the kitchen and its direct address to the “housekeeper” rather than “housewife,” as was the rhetorical norm, *Dictionary* inserts itself rhetorically more directly into the labor of the home than did many nineteenth-century cookbooks. In order to maintain the guise of gentility for themselves and their middle-class readers, many domestic texts often tacitly addressed the middle-class housewife through the guise of addressing the cook (Beetham 21, Humble 16). *Dictionary*, however, directly ties domestic labor, whether performed by the cook or by the housewife herself, to the moral task of maintaining the health of the body and thus the home.

As this survey of both widely-read and lesser-known cookbooks suggests, the growing anxiety about the perceived state of cookery and its wider implications for social health likewise becomes the cookbook genre’s structuring concern during this same period from roughly 1850 to the “craze” following the Exhibition. Yet what we also find in these cookbooks, I argue, is a growing anxiety about the genre’s identity as a practical treatise in an era that increasingly demanded “theoretical” culinary education as an antidote to these bodily and social ills. In his lectures at the Exhibition, for example, Buckmaster offered his views on the purpose of the genre: “My idea of a Cookery Book is,” Buckmaster explained, “is that it should teach, as far as a book can teach, the theory and practice of Cookery” (145). Complaints about how much a book *could* teach principled cookery had begun appearing in women’s magazines over a decade earlier. In the 1860 article from *The Englishwoman’s Domestic Magazine* we saw earlier, the writer

criticizes the genre's failure to appropriately sequence "theory" and "practice," complaining that cookbooks "rush into the practice . . . before imparting the theory." In 1872, *The Ladies' Treasury* blamed "written or printed rules," or the recipe, the cookbook genre's central narrative element, as a contributor to the cookery problem. Recipes, the article argues, teach only "rules," not the "reasons why," or the chemistry behind the processes of cookery.¹⁶⁰ In 1881, *The Ladies' Treasury* issued another complaint about the cookbook genre's omission of theoretical chemical content: "The multitude of modern cookery books need not be enlarged on," the article reads, "but there is not one that treats of the chemical action of one ingredient upon another." Cookbooks promote "practice" alone, and therefore "why? is rarely understood."¹⁶¹

This chapter explores a swath of Victorian cookbooks constructed specifically to fulfill the demand for instruction in "plain cookery" grounded in chemical principles. Acton, as we saw, revised a work first made famous through her "precise" recipes by including "principles" by "eminent" writers, suggesting her dissatisfaction with the recipe's narrative possibilities and its tie to practical cookery. Victorian poet George Meredith, together with his wife Mary Ellen Meredith and her father, Thomas Love Peacock, spent at least five years attempting to revise William Kitchiner's 1817 blockbuster cookbook *The Cook's Oracle* because "nearly all the cookery books written" were only "collections of receipts." From roughly 1850-1855, the threesome worked to

¹⁶⁰ This concern, as Attar and Manthorpe have shown, was one that also appears in school textbooks aiming to teach "scientific" cookery.

¹⁶¹ "The Chemistry of Cookery," *The Ladies' Treasury* (London: England), 1881.

revise *The Cook's Oracle* into a "Cookery Book," so named because it successfully restructured Kitchiner's scatter-shot "principles" into a coherent system of cookery.¹⁶²

Like Acton and the Merediths/Peacock trio, Hartelaw Reid, in his 1853 *Cookery, Rational, and Economical, Treated in Connexion with the Chemistry of Food*, questioned the value of a genre tied exclusively to practical instruction. "That this evil"—echoing Acton's word—"of defective cookery has long been felt and appreciated," he writes, "is strikingly evidenced by the great demand which has so long existed for good cookery-books, and the consequent success of many even of doubtful utility" (2). The "utility" of cookbooks is "doubtful," he argues, because "[h]itherto cookery-books have been generally little else than long and often ill-arranged lists of receipts for expensive dishes" (2). Reid, as I show, sought to overcome the recipe's limitations, which he ties to economy, by creating a narrative structure for his work that interpolated instruction in chemical principles with individual recipes. In 1875, *Dictionary of Cookery* tried another method, presenting a full curriculum on "The Principles of Cookery" as its preface. While classically, cookbooks helped readers make culinary decisions by organizing foodstuffs either by food type (beef, mutton, and so forth), or by cooking method (boiling, roasting, baking), *Dictionary*, as its title suggests, removes this organizing logic, presenting instead a literal "dictionary" of recipes. Rather than supporting its readers through a taxonomy of methods or food types, that is, *Dictionary* set out to train readers to use her knowledge of culinary principles as a means of planning meals.

¹⁶² For a history of the Meredith/Peacock cookbook project, see Anne Mendelson, "The Peacock-Meredith Cookbook Project: Long-sundered Manuscripts and Unanswered Questions," *Bibliion: The Bulletin of The New York Public Library*, 2.1 Fall 1993, pp. 77-99.

In this chapter, then, I spotlight four cookbooks that explicitly identify a national need for culinary principles, and that intentionally attempt to alter the structure and purpose of the genre as part of this particular scientizing effort. Through this survey, I thus not only show that chemistry permeated the cookbook at the level of content—as other scholars have documented—but also that it affected the genre at the level of form. In particular, I argue that central to the cookbook’s development of culinary principles in the second half of the nineteenth century was a gradual shift away from the genre’s formal staple—the recipe—and an exploration of supplementary narrative forms capable of transforming the “art” of cookery into a principled-based pursuit.

In arguing as much, I revise our common understanding of the role of the recipe in the scientization of nineteenth-century cookbooks. Nicola Humble, among others, has argued that the recipe form was essential for cookbook writers such as Beeton in her efforts to “put cooking on a logical, scientific basis” (10). Lieffers, too, has argued that the rationalization of cookery was tied to the newly quantified and detailed recipe. In this chapter I want to suggest, however, that in their attempts to transform practical into what I am calling “principled” cookery, however, the cookbook writers under review in fact began to push back against the recipe as the cookbook’s *primary* mode. For these cookbook writers, in other words, the recipe lent itself to quantification and precision, yes, but not the required inculcation of chemical principles. The formal changes I note instead show us that cookbook writers deliberately interpolated their recipes within larger narrative and epistemological frameworks, creating a *web* of textual materials that, through their symbiotic textual relationship, renders cookery “principled.” As scholars of the recipe have argued, recipes are inherently *embedded* forms; they construct culinary

knowledge in conjunction with their surrounding material. In her seminal article “Recipes for Reading: Summer Past, Lobster á la Riseholme, and Key Lime Pie,” Susan J. Leonardi argues that the recipe’s construction as a list renders it “useless, even for a fairly experienced cook” (342, 340). The recipe, she suggests, is “an embedded discourse,” and requires a discursive frame in order for it to make meaning (341). The final purpose of this chapter is to explore the dynamic relationship between recipes and the “frames” nineteenth-century cookbook writers constructed in their efforts to transform the genre and the cookery it engenders from technical to “principled.” What we will find is that the changes in textual forms ultimately transformed the ways in which cookbook users engaged the genre.

THE PRINCIPLED RECIPE

In the first edition of her 1845 *Modern Cookery in All its Branches for Private Families*, Eliza Acton presented the first version of what most scholars consider the modern recipe, pruning the historically narrative-based form down into what Kate Colquhoun has described as “exact quantities and detailed instructions,” lists of necessary ingredients, and cooking times.¹⁶³ While most scholars identify Acton’s enumeration of cooking times and ingredients as her main textual innovation, Acton herself points to her detailed *technical* instructions as one of her innovative textual tactics. “Amongst the large number of works on cookery, which we have carefully perused,” she writes, “we have never yet met with one which appeared to us either quite intended for, or entirely suited

¹⁶³ Colquhoun 281.

to the need of the totally inexperienced; none, in fact, . . . contained the first rudiments of the art, with directions so practical, clear, and simple, as to be at once understood, and easily followed, by those who had no previous knowledge of the subject” (xxi). Acton credits her “thoroughly explicit and minute instructions” as the remedy to “[t]his deficiency,” arguing that her instructions “may, we trust, be readily comprehended and carried out by any class of learners” (xxi). Although she admits that this “closeness of detail”—her own description of her new recipe style—necessarily “prevented the admission of so great a variety of receipts as the book might otherwise have comprised,” she nevertheless argues that “a limited number, thus completely explained, may perhaps be more acceptable to the reader than a larger mass of materials vaguely given” (xxii).

Acton’s designation of “minute” recipe prose as the textual solution to culinary ignorance fits with her early understanding, in 1845, of the cookbook genre’s audience and purpose. “It sometimes happens,” she explains in the preface, “. . . that the young mistress of a family has had no opportunity before her marriage of acquiring the knowledge which would enable her to conduct her household concerns as she could desire” (xx). Many such women, she writes, “may be placed . . . by circumstances at a distance from every friend who could counsel or assist her. Thrown thus entirely upon her own resources, she will naturally and glad avail herself of the aid to be derived from such books as can really afford to her the information she requires” (xxi). The purpose of the cookbook, she makes clear, is thus “sincerely to render the work one of genuine usefulness,” a goal she achieves by offering “thoroughly explicit and minute instructions” (xx). In presenting her detailed craft instructions as a lifeline for the solitary “young mistress,” Acton positions *Modern Cookery* within a generic tradition begun by

eighteenth-century culinary writers such as Hannah Glasse and Martha Bradley. These writers, as Sherman has shown, first made the genre user-friendly by developing “intelligible recipes” for “the new, urban, solitary reader, who for lack of an instructional community, required the type of culinary self-sufficiency that a book, if well crafted, could provide.”¹⁶⁴ It was thus in the eighteenth century, Sherman argues, that the cookbook became a modern genre in that it “appeals to a need and suggests that help is at hand. It projects empathy, and by that same token, an awareness of readers’ precise needs,” adapting its form and content to fulfill those needs (xvi).

Cookbook writers from the eighteenth- to the mid-nineteenth century aiming to teach plain cookery to the rising middle classes thus commonly defined their “readers’ precise needs” as the need for what Sherman calls “competent instruction”; as such, these writers worked to devise “textual strategies” that could impart what they termed “intelligible” culinary craft instruction via print rather than the traditional form of hands-on, “live” instruction. But by 1851, in line with the larger growing concerns about the state of cookery and the state of the nation, Acton had begun to identify and articulate a different set of readerly needs, declaring in the preface to the new edition that what was “still much needed in this country” was not only “an improved system of practical domestic cookery” but also “a better knowledge of its first principles” (ix). As this quotation suggests, Acton maintains her emphasis on cookery’s practical nature, but supplements it with the language of “knowledge” and “principles.” In the 1851 edition, in other words, Acton redefines domestic cookery as not simply a practical craft task, but as

¹⁶⁴ Sherman xvii.

a realm that contains another, more intellectual element.¹⁶⁵ In redefining cookery, Acton thus redefines the purpose and task of the genre. No longer does she only need to provide “explicit and minute instructions,” but now she must integrate a non-craft element, “The Principles of Baron Liebig and Other Eminent Writers,” into her work.¹⁶⁶

As we will see in the subsequent survey of mid-to-late nineteenth-century “plain” cookbooks, the definition of what constitutes the “first principles of cookery” changes over the course of the century. As it changes, the textual frames used to disseminate the “principles” likewise shifts. In both the 1845 and 1851 *Modern Cookery*, Acton follows the understanding circulated by the chemical community in women’s magazines, domestic chemistry textbooks, and popular works such as those by Liebig, defining “principles” as the chemical constituents that make up a particular food item. In both editions, furthermore, Acton delivers the principles via recipes. Indeed, in both editions of *Modern Cookery*, Acton first introduces culinary principles by transcribing Carême’s recipe for “Bouillon,” directing readers “who may be desirous to excel in . . . the art of preparing good, wholesome, palatable soups” to “study the instructions given under the article Bouillon, where the principles of this branch of cookery are fully explained” (37).

¹⁶⁵ The question of cookery’s dual status as theory and practice supersedes the boundaries of the cookbook, dominating other educational enterprises as well. The home economics movement—and the courses taught in cookery schools and Board schools—in fact underwent several changes in name as questions arose as to whether cookery ought to be taught as a practical subject or through intellectual training. As Attar notes, educators alternately titled their courses “domestic subjects,” “domestic science,” “Domestic economy,” “housecraft,” and home economics.” Manthorpe has likewise documented this struggle within school curricula. For a discussion of the various names attached to the movement itself, see Emma Seifrit Weigley, “It Might Have Been Euthenics: The Lake Placid Conferences and the Home Economics Movement” (*American Quarterly* 26 (March 1974): 79-96).

¹⁶⁶ Acton was only one of several cookbook writers to cite Liebig explicitly. A German chemist involved the British chemical community, Liebig widely disseminated his revolutionary theories of the nutritional potential of food’s chemical through popular textbooks such as *Familiar Letters on Chemistry* (1843) and *Researches on the Chemistry of Food* (1847). For more on Liebig, his discoveries, and their dissemination, see Attar, Lieffers, and also Walter Gratzer, *Terrors of the Table: the Curious History of Nutrition* (Oxford: Oxford UP, 2005).

In the recipe itself, Carême argues that “[t]he stock or soup-pot of the French artisan . . . is managed by his wife, who, without the slightest knowledge of chemistry, conducts the process in a truly scientific manner” (41). Acton transcribes the recipe directly:

She first lays the meat into her earthen stock-pot, and pours cold water to it in the proportion of about two quarts to three pounds of the beef; she then places it by the side of the fire, where it slowly becomes hot; and as it does so, the heat enlarges the fibre of the meat, dissolves the gelatinous substances which it contains, allows the albumen (or the muscular part which produces the scum) to disengage itself, and rise to the surface, and the ozmazome (which is the most savoury part of the meat) to be diffused through the broth. Thus, from the simple circumstances of boiling it in the gentlest manner, a relishing and nutritious soup will be obtained, and a dish of tender and palatable meat; but if the pot be placed and kept over a quick fire, the *albumen* will coagulate, harden the meat, prevent the water from penetrating it, and the *osmazome* from disengaging itself; the result will be a broth without flavour or goodness, and a tough, dry bit of meat. (37)

The principles, in this recipe, are defined as the constituents “ozmazome” and “albumen”; the cooking process—and indeed, the narrative arc of the recipe itself—“truly scientific” because it is dictated by these chemical constituents. The principles, in other words, shape both the content and structure of the recipe, standing as an example of what I call a “principled recipe,” or recipes wherein the technical steps are predicated or built around the constituents of the food product and their responses to heat.

The principled recipe is thus markedly different than, to borrow Sherman’s term, the “intelligible” recipe, the kind of minutely-rendered craft recipe Acton touted as a textual innovation in her 1845 edition. Whereas the intelligible recipe consists of precise instructions meant to walk readers through the technical processes for how handle and prepare foodstuffs, the principled recipe, as showcased here, largely offers a description of what happens chemically to the meat during the process of boiling. This description

serves as its own kind of instruction, however, explaining to readers how meat ought to be boiled, as determined by the meat's "principles," or chemical constituents.

Acton was not the first writer to offer "principled" recipes. Versions of the principled recipe had begun to crop up outside the genre of the cookbook as least as early as 1821, often in the textbooks and lectures produced by chemists. As we saw in Chapter One, for example, chemist Friedrich Accum embedded domestic recipes within chemical explanations of the effects of the processes on the food.¹⁶⁷ Albert Bernays, too, offered "Prescriptions," or recipes derived from a quantitative analysis of food's constituents. Physicians such as Robert Bakewell offered loose versions of the principled recipe in their texts, walking readers through descriptions of the "modes of cookery" best suited to certain kinds of foodstuffs, although such texts were descriptive rather directional. Yet, with the exception of Accum, chemists writing in this textual tradition offered increasingly narrative descriptions of these modes, often explicitly declining to instruct readers in the "art" of cookery.

The job of transposing chemical knowledge into an actual system of cookery thus largely became a job specifically for the domestic cookbook *genre*. Within *Modern Cookery*, Carême's "principled recipe" for bouillon stands as one of the only examples of the language of culinary principles in the 1845 edition Acton's work. By the 1851 edition, however, Acton explicitly positions the principled recipe as the foundation of her culinary enterprise, claiming in the subtitle that she offers "A Series of Carefully Tested Receipts, In Which the Principles of Baron Liebig and other Eminent Writers Have been As Much As Possible Applied and Explained." To that end, Acton repeats Carême's

¹⁶⁷ For a further discussion of Accum's use of the recipe form to construct and impart chemical knowledge, see Chapter One of this project.

principled recipe verbatim, although she repositions it as part of a larger curriculum of soup-making principles, writing that “the reader who desires to understand the *principles* of soup-making is advised to study with attention the directions for ‘Baron Liebig’s [*sic*] Extract of Beef,’ in the present chapter, and the receipt for *bouillon* which follows it” (emphasis original, 2). In repositioning Carême’s recipe behind Liebig’s, Acton makes clear the new edition’s shift in epistemological emphasis. Despite its nod towards culinary principles, that is, the 1845 edition privileges craft preparation, utilizing Carême’s recipe to help readers “who may be desirous to excel in . . . the art of preparing good, wholesome, palatable soups.” The 1851 edition, however, privileges cookery’s intellectual component, assuming readers now wish to learn soup-making principles rather than “art.”

Despite her rhetorical emphasis in these recipes on principles rather than practical outcomes, the majority of Acton’s new edition in fact remains dedicated to “intelligible” recipes and the craft of domestic cookery. Acton presents her own experiences and knowledge as a source of authority for these traditional, technically-oriented recipes, pointing out in the preface that they “may be *perfectly depended on* from having been proved beneath our own roof and under our own personal inspection.” Acton furthermore claims direct authorship for many of the “intelligible” recipes: “In consequence of the unscrupulous manner in which large portions of my volume have been appropriated by contemporary authors,” she explains, “I have appended ‘*Author’s Receipts*’ and ‘*Author’s Original Receipts*’ to many of the contents of the following pages (ix).

Strategically threaded throughout the new edition, however, are “principled recipes”—recipes copied or derived directly from the chemical works produced by

chemists, mainly Liebig. Acton identifies these recipes with attributive tags, writing above each a variant on the following: “*Baron Liebig’s Recipe*”; “*Baron Liebig’s Beef Gravy*”; “*Professor Liebig’s Bavarian Brown Bread*,” and so forth. Lieffers argues that “the chemistry was largely limited to the preface” of Acton’s new edition, and it’s certainly true that the principled recipes make up a relatively minimal portion of the book (947). Over the course of six hundred and forty-three pages, only a dozen or so principled recipes appear, suggesting that the recipe as a narrative mode remained central to the cookbook’s project at midcentury.

Yet Acton presents these recipes as what she calls a “series,” creating a web of cross-references that position the individual, seemingly-scattered recipes into a chemical foundation of sorts for the “system of cookery” presented in the book. Liebig’s recipe for “*Extract of Beef; or, Very Strong Plain Beef Gravy Soup*” provides one of the clearest examples of this structural curriculum. The recipe appears immediately after Carême’s, in Chapter 1: “Soups”:

Receipt.—take a pound of good, juicy beef (rumpsteak is enough for the purpose), from which all the skin and fat that can possibly be separated from it, has been cut away. Chop it up small like sausage-meat; then mix it thoroughly with an exact pint of cold water, and place it on the side of the stove to heat *very slowly indeed*; and give it an occasional stir. It may stay for two or three hours before it is allowed to simmer, and will then requires at the utmost but fifteen minutes of gentle boiling. (7)

Here, Acton’s paraphrase of Liebig’s recipe emphasizes only technical tasks; it offers no mention of science or principles. Yet she cross-references this recipe four other times throughout the work: first in Chapter VI—“*Baron Liebig’s Beef Gravy (Most Excellent for hashes, minces, and other dishes made of cold meat)*”; next, in “*To Boil Meat*” in

Chapter IX: “Boiling, Roasting, etc.”; next in the recipe for “Roasting,” also in Ch. IX; and finally, in “To Roast a Turkey” in Chapter XIV.

The central underlying similarity linking all of these cross-referenced recipes is the lack of technical instructions; each refers the reader to Chapter I for the “particulars” of the original recipe. The *purpose* of these recipes is not to cook individual dishes, but to extract and explain the underlying principles, which Acton argues are applicable to each of the culinary scenarios in which the recipe appears. In Chapter IX, for example, Acton reframes Chapter I’s recipe for “Extract of Beef” into a recipe for “scientific boiling,” transforming it from technical instructions for an individual dish into a “scientific” process she argues is foundational to cookery itself. Indeed, in the opening paragraph of Chapter IX: “Boiling, Roasting, etc.,” she writes that “a thorough practical knowledge of the processes described in the present chapter will form a really good cook far sooner and more completely than any array of mere receipts can do, however minutely they may be explained; they should, therefore, be well studied and comprehended, before any attempt is made to compound difficult dishes; and the principles of roasting, boiling, stewing, and baking, at least, ought to be clearly understood” (167).

This emphasis on processes rather than recipes as a means of cooking scientifically was not new, but rather was instituted by chemists as the foundation of scientific cookery. Men of science such as Friedrich Accum and others approached the kitchen through these processes, using the various “modes” of cookery as a method of identifying food’s chemical components and their transformation under certain kinds of heat. As I discussed in Chapter One, Accum used the domestic recipe as a means of leading lay readers through this method. Later chemists and physicians such as

Bakewell, Buckmaster, and John Gray likewise devoted their magazine articles and lectures to describing the “chemistry” of boiling, baking, stewing, and so forth.¹⁶⁸

Some cookbooks had begun the work of transforming chemical method into domestic instruction. Anne Mendelson identifies physician William Kitchiner’s 1817 *The Cook’s Oracle* as “one of the first English Cookbooks to devote real attention” to the processes of cookery and their chemical output (89). (Mary Ellen and George Meredith, as I explore shortly, took it upon themselves to revise his cookbook, arguing that while his scientific content was sound, the structure of his book rendered the science useless and the book itself unusable. Unfortunately, history tells another story: Kitchiner’s work was in fact a bestseller in his moment and beyond.)¹⁶⁹

Given this strong connection created by chemists between the processes of cookery and chemical “principles,” Acton’s attention to these processes is unsurprising. In Chapter IX, her chapter on the modes of cookery, Acton opens by pointing out the issue with current domestic practices: “Boiling, in the usual English manner, is the least advantageous of all modes of cooking meat, because a large portion of the nourishment which it contains is withdrawn from it in the process, and it is usually very insipid in flavour” (167). To combat this nutritional deficit, Acton integrates Liebig’s recipe from Chapter One for “Extract of Beef,” opening the section “To Boil Meat” by reframing the recipe as “Scientific Boiling.” “We have already given, at the commencement of Chapter I, the substance of Liebig’s [*sic*] instructions for scientific boiling; but for the convenience of the reader, we will briefly recapitulate them here, with such additions as

¹⁶⁸ See Bakewell, “The Chemistry of Cookery,” *The British Mothers’ Magazine* (London, 1861); Buckmaster, “Lecture XII,” in *Buckmaster’s Cookery* (London, 1874), 201, and John Gray, “The Chemistry of Food and Cookery” in *The Girls’ Own Paper*, (London, April 1882)

¹⁶⁹ Mennell 213.

our own observation has enabled us to supply” (168). Acton, however, does not in fact re-detail the specific craft instructions, making good on her claim in the opening of the chapter that “mere receipts” do not produce good cooks. Instead, she paraphrases the reasons upon which his craft instructions were originally founded. “In making soup, gravy, or savoury jelly of any kind, the principal object is to extract from the meat used for the preparation, all the nutriment and savour which it can be made to yield,” she explains. “This is effected by putting it into *cold* water, and heating it very slowly indeed, and then keeping it for a specified time at the point of boiling, or letting it simmer in the gentlest manner” (168).

By reframing the recipe as “scientific boiling” and replacing technical instructions in favor of an explanation for the reasons behind the technical directions, Acton rhetorically implies that her “new domestic system of cookery” is built upon processes that are inherently scientific. Acton showcases the ubiquity of “scientific boiling” as a foundational culinary process by recycling it elsewhere in the text, illustrating its varied purposes within her cookery curriculum. Indeed, she initially introduces his recipe by explaining that “[t]his admirable preparation is not only most valuable as a restorative diet, it is also of the utmost utility for the general purposes of the kitchen, and will enable a cook who can take skilful advantage of it, to convert the *cold meat* . . . into good nourishing dishes, which the hashes and minces of our common cookery *are not*” (6). As such, Acton explains, “We shall indicate in the proper chapters the many other uses to which this *beef juice*—for such indeed it is—will be found eminently adapted” (6). In Chapter VI, “Gravies,” for example, she includes a recipe entitled “Baron Liebeg’s Beef Gravy (Most Excellent for hashes, minces, and other dishes made of cold meat). As in

Chapter IX, she begins the recipe here by referring readers who want the “particulars of this most useful receipt” to “the first part of the chapter on soups” (96). The concept for readers to understand in this instance is thus not the technical “particulars,” but rather that the “scientific boiling” described in “Beef Gravy” likewise applies “for extracting all [the] juices from fresh meat of every kind in the best manner (96-7). The implicit message here is that each time the reader completes a dish that includes this foundational process, she is utilizing Liebig’s method for “scientific boiling,” and thus, according to Acton, is cooking “scientifically.”

Liebig’s principled recipe for “Roasting” in the same chapter links this culinary process to the scientific boiling enacted in “Gravies” and “to Boil Meat.” When introducing the process of “Roasting,” Acton explains its chemical connection to boiling: “Baron Liebig, whom we have already so often quoted, says, that roasting should be conducted on the same principle as boiling. . . . When a joint is first laid to the fire, therefore, it should be placed for twenty minutes or half an hour sufficiently near to effect this . . . and then drawn back and finished by the directions at the end of this section” (171). Acton connects all of these processes together in her recipe “To Roast a Turkey,” wherein she states at the end of the recipe in an appended “*Obs. 1*” that “Baron Liebig’s improved method of roasting will be found at p. 171, and can be followed always instead of the directions given here” (267). Interestingly, through appending this “observation” to the end of rather detailed craft directions, Acton undermines her own technical directions—the textual innovation she puffs in the preface of both the 1845 and 1851 editions—suggesting Liebig’s principled method as an alternative to the given directions. Lieffers notes this tension between masculine and feminine authority in the text, arguing

that “although Acton claimed devotion to chemical principles,” her “subordination to chemical authority was superficial” (948). Indeed, Acton clearly retains her culinary authority, claiming authorship of roughly the same number of recipes as those she credits to Liebig. The title itself, furthermore,—“In a series of carefully tested receipts, in which the principles of Baron Liebig and other Eminent Writers have been as much as possible applied and explained”—visually and epistemologically positions her recipes alongside Liebig’s.

While certainly moments such as Acton’s “Obs. 1” above illustrate a tension between sources of authority in the text, they—together with passages such as in Chapter IX where she downplays the effectiveness of “mere receipts” in favor of processes—also, I argue, illustrate a growing tension surrounding the recipe and its place as the central narrative form of the cookbook genre. Central to this tension was an increasing dissatisfaction with the cookbook genre’s emphasis on practical cookery, as embodied in recipes, to the exclusion of theoretical science, or culinary principles. Over the next several decades, the rhetoric of dissatisfaction with the genre increasingly cropped up in culinary texts as cookbook writers indicted the genre as unscientific, arguing that it focused on preparation and recipes rather than offering, to use Acton’s phrase, a full “system of domestic cookery” built on scientific principles. In the following section, I survey three cookbooks—the Merediths’ and Peacock’s c.1850-1855 *The Science of Cookery*, Hartelaw Reid’s 1853 *Cookery, Rational, Practical, Economical, Treated in Connexion with the Chemistry of Food*, and Cassell’s 1875 *Dictionary of Cookery*. Each of these texts, as we will see, explicitly construct new narrative frames meant to embed

the recipe as an instructional mode, and thus repair what Reid calls “the evil of defective cookery.”

EMBEDDED RECIPES

From about 1850-1855, Mary Ellen Meredith, daughter of the Romantic poet Thomas Love Peacock and first wife of the Victorian poet George Meredith, worked together with both men on a series of cookbook projects meant to solve the textual dilemma posed by the integration of chemical principles into the cookbook genre. Their collaborations on the relationship between practical cooking and chemistry produced at least two partial manuscripts, *Dissertations on Cookery* and *The Science of Cookery*.¹⁷⁰ The manuscripts bear the handwriting of all three contributors. *Dissertations* is largely written in Mary Ellen’s hand, although there are interpolated comments and marginalia throughout in George Meredith’s and Peacock’s hand. *The Science of Cookery*, in contrast, mostly bears Peacock’s hand. Mary Ellen contributed several pages and George Meredith contributed only one.

While these manuscripts never reached publication, I include them here as objects of study because they offer for us a richer sense of the efforts at midcentury to transform the cookbook genre into a medium capable of mitigating the danger of domestic ignorance. As the dates of composition suggest, the Merediths/Peacock and Acton were simultaneously engaged in remarkably similar cookbook projects, and were motivated by remarkably similar social and generic concerns. Like Acton, that is, Meredith frames the “cookery problem” as a larger social problem, or what Mendelson refers to as the issue of

¹⁷⁰ Mendelsohn 94. For an account of the direct relationship between *Dissertations* and *The Science of Cookery*, see Charles Cuykendall Carter’s NYPL blog post “Romantic Interests: Peacock’s Science of Cookery.”

“cultural debasement” (80). In the preface to *Dissertations*, Meredith writes that “[w]e have made but little progress in the science and practice of cookery during the last thirty years. If we have not retrograded, which is by no means clear, we certainly have not advanced. We attempt more and know less how to get about it than our predecessors did.” Addressing her work to the “young housekeeper,” Meredith’s work echoes the rhetoric of the larger culinary culture, framing the cookery problem as a problem of domestic—and thus women’s—ignorance: “we . . . know less” about “the science and practice of cookery.” Also like Acton, Meredith ultimately frames this issue of scientific ignorance as the fault of prior systems of culinary instruction. Yet while Acton continued to rely on the recipe as a narrative mode of chemical knowledge construction, offering up a cookbook of mostly “intelligible” recipes, Meredith displays skepticism towards the recipe as a central component of the genre. In the “Editor’s Preface” to *Dissertations*, Meredith argues that while it is the “[y]oung housekeeper’s desire to be made acquainted with the science of cookery,” “nearly all the cookery books written” were in fact only “collections of receipts,” and thus fall short of fulfilling the reader’s needs.

To solidify her point about the genre’s ongoing deficiencies, Meredith identifies and overtly dismisses as merely practical some of the most popular contemporary cookbooks of the early century. Those texts “which are good for anything,” she writes, “are more properly receipts than cookery books.” In particular, Meredith targets Maria Rundell’s popular 1806 *A New System of Domestic Cookery*. Stephen Mennell identifies Rundell’s work, aimed at middle-class readers, as “one of the best selling cookery books of the first half of the nineteenth century.”¹⁷¹ Meredith, however, declares it “a very good

¹⁷¹ Mennell 212.

receipt book.” Anne Cobbett’s 1840s *The English Housekeeper* fares slightly better; Cobbett achieves “more of the nature of a cookery book than others.”

Meredith’s distinction here between receipt books and cookbooks is not mere semantics; rather, it articulates the growing sense that a cookbook had value only when it exceeded the practical instruction traditional to the genre. Like Acton, Meredith remedied what she saw as the genre’s epistemological problem by revising an already-published cookbook, William Kitchiner’s 1817 *The Cook’s Oracle*. Meredith, together with her husband, her father, reworked Kitchiner’s text into a new cookbook entitled—unsubtly—*The Science of Cookery*. In the “Editor’s Preface” to *Dissertations*, Meredith explains their plan and theorizes the differences between recipe and cookery books. She does so through an extended comparison of *The Cook’s Oracle* and another popular cookbook, Alexis Soyer’s 1851 *The Modern Housewife*. Although widely considered by both Victorians and contemporary scholars as the Victorian era’s first celebrity chef,¹⁷² Meredith accuses Soyer of using his popularity to hoodwink vulnerable readers with a “receipt book” cloaked in pseudoscience:

The scientific pretensions of Monsieur Soyer gives his book a double attractiveness: nearly all the cookery books written being generally nearly collections of receipts: and so many young housekeeper’s desire to be made acquainted with the science of cookery that the promise of learning it & the same time getting a . . . choice and delicate receipts from a distinguished French Cook was irresistible, and seemed to offer [what] no other cookery books could give. All this was delusion, there are no choice receipts in Monsieur Soyer’s ‘[Modern] Housewife’ and we have shown on what basis his scientific pretensions are founded. (7-8)

Soyer, that is, deludes his readers twice, according to Meredith. First, he lures them in with French recipes (most of which Meredith identifies as having been lifted from Maria

¹⁷² Mennell 151.

Rundell). Secondly, he extends the larger “promise” that his overall work transcends those works that are merely a “collection of receipts,” Meredith put it, by offering the “promise” of “the science of cookery.” Yet Meredith insists that what readers really get is “farrago”: “[t]he science of Monsieur Soyer where it is true consists of a clap-trap arrangement of other people’s ideas,” she argues, “and where it is original it is valueless and unscientific.” Meredith further exposes Soyer’s pseudoscience by directly comparing it to William Kitchiner’s work, the cookbook she holds up as a model for revision of the genre:

While we were receiving all this farrago as new and important we had all the while a Cookery Book of real science and excellent receipts quite ignored as such. Dr. Kitchiner’s “Cook’s Oracle” contains all the science that is to be found in M. Soyer with this difference[:] that it is all embodied in principles directly applied to the different processes proportions or harmonies of cookery. . . . [T]hough all the real science to be found in M. Soyer pre-existed in Dr. Kitchener, some of the spurious science of the former is [not] detected in the latter, who is also as much more complete in the comprehensiveness of his plan of instructing in the principles of all the branches of the science of cookery as he is in its execution. (8)

The dissonance for Meredith between Soyer’s and Kitchiner’s science is not simply a question of the “spuriousness” of Soyer’s science versus the validity of Kitchiner’s. Rather, as we see from the passage above, Meredith labels Kitchiner’s “cookery book” as scientific because of the textual methods he uses to present his chemistry— “embodied in principles.” Kitchiner, she continues, is a true “scientific cook” because he “discribes [*sic*] the different effects produced on the chief constituents of alimentary substances by the various applications of heat.” Kitchiner, that is, presents *principled* recipes, thereby textually connecting the chemical information “embodied in principles” to the practical cooking process. A bit penned in George Meredith’s hand underscores her evaluation: *The Cook’s Oracle*, he writes, “was comprehensive and excellent. [Kitchiner] desired to

introduce science to the notice of Housekeepers and Cooks so as to lay the foundation for practical adaptation” (12).

Soyer, by contrast, only “gives a receipt for making ‘Osmazone,’” Mary Ellen writes, “modestly informing his reader that ‘osmazone is known under the various names of science . . . [in] different cookery books.’ Besides its actual “spuriousness,” that is, Mary Ellen argues that Soyer’s attempt to render his cookery “scientific” fails because of his chosen narrative mode. Cookery does not become scientific or “principled” when formulated through a recipe alone; as a corollary, preparing a recipe, even for “Osmazone” does not make one a scientific cook.

Besides presenting principles such as Ozmazone through recipes, another of Soyer’s central failings, according to Mary Ellen, is that his craft recipes are in fact “unprincipled”: “No principle dictates his proportions,” she writes in regards to his instructions for different sorts of jams. “[H]e orders equal weights of sugar & fruit to make strawberry jam, & to make currant jelly he prescribes only three quarters of a pound of sugar to a pint (which is equal to a pound) of juices. It must be evident,” she repeats, “that no principle dictated the distribution of a pound of sugar to a sweet pulp and three quarters of a pound to an acid juice” (6-7). By conveying his “science” as mere recipes and presenting recipes that are “unprincipled,” Meredith argues, Soyer divorces the cooking process from abstract chemistry, perpetuating what she perceives as an unscientific model of cooking.

Yet even while upholding *The Cook’s Oracle* and the content of its “principles” as a model text of scientific cookery, the Merediths and Peacock admit that Kitchiner, like Soyer, ultimately fails to effectively integrate principles into domestic cookery:

We believe that the faulty . . . mode of its arrangement has been the chief hindrance to the circulation of Dr. Kitchiner's Book. With all its intrinsic merit it is the most ill arranged book possible. M. Soyer's science, such as it is, is all to be got at by the most casual skimming of chapters. Dr. Kitchener's is scattered here and there throughout the book with only so much arrangements that it appears to have been jotted down in notes & references whenever it occurred to him to be illustrious of practical directions. In this way it served to confuse the cook instead of enlightening the mistress. The . . . principles should have been in one place and the receipts should have been their illustration without other comments, instead of being encumbered with incessant reference and illustration which Dr. Kitchener . . . burdened them with. (11-12)

Kitchiner, like Soyer, fails because of his formal choices, particularly those concerning "practical directions," or his recipes. "The . . . principles," as Mary Ellen writes above, "should have been in one place and the receipts should have been their illustration without other comments, instead of being encumbered with incessant reference and illustration which Dr. Kitchener . . . burdened them with." Because Kitchiner does not properly sequence principles with recipes, or "art" with "science," that is, his cookbook falls short in its intellectual purpose. Here Mary Ellen articulates a complaint that was commonly made about the cookbook. In the 1860 article from *The Englishwoman's Domestic Magazine* we saw earlier, for example the writer criticizes the genre's failure to appropriately sequence "theory" and "practice," complaining that cookbooks "rush into the practice . . . before imparting the theory."

While Meredith earlier, in her distinction between a "recipe book" and a "cookery book," undermined the intellectual value of the recipe by framing it as something to be transcended, she nevertheless positions as central to her scheme for a scientific cookbook. *If* properly embedded with a chemical "principle," the recipe in fact has the potential to "enlighten" the cook's intellect rather than only facilitate a discrete craft task. Meredith's scheme for a scientific cookbook thus relies on cooks moving through the cookbook in a

certain order, first reading theoretical principles before they attempt to make a recipe. Kitchiner's "scattered" cross-references, in contrast, engage the reader in an ongoing zigzag reading process that ultimately "confuse" rather than "enlighten"; like Soyer, they sever the principles from the recipe, thus defeating the pedagogical goal of the cookbook.

While *Dissertations* largely functions as Meredith's critique of the cookbook genre, borne out through her comparison of Kitchiner and Soyer, she partnered again with George Meredith and her father, Thomas Love Peacock, to revise *The Cook's Oracle* into *The Science of Cookery*.¹⁷³ Theirs was a select revision though, targeting Kitchiner's form rather than his science. *Cookery* begins with a narrative Preface written by Mary Ellen:

To understand the Theory of Cookery, we must attend to the action of heat upon the various constituents of alimentary substances as applied directly & indirectly through the medium of some fluid, in the former way as exemplified in the process of Roasting & Boiling, the chief constituents of animal substances undergo the following changes—the Fibrin is corrugated, Albumen coagulated, the Gelatin & Osmazone rendered more soluble in water, the Fat liquefied, and the Water evaporated. If the heat exceed a certain degree, the surface becomes first brown, and then scorched. In consequence of these changes, the muscular fibre become opaque, shorter, firmer, and drier; the tendons less opaque, softer & greasy; the fat is either melted and or rendered semi-transparent. Animal fluids become more transparent; the albumen is coagulated & separated, and they dissolve gelatine & osmazone.

Like Accum, Acton, and Kitchiner, the Merediths and Peacock identify the processes of cookery—boiling, roasting, frying, and so forth—as the area of the culinary most intrinsically chemical. Yet unlike Acton, they textually represent the principles of cookery, or the chemical transformations that occur during these processes, not in

¹⁷³ For an account of the direct relationship between *Dissertations* and *The Science of Cookery*, see Charles Cuykendall Carter's NYPL blog post "Romantic Interests: Peacock's Science of Cookery." Mendelsohn also explains the back story to the planned cookbook project. See esp. 87-94. In her explanation of their project, Mendelsohn helps piece together the story of the revision, as well as its attempts to restructure Kitchiner's work.

principled recipes copied from a chemist but through prose—specifically, a narrative explanation in the preface. In utilizing the preface to convey culinary principles, Meredith fulfils her goal of consolidating the principles, which Kitchener had “scattered here and there throughout,” into the front of the book. As in the preface, the body of the work focuses on the processes of cookery, retaining Kitchiner’s original structure for organizing his recipes: “Boiling,” “Roasting,” and “Frying.”¹⁷⁴ In structuring the recipes around the processes enumerated in the preface, the Merediths and Peacock textually embed the book’s practical meal preparation with the principles or “Theory” of cookery, a feat they argue Kitchiner failed to accomplish.

This embeddedness sets up the principles or “Theory” narrated in the preface as the theoretical foundation for the practical recipes that follow. In *Dissertations*, George Meredith praises Kitchiner for “introducing science to the notice of housekeepers and cooks”; doing so, he argues, “lay[s] the foundation for practical adaptation,” or the ability to apply theoretical knowledge to domestic tasks (12). Yet Mary Ellen argues in *Dissertations* that the structure of Kitchiner’s work stymied such “practical adaptation,” arguing that because Kitchiner’s science is “scattered here and there throughout the book,” it thus “served to confuse the cook instead of enlightening the mistress” (12). Instead, “[t]he process and . . . the principles should have been in one place,” she argues, “and the receipts should have been their illustration without other comments” (12). By explaining the “principles” of boiling, roasting, and frying in the preface and then

¹⁷⁴ According Mendelson, Kitchiner’s cookbook “was one of the first English cookbooks to devote real attention to the main processes of cookery—boiling, roasting, frying, broiling, baking—as applications of heat to be analyzed and understood each in its own right” (89). Men of science such as Benjamin “Count” Rumford had, however, as Kitchiner himself notes, already begun that exploration prior to the nineteenth century. The cookbooks under review thus followed the scientific treatise in carving out the process rather than the individual dish as the area to be studied.

organizing their craft receipts around these same concepts, the Merediths and Peacock engage the reader in an act of “practical adaptation”; the “principles” are “in one place” and the recipes become their “illustration.” Readers read the principles first, that is, and then complete the recipe; doing so positions the principles as the “foundation,” and the recipe as the illustration or “adaptation.” As they complete the recipe, readers can visibly see the scientific principles just narrated.

The quantification of the cookbook has received more extended critical study than its efforts to incorporate principles. Indeed, focusing on the recipes, scholars have argued that central to the scientization of cookery in the nineteenth century was a revision of the recipe form. While Acton was the first to offer the list-based recipe style, Humble argues that it was Isabella Beeton who “put cooking on a logical, scientific basis,” modifying Acton’s form in order to rationalize cookery into an objective process represented through numbers and quantified measurements.¹⁷⁵ Beeton’s central strategy, Humble argues, lay in “the clear, unambiguous language she developed for the exposition of cooking methods, and her ability to organize an intractable mass of information into bite-sized nuggets.”¹⁷⁶ Winnowing the recipe down to “bite-size nuggets,” that is, controls the culinary process itself. Humble thus sees the transformation of cookery into a scientific process in the nineteenth century as one that occurs largely by way of the recipe.

The quantification of the recipe was thus one way in which Victorian cookbooks became increasingly “scientific.” But, as we have begun to see, cookbook writers in the second half of the century who attempted to render cookery “principled” evinced anxiety about the recipe because their goal was to reduce disease and waste by promoting a more

¹⁷⁵ Humble 10.

¹⁷⁶ Ibid 9.

intellectual, and thus economical mode of cookery. One of the strongest examples of this culinary sensibility comes through in Hartelaw Reid's 1853 *Cookery, Rational, Practical and Economical, treated in Connexion with the Chemistry of Food*. In opening lines of the preface, Reid directs his reader, "the economically disposed housewife," to his two epigraphs. The first is a quote from James Boswell's biography of Samuel Johnson, which reads: "I could write a better book of Cookery than has ever yet been written; it should be a book of *philosophical principles*." The second quote is one by Kitchiner himself: "These [cooks] who wish to excel in their art, must only consider *how the processes of it can be most perfectly performed*."¹⁷⁷ In his preface, Reid connects the epigraphs to the content and structure of own text:

The aim of this work is fully expressed in the two quotations which appear in its title-page. A rational understanding of every process, so as to be able to distinguish its essential peculiarities from those which merely mark its relation to a particular article of food, is, we are convinced, far more important to the modern housewife than an empirical knowledge of specific receipts. This latter, indeed, is but the pedantry of cookery, which many modern cookery-books seem specially designed to encourage. On consulting some them, one might almost suppose that the *precise proportioning* of ingredients and seasonings was everything, and the *process* nothing. But it is otherwise with the *operations* of cookery. These bear relation to the chemical and mechanical properties of food, which never vary; and to the requirements of healthy nutrition, which are equally immutable. (ii)

The recipe, even the rationalized and quantified recipe, is "but the pedantry of cookery," because it fails to fulfill the mandate for economy and nutrition. Reid explicitly rejects a model of scientizing cookery via the rationalization of the recipe. Instead, like Meredith—and, unevenly, Acton—he argues that cookery's true tie to science occurs in

¹⁷⁷ Reid title page.

its processes and the “principles” therein.¹⁷⁸ Because “they bear relation to the chemical and mechanical properties of food, which never vary,” he argues, such processes, he argues, constitute the foundational culinary knowledge.

The aim of his cookbook is thus to promote readers’ comprehension of the “essential peculiarities,” or principles, of each mode of cookery. Like the Merediths and Peacock, these principles dictate the structure of his text. “The present work, being conceived in accordance with the foregoing remarks, naturally came to be classified according to the various processes—Roasting, Boiling, &c. . . . To each of these, therefore, a separate space has been devoted, containing not only receipts for the most generally popular dishes, but also an introductory paragraph of ‘General Directions’” (ii). Besides its organization around the processes of cookery, Reid’s text provides another example of the embedded preface + recipe structure; like Meredith, Reid does not simply graft in principled recipes, as we saw in Acton’s *Modern Cookery*. Rather, he carves out what he calls “a separate space” in which to explain culinary principles in prose form, clustering the recipes after.

Reid makes explicit in his preface that his chosen structure is intrinsically connected to his goal of helping readers learn principled cookery, going so far as to provide specific instructions for the most effective reading strategies. Referring to the “separate space devoted” to explaining “the various processes,” he writes:

To these paragraphs, as being the most important part of the book, and indeed the proper complement to the receipts, the author begs particular attention; and likewise to Chapter IV. which treat of “The General Principles to be kept in view

¹⁷⁸ Lieffers argues that Reid “[o]ffered both a challenge to and confirmation of cookery’s scientization. Reid fought against the current by arguing that in the hands of many cooks, precisely quantified recipes resulted in more mis-measurement than anything else” (943). I argue that Reid challenges one means of scientizing cookery—rationalization and quantification—*specifically* in order to promote another means: cookery via chemical principles, which he argues cannot occur via precise recipes.

in every process of Cookery. . . . A Table of Contents, arranged partly by way of Index, is prefixed, showing the page on which the receipt for each dish is to be found, and also that containing the General Directions for the class to which it belongs, which ought to be studied in connection with each particular receipt. (ii-iii)

What I want us to notice here in particular is that Reid's structure changes the way readers would encounter a cookbook. Like Meredith, not only does Reid hierarchize principles over recipes, he likewise positions technical recipes as epistemologically meaningless unless embedded in an accompanying prose explanation of the principles at work in the recipe—a narrative gloss he calls “the proper complement to the receipts” (ii). Thus, rather than selecting an individual recipe from any given spot—a mode of reading that essentially turns the cookbook into a reference work for the preparation of one-off dishes—that is, Reid's prescribed embedded structure requires readers to first actually *read*: to work their way through two prose explanations of the principles at work in a given recipe *before* completing the recipe itself. (The first explanation comes in Chapter IV, which offers an overview of “The General Principles to be kept in view of every process of Cookery”; the second in the “General Directions,” which head the subsequent individual chapters on each process.) Unlike those household texts that addressed the book *through* the mistress, preserving the classed notion of domestic labor, Reid *requires* his cook to read; reading the “frame” is a mandatory piece of the text's epistemology.

The organization of the table of contents reinforces this mode of textual engagement. Although readers can look up a recipe for an individual dish, the table of contents nests each recipe next to “the General Directions for the class to which it belongs”—i.e., roasting, boiling, etc. Lest readers be tempted to make the dish without

first reading the accompanying General Directions, Reid makes clear that these prose principles “ought to be studied in connection with each particular receipt” (iii). By changing the way readers would engage with the cookbook, embedding his recipes within a scientific “frame,” Reid, theoretically at least, changes the culinary process itself from a craft-oriented technical endeavour to one that begins with intellectual study.

What we can see in cookbooks such as those by Acton, Meredith, and Reid, then, is that Victorian cookbooks aimed at middle-class women not only sought to transform their instruction from technical to principled, but they also sought to cultivate in women a particular kind of thinking. Women’s magazines of the time frequently connected the issue of “thought” and thinking to the larger cookery problem. In an 1871 article in *The Ladies’ Treasury*, for example, the writer argued that “[a] knowledge of cookery is an intellectual faculty.”¹⁷⁹ Women who are “ignorant of such knowledge, or of the scientific application of a few simple rules . . . in her blind efforts produces waste, ‘villanous compounds,’ sickness, and misery, because she did not use her intellect—she worked without thought.” While the 1871 article directed its criticism about women’s failure to use their “intellectual faculties” towards “a lady,” in 1873 it directed nearly identical criticism towards working class girls. In the article, entitled “Skilled Domestic Service,” the writer argues that “girls should be trained to use their intellectual faculties; trained to think—to learn the reason why such and such modes are adopted—in fact, should be ‘wakened up.’”¹⁸⁰

Not only did these cookbook writers seek to redefine cookery from a craft to a realm of scientific learning, they also, I suggest, attach principled cookery to the specific

¹⁷⁹ “Social Science,” *The Ladies’ Treasury* (London, 1871).

¹⁸⁰ “Skilled Domestic Service,” *The Ladies’ Treasury* (London, 1873).

kind of intellectual work George Meredith termed “practical adaptation.” Both *The Science of Cookery* and Reid’s text, that is, intentionally convert the recipe from a tool designed to facilitate a step-by-step approach to cookery. Instead, by embedding the recipe in a larger textual frame, they cultivate a kind of cookery wherein completing a recipe requires readers to adapt the principles she has read in the preceding sections. The narrative frame, that is, works to train women to bring principles to bear on the dish at hand.

For many cookbook writers of the time, knowledge of cookery’s first principles and the cognitive skill of “practical adaptation” it cultivates promoted what we might think of as a kind of culinary creativity. By its very definition, principled cookery, they argued, turned cookery into an open-ended process because it freed readers from the confines of recipe-based craft cookery. In his 1874 transcription of his Exhibition lectures, for example, chemist John Buckmaster presents principled cookery as a process antithetical to prescribed rules or steps. Instead, principled cooking involves open-ended, subjective thought. “Perfection is only to be obtained by reflection and practice, and not by the slavish following of recipes,” he writes. Instead, “[m]uch must be left to the judgment of the cook. No domestic art requires so much caution, thought, intelligence, judgment, and taste as good cooking” (vii-viii).” At one point in the text, Buckmaster refuses to give exact specification for how long to cook a stew, arguing again that “no rule can be given; everything depends upon the intelligence and judgment of the cook” (70). The foundation for all of these intellectual attributes, for Buckmaster, is chemistry: “Any system of instruction in cooking which does not include some knowledge of the chemistry and physiology of food,” he argued, “must be defective” (74).

Perhaps the most pointed example of a cookbook that combated the “cookery problem” by cultivating culinary “ingenuity” grounded in “first principles” is Cassell’s *Dictionary of Cookery*. Issued in 1875 by Cassell and Co., the publisher of such popular magazines as *Cassell’s Illustrated Family Paper* and *Cassell’s Magazine of Fiction*, *Dictionary* addressed itself to a lower-middle and middle-class audience clearly concerned with economical cookery. “One of the first principles of cookery is, as we have already stated, economy,” the editor writes, “and we will broadly define economy as the art of extracting the greatest amount of nourishment out of the various materials used” (x). The language of “principles” in *Dictionary* takes on a double meaning; readers, as this quote suggests, follow culinary principles that are chemical in origin (“extract the greatest amount of nourishment”), but that have been transmuted into a system for (moral) living. “Principled cookery,” in *Cassell’s* is not a scientific exercise with *implied* moral implications, that is. Rather, cooking according to “principle” becomes an explicit exercise in a certain domestic economy.

At first glance, however, *Dictionary* seems largely interested in recipe-cooking. Indeed, its title page puffs the work as one “Containing over nine thousand recipes,” explaining that it seeks to be a “Work on Cookery which would be at once the largest and most complete collection of recipes ever produced in this country” (iv). These opening sentences valorize the recipe as a means of culinary literacy, a sense the preface underscores. “The directions have been put in the simplest form and the plainest language, so that the recipes may be as easily understood in the kitchen as their results are sure to be popular in the dining-room” (iv). Domestic labor, here, is deeply classed;

the labor of the kitchen is entirely practical, the text implies, reduced to a system of easy steps couched in the “plainest language.”

Yet, the following section, a lengthy section by journalist and cookery writer Arthur Gay Payne, is also written for the cook. “By reading these ‘Principles of Cookery,’” Payne writes, “the cook will become possessed of the whole alphabet of her art.” Fittingly entitled “The Principles of Cookery,” the untraditionally lengthy introduction—ninety-six close-printed pages—lays out an enumerated, detailed system of culinary principles. *Dictionary*, like Meredith and Reid, frames the recipe as a textual form that limits the creative potential of the culinary process. “If we understood more than we do the *principles* on which cooking depends,” the editor argues, “the fact of being able to make one dish, combined with knowing the reasons for the result, would often lead to our being able to make a large variety of similar dishes . . . that instead of knowing one recipe we would know twenty” (i). Cooks who know “facts but not reasons”—or recipes, not principles—“consequently are limited to a certain number of recipes which they have learnt by heart, but are quite incapable of either invention or imitation” (x).

The creative potential enabled by principled- rather than recipe-cooking here, however, is explicitly tied to domestic economy, or a woman’s ability to suit her cooking to the needs and requirements of her family:

As we have before pointed out, when once the principles of cooking are understood, one recipe will often lead to another. Now there is perhaps no part of this practice so important as the knowledge of *varying* recipes as occasion may require. It will be evident that no work on cooking, however large or however good, can adapt its recipes to meet the requirements of every family in *quantity* as well as quality. We have endeavoured, therefore, when it is possible, to give in our present work different methods of preparing the various dishes, etc., but, of

course, it would be quite impossible to give recipes, one adapted to a family of only two, another for one of six, and another of twelve or more persons. (ix)

The endless variability of family needs, in other words, limits the cookbook's pedagogical and narrative capacity. *Dictionary* excuses itself from the responsibility of adequately providing for the family, shifting this task instead to the cook. "In the many hundreds of recipes we have given, and shall give, it will be the duty of the cook," Payne writes, "in order to render such recipes practical, or, in other words, to make the recipe fit in to the exceptional circumstances of the family or place, to make such little alterations as we have described" (x). *Dictionary* offers readers thousands of recipes, in other words, but it is the cook's duty to make these recipes useful by understanding how to adapt those recipes her family's particular needs.

Thus, whereas both Meredith and Reid give their reader further narrative explanations of "principle" in the headers for individual chapters, *Dictionary*, in contrast, restricts its explanations almost entirely to this initial curriculum of principles. Readers are expected to learn the principles first, and then search out a recipe. As such, the two-part structure of the work becomes a crucial mechanism of the text's epistemology. To return to the quote from above, after noting that the "practical portion" of the text "has been preceded by a complete treatise on the Principles of Cookery," the editor argues that "[b]y reading these 'Principles of Cookery,' the cook will become possessed of the whole alphabet of her art" (iv). Although somewhat vague, the phrase "the whole alphabet" is a reference to the recipe section, which is structured in "the dictionary form" so that "any article in the world may be found without difficulty and at a moment's notice." A knowledge of the principles, in other words, enables the cook to access any letter in the alphabet of recipes "at a moment's notice," a point the editor later reiterates explicitly:

When once the principles of cooking are understood,” the editor writes, “one recipe will often lead to another: cooking . . . cannot be learned in a day, nor can it be learnt by simply reading a book on the subject. A man can no more become a first-rate cook by reading *alone* than he could become a first-rate artist. The study of cookery must be combined with practice. Now there is perhaps no part of this practice so important as the knowledge of *varying* recipes as occasion may require.” (ix)

Whereas Reid and Meredith tightly link individual recipes to explanations of the principles at work in that particular recipe, *Cassell's* purposefully structures itself as a reference. “Once the principles of cooking are understood,” readers are *meant* to dip into the text for one-off dishes. As in Meredith and Reid’s text, the study of principles leads to successful practice, but by separating the principles into the preface and the recipes into a dictionary form, *Cassell's* equips the cook with another cognitive skill: “the knowledge of *varying* recipes as occasion may require.” Later, the narrator expands on this intellectual ideal: “There are few points,” he argues, “in which a knowledge of the principles of cookery becomes more beneficial than when such knowledge enables the cook to substitute one ingredient for another. Ingenuity on the part of the cook . . . is a crucial test of excellence” (xxxv). The integration of chemical principles in the preface requires the cook to use the objective in service of the subjective; to engage, that is, in an act of individual interpretation and creation that springboards from universal scientific law. Yet such variability, as we saw, is cultivated in the service of the family. *Dictionary*, like Buckmaster, conflates scientific understanding with domestic duty.

Unlike Meredith and Reid’s texts, which subdivide by food item in order to show the chemistry at work in a particular dish, the introductory “Principles” section in *Cassell's* cultivates this “ingenuity” by subdividing by the principles themselves, effectively demonstrating to readers that individual chemical laws apply to any number of

culinary situations, not just the one at hand. Under “Principle 10: *Preparation of Joints—Roast and Boiled*, for example, we learn that “one great secret of successful roasting is in the basting.” While at first glance this “secret,” or principle, appears to be a craft tip rather than a chemical law, in fact it is just another iteration of “Principle 1: How to keep flavour in; how to extract it,” which is indeed grounded in chemistry. “There is a certain principle, or rather fact, which may be called a chemical fact, and that is, that albumen coagulates and becomes hard at boiling point,” the anonymous author writes. “This very important fact should never be lost sight of in cooking meat, for it should be remembered that meat largely consists of albumen” (iii). After exploring two cooking processes—boiling mutton and making mutton broth, and explaining their effects on albumen—the editor explains that “[t]he same principle of which I have been speaking, namely, keeping in all the flavour, applies to a large variety of dishes” beyond meat.

Not unlike Acton, who, as we saw earlier, used Liebig’s principled recipe for “boiling” as a foundation for other recipes throughout *Modern Cookery, Cassell’s* illustrates this principle at work multiple times in sections beyond Principle 1 (iii). After offering directions for how to cook oysters, for example, he writes that “a moment’s consideration will show that we have treated the oysters just on the same principle that we did the leg of mutton, viz., we have surrounded each oyster with a very thin film that keeps in the flavour” (iii). Readers wanting to know why they ought to wrap a slice of salmon in oil paper? “Simply for the good old reason of keeping in the flavour”—a repeat of Principle #1 (xiii). Similarly, when baking a cake, or when cooking an omelet, the editor writes, “the *principle* is the thing to grasp. The principle of cooking here to be

considered is how to make things light” (iii-iv). Here, and elsewhere, the chemical principle rather than a craft recipe directs the readers’ actions.

As in *The Science of Cookery* and Reid’s text, it is the mode of reading, embedded in the work’s structure, that ultimately activates the cognitive skill of “ingenuity” and adaptation. While the bulk of the cookbook is comprised of individual recipes arranged in “the dictionary form,” the recipes themselves are brief, and often quite vague. While Reid’s work textually appended the relevant principle to individual recipes, *Cassell’s*, on the other hand, requires the cook, when choosing a certain recipe from the dictionary portion, to sift through her knowledge of all the principles she learned in the preface and select what she believes to be the most appropriate one(s). (“Here again, when you know the principles, it is a guide to boiling all large fish.” Likewise, “This principle of ‘making things look white’ will extend beyond the region of fish”.) The dictionary form itself heightens this need for cooks to be able to bring to the recipe the relevant principles; unlike Reid’s text, and even Acton’s, where recipes and principles were pre-grouped for the reader, the dictionary form detaches or “un-embeds” a recipe from its scientific or “principled” frame, placing a larger intellectual responsibility on the cook. Readers, are not lead through textual “embeddedness” to a principled way of cookery; her mind, rather than the text, must make these connections.

As a genre, cookbooks have longed involved readers in the process of knowledge construction. Seventeenth and eighteenth century cookbooks, as Sherman has shown, insisted that the technical knowledge they offered required readers “to try the text,” or work her way through the recipes on offer (182). Writers such as Martha Bradley developed “cumulative” systems of technical instruction that “transfe[r] a substantial

pedagogic burden to the reader” (182). If readers wanted to learn culinary technique, that is, she labored her way through the text.

Victorian cookbook writers, however, were faced with a different pedagogical challenge: a cultural mandate to create a system of cookery that constructed a symbiotic relationship between women’s “intellectual faculties” and her hands. Beginning in the middle of the nineteenth century, as I have shown, cookbooks transformed themselves in order to help their reader connect the science she was reading to the dishes she was required to make. The “burden” here, for the reader and for the cookbook, is thus intellectual –and, crucially, moral—rather than purely technical. As John Buckmaster put it in *Buckmaster’s Cookery*, “Educated cooking is as much a science as chemistry. What you have to think about and understand is always associated with something which you have to do, and this pleasure of thinking and doing, every one must be conscious of who has worked out with her own hands the plans which she has thought over and matured in her own mind. This exercise of a woman’s faculties is itself an education of the highest order” (145).

Chapter Three:

Visual Cookery: Culinary Ekphrasis and the Aesthetic Eye

INTRODUCTION

About a third of the way through her 1896 collection of food essays, *Delights of Delicate Eating*, Elizabeth Robins Pennell—American ex-pat, journalist, and art critic—offers an extraordinary recipe. The recipe, for *Sole au gratin*, directs readers to enclose the sole in a bed of bread crumbs and a mushroom sauce:

Let your first care be the sauce, elegantly fashioned of butter and mushrooms and shallots and parsley; pour a little—on your own judgment you have best rely for exact quantity—into a baking dish; lay the sole upon this liquid couch; deluge it with the remainder of the sauce, exhilarating white wine, and lemon juice; bury it under bread-crumbs, and bake until it rivals a Rembrandt in richness and splendour. (94)¹⁸¹

This recipe constitutes a deep departure from convention. By 1896, through the textual innovations of cookbook writers throughout the eighteenth and nineteenth centuries, the recipe had stabilized from its traditional, somewhat haphazard narrative form into a more standard structure organized around precise technical directions, exact measurements, and cooking times. As I discuss in Chapter Two, clear recipe prose and accurate numbers were one mechanism through which many nineteenth-century Victorian cookbook writers attempted to integrate science into the culinary realm.¹⁸² Adopting quantification allowed these writers, as Humble puts it, “to put cookery on a logical, scientific basis,” a goal so popular in the second half of the nineteenth century that it energized the home economics

¹⁸¹ Elizabeth Robins Pennell, *Delights of Delicate Eating*, (Chicago: University of Illinois Press, 2000). All citations are taken from this edition and are hereafter indicated in parentheses following quotations from the text.

¹⁸² See also Humble, Ch. 1 and Lieffers.

social crusade, new Board school curricula, and a series of lectures at the 1873 Exhibition that culminated in England's first national cookery school (Humble 10).

In her recipe for *Sole au gratin*, however, Pennell explicitly refuses to include specific measurements, even for the dish's main gustatory component, mushroom sauce. Indeed, she openly urges the reader to trust her own reasoning rather than looking to "exact" numbers as the key to determining the perfect amount of sauce ("on your own judgment you have best rely for exact quantity"). Pennell further detaches cookery from any scientific basis in her baking instructions. Once readers "deluge" the fish with sauce and "bury it" under an unspecified amount of breadcrumbs, she instructs them to "bake until it rivals a Rembrandt in richness and splendour" (94). Scholars such as Talia Schaffer and Jamie Horrocks have noted the numeric gaps in Pennell's recipes, arguing that Pennell "teas[es] the reader with partial recipes withdrawn at the last moment in favour of artistic effusions about food" (Schaffer 110).¹⁸³ Schaffer reads these moments as Pennell's attempt to walk the line between a (feminine) writer of recipes and a (masculine) art connoisseur, while Horrocks sees them as assisting readers in a "program" of "self-cultivation" through creativity (Horrocks 56-65).

But in 1896, the particular kinds of information Pennell pointedly omits in *Sole au gratin* carried connotations in the culinary culture that these interpretations do not fully address. Beginning around 1850, as I discussed in Chapter Two, there emerged a growing "craze" for what chemist John Buckmaster, writing in 1873, called "educated cooking."

¹⁸⁴ Arguing that poor domestic cookery threatened the health of the physical and the

¹⁸³ Schaffer 105-126; Jamie Horrocks, "To Court Perfection, Rely Upon Mushrooms": Camping in the Kitchen of Elizabeth Robins Pennell's *Delights*." "The Gospels of Aestheticism." Diss. (Bloomington: Indiana University, 2010).

¹⁸⁴ Buckmaster 145.

national body, chemists, public figures, journalists, and cookbook writers launched a campaign to educate working and middle-class women in the “science” of cookery. Cookery instruction, these writers insisted, required the cultivation not (only) of women’s hands but of what writers in middle-class women’s magazines referred to as their “intellectual faculties.”¹⁸⁵ Not only did recipes themselves become more precise, but they also, as I discussed in Chapter Two, were increasingly embedded in a larger textual framework comprised of chemical “principles.” Learning these principles, cookbooks argued, transformed cookery from a practical enterprise into an intellectual project; readers cooked not (only) by following steps, but by drawing on her understanding of chemical “principles.” Principled cookery, furthermore, cultivated the particular cognitive skill of “adaptation,” or variation. Once readers comprehended “principles,” she could ignore certain recipe particulars such as measurement, instead varying or adapting the recipe for the unique needs of her domestic culinary situation.

By the time Pennell published her essays, the notion of cookery as “intellectual” was thus inextricably attached to particular ideals of science, both quantification and “principles.” In refusing to offer specific ingredient measurements, baking times, and any particulars of technical instruction, Pennell, I argue, is not rejecting the recipe as a form of feminine writing or even domestic labor as much as she is resisting its *epistemology*, or the kinds of thinking it had come to represent and construct as mandatory to “right cookery.”¹⁸⁶ The “recipe”—for *Sole au gratin* is in fact a recipe of sorts, a linear form driven by imperative verbs—instead reorients its epistemological basis from the numeric

¹⁸⁵ “Social Science,” *The Ladies’ Treasury* (London, 1871).

¹⁸⁶ Schaffer discusses Pennell in opposition to the domestic cookbook and the scientific trend in cookery, although she does so in relation to the development of the calorie and its effect on taste “as a measure of success.” See 113-114.

to the visual. Rather than watch the clock, readers must turn inward to their mind's eye, conjuring up the "richness" and "splendour" of a Rembrandt painting in order to evaluate whether or not the Sole is finished.

In this chapter I explore the ways in which Pennell's food essays, first published to great popularity in the early 1890s as weekly columns in the *Pall Mall Gazette*, respond to the entrenched tradition of the middle-class "scientific" Victorian cookbook and its curriculum of "rational" and "principled" cookery. In *Delights*, I argue, Pennell leverages the labor of cookery into what Kate Flint calls a "visual act," or an intentional, trained method of observing.¹⁸⁷ The Victorians, as Flint and other scholars have demonstrated, were preoccupied with looking—at faces and bodies, at the natural world, at the commodities of other cultures, and especially at works of art.¹⁸⁸ A journalist and art critic with close ties to well-known figures of the *fin de siècle* aesthetic movement,¹⁸⁹ Pennell, I argue, cultivates in *Delights* what Flint calls "the excitement of looking differently," training her readers to look at, evaluate, and respond to the visual objects of art created in their kitchens.¹⁹⁰

¹⁸⁷Kate Flint, *The Victorians and the Visual Imagination* (Cambridge: Cambridge UP, 2000), 22.

¹⁸⁸ See also Rachel Teukolsky, *The Literate Eye* (Oxford: Oxford UP, 2009), Jeffrey Spear, "The Other Arts: Victorian Visual Culture," *A Companion to The Victorian Novel*, Patrick Brantlinger and William B. Thesing, eds. (Oxford: Blackwell Publishing, 2002), 189-206. Flint and Teukolsky's accounts have, in particular, informed my thinking about the prominence of the visual in *Delights* and its evident desire to train the eye.

¹⁸⁹ Schaffer notes that Pennell was "one of the central contributors to British aesthetic culture," hosting "aesthetic salon[s]" on Thursday evenings for the "rather flamboyantly artistic circle" made up of writers and artists such as James McNeill Whistler, Henry James, Edmund Gosse, George Moore, Oscar Wilde, and George Bernard Shaw. Pennell's husband, artist Joseph Pennell, frequently contributed illustrations for *The Yellow Book*, and in fact the idea for the publication—the "bible" of Aestheticism—was conceived in the Pennell's flat (Schaffer 108).

¹⁹⁰ Flint makes the point that new technologies such as the "the magic lantern, the kaleidoscope, the stereoscope, the pseudoscope, the zoetrope" brought "the excitement of looking differently into the domestic environment" (5). Pennell, I am arguing, brings food to this list.

To do so, Pennell replaces the textual conventions of the scientific cookbook with a series of essays punctuated with what I call “culinary ekphrasis,” or recipes that teach cookery by describing the dish as if it is a painting.¹⁹¹ Pennell, I argue, turns the kitchen into a visual sphere, utilizing the recognizable textual form of the recipe and the visual materiality of everyday foods to cultivate women’s aesthetic eye. But, crucially, the works of food art Pennell’s readers are viewing are in fact their own. The finished *Sole au Gratin* may “rival a Rembrandt,” but it is, after all, a fish entree created, at least ostensibly, and certainly imaginatively, by the reader herself. In uniting ekphrasis, a staple rhetorical strategy of art criticism, with the recipe, a textual form built around a command to act, to produce, Pennell positions her readers as creator and critic, pushing against the boundaries between these intellectual acts. In so doing, *Delights* leverages ekphrasis as a means of exploring the appropriate response to art—one of the central tensions at the heart of fin de siècle aesthetic debates. This chapter thus brings late-nineteenth-century food to the conversation scholars such as Flint and Rachel Teukolsky have begun about the “importance of seeing” in the Victorian era, and, more specifically,

¹⁹¹ Most scholars who write on Pennell address the generic liminality of *Delights*, particularly in relation to the cookbook genre and the other aesthetic discourses that infiltrate the text. Alice McLean argues that Pennell “eschewed the cookbook genre altogether, choosing instead to adopt the masculine form of gastronomic literature,” (*Aesthetic Pleasure in Twentieth-Century Women’s Food Writing* 2). According to McLean, the genre of gastronomy allows Pennell to “challenge her female readers to practice gastronomy because,” according to gastronomic writers, the pleasures of eating lead to creativity “and develops genius” (53). Horrocks likewise explores the relationship in the text between the language of gastronomy, domestic cookery, and aestheticism, arguing, like McLean, that Pennell “imagines her culinary meditations capable of transforming readers into Men (and Women) of Taste” (33). Horrocks focuses on the moral implications of such “self-cultivation” within the context of aestheticism. Schaffer, too, considers the “rhetoric of aestheticism” in *Delights*—indeed, she was the first to do so,—arguing that Pennell balances aestheticist rhetoric with the language of the cookbook in order to negotiate her precarious position as a woman writing about food (110). My chapter draws on and adds to the work of these scholars by exploring how Pennell’s emphasis on food’s visuality engages her text—and the subject of domestic cookery—with the rhetoric of the so-called “subjective” or “aesthetic” art criticism and the modes of aesthetic response it idealized in order to cultivate an aesthetically-discriminate eye.

the importance of “looking at”—and reading and writing about looking at—art (Flint 174, 22).

What I also want to show in this chapter is that, in wedding the “art” of cookery with visual Art, Pennell retains and propagates the intellectual reforming model of the scientific cookbook. Although she replaces the language of “principles” with the visual language of art criticism, what Pennell offers in *Delights* is an aesthetic version of “educated cooking,” or the model of cookery Buckmaster described as combining the “pleasure of thinking and doing” (145). “What you have to think about and understand,” he argued, “is always associated with something which you have to do, and this . . . exercise of a woman’s faculties is itself an education of the highest order” (145). The ekphrastic recipe, I argue, weds the motions and processes inherent domestic cookery to certain kinds of thinking grounded in aesthetic inquiry. For Pennell, as for those advocating chemical understanding, “a knowledge of cookery” is indeed “an intellectual faculty,” as we will see.

Yet this raises the question of just *who* it is Pennell seeks to reform. Victorian cookbook writers such as Acton, Meredith, Reid, and the editor of *Cassell’s*, as we saw in Chapter Two, aimed their “principled cookery” specifically at middle- and lower-middle class women. Elevating practical cookery into “principled” cookery, they argue, promoted healthier bodies, more economically savvy housewives, and thus a more progressive nation.

Pennell, however, wrote in a very different print venue. While many advocates of principled cookery published their articles in magazines focused on middle-class domestic life, such as *The Englishwoman’s Domestic Magazine*, *The Girls’ Own Paper*,

and *The Ladies' Treasury*, Pennell's articles first appeared not in a women's magazine, but as a series of columns in a daily evening paper, the *Pall Mall Gazette*.¹⁹² Launched in 1865, the *Pall Mall Gazette* pitched itself as "written by gentlemen for gentlemen," and offered readers reviews, social sketches, and notes by writers such as John Ruskin, Anthony Trollope, Leslie Stephen and Matthew Arnold.¹⁹³

The paper was not entirely taken up with masculine voices, however. Throughout the 1890s, it also published a column, "The Wares of Autolycus," which featured essays by distinguished women writers, aesthetes such as Alice Meynell, Violent Hunt, and Rosamund Marriott Watson.¹⁹⁴ Despite their venue of publication, these writers focused not on masculine concerns, but on domestic interests, covering fashion, gardening, decoration, and, in the case of Pennell, cookery.¹⁹⁵ The purpose of their essays, as Schaffer has argued, was to "dignif[y] women's domestic life by rewriting it in the newest artistic vocabularies and literary forms" (47). At the end of the century, in other words, art joined chemistry as a means of validating and reforming domestic labor, including cookery. Indeed, Schaffer's account of these reforming efforts is nearly identical to Buckmaster's description of his own at the 1873 Exhibition. "My purpose," as he explained, "is to dignify, as far as I am able, the art of cookery, by making it more scientific" (112). Female aesthetes such as Pennell, Schaffer explains, "identified

¹⁹² The "Introduction" to *Delights* explains that the essays were collected and published by The Merriam Company as *The Feasts of Autolycus* in 1896, and again in 1900 by the American firm Sallfield Publishing Company as *Delights of Delicate Eating*. For more on the column and its contributors, see also Jacqueline Block Williams, "Introduction," *Delights of Delicate Eating* (Urbana: University of Illinois Press, 2000), vii-xxv; Schaffer 105-106, and *ibid*, *The Forgotten Female Aesthetes: Literary Culture in Late-Victorian England* (Charlottesville: University Press of Virginia, 2000), 47.

¹⁹³ Brake and Demoor 477-478. The paper's motto, "written by gentlemen for gentlemen," was W.M. Thackeray's, from *Pendennis*.

¹⁹⁴ Schaffer, *The Forgotten Female Aesthetes* 47. Schaffer offers an extended study of the gender dynamics at work in the column. See esp. Chs. 2-3.

¹⁹⁵ *ibid* 47.

themselves as expert artistic reformers of a corrupt space,” using aesthetic language to “forge a compromise between domestic skill and connoisseurship” (120).

By the end of the century, then, domestic cookery was subjected to two intellectual reforming efforts—both intellectual, both masculine. In both cases, furthermore, women were the target audience. Yet the intellectual discourses employed as mechanisms of reform fall, at least on the surface, along class lines. As I show, the culinary literature of “principled” cookery sought, through the turn to chemistry, to perpetuate working- and middle-class women’s labor to serve the ends of the home. Pennell’s ekphrastic recipes, on the other hand, offer readers of the purportedly more fashionable *Pall Mall Gazette* training in visual art response. Not only were the knowledges that swirl through the culinary literature of the nineteenth century deeply gendered, then, the contrasting intellectual approaches to reforming cookery likewise reflect classed perceptions of the purpose and value of women’s work.¹⁹⁶ Indeed, domestic cookery, as Schaffer has noted, existed in opposition to *fin de siècle* aesthetic ideals, which valued intellectual rather than physical labor—particularly women’s labor. Schaffer thus reads Pennell’s essays as attempts to elevate cooking into “a lofty artistic process of creativity, achievement and appreciation.”¹⁹⁷ Horrocks has likewise read Pennell as an agent of aesthetic reform, arguing that Pennell draws on the “ethic” of self-

¹⁹⁶ While the *Pall Mall Gazette* styled itself as a magazine for the upper classes, it in fact had a more checkered readership, suggesting that Pennell’s articles were likely not simply read by members of a more elite class. During the 1880s, under the leadership of W.T. Stead, the paper immersed itself in the sensational fare of the New Journalism, attracting a middle-class readership. In the 1890s, as Pennell began publishing her articles, Henry Cust took over as editor and began to push the paper back towards more rarified content. As Meaghan Clarke notes, the *Pall Mall Gazette* thus stood during Pennell’s moment as a paper “where populism and elitism overlapped.” “‘Bribery with sherry’ and ‘the influence of weak tea’: Women Critics as Arbiters of Taste in the late-Victorian and Edwardian Press.” *Visual Culture in Britain* 6.2 (Winter, 2005): 139-55. (143). See also Horrocks 42-44.

¹⁹⁷ *Forgotten Female Aesthetes* 117.

improvement inherent to the genres of the cookbook and gastronomy in order to produce a “Woman of Taste,” “an aesthete fashioned after the manner of a gastronome, a model of indulgent restraint” (60).

This chapter adds to these understandings of the aesthetic model of reform put forward in *Delights* by considering Pennell’s efforts to revise the kinds of thinking implicated in and cultivated by domestic cookery. While Pennell, as these scholars note, sought to reclaim aesthetic creativity as a feature of domestic cookery, what has been less well studied is the visual aesthetic language of *Delights* and its attempt to cultivate the mental work of art criticism. *Delights* is not pure ekphrasis, pure aesthetic description, however. Rather, Pennell’s ekphrastic recipes deploy the imperative structure of the recipe, its step-by-step processes, as a means of training women to think about food not through “first principles,” as Pennell writes in her chapter on soup, but through an understanding of food’s visual qualities. Yet the recipe, deeply tied to scientific values, functions for Pennell as an epistemological liability as well as a boon. This chapter thus explores the ways in which “visual” cookery, like “principled” cookery, develops in relation and opposition to the recipe form.

PART II: “HE SHOULD HAVE CALLED IT ART, NOT SCIENCE”

Scattered throughout *Delights* are a series of classical recipes: a recipe for salad, one for cheese soufflé, another for *Sauce Soubise*. As she gives the recipes, Pennell makes note of the kinds of information it offers the reader. For the recipe on salads, she highlights the proportions given; in the recipe for cheese soufflé, she notes the technical instructions; and in the recipe for *Sauce Soubise*, she notes the “statistics” and “formal table” of the recipes.

Yet, in each of her recipes, Pennell identifies these textual features only to mock their inefficacy as culinary teaching tools. The textual form of the recipe, she argues, is epistemologically ineffective, for it delivers scientific knowledge inessential—harmful, even—to “good” cookery. In her essay “On Salads,” for example, Pennell dismantles quantification as a foundational knowledge for good cookery, writing that “[i]t is simple to put down in black and white the several ingredients of a good [salad] dressing. But what of the proportions? What of the methods of mixing? . . . Only the genius born,” she insists, “can mix a salad dressing as it should be mixed.” The “Philistine” might “insist upon one spoonful of oil for every guest and one for the bowl . . . and then one-third the quantity of vinegar” (195). Tethering oneself to measurement in this way will not produce a good meal but what she calls “a nauseating concoction.” The “initiated” cook, on the other hand, does not even consider numbers when cooking. “Quantities of pepper and salt, of oil and vinegar for him (or her) are not measured by rule or recipe, but by inspiration.” (194).

In a recipe for a cheese soufflé, Pennell again mockingly follows the traditional structure and content of a recipe, only to undermine its scientific—and thus, she argues, overly simplistic—approach to cookery:

It is simple to say how the miracle is worked: a well-heated oven, a proper saucepan, butter, water, pepper, salt and sugar in becoming proportions, the yolks of eggs and grated Parmesan, the whites of the eggs added, as if an afterthought; and twenty-five minutes in the expectant oven will do the rest. But was ever lyric turned out by rule and measure?” (218)

In both of these examples, Pennell suggests that the culinary process consists of something beyond numbers and even beyond language, certainly the language of the scientific cookbook. (“It is simple to put down in black and white”; “it is simple to say

how the miracle is worked.”) At one point, she even deliberately interrupts an uncharacteristically descriptive recipe for *Sauce Soubise* to point out its narrative insufficiency:

Turn to the first cookery book at hand, and read the recipe: ‘Peel four large onions and cut them into thin slices; sprinkle a little pepper and salt upon them, together with a small quantity of nutmeg; put them into a saucepan with a slice of fresh butter, and steam gently . . . ‘til they are soft.’ But why go on with elaborate directions? Why describe the exact quantity of flour, the size of the potato, the proportions of milk and cream to be added? In telling or the reading these matters seem not above the intelligence of a child. But in the actual making, only the artist understands the secret of perfection, and his understanding is born within him, not borrowed from dry statistics and formal tables. He may safely be left to vary his methods; he may fry the onions instead of boiling, for love of the tinge of brown, rich and somber thus obtained. (164)

In this passage Pennell quotes a recipe from a representative Victorian cookbook (“take the first cookery book at hand”) in order to highlight two central textual conventions of scientific cookery instruction: “dry statistics and formal tables,” or the nutritional charts included in many Victorian cookery texts, and prescriptions for which process to use on a particular food item (boiling, roasting, frying, etc.).¹⁹⁸ As I discussed in Chapter Two, proponents of principled cookery argued that understanding culinary processes and their effects on a food item’s nutritional potential was essential to effective, or nutritious, cookery. Cookbooks thus reoriented their instruction away from the individual recipe, textually embedding recipes for meals in larger discussions of culinary processes and food’s nutritional “principles.”

¹⁹⁸ In the published version of his 1873 Exhibition lectures on “the science of cookery,” for example, chemist John Buckmaster devotes nearly an entire chapter to charts on food’s chemical and nutritional properties. Other examples of cookbooks that include tables and lists include J.H. Walsh, *The English Cookery Book, Receipts collected by a Committee of ladies, and Ed. by J.H. Walsh* (London, 1859), and Isabella Beeton, *Book of Household Management*. Lieffers also writes about the importance of lists to the objectification of cookery. See esp. pp. 943.

Pennell's ideal cook, however, is not a middle-class domestic cook but a male chef, or what Schaffer describes as an example of the Romantic artist "who cannot brook rules and requires the hand of genius."¹⁹⁹ As Schaffer argues, these partial-recipe passages present masculine "art as the antithesis of the cookbook" (119). But art is specifically the antithesis of the *scientific* cookbook, which aimed its scientific knowledges specifically at middle-class women. Pennell, that is, clearly ranks masculine and feminine intellectual approaches to cookery. This chef cannot use the textual conventions of statistics or a formulated "method" because his goal, unlike those of middle-class domestic cooks, is not to produce a nutritionally-balanced meal cooked according to scientific "principles." Rather, he seeks to produce a "tinge of brown, rich and somber." Pennell thus genders both scientific models of thinking about cookery and the forms of culinary writing used to deliver scientific culinary instruction. The male chef, Pennell implies, approaches cookery not through the "the first cookery book at hand," its quantified recipes, or its prescriptive process instructions, but through his subjective understanding of beauty. This masculine cook chooses to fry rather than boil the onions simply for the purpose of producing sheer visual beauty; not even, it is worth noting, for the purpose of improving the dish's taste.

By depicting scenes of cooking in which scientific knowledges and their textual forms hinder rather than help the cook, Pennell dismantles the entrenched assumption that science was cookery's natural and best intellectual counterpart. Through these passages, she boldly claims an arena of the domestic sphere dominated since the beginning of the nineteenth century by the languages and intellectual values of chemistry.

¹⁹⁹ Schaffer "The Importance of Being Greedy" 119-120.

In response to this prevailing culinary narrative, Pennell attaches cookery to an entirely different body of knowledge; in *Delights*, both the processes and the products of cookery are aesthetic. As she writes in an opening passage:

All his life a Velasquez devoted to his pictures, a Shakespeare to his plays, a Wagner to his operas: why should not the woman of genius spend hers in designing exquisite dinners, inventing original breakfasts, and be respected for the nobility of her self-appointed task? For in the planning of the perfect meal there is art; and, after all, is not art the one real, the one important thing in life? (11-12)

While scholars have identified this passage as Pennell's attempt to elevate women's work by aligning it with aesthetic acts, it also plays into and rewrites the rationale for women's culinary labor often featured in the scientifically-oriented middle-class cookbook.²⁰⁰

Advocates for scientific culinary reform, as I discussed in Chapter Two, deployed a moral and even religious language of "sin" and "duty" in relation to cookery. "Good cookery is required," as Buckmaster argued, "because it has a great moral influence in every family" (271). Scientific cookery was thus attached to a greater calling, a calling to preserve the family and its physical and moral health. Pennell likewise frames aesthetically- masterful cookery as a greater calling, one freighted with "nobility." The calling, however, is "self-appointed," not a religious or cultural mandate. It comes, rather, from Art, what Schaffer identifies as "the Paterian dictum of living one's life in, and for, art."²⁰¹ Ultimately, in engaging in this aesthetic work, women earn not religious or moral sanctity, but personal "respect."

While Pennell strips aesthetic cookery of its moral mandates, she nevertheless similarly links the state of British cookery with the state of the nation, both of which, she

²⁰⁰ Ibid 121. 122.

²⁰¹ Ibid 122.

argues are in a state of decline. In the nationalist rhetoric commonly deployed by advocates of scientific culinary reform, Pennell argues that it is “folly to boast of modern progress when, at table, the Englishman of to-day is but a brute savage compared with his ancestors of a hundred years and more ago!” (94). Like the scientifically-oriented cookbook, Pennell lauds her own culinary program as the solution to the nation’s decline. “But take heart: be humble, read this golden book, and the day of emancipation cannot be very far distant. Make your *fricasey* [*sic*] as a step in the right direction” (94). While Pennell is almost certainly parodying the cookbook genre’s apocalyptic rhetoric and its lofty claims to solve the nation’s ills through an improved system of cookery, *Delights* nonetheless in fact follows the conventional cookbook in its efforts to reform British cookery by training readers in an intellectually-informed model of cookery.

Yet *Delights* not only sets out to reform *cookery*; rather, part of its cultivating mission includes weeding out notions that scientific cookery improved the culinary mind. Indeed, passages throughout *Delights* suggest that rationalist and principled approaches have contributed to rather than mitigated the decline of the English mind. Pennell argues that those who objectively measure their ingredients are “Philistines,” the Arnoldian term for an anti-intellectual, anti-aesthetic sensibility (“Out of these proportions the Philistine will evolve for you a nauseating concoction.”). In an essay “On Soup,” Pennell argues that the application of scientific “principles” to the realm of the culinary has blunted rather than widened cookery’s intellectual potential. ““Thick or clear?”” whispers the restaurant waiter in your ear, as he points to the soups on the bill of fare. ‘Thick and clear,—there you have the two all-important divisions. In that simple phrase is expressed the whole science of soupmaking; face to face with first principles it brings you,’ she

mocks (81). A “principled” approach to soup—one that analyzes a dish’s chemical makeup and thus nutritional potential—confines understanding to two pre-defined spheres, encouraging both cook and diner to default into a rehearsal of prescribed knowledge.

Thus, in *Delights*, I argue, Pennell champions aesthetic cookery by pointing out that conventional—and often, specifically scientific—approaches to the culinary have turned Britain into a nation of what she calls “thoughtless” eaters whose minds have atrophied along with their palates. Exhibiting what Schaffer identifies as “the female aesthetes’ characteristic desire to reorganize domestic culture according to the newest artistic standards,” Pennell argues that the “Philistine” is likely to remain so without embarking on a campaign of culinary enlightenment—a campaign she enacts in *Delights*.²⁰²

As we saw in Chapter Two, cookbook writers seeking to integrate theoretical “principles” into cookery did so by refashioning the genre’s formal conventions for instructions, offering readers narrative explications that guided their choice of recipe. *Delights* displays a similar generic transformation. In the preface, Pennell explains that “[t]he collection . . . does not pretend to be a ‘Cook’s Manual,’ or a ‘Housewife’s Companion’: already the diligent, in numbers, have catalogued recipes, with more or less exactness” (9). Here again, Pennell takes a jab at the quantified, precise recipe. In contrast, *Delights* is “a guide to the Beauty, the Poetry, that exists in the perfect dish, even as in the masterpiece of a Titian or a Swinburne” (9). Rather than training readers to analyze food for its principles, or its chemical attributes, *Delights* helps readers identify

²⁰² Ibid 121.

its aesthetic attributes: “Beauty” and “Poetry.” Both exist as adjectives here; poetry is not a noun signifying a genre of literature, but rather a quality of art, one as present in food “as in the masterpiece of a Titian or a Swinburne.”

In order to recognize the “Beauty” and “Poetry” that reside in food, Pennell’s simile implies, readers must also be able to comprehend these elements within works of art (“even as in the masterpiece of a Titian or a Swinburne). No recipe, she argues, can offer such instruction. While it may be “simple to say how the miracle is worked,” how to represent “Beauty” and “Poetry”? Students of cookery need a “Guide”—a genre designed to isolate and explore the qualities in a work of art; the kind of writing connected with the museum, or the gallery. The kind of writing, that is, that Pennell practiced in her career as an art critic.²⁰³

In what follows I situate *Delights* at the intersection of two cultural contexts: late-Victorian food culture, a culture supremely concerned with food’s external appearance, and the culture of visuality, a culture in which the aesthetic guide played an enormous role in establishing, as Flint puts it, “the visual as the dominant mode of the Victorian period” (7).

VICTORIAN VISUAL FOOD

Pennell was not the only culinary writer to emphasize food’s visual nature. In the last quarter of the Victorian era, food that appeared on the middle-class dining table was

²⁰³ For a discussion of Pennell’s life and career as an art critic, see Clarke. Schaffer describes the form of *Delights* as a “compromise between the cookbook genre and the critique,” although she largely describes the aestheticist vocabulary and values Pennell attaches to food. I am interested in *Delights* as a visual aesthetic guide (117-8).

meant to be looked at, to be read, to be interpreted. As Emily Allen explains, food objects such as wedding cakes, particularly those created in celebration of royal marriages, frequently “transcended [their] culinary status to become pure image, intended for ocular, not oral, consumption.”²⁰⁴ Food’s status as observable image was not limited to cakes but characterized the general culinary sensibility in the last decade of the nineteenth century. Culinary historian Dena Attar writes that elaborate recipes in late-nineteenth-century cookbooks “show that the visual appearance of food has become significantly more serious and important for the Victorian hostess or host.”²⁰⁵ What Valeria Mars calls the “move to elaboration” was reflected in the trend towards French-inspired towering edifices wherein natural foodstuffs such as chicken, beef, or fish were put through a process that I have come to call “culinary taxidermy.”²⁰⁶ In this method of cooking, popularized through cookbooks such as Agnes Marshall’s 1888 *Mrs. Marshall’s Book of Cookery* (Mars 142), the meat and other edible parts of the animal were pulled out, ground down and, with aspic jelly functioning as a kind of glue, reconstituted into something that Attar describes as “mounted to look like, yet fearsomely unlike, itself in its living state” (Attar 123).²⁰⁷ Such dishes, she writes, were “designed to be seen and admired by a company of guests,” and were crucial to the popular new scheme of dining known as dinner “*à la Russe*” (Attar 124). Fully entrenched by the 1890s, dining *à la*

²⁰⁴ Emily Allan, “Culinary Exhibition: Victorian Wedding Cakes and Royal Spectacle,” *Victorian Studies* 45.3 Spring 2003, pp. 457-484, 465.

²⁰⁵ Dena Attar, “Keeping up Appearance: The Genteel Art of Dining in Middle-Class Victorian Britain,” *The Appetite and the Eye: Visual aspects of food and its presentation within their historical context*, C. Anne Wilson, ed. (Edinburgh: Edinburgh UP, 1987), 125-140.

²⁰⁶ Valeria Mars, “A La Russe: the New Way of Dining,” *Luncheon, Nuncheon and Other Meals: Eating with the Victorians*, C. Anne Wilson, ed. (Stroud: Alan Sutton), 117-156, 142.

²⁰⁷ For a discussion of Marshall’s “culinary code” in opposition to Pennell’s “aesthetic sensibility,” see Schaffer 111-115.

Russe replaced the “*à la Francaise*” tradition wherein all courses to be consumed were placed simultaneously on the table and passed around by diners themselves²⁰⁸ *À la Russe*, on the other hand, divided the meal into a dazzling array of courses served off the sideboard by servants. Such an arrangement increased the amount of dinnerware and hired help, and thus became a new opportunity for the aspiring middle-class to showcase its new wealth (Mars 117-144). (Charles Dickens mocks this sensibility in *Our Mutual Friend* through the figures of the Veneerings and their “bran-new” home, domestic items, and friends.) The new dining method, as Mars points out, “turned the table into a mass of visual and ranked messages,” amplifying its status as an object of study and interpretation (Mars 143).

The rise of a visual sensibility in the late-century culinary culture can be seen by comparing Isabella Beeton’s treatment of culinary ornamentation in the 1861 and 1892 editions of her important *Book of Household Management*. In 1861, Beeton writes that “the odours and flavours of the various dishes should contrast nicely; there should be plenty of fruit and flowers on the table, and the room should be well lighted. . . . Hams and tongues should be ornamented with cut vegetable flowers, raised pies with aspic jelly cut in dice, and all the dishes garnished sufficiently be in good taste without looking absurd.”²⁰⁹ In the 1892 edition, she explains that “[i]t is not at all unusual for a lady to

²⁰⁸ C. Anne Wilson writes that *à la Russe* became so fashionable in the last decades of the century that Beeton’s *Book of Household Management* “had to be amplified in new editions from the late 1870s onwards to include much fuller advice on how to serve meals” in the new style. “Introduction,” *Luncheon, Nuncheon and Other Meals: Eating with the Victorians* C. Anne Wilson, ed. (Stroud: Alan Sutton, 51-70), xii.

²⁰⁹ Isabella Beeton, *Book of Household Management* (956), qtd in Wilson 150. Wilson reads this passage in light of the emergence of the cold supper as a new meal, arguing that this meal “became an ideal area for the Victorians to indulge in their love of ornament and decoration” (150). C. Anne Wilson, “Supper: The Ultimate Meal,” *Luncheon, Nuncheon and Other Meals: Eating with the Victorians* C. Anne Wilson, ed. (Stroud: Alan Sutton, 145-156), 150.

prepare, with her own hands, very many of the pretty decorations one likes to see upon one's table in the shape of sweets."²¹⁰ In 1861, the visual beauty of the food is only one consideration, and not even the primary one; the cook instead should first aim to appeal to smell and taste. Meat dishes, furthermore, are only garnished "sufficiently to be in good taste"—not, as would later become popular, crushed down and refashioned into something different altogether (Attar 125). Rather, the original shape—and taste—of the animal suffices.

In contrast, in the 1892 edition of *Book of Household Management*, food is transformed linguistically into "decorations"; these become objects of value because they are what "one likes to see upon one's table." It is not until we reach the end of the sentence that it becomes apparent that the "decorations" Beeton names are "sweets," although the descriptive phrase "in the shape of" leaves us in doubt as to the "sweets'" alimentary origins. Indeed, Beeton's description, which elides the food's materiality altogether, is reminiscent of a recipe Attar describes for a nursery-pudding referred to only as "shape" (Attar 136).²¹¹ "This is food for show rather than sustenance," Humble explains, "designed to be extensively admired and then toyed with on the plate" (Humble 21).

Looking at food in the second half of the nineteenth-century thus became a way of seeing that sought to analyze and to interpret—a type of looking in direct opposition to the casual glance. The impulse to look in order to know, I argue, places the culinary firmly within the larger Victorian visual culture. "The Victorians," Flint explains "were

²¹⁰ Isabella Beeton, *Book of Household Management*, 1897, 817; qtd in Allen 460. For Allen's discussion of this passage in relation to the class symbolism of late-Victorian confections, see 460-1.

²¹¹ For a discussion of the role of taste in food at the end of the century see Schaffer 111-115.

fascinated” not only “with the act of seeing” but “with the problems of interpreting what they saw” (2). Driving this fascination with the epistemological potential of the visual was the rise of opportunities to look. Inventions such as the telescope and the microscope became more widely available, bringing the natural world into new focus for the public, while publications on the pseudo-science of physiognomy and public displays of “racial types” and “human ‘curiosities’” turned the human body itself into a site of interpretation (Flint 14, 5). Other cultures, too, became objects for ocular consumption, as the rise of public exhibitions beginning in 1851 provided widespread access to the works of art and industry produced around the Empire.

Beyond landscapes and bodies, Victorian audiences were confronted with a mass of new images. The second half of the nineteenth century saw an explosion of images in a range of mediums such as photographs, etchings, lithographs, as well as new technologies through which to produce or view said images—the viewfinder, the magic lantern, the camera (Flint 5). Print media, too, increasingly turned to images as a mode of representation; Flint argues that periodicals such as the *Illustrated London News* and the *Graphic* “relied as much, if not more, on images as on words in their representation of the world,” while advances in print technologies for advertizing “turned the streets quite literally into environments to be read” (3-4).

Access to, and engagement with, visual images was not confined to print culture, however. Juxtaposed with these cheap commercial images was the growing public access to fine art (Teukolsky 20). Legislation such as the 1845 Museums Act and the Museums and Libraries Act of 1850 increased public access to art, as did the relocation of the National Gallery from Pall Mall to the centrally-located Trafalgar Square (Flint 4,

Teukolsky 19). As Teukolsky has argued, the democratization of art in the Victorian era created a “passion for aesthetic spectatorship,” a passion tied to the belief that “art spectatorship could provide one of the most intense and meaningful forms of human experience” (3). Yet art spectatorship was not merely about aesthetic experience; the relatively sudden democratization of art threaded the act of engaging art with class concerns. Teukolsky points out that the proliferation of commercial images and the relatively sudden widespread access to art “necessitated that viewers discriminate in the visual field and hierarchize certain kinds of visual experiences” (20). Looking at and responding to art thus began to function in Victorian England as an index of “taste and culture for a growing middle-class audience”; in turn, it provided a model of self-improvement tied to what Teukolsky calls “self-culture” (3).

Perhaps unsurprisingly, a newly urgent demand arose for guidance in matters of aesthetic discrimination and response, imbuing the art critic and the genre of art writing with increased positions of cultural authority in the second half of the nineteenth century (Flint 167-74). As Flint points out, “[t]he critic became,” in the second half of the nineteenth century, “the eyes of the growing middle-class public” (173). Art critics themselves took their status as tastemakers and public educators seriously, if unevenly.²¹² Responding to what Teukolsky describes as “the increasingly urgent sense that modern British citizens needed to be literate in the visual arts,” Victorian writers and critics produced a wide range of texts designed to adjudicate the public’s engagement with and response to art (15). Nineteenth-century audiences in search of self-improvement through aesthetics could read reviews and essays on the latest exhibition at a particular gallery—

²¹² For a discussion of the rancorous arguments over the function of art critics and criticism, see Flint, esp. Ch. 7.

such as Ruskin's disastrous review of James McNeill Whistler's exhibition at the controversial Grosvenor Gallery—attend a lecture, read discourses on aesthetics or art history—the options were numerous (Teukolsky 3).

As this diversity of genres and methodologies suggests, Victorian audiences were trained in aesthetic discrimination and response not only—or even necessarily primarily—by looking at art, but by *reading* about looking at art. Both Flint and Teukolsky, among others, have written extensively about the symbiotic relationship between language and image in the Victorian visual culture, particularly the role the art critic played in creating what Teukolsky calls the “fusion of writing and seeing” that characterized the Victorian engagement with art (17).²¹³ Indeed, Teukolsky has argued that “[t]he Victorian experience of art was shaped by a flurry of accompanying captions, poems, guidebooks, and other linguistic signs, producing a wholesale entwining of writing and seeing” (16). “The act of looking at art,” she continues, “was not a disembodied Gaze of power but a scripted, linguistic, culturally conditioned experience” (16). The art writing that flourished in the second half of the nineteenth century, in other words, was “not merely incidental to spectatorship but in fact worked to construct the Victorian art experience” (16). At the heart of this cultivating body of writing was the critical essay, which Teukolsky argues functioned in the visual culture as the “preeminent genre for shaping the taste of middle-class readers” (15). In the hands of critics, the critical essay worked as a kind of docent, establishing aesthetic criteria and modeling response as it guided readers' eye around the work of art.

²¹³ Stephen Cheeke, *Writing for Art: the Aesthetics of Ekphrasis* (Manchester: Manchester UP, 2008).

This nexus of language and image characterizes many of the food essays in *Delights*, a work Pennell frames explicitly as an aesthetic “guide,” or a series of critical essays intended to help readers interpret and “understand,” to use Pennell’s own word, the “Beauty and Poetry that exists in the perfect dish, even as in the masterpiece of a Titian or a Swinburne” (8). While, as I have noted before, other scholars address the cultivating ethos of *Delights*’ aesthetic language, what has been less well studied are the ways in which Pennell employs trained sight as path to “enlightenment,” as she calls it, and the visual language of aesthetic criticism she invokes to do so.

The structure of *Delights* begins this work. While conventional Victorian cookbooks frequently classify by animal or dish (“Fish,” “Beef,” “Mutton,” etc.), Pennell separates many of her chapters into single ingredients: “The Triumphant Tomato”; “The Most Excellent Oyster”; “The Magnificent Mushroom,” “The Simple Sole”). The structural focus on individual ingredients showcases the many ways the particular food item can be manipulated into delicious dishes. Each of the chapters thus features recipe variations, or multiple ways to prepare the food item; such variations are often based on the item’s visual merit. In “The Triumphant Tomato,” for example, Pennell presents four variations, which she frames as a four-point “meditation”—language that engages the mind, while the recipe structure invokes the hand. Two of the variations are presented in part because of the visual effect of including the tomato, a move reminiscent of the cook in “Sauce Soubise” who “may fry the onions instead of boiling, for love of the tinge of brown, rich and somber thus obtained.” In the “Tomato as Auxiliary” variation, for example, she writes, “If you have learned the trick of association, at once you see before you a steaming harmony in pale yellow and scarlet, the long soft tubes of *macaroni* or

spaghetti encompassed round about by a deep stream of tomatoes stewed and seasoned”) (175). The chapter on oranges, “A Message from the South,” features a similar move, offering readers not a meditation but a “study of the orange” and its “pure, uncontaminated gold” (241). In the “study,” Pennell directs readers to mix orange and coconut in order to “yield a new flavour,” but then focuses her directions to maximize the visual effect of the dish: “For this purpose [of producing “a new flavour”], the orange must be cut that the juice may flow, and if in symmetrical rounds, the effect will be more satisfying to the critical. . . . Then taking the cocoanut that has been well drained, grate it as fine as patience will allow; under it bury the orange until the gold is all concealed, and the dish looks white and light and soft as the driven snow. . . . It is a pretty conceit; half unwillingly the spoon disturbs this summery snow-field” (243). Despite emphasizing taste, which both the chapter and recipe certainly do, here the ingredients become ultimately meaningful insofar as they produce a particular visual image—in this case, “the driven snow”—both in the mind’s eye and on the plate.

Isolating individual ingredients and exposing their potential to create an aesthetically pleasing image through what are essentially recipe variations thus begins to fulfill the argument she puts forward in her chapter on sandwiches: “human beings educated to look upon food and drink,” she argues, consider them in the same way as “the painter regard[s] his colours, the sculptor his clay—as means only to a perfect, artistic end” (77).²¹⁴

²¹⁴ Alice McLean reads these passages as evidence of Pennell’s investment in the ethos and discourse of the gastronomy movement, which advocated careful consideration of one’s food. I am interested in Pennell’s definition of a trained eye as one that can visually appreciate a painting.

But it is not just any eye that Pennell seeks to train. Rather, she pitches *Delights* specifically to women, arguing that “in the cultivation and practice of an art which concerns life more seriously, woman has hitherto proved an inferior creature” (7). Although “for centuries the kitchen has been her appointed sphere of action,” she writes in the preface, “here, as in the studio and the study, she has allowed man to carry off the laurels. Vatel, Carême, Ude, Dumas, Gouffé, Etienne, these are some of the immortal cooks of history: the kitchen still waits its Sappho” (7). It is important to note here that Pennell explicitly invokes the kitchen as the sphere awaiting aestheticization. In studies of *Delights*, scholars have tended to focus on Pennell’s pioneering aestheticization of female eating and appetite, pointing out her vexed relationship to cookery (Schaffer, Horrocks) or arguing that she ignores it altogether (McLean). Certainly, as Schaffer notes, *Delights* slides between treating the production and consumption of food, upending the entrenched notion that to write about food meant to invoke the degradation of culinary labor. But I argue that it is, in fact, in the actual production of food and in the *planning* for the future production of meals that Pennell schools her readers’ eye; indeed, looking at art and making food, as we will see in a moment, go hand in hand in *Delights*.

Pennell’s application of the aesthetics of seeing to the kitchen is unsurprising, given her professional body of work prior to *Delights* and her experience as a female critic in a predominately masculine sphere. Pennell began her career as a professional writer by using language to describe a visual object, accepting her husband’s suggestion that she gloss his illustrations for a Philadelphia weekly paper (Williams xiii). Eventually becoming an art critic for the *London Star*, *New York Nation*, *Philadelphia American*, and the *London Woman*, the bulk of Pennell’s published work was directed towards what

Meaghan Clarke describes as “conveying the visual through print culture.”²¹⁵ During “an intense period of exhibition reviewing,” Clarke explains, Pennell was an active participant in what Clarke calls the “the rituals of viewing and reviewing” that made up the culture of reviewing, “travelling to exhibitions, attending press days, visiting studios, interacting with artists and artist groups while observing and recording what they saw” (Clarke 143, 145, 153). In her Introduction to *Delights*, Jacqueline Block Williams writes that Pennell frequently travelled to galleries not only in London, but also to Paris, where she spent so much time immersed in studying aesthetic trends, artists, and techniques that she later bemoaned her failure to take in the city’s other sights (Block xv).

While it was not unusual for women in the Victorian era to visit museums and galleries, Clarke argues that there existed “a gendered split in the way women were encouraged to look at art” (141). Rather than openly scrutinize a piece of artwork, etiquette demanded that women look *indirectly*, or cast “demure or absent looks” at the work of art (141). Female critics, on the other hand, engaged with art quite differently; they could not, Clarke explains, “adhere to the perceived etiquette” of sidelong looks because they were in fact “employed to look,” to directly visually engage the painting or sculpture (141). *Delights*, as I argue below, compels women to assume the “authoritative gaze” of the woman critic, to look directly at the works of art before them. (142). By bringing the visual language of art criticism to bear on the material products of the domestic sphere, eating food and making food in *Delights* cannot be accomplished

²¹⁵ Clarke 143. Clarke offers one of the only studies I’ve found on Pennell’s work and role as an art critic; most scholars treat *Delights* as the primary object of inquiry. Clarke offers a short reading of Pennell’s aesthetic as an art critic, focusing on the relationship between taste and visual aesthetic; see esp. p. 139 and 141.

without studying and understanding the visual components and aesthetic elements of the works of gustatory “art” Pennell describes in her essays.

In so doing, *Delights* places women in a position not unlike that of the art critic—a bold move, particularly in the 1890s, a time when both critical modes and aesthetic style were embroiled in intense debate: debates over narrative art versus “formalist” art; over what aspects of a painting critics ought to emphasize; and over which gallery housed the “best” art, the controversial Grosvenor Gallery or the more traditional Royal Academy.²¹⁶ Pennell was intimately familiar with these aesthetic conversations. As Schaffer documents, Pennell deliberately placed herself in the thick of the circle in which those debates were occurring, befriending (and writing several biographies of) James McNeill Whistler, whose controversial exhibit at the Grosvenor Gallery sparked Ruskin’s infamous review and the ensuing legal battle between the two men (Schaffer 108).²¹⁷ The Pennells also regularly hosted other well-known avant garde artists and writers such as George Bernard Shaw, Henry James, Max Beerbohm, Aubrey Beardsley, and Oscar Wilde (Block xiv, Schaffer 108). Pennell dubbed this era the “Fighting Nineties,” writing that “[s]carcely an important picture was painted, an important illustration published, an important book written, an important criticism made that it did not lead to battle.”²¹⁸

Through both explicit references and the kinds of alimentary creation and spectatorship it models, *Delights* renders women readers as active participants in these debates. Teukolsky has argued for the importance of language—or specific “linguistic

²¹⁶ Although I will explore some of these debates at length, for further reading see Teukolsky and Flint, both of whom chart these debates thoroughly.

²¹⁷ For more on the Ruskin-Whistler controversy, see Rachel Teukolsky, *The Literate Eye* pp. 5, 103, 11, 115, 118-19, 121-22, 134.

²¹⁸ Elizabeth Robins Pennell, *Nights: Rome, Venice, London, Paris in the Fighting Nineties* (Philadelphia: J.B. Lippincott, 1916), 119, qtd in Block xiv.

constructions”—in fashioning the modes of art response perpetuated by Victorian critics, and *Delights* is no exception (16). In what follows I thus explore *Delights* as a series of critical essays characterized by the vivid description inherent to ancient understandings of ekphrasis. While Pennell punctuates *Delights* with evocative descriptions of places and spaces, my primary focus will be on the descriptions of food that I argue double as recipes.²¹⁹ If readers learn to “eat”—and cook, as she models through *Delights*—“with understanding,” she writes, “[t]he ambitious will trust to her kitchen to win her reputation; the poet will offer lyrics and pastorals with every course; the painter will present in every dish a lovely scheme of color”—aesthetic goals Pennell models and enacts in *Delights* (16).

CULINARY EKPHRASIS

Modern critical understandings of ekphrasis tend to emphasize it as a narrative device, used in both literary and critical contexts, in which the purpose is to describe a visual work of art.²²⁰ Yet as Ruth Webb has shown, ekphrasis as it was originally conceived “in the Greek schools of the Roman Empire” served very different ends (1). The original purpose of ekphrasis, she explains, was “the use of language to try to make an audience imagine a scene” (3). Thus, ancient ekphrasis differs from more modern understandings in two key ways: first, unlike modern understandings of ekphrasis wherein the goal is to describe the art object, Webb argues that in ancient ekphrasis “the subject matter is not a factor in the definition” (70). While “[p]ainting, sculpture and architecture . . . could be evoked in ekphrasis,” she writes, “they were not its defining

²¹⁹ For a consideration of Pennell’s travels, which scholars argue influence her descriptions in *Delights*, see Schaffer 111 and Mclean 55.

²²⁰ Ruth Webb, *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice* (Surrey: Ashgate Publishing, 2009), 1.

feature” (2). Secondly, the purpose of ancient ekphrasis was not merely to describe; indeed, Webb argues that ancient ekphrasis “was not even understood in the same terms as our ‘description’” (70). Whereas a description may “simply give the information,” an ekphrasis “does not seek to represent, but to have an effect on the audience’s mind that mimics the act of seeing” (38). The purpose of ekphrastic language, in other words, was to impact the audience’s mind; as such, in the ancient ekphrastic description, the mind took priority over the object or “referent.” Greek writers themselves described effective ekphrasis as speech that “makes listeners into spectators” by “creat[ing] immaterial images in the mind” (22). In this understanding, Webb explains, “[m]ere words are credited with the ability to . . . control the contents of the most intimate of faculties, the imagination” (8).

With these twin understandings of ekphrasis in mind, consider the following “recipe” for an egg and mushroom omelet from *Delights*:

The reigning sultana in the mushroom’s harem is the brilliant golden egg. Sweet symphonies in brown and gold are the dishes their union yields. *Oeufs brouillés aux champignons*—has not the very name a pretty sound? . . . The eggs, scrambled and rivaling the buttercup’s rich gold, are laid delicately on crisp toast, and present a couch, soft as down, for a layer of mushrooms. Let Ruskin rave of Turner’s sunsets, let the glory of the Venetians be a delight among art critics; but when did Turner or Titian or Tintoret invent a finer scheme of colour than eggs and mushroom thus combined? A silver dish or one of rarest porcelain should be frame for a picture so perfect. (148)

Although certainly unorthodox, this passage, I argue, is a kind of recipe; using action verbs, it tells the reader which ingredients to combine (mushrooms and eggs), how the eggs should be fixed (scrambled), how done the toast should be (crisp), and how to assemble these alimentary elements into the final dish (delicately, on toast). But Pennell guides the culinary process by describing it *as if it were a painting*, even alluding to

Ruskin's famous ekphrastic descriptions of William Turner's paintings as a cue to readers that she, too, is walking through them a work of art, pointing out its elements of color, texture, and medium.

So far, Pennell seems to be utilizing ekphrasis in its more modern sense, following what Jeffrey Spear describes as Ruskin's "word-painting mode," or what Kate Flint calls "translating visual impressions into language" (Flint 205).²²¹ But this meal is not in fact a painting; indeed, there is no object to describe. Rather, her aesthetic descriptions are meant to help the reader visualize something material that is not actually there—in this case, a dish of scrambled eggs and mushrooms on toast that Pennell wants the reader to produce in the future, or imaginatively in the moment of reading. In some moments, ekphrasis and the recipe complement each other: both are narrative forms that anticipate or describe something that is absent.

Like a recipe, the purpose of the passage is thus not to narrate something that exists already but to describe future actions the reader needs to take. (Recipes nearly always begin with an imperative or action verb, typically "take," from the Latin *recipere*.) Yet whereas the traditional recipe form lists these future actions in a series of narrative instructions structured by action verbs, Pennell instructs using language calculated to impact the reader's imagination by conjuring up an image in her mind. Put another way, Pennell's language guides culinarily by "make[ing] absent things present," the move Webb defines as "the central quality of ekphrasis."

In so doing, Pennell engages her reader's mind's eye directly with the image. The culinary creation—both textually and in reality, should the reader make it—relies on the

²²¹ Jeffrey Spear, "The Other Arts: Victorian Visual Culture," *A Companion to The Victorian Novel*, Patrick Brantlinger and William B. Thesing, eds. (Oxford: Blackwell Publishing, 2002), 189-206, 192.

reader to actually imagine the dish, to spend time in her mind following Pennell's detailed description of its components.

This mental work of imaginative aesthetic spectatorship characterizes the other ekphrastic recipes running throughout *Delights*, bringing into the home the kind of aesthetic gaze otherwise reserved for the public space of the museum and gallery.

Consider, for example, a recipe for *omelette aux rognons*. After directing readers to decorate the table with daffodils, Pennell writes:

Sweeter smiles fall from the daffodils, if now they prove motive to a fine symphony in gold. Do not trust the omelet to heavy-handed cook, who thinks it means a compromise between piecrust and pancake. It must be frothy, and strong in that quality of lightness which gives the keynote to the composition as a whole. Enclosed within its melting gold, at its very heart, as it were, lie the kidneys elegantly minced and seasoned with delicate care. (27)

Following this dish is a second course, *pilaf de volaille á Indienne* [*sic*], chosen because it offers “a new and more stirring symphony in the same radiant gold. For golden is the rice, stained with curry, as it encircles the pretty, soft mound of chicken livers, brown and delicious The curry must not be too hot, but rather gentle and genial like the lovely May sunshine” (28). When instructing readers to include peas to succeed the rice pilaf, she writes, “Now, a pause and a contrast. Gold fades into green. As are the stalks to the daffodils, so the dish of *petits pois aux laities* to *pilaf*” (the above course) “and *omelette* (the first course). “The peas are so young that no device need to be sought to disguise their age” (28). For the final course of the meal, Pennell tells readers that “Graves is the wine to drink with daffodil-crowned feast—golden Graves, light as the breakfast, gay as the sunshine. Coffee completes the composition nobly, if it be black and strong. As for liqueur, Benedictine, in colour and feeling alike, enters most fittingly into the harmony” (28).

In the ekphrastic recipe, then, ingredient choices double as visual formal qualities or components. In the first recipe above, the eggs are combined with mushrooms in order to achieve “sweet symphonies in brown and gold”; they’re scrambled not necessarily because they taste better when prepared that way, but rather to achieve or reflect the “buttercup’s rich gold.” In *omelette aux rognons*, the daffodils “prove motive to a fine symphony in gold”; the ensuing dishes are chosen and prepared in order to create said “symphony.” It is the omelet’s unique “lightness”—a word that evokes both color and texture—that gives the “keynote to the composition as a whole,” while the kidneys are centered in the dish, “within its melting gold,” as visual contrast.

In *pilaf de volaille à Indienne*, the succeeding dish, Pennell suggests mixing rice with curry so that it becomes “golden”; the curry, in turn, is determined by color, its taste rendered inextricable from its visual appearance (“The curry must not be too hot, but rather gentle and genial like the lovely May sunshine”). The peas are chosen because, when combined with the rice pilaf, they mirror the color combination of the daffodils; their visual components providing “a pause and a contrast” in the gustatory and visual “symphony.” The wine to complete the meal is golden, and, like the omelet, “light”—a reference to both color and body.

Indeed, in a recipe for salad in the preceding chapter, the materiality of food disappears nearly entirely into the visual scheme: after telling readers to combine cabbage leaves with oil and vinegar and to “rub the bowl with onion,” Pennell explains that “[n]o other garniture is needed. The tender leaves of the lettuce leaves will blend and harmonise with the anemone and tulips, in old blue china or dazzling crystal, that decorate the table’s centre” (21). Ingredients become “garniture,” chosen (or not

included, in this case) not because the salad would taste better but because it will better complement the table's centerpiece—a move we saw repeated several times earlier: first in “The Triumphant Tomato,” next in the cook who fried his onions for the “love of the tinge of brown,” and, lastly, in the recipe that paired coconut with oranges to produce an image of the “driven snow.”

These ekphrastic recipes thus treat foodstuffs as simultaneously something to be cooked and as important aesthetic elements of a visual composition. Because the culinary choices double as visual formal qualities, Pennell frames the culinary task as indistinguishable from the task of making aesthetic evaluations. To make Pennell's “Two Breakfasts”—the name of the chapter in which the above recipes are located—is to also to create “a symphony in gold,” the success of which depends on the selection of the right ingredient-elements. In *Delights*, the ability to visualize and discriminate the elements of an aesthetic composition thus functions as the prerequisite for a successful meal; if readers rightly perceive the work of art, her culinary creation will turn out (as, for example, in the opening passage to this chapter wherein Pennell instructs her reader to bake their *Sole au Gratin* “until it rivals the richness and splendour of a Rembrandt”—a task impossible to achieve unless the reader can pull up in her mind's eye an image of a Rembrandt and, furthermore, possesses an eye trained to discern and recognize those particular visual qualities).

The ekphrastic recipe thus blends together cooking and looking, engaging women—and Pennell herself—in an act that I argue functions simultaneously as aesthetic critique and creation. This slippage between creator and critic, between cooking and looking, is uniquely facilitated by ekphrasis itself, a narrative strategy Cheeke argues “is

an example both of the creative act itself . . . and of the secondary critical act of commentary, description, revelation” and response (186).

The question of the creativity of art criticism and the line between the critic and artist was a fraught one in Pennell’s moment, one that frequently cropped up around ekphrastic passages in works of art criticism (Cheeke 184). Famously, Oscar Wilde, in *The Critic as Artist*, pointed to Ruskin’s ekphrastic descriptions of Turner to make the argument that aesthetic criticism constituted “a ‘new creation.’”²²² Contributing to the question of the creative potential of critical ekphrasis was the question of who was qualified to be a critic—a question James Whistler described as a battle between “the brush and the pen” (Teukolsky 119). In *Whistler vs. Ruskin: Art and Art Critics*, Whistler, responding to Ruskin’s contemptuous review of his exhibit at the Grosvenor, argued that aesthetic evaluation should not be performed by someone who had only “passed [his life] among pictures,” as he accused Ruskin, but rather by those with actual creative experience.²²³ The artist, in short, makes the best critic.

In *Delights*, Pennell seems to agree, manipulating the common critical narrative strategy of ekphrastic description as a means of making linguistically indistinguishable the imaginative act of composing a meal and visually evaluating a painting’s formal composition. Indeed, the very act of describing the work of alimentary art—what Cheeke has called “the first impulse of art criticism”—also creates it culinarily, bringing it into existence, at least in the mind’s eye of the reader.²²⁴ The ekphrastic recipe thus

²²² Oscar Wilde, *The Critic as Artist*, qtd. in Cheeke 184.

²²³ For more on this controversy and Whistler’s response, see Teukolsky p. 118-120.

²²⁴ Description of the artwork is, as Stephen Cheeke has argued “the first impulse of art criticism,” an impulse that dominated Victorian aesthetic critique, as Flint has shown. For more on the Victorian tendency towards description, see Flint 169.

encompasses both aesthetic evaluation and culinary instruction, teaching readers how to compose a meal by modeling for her how to look at and evaluate the elements of these food compositions.

To that end, Pennell assumes the part of the art critic herself, isolating and describing the “artwork’s” formal constituents, which, as we have seen above, double as its ingredients. As such, the attention to visual alimentary form is nearly ubiquitous in the ekphrastic recipe, the language of the passages directing the reader’s gaze most obviously to color, but also to texture and shape (“Enclosed within its melting gold, at its very heart, as it were, lie the kidneys”; “For golden is the rice, stained with curry, as it encircles the pretty, soft mound of chicken livers”).²²⁵ Similarly, in her chapter “Two Suppers,” Pennell lauds the *gourmande* because he begins a meal with salmon, “refreshing to the eye in its arrangement of pale silver and rose A *mayonnaise* sauce, creamy and rich, turning the silver to gold, like a fairy godmother of legend, is the cherished accompaniment” (69). Continuing the musical language from the recipes above, Pennell describes this dish as the “exquisite prologue, with its rose and citron, its gold and soft grey tints” (69-70). Elsewhere she tells readers to organize a meal around “a bunch of late tulips, scarlet and glowing,” instructing them to “open [the meal] with that triumph of color which would have enchanted a Titian or a Monticelli: the roseate salmon of the Rhine, smoked to a turn and cut in thin slices, all but transparent. . . . What better suited for ensuing course than *oeufs brouilles aux pointes d’asperges*? the eggs golden and

²²⁵ Here I would like to point out that the ekphrastic recipe is only one mode of writing in *Delights*. As most studies of Pennell note, *Delights* is a highly heteroglossic text, one clearly informed by a variety of discourses and schools of aesthetic, gustatory, and philosophical thought. The purpose of this chapter is to attend to the visual rhetoric in the text.

fleecy as the clouds in the sunset's glow Cloudlike, the loveliness gradually and gracefully disappears, as in a poet's dream or a painter's impression" (30).

And, in her chapter "A Study in Red and Green," which Schaffer identifies as a salute to her friend and fellow aesthete, James Whistler,²²⁶ Pennell argues that no art gallery in England, France, or Germany can offer a "richer, more stirring arrangement of colour" than the ripe strawberry. "From under the green of broad leaves the red fruit looks out and up to the sun in splendour unsurpassed by paint upon canvas" (231). The food's sensory qualities determine the method of preparation Pennell prescribes. Telling readers not to "defile" the strawberry by encasing it in a tart, she instructs them to "[r]eserve it rather for dessert that in fragile porcelain dish or frail glass bowl it may lose nothing of the fragrance and crispness and glow of colour that distinguished it as it lay upon the brown earth under cool green shelter" (232). Readers should serve the strawberry with its "little green stem attached"; doing so "lend[s] to dinner or breakfast table the same stirring, splendid harmony that lit up, as with a flame, the kitchen garden's memorable corner" (25).

In leading the reader visually through the food-art's formal elements, Pennell places images in the reader's mind not just of any dish, but of dishes that exemplify what she presents as the perfect visual composition. The ekphrastic recipe, in other words, directs readers in how to look at art while also establishing aesthetic—and thus alimentary—merit. The kinds of alimentary art Pennell's conjures up in these passages inserts *Delights* into the center of a vitriolic debate over aesthetic style. Pennell's friends and fellow aesthetes such as James Whistler, Walter Pater, and Oscar Wilde lambasted

²²⁶ "The Importance of Being Greedy" 117.

what Elizabeth Prettejohn describes as the “Victorian conventions for narrative painting,” or paintings that told a story, such as those housed in the Royal Academy.²²⁷ What Pater called “[a]esthetic’ painting, by contrast,” as Teukolsky explains, valued “sensuous form” over narrative story. For Pater, in particular, “the best art emphasizes sensuous form—drawing, color, or composition—rather than narrative content” (110). A good painting, according to Pater, “makes its effects out of the simple play of light on the wall,” a statement that outraged popular belief about aesthetic merit. Indeed, according to Whistler, “the vast majority of English folk cannot and will not consider a picture as a picture, apart from any story which it may be supposed to tell.”²²⁸ In the paintings that outraged Ruskin, as Teukolsky points out, Whistler “deliberately emphasiz[ed] color and light at the expense of representative subject matter” (Teukolsky 117).

The debate over aesthetic style was inextricable from what Teukolsky describes as “the battle over what kind of criticism is best” (110). She explains that, according to Pater “[t]he greatest error of popular critics is to read visual art as though its only aim were to transmit a message or narrative” (110). For Pater, the “form of art, especially the sensuous materiality of paint, is the best criterion for aesthetic judgment” (Teukolsky 102). What he called “professional” critics, on the other hand, thus ought to direct the eye to painting’s formal elements, evaluating a painting based on its “sensuous elements” rather than its story. As Flint explains the distinction in critical models, “[m]any generalist critics fell readily into using a vocabulary equally or better suited to fictional prose when it came to discussing the moral implications or sentimental appeal of

²²⁷ Elizabeth Prettejohn, *Art for Art's Sake: Aestheticism in Victorian Painting* (New Haven: Yale University Press, 2008). qtd in Teukolsky 120.

²²⁸ qtd in Flint 197.

painting. Professional critics, by contrast, came to develop a more distinctive range of technical vocabulary with which to describe effects of colour and modeling, line and tone” (198).

In the above ekphrastic descriptions, which simultaneously create and describe an art image, Pennell deliberately rejects representational prose descriptions, bringing to food both the “professional” mode of response and the “aesthetic” style espoused by her aestheticist peers. The particulars of the food are described not in order to represent their original alimentary nature, as in a still life painting, but rather are figured as aesthetic form. In her recipe for salmon, for example, the fish’s fishiness is never described; the reader encounters no scales, or eyes, or fins. The animal’s materiality instead is featured as a “play” of color: “pale silver and rose,” the colors itself serving their own aesthetic end, “with its rose and citron, its gold and soft grey tints.” Recalling Pater’s reverence for “the play of light across a canvas,” eggs are repeatedly figured as clouds, “golden and fleecy as the clouds in the sunset’s glow” (Teukolsky 124). Later in the sentence, however, even the materiality and texture of the cloud resolves into pure aesthetic technique: “Cloudlike, the loveliness gradually and gracefully disappears, as in a poet’s dream or a painter’s impression.” By the end of the passage, the eggs are frozen into an impressionist painting, disappearing into brush strokes. To circle back to Emily Allen’s analysis of Victorian wedding cakes, this is truly food for “ocular, not oral consumption,” a move Pennell replicates in her strawberry chapter.²²⁹

Indeed, its very title, “A Study in Red and Green,” evokes not a strawberry, as in her other single-ingredient chapters (“The Magnificent Mushroom,” “The Triumphant

²²⁹ For a discussion of Pennell’s tendency to elide descriptions of eating, see McLean and Schaffer.

Tomato,” etc.), but is meant to conjure up images in the reader’s mind of actual works of art by Whistler himself, such as his “Symphony in White and Red” or “Harmony in Blue and Silver.” Indeed, Pennell opens the chapter by placing us in the world of the public gallery: “You may search from end to end of the vast Louvre; you may wander from room to room in England’s National Gallery; you may travel to the Pitti, to the Rykes Museum, to the Prado; and no richer, more stirring arrangement of colour will you find than in that corner of your kitchen garden where June’s strawberries grow ripe” (231). Taking up the suggestion of the title, this opening passage solidifies the strawberry’s indeterminate status as work of art or material fruit object, introducing the strawberry as a visual painting that, although it happens to reside “in that corner of your kitchen garden,” could in fact hang in a gallery. Throughout “A Study in Green and Red,” Pennell’s language both lovingly describes and elides the strawberry itself altogether, here in the title and in the subsequent descriptions. “From under the green of broad leaves the red fruit looks out and up to the sun in splendour unsurpassed by paint upon canvas [B]y loveliness of colour and form, of flavour and scent, proved one of the chief factors in reclaiming man from barbarism”,” she writes in the chapter’s opening pages (231-2). Here Pennell describes the strawberry through its aesthetically-correct formal elements, elements whose very perfection lend them the power to civilize.²³⁰

Beyond a wink to Whistler, Pennell’s choice of titles both here and elsewhere, as in “A Symphony in Gold,” and her use of a musical vocabulary to render food art into visual form recall the aesthetic doctrine driving Whistler’s own musical titles. To return

²³⁰ In moments such as these, Pennell is almost certainly mocking the idea of art’s civilizing possibilities. For more on her tendency to parody or, as Horrocks claims, “camp” aestheticism and the larger Victorian belief in the reforming possibilities of art, see Horrocks, Schaffer, and McLean, esp. p. 56.

to the ekphrastic recipes from above for a moment, it is remarkable how frequently Pennell invokes the musical as a descriptive mechanism when leading the eye through the dish's aesthetic form. In the chapter "Two Breakfasts," for example, daffodils "prove motive to a fine symphony in gold." Color is not merely likened to music here, but rather the visual element becomes musical in its aesthetic effect. Similarly, the rice pilaf dish "offer[s] a new and more stirring symphony in the same radiant gold"; the "quality of lightness" in the omelet "gives the keynote to the composition as a whole," while "Benedictine, in colour and feeling alike, enters most fittingly into the harmony." Finally, "[c]offee completes the composition nobly, if it be black and strong." In this final sentence, the medium of the entire work becomes not a painting, as these visual, material components would suggest, but a musical "composition." Color becomes fully indistinguishable from music—indeed, it *becomes* music—with the introduction of the peas: "Now, a pause and a contrast. Gold fades into green." In this moment, food's visual materiality transforms into pure music, while the very rhythm and structure of the overall meal become synonymous with the structure of a musical composition.

In passages such as these, it's difficult to not turn to Pater's famous maxim, "all art constantly aspires to the condition of music" to help us parse Pennell's language and understand the aesthetic impulses driving her ekphrastic descriptions.²³¹ The ingredients and dishes in this meal, in their aim to create a "composition" that achieves "harmonies" and "symphonies" certainly seem to be aspiring towards the musical as the ultimate aesthetic goal. As Teukolsky points out, Pater's concept of "*anders-streben*," or the

²³¹ Walter Pater, "The School of Giorgione," *Studies in the History of the Renaissance* (Oxford: Oxford UP), 1220135.

notion that “all art constantly strives toward other arts,” enshrined music as “the typical, or ideally consummate art,” as Pater put himself described it.²³² One way of reading these passages, then, is to see them as illustrating Pennell’s desire not just to “len[d] food the status of art,” as Schaffer puts it in her study, but to conjure for her readers images of food that have achieved what Pater defined as the “ideally consummate art” (117).

But, as Teukolsky points out, Pater’s phrase functions not merely as a comment on literal art forms but rather raises the issue of aesthetic spectatorship. “The ‘condition of music,’” she explains, “indicates not actual music but a radical and even anarchic dispensing with agreed-upon meaning, telescoping aesthetic experience down into the body of the beholder” (118). Pater’s claim, that is, sought to present a new mode of aesthetic critique, one that resisted the notion of objectivity and “agreed-upon meaning” that characterized Victorian art writing in favor of meaning grounded in “personal sensation” (118). Teukolsky points to Whistler’s musical titles as a microcosm of these clashing aesthetic doctrines. “The choice of painting title . . . became its own kind of art criticism or theory” in the nineteenth century, she writes. Whereas “popular” critics espoused titles that made clear the painting’s story, such as Turner’s *Snowstorm—Steam-Boat off a Harbour’s Mouth making Signals in Shallow Water, and going by the Lead*, Whistler’s musical titles refused to identify a referent or a story (Teukolsky 117). Story, for the Victorians, was intimately bound up in meaning or aesthetic truth. Narrative titles, Teukolsky claims, “served to shape or control narrative meaning,” while titles such as Whistler’s “worked to radically unhinge meaning,” presenting instead of clear story “an open-ended kind of symbolism” (117).

²³² qtd. in Teukolsky 123.

Musical vocabulary, in other words, detached art from objective meaning, opening it up to a subjective interpretation based in the body and its sensations—what Teukolsky calls “subjective criticism” (104-105). As she explains it, “[b]oth Whistler’s titles and Pater’s aesthetic criticism used a musical vocabulary to authorize personal sensation as the most important criteria of artistic perception” (118). This bodily-based spectatorship was, for the aesthetes, inextricable from the kind of formalist art they lauded. Indeed, as Teukolsky points out, formalist or “Professional” criticism came under fire in large part because “the appreciation of art for its lines, shapes and colors was quintessentially a pleasure sited in the body,” a “corporeal thrill” aesthetes such as Pater tied to aesthetic response and meaning (129).

Another way of reading Pennell’s musical representations of material food, then, is thus to consider how this musical language—and, in general, the visual language of the text as such—brings the body and the question of “personal sensation” into the model of aesthetic creation and spectatorship put forward in *Delights*. In describing “a new and more stirring symphony in the same radiant gold”; or “a pause and a contrast; gold fades to green”; or “the roseate salmon of the Rhine, smoked to a turn, and cut in thin slices, all but transparent”; or “eggs, scrambled and rivaling the buttercup’s rich gold,” which “present a couch, soft as down, for a layer of mushrooms,” Pennell brings images into the minds of her readers that invoke all of the senses: sight, of course, but also touch (“soft as down”), taste (“scrambled”, “smoked), smell (“smoked”), and even hearing (“symphony”; “a pause and a contrast”). The visuality of the ekphrastic recipe, then, relies on the other bodily senses to fully realize the image in the mind’s eye. Looking at alimentary art through the ekphrastic recipe, I argue, involves the whole body, creating a

bodily-based epistemology ultimately centered on the eye. Pennell's emphasis on visual "sensuous form," to borrow Teukolsky's term, connects readers' eyes to the rest of their bodies, turning bodily sensation into a strategy of looking at alimentary art.²³³

But where does all this leave hunger, that most obvious bodily sensation related to the subject of food? Studies of Pennell have tended to emphasize what scholars argue is her ambivalence towards the issues of the body that attend cooking and eating, even aestheticized cooking and eating. "Cookery was the dark side of aestheticism," Schaffer argues, "for it was the place where art met the body" (123). Schaffer thus contends that on the one hand, Pennell emphasizes "the sensory experience of eating the food" in order to "insis[t] that the love of food is a serious, admirable emotion" (110). On the other hand, however, Pennell "repudiates her belief in the nobility of bodily pleasure," her very prose "shaped by the bodily shame associated with food, an unbecoming gluttony that she must either reclaim as virtue, or sublimate into art" (110, 123). McLean, too, points out that while "Pennell reconfigures women's duty to include the pursuit of sensual pleasures," she ultimately "avoids honing a language with which to capture and convey her own appetite." Pennell, according to McLean, "has difficulty imagining female desire in a way that does not simultaneously constrain the very appetite that she works to express" (58). Rather than describe her own physical desires, Pennell instead "often displaces her desire onto the food itself" (59).

In closing, I want to extend this discussion of Pennell's ambiguity around bodily desire by drawing our attention to the language of "sensation" and "ecstasy" that

²³³ In her study of the nature of female taste, Clarke explores Pennell's aesthetic in her critical writing; touching on *Delights*, she notes that Pennell invited readers to consider olfactory as well as visual sensorial experience. I am interested in the way the invocation of the other senses here are ultimately in the service of the eye. Clarke 139.

permeates the essays' ekphrastic descriptions. Such language lay at the center of subjective criticism and the kind of art valued by both Pennell and her aesthetic circle. Pennell frequently figures her readers as seekers of these "corporeal thrills," or "bodily sensations," to borrow Teukolsky's terms. For example, immediately following the recipe for "driven snow," or the orange and coconut concoction we saw earlier, Pennell offers a variation: "If more stirring sensations be craved, baste the cut-up oranges and sugar with Cognac, and eat to your own edification" (244). Although the word "craving" evokes physical hunger, the reader here seeks a "stirring sensation," not gustatory satisfaction. Experiencing the sensation by creating her arrangement leads not to a full stomach but to "edification," or a kind of enlightenment, whether gustatory or intellectual, the passage is unclear.

In her onion chapter, Pennell offers a detailed recipe for a fish omelet in a sauce of butter, parsley, lemon juice and chives. "Spread upon the plate that waits so patiently, serve at once; and words fail to describe the ecstasy that follows" (168). Here, readers don't eat; rather, they experience "ecstasy." In the tomato chapter, with its four-point meditation-recipes, Pennell introduces her fourth and final "heading" as the gateway to "new ecstasies: the tomato as salad" (28). In her chapter on mushrooms, Pennell chastises readers who do not like mushrooms: "to say that you do not like them is confession of your own philistinism. Learn to like them; *will* to like them You will have lived your life in vain if, at its close, you have missed one of its finest emotions" (154). Here, the bodily act of eating mushrooms multiple times in order to gain an appreciation for their taste leads not to gustatory pleasure but to the experience of an intense emotion. Later in the chapter she writes that the "[p]ossibility of rapture there is likewise in a white

fricassée of mushrooms Another sensation, another thrill, awaits you in mushrooms *au gratin*” (147).

Cooking and eating food, in these passages, become a means of seeking and experiencing sensation, ecstasy, thrills. These pleasures flirt with the notion of hunger, but instead become something more akin to the bodily pleasures Pater describes in his famous “Conclusion”, wherein he argues that “to burn always with this hard, gem-like flame, to maintain this ecstasy, is success in life.”²³⁴ Other scholars have argued convincingly that Pennell uses the language of gastronomy and aestheticism to both celebrate and negate bodily hunger. I am suggesting, beyond that point, that in passages such as those I have laid out, the bodily pleasure that comes from engaging with the “sensuous matter” Pennell describes in her ekphrastic recipes is not connected to aesthetic eating or taste but rather invokes a different realm—the “ecstasy” that accompanies and indeed drives aesthetic response.

With this in mind, consider, for example, Pennell’s passage “an autumn dinner,” for which she presents an “ecstatic menu” structured by dishes described in musical terms:

Let an autumn dinner then be created! dainty, as all art must be, with that elegance and distinction and individuality without which the masterpiece is not. Strike the personal note; forswear commonplace The glorious, unexpected overture shall be *soupe aux moules*. . . . [B]ouillon, tomatoes, and mussels meet in a proper pot well rubbed with garlic, and an ardent quarter of an hour will consummate the union. As you eat, something of the ardour becomes yours, and in an ecstasy the dinner begins. Sad indeed would it prove were imagination exhausted with so promising a prelude. Each succeeding course must lead to new ecstasy, else will the dinner turn out the worst of failures. In *turbot au gratin*, the ecstatic possibilities are by no means limited. In a chaste silver dish, make a pretty wall of potatoes, which have been beaten to flour, enlivened with pepper and salt, enriched with butter and cream . . . seasoned with Parmesan cheese, and left on the stove for ten minutes, neither more, nor less. . . . Words are weak to express,

²³⁴ Walter Pater, *Studies in the History of the Renaissance* (Oxford: Oxford UP), 118-121.

but the true poet strong to feel the loveliness now fast reaching its climax . . . By the law of contrasts, the vague must give way to the decided. The stirring, glorious climax after the brief, gentle interlude, will be had in *canapé des olives farcies*, the olives stuffed with anchovies and capers, deluged with cayenne, prone on their beds of toast and girded about with astonished watercress. (54)

The making and eating of this “autumn dinner”—for the passage treats both equally, positioning women as creators and consumers—is specifically designed to engulf the reader in a sustained frenzy of “ecstasy.” Indeed, ecstasy becomes *the* criterion for including each dish; the “glorious, unexpected overture shall be *soupe aux moules*” precisely because “it holds the attention not only in the short—all too short—moment of eating, but from early in the morning of the eventful day; nor does it allow itself to be forgotten as the eager hours race on” (54). This “prelude” gives way to *turbot au gratin*, in which “the ecstatic possibilities are by no means limited,” the “stirring glorious climax of *canapé des olives farcies*” become a gustatory climax because they were preceded by “the brief, gentle interlude” of an *Omelette soufflé*. The meal, that is, achieves and maintains its “ecstatic possibilities” through its musical structure. The sequencing of the dishes like a musical piece becomes inextricable from the meal’s aim to produce, maximize, and sustain aesthetic bodily thrill, both in the making and eating.

Yet the passage is also highly sexual, its musical language making indistinguishable sexual and aesthetic sensation.²³⁵ The musical structure leads the reader through the rhythm of a meal and the rhythm of the sex act: the “overture” infects the reader-eater with the “ardour” generated by the “consummated union” of the ingredients in the *soupe aux moules*. The following dishes generate new “ecstasy,” for “[s]ad indeed

²³⁵ McLean explores some of the sexualized language in *Delights*, making the argument that “such highly erotic discourse . . . elides Pennell’s appetite for the food itself” (56-7, 59).

would it prove were imagination exhausted with so promising a prelude.” After eating *turbot au gratin*, readers begin “to feel the loveliness now fast reaching its climax,” which, which it arrives in *canapé des olives farcies*, is “stirring and glorious,” the musical climax producing a bodily “thrill” in which the sexual and aesthetic merge.

Here Pennell parodies the critique that aesthetic art, with its emphasis on the body, could just as easily evoke orgasmic bodily pleasure as legitimate aesthetic response (Teukolsky 129). But for Pennell—as for Pater—“physical pleasure is pursued not for some base indulgence but for the philosophical perfection of the perceptive consciousness, always attuned to the world’s sensuous matter” (Teukolsky 129-130). Hunger, figured here as sexual sensation, originates not in the stomach or even in the genitals but in the mind, provoked by cooking and eating—or reading about cooking and eating—these aesthetic meals. This is, to quote Teukolsky, an aesthetic pleasure “sited in the body,” although a pleasure rooted in and emerging from the mind’s eye, as it imagines and lingers over the meal so deliciously described. Pennell’s vivid ekphrastic images thus become a kind of food porn, the bodily thrill an aesthetic response to the images raised and ultimately contemplated in the mind’s eye.

Coda

Bulletproof Recipes, Mathematic Ratios, and the “Art” of Cookery: Culinary Form in Contemporary Cookbooks

In its 2012 Food and Drink Issue, the *New York Times Magazine* published an article declaring Christopher Kimball, founder of *Cooks Illustrated* and its televised counterpart, “America’s Test Kitchen,” “the most influential home cook in America.”²³⁶ Author Alex Halberstadt spends much of the biopic exploring how such an “oddly Victorian black-and-white cooking manual” has managed to outsell its more glamorous food magazine competitors. Over the course of the piece, he concludes that Kimball’s tremendous success in fact stems from this unglamorous aesthetic, one in stark contrast to the current “cookbook pastoral” trend. Coined by critic Albert Cockburn, this trend, as Halberstadt defines it, conveys “the sense that the ideal dinner is a sit-down for 16 with candlelight and hydrangea and unbridled toasting, a pseudo-Mediterranean hedonism.” In contrast to this romantic culinary sensibility, the stern aesthetic of *Cook’s Illustrated* reflects its mundane, middle-class ethos. Cooking, according to Kimball, “should be about putting food on the table night after night and there’s nothing glamorous about it.” The goal of the magazine is correspondingly simple: to help readers, as Halberstadt puts it, “cook well at home.”

Driving Kimball’s disdain for the “cookbook pastoral” trend is his contempt for their belief that successful cookery relies on creativity. Halberstadt labels those who hold to this aesthetic model as “the relativists—those Pollyannas who insist that cooking is as much an art as a science and that a recipe’s effectiveness depends mostly on what a

²³⁶ Alex Halberstadt, “Cooking Isn’t Easy, and it Isn’t Creative.” *New York Times Magazine*, October 11th, 2012.

particular cook enjoys eating.” Kimball, in contrast, argues that cookery relies on material, rather than intellectual labor. “Cooking,” he argues, “isn’t creative, and it isn’t easy. It’s serious, and it’s hard to do well, just as everything worth doing is damn hard.”

In opposition to more highbrow, aesthetic foods, *Cook’s Illustrated*, offers what Halberstadt describes as utilitarian “middlebrow” fare containing “supermarket ingredients,” what Victorian readers would have called plain cooking. Determinedly utilitarian, Kimball “omits everything glossy cooking magazines have become known for,” such as travelogues, guides for creating sumptuous feasts, and wine columns. What Kimball offers instead is a culinary program enacted through his formal invention: the “bulletproof recipe,” which Halberstadt defines as recipes “worried into technical infallibility” after a prolonged stint of “empirically rigorous testing.” Through the bulletproof recipe, Halberstadt explains, Kimball looks to replace the prevailing belief that creativity trumps the recipe as a culinary epistemology with “faith in empirical perfection.”

What we can begin to perceive through Halberstadt’s biopic is that Kimball’s magazine is “oddly Victorian” not only in its aesthetic, but in its efforts to deploy scientific methods and knowledge as a means of constructing middle-class culinary ideologies and practices rooted in the virtues of economy and labor. Cookery for Kimball, as Halberstadt writes, consists not of “pseudo-Mediterranean hedonism” realized through culinary flights of fancy, but rather economically-prudent meals produced through continuous, daily work (“cooking should be about putting food on the table night after night,” the article quotes Kimball as saying). The labor at the heart of Kimball’s culinary epistemology, moreover, is inflected with a sense of duty, an

obligation not to sanctify—as in the Victorian era—but to conquer the culinary. “To cook well at home,” Halberstadt explains, “is to master the quotidian, to wrest a measure of control” over daily life in the home. (Indeed, Halberstadt describes attempts by Kimball’s employees to master a recipe for boiled eggs as a “Calvinist assault.”)

Like Victorian writers who sought to reform middle-class culinary practices, Kimball puts his “faith in science,” as Halberstadt puts it, turning to scientific methods as a means of realizing his culinary program. According to Halberstadt, what Kimball believes the middle-class cook needs is not personal creativity or intellectual freedom, which he ties to extravagance and “aspirational pipe dreams,” but rather culinary knowledge that has been created by a laboratory—namely, his laboratory. In his hit television show, “America’s Test Kitchen,” Kimball invites readers inside his space for culinary experimentation, allowing them to watch as his team of experts constructs the knowledge that eventually becomes the backbone of the bulletproof recipe.

Through the medium of his television show, Kimball, I suggest, offers contemporary middle-class audiences a modern version of the middle-class consumer model of culinary training we saw enacted in the mid-century domestic chemistry manual and the Victorian woman’s magazine. Readers, or in this case, viewers, do not participate in the labor of *knowledge* production, but rather are meant to watch and learn—and marvel. America’s Test Kitchen, Halberstadt writes, consists of “a hangar-size expanse of gleaming culinaria where throngs of aproned test cooks and interns turn the wheels of his enterprise.” The name and physical space of Kimball’s laboratory, moreover, makes literal the metaphorical and epistemological connection writers such as Accum traced between the laboratory and the kitchen—a connection I explored in Chapter One. Rather

than located in the home, however, this laboratory is awe-inspiringly commercial; a space created specifically to construct and disseminate scientific knowledge to the public.

Yet the program of economical middle-class cookery Kimball constructs relies not only on professional knowledge created in the public laboratory, but also on the importation of that knowledge into the middle-class kitchen. Enter the bulletproof recipe, that for Kimball becomes the agent that carries laboratory knowledge to the processes of everyday cookery. Kimball, Halberstadt explains, aims to reinstate the recipe as a legitimate approach to cooking, reforming readers' entrenched belief "that slavishly following directions is an implicit admission that you cannot cook." Kimball thus strikes a bargain with readers: "if they agree to follow the recipes as written," Halberstadt writes, "their cooking will succeed and they will be recognized by family and friends as competent or even expert in the kitchen."

What Halberstadt's biopic helps illuminate for us is that the recipe stands at the heart of a debate in our culinary landscape, a debate wherein questions of culinary epistemology and representation are deeply bound up in questions of social class. *Cook's Illustrated*, that is, positions its recipes and its empirical culinary epistemology as the acting agents of a middle-class culinary program designed specifically in opposition to aesthetic notions of cookery represented in the "glossy cooking magazines." Through "lavish photography," wine columns, and travelogues, as Halberstadt notes, these magazines promote a mode of cooking bound up in creativity, beauty, and exploration.

The empirically-developed bulletproof recipe, on the other hand, represents Kimball's efforts to save middle-class readers money and time, while still teaching them how to cook. The empirical process of "bulletproofing" recipes absorbs for the reader the

economic cost of waste—Halberstadt reports with astonishment the sheer amount of eggs test cooks burned through in their attempts to bulletproof the recipe for boiled eggs—as well as time. Following bulletproof recipes guarantees the time readers invest will produce a respectable meal, not a culinary disaster.

Reading between the lines in Halberstadt’s biopic, what we can deduce is that, for Christopher Kimball, the empirically-validated bulletproof recipe becomes not simply a narrative agent of meal making but an agent of middle-class ideology. Kimball frames cookery as a decidedly middle-class endeavour; the bulletproof recipe becomes a mechanism for engaging readers in a culinary program that reflect and cultivate economy and labor, turning meal-making into an exercise of particular kinds of values.

If the recipe for Kimball becomes a means of middle-class culinary reliability, for Michael Ruhlman—chef, writer, creator of apps for the kitchen—the recipe becomes a “chain” preventing middle-class readers from moving up the culinary ladder. In 2009, Ruhlman published *Ratio: the Simple Codes Behind the Craft of Everyday Cookery*, a work he later described as “a completely original book, a book like no other.”²³⁷ As the title suggests, what is “completely original” about *Ratio* is that it teaches cookery through math, and more specifically, through the mathematic codes at work in ingredient combinations. Ruhlman, like Kimball, devotes himself to helping middle-class readers learn how to cook. Yet rather than define middle-class cookery through its opposition to the more rarified realm of professional cookery, Ruhlman in fact sets out to help his readers achieve the kind of cookery produced by professional chefs. The slogan on his accompanying webpage - “translating the Chef’s Craft for Every Kitchen” –suggests that

²³⁷ Michael Ruhlman, “Why Awards Matter to Me” 21 May 2012 <http://ruhlman.com/2012/05/why-awards-matter-to-me/>.

Ruhlman's purpose is not only to help readers cook *like* chefs; rather, Ruhlman offers to be readers' interpreters, to help them understand rather than simply emulate.

In *Ratio*, Ruhlman presents a mode of cookery that promises an upward mobility for the average cook. His culinary agenda, like Kimball's, hinges on the recipe. Whereas Kimball promotes the bulletproof recipe as a means of middle-class culinary success, however, Ruhlman boldly declares the recipe to be worthless as a means of culinary instruction. "There are hundreds of thousands of recipes out there, but few of them can help you be a better cook in any substantial way," he argues. "In fact, they may hurt you as a cook by keeping you chained to recipes. Getting your hands on a ratio is like being given a key to unlock these chains. They free you" (xiii). "When you know a culinary ratio," Ruhlman explains, "it's not like knowing a single recipe. It's instantly knowing a thousand."

In its rejection of the recipe as a culinary epistemology, *Ratio* presents a version of middle-class cookery in which success is tied not to the virtues of labor or economy enacted through the recipe but rather to the intellectual comprehension of an abstract body of knowledge. "With thirty-three ratios and suggestions for enticing variations, *Ratio*," Ruhlman claims, "is the truth of cooking: basic preparations that teach us the fundamentals of cooking" (x). In this description, the material labor of cookery is replaced with a description of intellectual labor: the text offers "ratios," "suggestions" and "variations," not recipes or techniques.

The emphasis on cookery's intellectual rather than technical demands continues throughout the text. In his ratio for mayonnaise, for example, Ruhlman writes that:

[i]f you know the ratio for a mayonnaise, you don't know just mayonnaise—which is an amazing preparation when you make it yourself . . . you know a

lemon-shallot dipping sauce for a steamed artichoke. The elegant hollandaise, a thick butter sauce, becomes a state béarnaise sauce when you pack it with fresh tarragon. Know the hollandaise ratio and technique rather than a specific recipe for hollandaise sauce, and you can infuse it with chillis, or reduced red wine and rosemary for roasted leg of lamb. There's no end to what you can do in the kitchen when you know a ratio. (xiv)

Notice the number of times he uses the word “know”—“if you *know* a ratio for a mayonnaise, . . . you *know* a lemon-shallot dipping sauce; . . . *Know* the hollandaise ratio There's no end to what you can *do* in the kitchen when you *know* a ratio” (emphasis mine). The primary emphasis here is not trained hands but a trained mind. Readers' ability to “*do*” in the kitchen—to labor over food—is predicated on knowing. Whereas Kimball's bulletproof recipes present readers with the end result of an empirical investigation, involving them only in the final labor of making the meal, for Ruhlman, intellectual understanding precedes the act of cooking.

Indeed, cooking and baking by ratio tantalizes with the possibility of eradicating the need for technical instructions altogether, relying instead only on math. In his chapter “Introduction: the Truth of Cooking,” Ruhlman presents this fantasy of mathematic culinary representation through the story of his visit to Uwe Hestnar, celebrated chef at the Culinary Institute of America, during his research for a new cookbook. Hestnar dismissed the need for another cookbook, remarking “derisively” that “the shelves are bulging with cookbooks.” Hestnar instead posted a question: “What makes the culinary arts tick?” As Ruhlman recounts:

I don't know if he's actually directing this to me or offering it rhetorically. He has more or less lofted it into the air. He lifts his index finger, then spins in his chair to a file behind him, as if quickly reaching for a bat to knock the question into the bleachers. He riffles manila folders and turns to me with two sheets of paper. They contain a chart or grid covering a page and a half. This, he says, are all one truly needs. Here are the fundamentals of the culinary arts—all of Escoffier, Larousse, Carême, as well as Julia Child, James Beard, *The Joy of Cookery*, and

the Food Network—in their entirety, distilled to a page and a half. ‘I would like to sell *this* for fifty dollars,’ he says, ‘but no one would buy.’ . . . I examine the sheets—a list of twenty-six items and their ratios. Along the top run the numbers 1, 2, 4, 6, 8, and 16. Along the sides are rows divided by base products such as aspic, pâte à choux, sabayon, court boillouin orindaire. (xxii)

Rhulman describes this moment in a tone of humor, but also in one of wonder, writing that he finds the document “mysteriously thrilling.” The awe of this moment comes from two startling relationships suggested by the paper: the relationship of math with culinary art, with creative genius, and the juxtaposition of the dazzling list of celebrity names with the spartan textual form. Captured in this “primitive culinary spreadsheet,” this mere “two sheets of paper,” culinary genius is stripped of any language beyond dish names, distilled instead into raw math, pure numbers, sheer grid form.

What culinary form tells us here is that in the realm of the culinary, disciplinary boundaries can get messy. On the one hand, some cookery writers hold fast to the intellectual values and methods of a particular discipline; Kimball’s flat statement that “cooking isn’t creative” and his bulletproof recipes, for example, leave little room for interpretation. Yet Kimball’s coldly scientific epistemology, as we have seen, plays into his beliefs that middle-class readers require prescriptive cookery practices. While ideologies of social class motivate Kimball’s empiricist approach, cookbooks such as Simon Quellen Field’s 2011 *Culinary Reactions: the Everyday Chemistry* display clear connections between the work’s culinary epistemology and the notions of gender it advances. In the opening sentences of its Introduction, Field makes this connection clear. “Your mother was a chemist. In the kitchen she experimented with acids and bases . . . She denatured proteins, crystallized compounds, reacted enzymes with substrates. In

other words, she cooked your dinner.²³⁸ The passage offers a revisionist account of women's work, rhetorically transforming domestic labor into the actions of a chemist. Indeed, the language of the passage effects a total chemical takeover of the kitchen. All verbs point to chemical activity: experiment, denature, crystallize, react, nurture. Ingredients become chemical nouns: acids and bases, and so forth. The back cover offers a nearly identical passage:

Every time you follow or modify a recipe you are experimenting with acids and bases, emulsions and suspensions, gels and foams. In your kitchen you denature proteins, crystallize compounds, react enzymes with substrates, and nurture desired microbial life while suppressing harmful microbes. And unlike in a laboratory, you can eat your experiments to verify your hypotheses. (Back cover)

In contrast to the earlier quotation, which describes the reader's mother, here the text directs itself to the reader. Repeating the passage but changing the audience creates a heritage or lineage of women's work figured as chemical investigation. *Culinary Reactions* thus offers women a new identity in the kitchen, replacing domestic labor with chemical experiment.

In contrast to the bulletproof recipe, and *Culinary Reactions*, cookbooks such as *Ratio* present deeply interdisciplinary approaches to culinary learning. Part of the shock Ruhlman experiences when seeing the "culinary spreadsheet" is that what he believed to be a purely aesthetic form of culinary knowledge—creativity—is in fact textually rendered in and made visible through a grid; that the textual forms of math, in other words, are the favored tools of the artiste. In *Ratio*, then, such "interdisciplinarity" lies at the heart of the text's form, its replacement of the recipe with ratios. By studying ratios

²³⁸ Simon Quellen Field, *Culinary Reactions: the Everyday Chemistry of Cooking* (Chicago: Chicago Review Press 2011), dust jacket and xiii.

rather than making recipes, everyday readers become not only “unchained” from the recipe, but are initiated into what Ruhlman calls culinary “truth”—the mathematic body of knowledge created by the great chefs.

Ultimately, Ruhlman offers to help readers escape print instructions altogether, even those rendered as math. After offering the ratio for bread, for example, he writes: “What can you do, now that you know the ratio for bread? You can make fresh bread without opening a single book, or scouring a website for random recipes” (xi-xii).

Intellectual, specifically mathematic, knowledge promises to “unchain” readers not only from individual recipes but from the materiality of the text altogether. Through passages such as these, *Ratio* offers its readers visions of a cookbook-free kitchen, a space where their own minds, rather than book or a computer, guides culinary production.²³⁹

Whereas Ruhlman turns to the ratio in order to initiate middle-class readers into a purely intellectual approach to the kitchen practiced by the great chefs, Alice Waters, in her popular 2007 cookbook *The Art of Simple Food*, offers similar readers “lessons” and “principles” meant to initiate them into her “delicious revolution.”²⁴⁰ A pioneer of California cuisine, or a mode of cooking that treasures food’s sensory properties, Waters has become one of the most influential cooks of our cultural moment. Read alongside Kimball and Ruhlman, her cookbook displays expected differences as well as striking similarities. All of these writers, I suggest, work to offer the middle-class cook access to a

²³⁹ Indeed, Sherman describes Ruhlman’s work as the “anti-cookbook” in its efforts to “liberate” readers (101). Sherman likewise points to Ruhlman’s ratios as a means of freeing readers from the recipe, although she does so in order to compare this culinary methodology to the apprenticeship system in the eighteenth century, arguing that “the idea that rules matter less than understanding is just a modern update of the earlier notion that apprenticeship was the route to true ability” (101). While a similar sensibility of “understanding over rules” exists here and in the Victorian cookbook, the kind of “understanding” that mattered in the nineteenth century, as we have seen, was based on scientific and aesthetic knowledge rather than technical craft.

²⁴⁰ Alice Waters, *The Art of Simple Food* (New York: Clarkson Potter 2007), i.

new culinary identity: Kimball's bulletproof recipes help readers cook respectably and reliably; Ruhlman's ratios elevate the everyday cook intellectually, "unchaining" readers from recipes. Waters, too, seeks to help the middle-class reader learn to prepare simple, fresh, delicious food. Yet both Kimball and Ruhlman ultimately seek to maximize the ease of culinary production--Kimball through the recipe, Ruhlman by banishing first the recipe, and ultimately the cookbook itself.

Waters, however, sublimates this productive model of the kitchen in her work. *The Art of Simple Food* is not a cookbook as much as it is a primer to a "revolution," a whole way of living. This way of living, in turn, becomes its own culinary epistemology, a means of helping readers learn the art of simple food. The sub-title of *The Art of Simple Food* hints at the relationship between living and cooking: "Notes, Lessons, and Recipes from a Delicious Revolution." What I want us to notice here is the hierarchy, or order, of information in the title: notes, first, then lessons, and finally recipes. This hierarchy of knowledge is embedded in the structure of the book. Flipping through the text, particularly its early chapters, it takes effort to locate recipes; long prose paragraphs are instead its dominant textual feature, with short recipes embedded throughout. The form of *The Art of Simple Food* thus reveals its culinary philosophy: a "delicious revolution" does not happen simply through the act of preparing food; recipes come last in the textual order. Rather, readers hoping to prepare simple food must first work their way through notes and lessons.

The purpose of these notes and lessons, as she explains in the introduction, is to train readers in the fundamentals of culinary knowledge. "Good cooking is no mystery," she explains. "You don't need years of culinary training, or rare and costly food stuffs, or

an encyclopedic knowledge of world cuisines.” Rather, she argues, “[y]ou need only your own five senses” (4). Like Kimball, Waters lauds the economic virtue of her culinary program. Dismissing the notion that simple food relies on “rare” or “costly food stuffs,” or require sophisticated cultural experiences, readers, Waters argues, already have what they need to be good cooks: their “five senses.” Whereas Ruhlman suggests that the whole of culinary knowledge can be understood by turning to numbers, Waters asks her readers to look not to an external way of knowing but to their own bodies as the basis of culinary understanding.

Waters, seeking to train readers in the cultivation of the senses, develops “notes,” “lessons” and “principles.” The opening section of the work is a series of chapters that trains readers in the process of ingredient selection, teaching them to use their senses as a means of choosing the best ingredients. The following section turns to the kitchen, teaching “essential cooking techniques, with details explains of the why and wherefores and simple model recipes” (5). In the section, Waters embeds short recipes within longer prose explanations meant to contextualize the history, technique, and sensory potential of the food. “By cooking your way through these lessons, tasting and learning from your successes (and your mistakes),” she writes, “you will get to know some fundamental techniques by heart and you won’t have to look them up again” (5).

While this opening section on the “foundation” of cooking contains recipes, the language of “lessons” positions the recipe as only one component of the larger educational purpose of each lesson. Indeed, in instructing readers to “tast[e] and lear[n] from their successes, Waters positions the reader’s tongue, rather than the recipe, as the ultimate means of culinary instruction. Readers, that is, should trust their own senses as

the final source of authority. The outcome of this sensory training, Waters writes, is that readers will be able “to cook with ease and confidence, inspired by recipes—rather than being ruled by them—and free to enjoy the sheer pleasure of preparing and sharing simple food with your friends and family” (5).

While Waters, like Ruhlman, promises readers that eventually they will be able to cook without recipes, the stakes for cooking without recipes are much higher in *The Art of Simple Food*. Cooking without recipes, in *Ratio*, becomes a mark of individual status, an intellectual achievement that elevates the middle-class cook to the level of a Chef. In *The Art of Simple Food*, cultivating the senses as a means of moving beyond recipes leads not only to “inspiration”—a personal intellectual value; rather, readers seek to cultivate inspiration in the service of creating stronger family units and communities. Once readers are no longer “ruled” by recipes, that is, they are “free to enjoy the sheer pleasure of preparing and sharing simple food with . . . friends and family” (5). Cultivating the senses as a means of gaining freedom from the recipe, in *The Art of Simple Food*, ultimately becomes a project not for the cook, but rather for the cook in relation to her community.

Indeed, in addition to the “Notes” and “Recipes,” Waters offers a series of nine “principles of a delicious revolution,” principles that she positions as “the underlying principles of good cooking,” which “are the same everywhere” (5). “These principles have less to do with recipes and techniques than they do with gathering good ingredients,” she writes, “which for me is the essence of cooking” (5). Learning to gather good ingredients requires sensory understanding, which she makes the foundational project of her work. The “principles” thus position trained senses at the center of a web

of social, economic, and even ethical issues: readers are urged to “eat locally and sustainably,” “eat seasonally,” to “shop at farmer’s markets,” to “plant a garden,” to “conserve, compose, and recycle,” to “cook simply, engaging all your senses,” to “remember food is precious.” As these principles suggest, cooking simply, for Waters, is not a process confined to the kitchen but rather a process of caring for the family, the community, and even the earth.

By reading these contemporary cookbooks alongside their nineteenth-century predecessors, what we learn is that cookbooks today continue to negotiate the tension between the recipe and its frame, or the other knowledges writers seek to locate in the culinary. For writers of both eras, effectively transmitting such knowledge is bound in larger social agendas. Mid-Victorian writers believed the health of their bodies and of the middle-class home was at stake; Ruhlman seeks to elevate the middle-class cook by initiating that cook into the mathematic “codes” of cookery; Waters, in turn, offers to help her middle-class readers cultivate a palate that yearns for foods from the farmer’s market rather than the supermarket.

Victorian writers, as we have begun to see, navigated the tension between technical and theoretical by continuously reworking the recipe’s relationship to—or embeddedness within—its larger frame. These writers, as we have seen, labored to embed, re-embed, and revise the recipe within new and increasingly complicated textual “frames.” Yet even as they troubled and re-contextualized the formal element of the recipe, they nevertheless positioned the recipe as a central epistemological feature of their larger culinary—and social—aims.

By looking closely at the same formal bond in our modern context, what we find is that some of today's most famous and revered chefs boldly seek not to strengthen but in fact to sever that tie. The textual tie Ruhlman initially creates between ratios and recipes ultimately becomes a metaphorical "chain." The goal of reading his cookbook, that is, is to gather a body of mathematic knowledge that can "unchain you from recipes and set you free." Waters, whose work aims to help readers achieve her simple, aesthetic cuisine, promises not "freedom," as Ruhlman does, but "inspiration."

Waters and Ruhlman are not alone in their promises; other cookbooks in our modern context similarly frame the recipe as a kind of training wheels for the amateur cook—a textual device that can be discarded once readers are confident enough to enter into their kitchens alone. Writing for the "servantless American cook," or middle-class housewife in 1961, Julia Child, in her seminal *Mastering the Art of French Cooking*, describes the tie to the recipe not through the language of slavery and "rule" that we see in Ruhlman and Waters, but through a different, more metaphorical kind of bondage: marriage. Once "you . . . understand the fundamental techniques," she explains, "[you will] gradually be able to divorce yourself from a dependence on recipes" (xxv).

What, then, can we make of the trouble contemporary cookbook writers take to explain the presence of recipes in their work, to embed them, to use them, only to then rhetorically discard them from the text? Christopher Kimball, whose bulletproof recipes stand in opposition to a culinary culture increasingly uncomfortable with following recipes, offers one interpretation. "At the core of [*Cook's Illustrated*] M.O. are two intrepid observations Kimball has made about the innermost psychology of home cooks," Halberstadt writes. "Namely that they 1) are haunted by a fear of humiliation, and 2) will

not follow a recipe to the letter, believing that slavishly following directions is an implicit admission that you cannot cook. (When Kimball laid this out for me, I shuddered with recognition.)”

Halberstadt’s language of the “slavishness” of the recipe echoes Ruhlman’s metaphor of readers “enchained” by the recipe. Such language in fact has quite a long history in culinary literature. In his 1873 lectures at the Third International Exhibition, John Buckmaster argued that “[p]erfection” could not be “obtained by the slavish following of recipes.” Instead, he writes that “[m]uch must be left to the judgment of the cook (vii-viii).” In all of these examples, the language of enslavement rhetorically places the recipe in opposition to the “freedom” to cook well, or through personal inspiration. Critics of Kimball’s bulletproof point to this lost gustatory freedom and intellectual creativity as the recipe’s fatal flaw. “Kimball’s success and his faith in empirical perfection tend to provoke asperity from competitors,” Halberstadt notes, quoting the *Time*’s food writer Melissa Clark. ““Those recipes stifle the home cook,” Clark argues, ““because they leave no room for options. Only you know how much garlic you like and how much salt you prefer.”” Clark articulates the culinary sensibility of the “Pollyannas—those who insist that cooking is as much an art as a science and that a recipe’s effectiveness depends mostly on what a particular cook enjoys eating,” as Halberstadt described it.

One way we can understand the trouble contemporary writers take to work the recipe out of the text, at least rhetorically, is to interpret such rhetorical moves as marketing strategies. “It’s why readers buy cookbooks,” Sherman argues. “[K]nowing the basics, one can be creative” (101). In a cultural moment where readers deeply believe that

following recipes is “an implicit admission that you cannot cook,” cookbooks that offer recipes as their primary epistemology would seem to make a serious marketing blunder. Indeed, cookbooks that rely heavily on recipes, such as Matt Lee and Ted Lee’s 2010 *The Lee Bros. Southern Cookbook*, make haste in their introductions to undercut the imperative nature of their recipes. “Recipes are suggestive architecture,” the Lee brothers write, “and understanding the basic structure of a well-designed recipe frees you to make informed choices based on what you like, how much time you’ve got, what’s in your pantry, what’s within your budget, and who’s coming to dinner. That unbound spirit is among the many insights we hope to provide in this cookbook.”²⁴¹

Readers can depart from the Lee brothers’ recipes, in other words, for a variety of reasons. Whether or not readers choose to follow their recipes to the letter, the Lee brothers suggest, depends not only on gustatory taste but also on for reasons that are less glamorous: how much money they have, how much time they can invest in cooking, whether or not they made it to the store that weekend, or whether or not they can afford the ingredients listed in a certain recipe, and so forth.

What the Lee brothers suggest, that is, is that a recipe dictates not only the steps of the cooking process, but that it also makes certain assumptions about its readers, their resources, and their lives. To combat this prescriptiveness, they offer instead “suggestive recipes”—recipes that attempt to account for readers’ personal stories.

On the one hand, the notion of “suggestive recipes,” or that readers can bring to a recipe what they have, functions as a brilliant marketing strategy for this particular cookbook. As a text, the cookbook navigates many tensions: it pitches itself to

²⁴¹ Matt Lee and Ted Lee, *The Lee Bros. Southern Cookbook: Stories and Recipes for Southerners and Would-Be Southerners* (New York: W.W. Norton & Company), 11.

“Southerners and Would-Be Southerners”; it pairs “Downtown” Charleston glamor and historical “receipts” with recipes rooted in the rural culture of the South Carolina lowcountry; it offers a chapter on “Poultry, Pork, Beef, and Game” clearly meant to evoke southern traditions of meat-making traditionally performed by men.²⁴² The cookbook, in other words, navigates tensions of social class, of masculine and feminine, of urban and rural, of traditional and modern, of Southern and “would-be” Southern.

What I want to argue is that the description of their recipes as “suggestive architecture” in fact goes beyond simply a strategy to get more readers, or to reassure non-southern readers that she can cut the salt to her taste. Rather, it is in fact an articulation of the culinary and cultural project of the cookbook: a work, that is, that pays homage to traditional southern cultures and foodways even as it opens them up to new currents. This culinary and cultural project in turn gets worked out in part through the “suggestive recipes” themselves. In the cookbook, recipes are frequently followed by suggestions for variations. At times, these variations open the door for readers to add a modern twist to a traditional southern dish; at other times, they leave room for personal gustatory taste; at other times, suggestions are meant to account for economic or social considerations, rendering a dish more or less expensive as the reader or occasion requires. The Lee brothers’ description of their recipes as “suggestive architecture,” together with the actual recipes themselves, I argue, thus represents more than a marketing strategy meant to reassure readers that they will not be “enslaved” to the book’s recipes. Rather, the recipe’s “suggestiveness” becomes the vehicle for these writers to create a cookbook that looks to redefine Southern foodways for a modern age; one, that is, that invites

²⁴² Ibid, Frontispiece.

“Would-be Southerners” to try on being Southern by bringing their own identities to bear on the cooking experience itself.

The Lee brothers close their introduction with a metaphor that encapsulates the relationship between their recipes and the work’s culinary and cultural sensibility: “We hope you’ll use this cookbook like a comfortable second home, with familiar rooms, where you feel free to rearrange the lamps and change the drapes to suit your taste, and where you are always welcome. Come on in” (13). The metaphor evokes the spirit of Southern hospitality and extends the metaphor of recipes as “suggestive architecture” to include the cookbook itself. By framing the metaphorical home as a “second home,” furthermore, the passage underscores the text’s invitation for readers from different cultures and backgrounds to “rearrange and “change” their recipes, shaping them to meet their personal gustatory tastes, cultural stories, and even economic needs.

What I want to suggest in closing, then, is that to interpret a contemporary cookbook’s inclusion or dismissal of the recipe only as the author’s submission to a recipe-averse culture is to lose a rich means of understanding that cookbook and its social sensibilities. What I have shown throughout this Coda—and this dissertation as a whole—is that those who write culinary literature, whether Victorian or contemporary, in fact expend a great amount of effort on the recipe’s place and function within their work. This effort, I have argued, is not only motivated by questions of epistemology, or what kinds of knowledge to teach. Rather, questions of epistemology and representation in the cookbook are in turn motivated by and bound up in larger, socially-inflected concerns.

Within genres of culinary writing, I suggest, discussions of the recipe become a means for these writers to articulate their beliefs about and aspirations for their readers.

Within the contemporary cookbook, we have seen a wide range of visions: Kimball pledges to take the stress and frustration out of the labor of everyday cookery; Ruhlman promises readers upward culinary mobility through math; the Lee brothers stretch their door open wide, welcoming “Southerners and Would-Be Southerners” to build new foodways while enjoying the tastes of Southern history; Waters hopes to help her readers learn to cook by “inspiration” so that cooking becomes a communal activity rather than a communion between the reader and the text. Contemporary writers, as these examples suggest, craft a diversity of frames aimed to empower readers to imagine new possibilities, identities, and experiences for their middle-class readers.

From this modern vantage point, what we can now see more clearly is that, while Victorian culinary writers similarly navigate the tension between the recipe and its frame, or between technical cookery and new bodies of knowledge, they constructed their frames towards very different ends. Rather than deploying new culinary knowledges as a means of opening up social identities, that is, experimental, principled, and even visual cookery becomes for Victorian writers a means of prescribing and re-inscribing certain social regimes and identities. The Angel remains at the hearth--even the scientific hearth.

Works Cited

- “A School of Cookery,” *The Ladies’ Treasury*. London. 1873.
- A.B. “The Englishwoman’s Economist.” *The Englishwoman’s Domestic Magazine*, London, 1876.
- Accum, Friedrich Christian. *Culinary Chemistry: Exhibiting the Scientific Principles of Cookery, with Concise Instructions for Preparing Good and Wholesome Pickles, Vinegar, Conserves, Fruit Jellies, Marmalades, and Various Other Alimentary Substances Employed in Domestic Economy, with Observations on the Chemical Constitution and Nutritive Qualities of Different Kinds of Food; with Copper Plates*. London, Published by R. Ackermann, 1821.
- Acton, Eliza. *Modern Cookery for Private Families*. London, Longmans, Green, Reader, and Dye, 1851.
- *Modern Cookery, in All Its Branches: Reduced to a System of Easy Practice, for the Use of Private Families. In a Series of Receipts, Which Have Been Strictly Tested, and Are given with the Most Minute Exactness*. 2nd ed., Philadelphia, Lea and Blanchard, 1845.
- Allen, Emily. “Culinary Exhibition: Victorian Wedding Cakes and Royal Spectacle.” *Victorian Studies*, vol. 45, no. 3, 2003, pp. 457–484.
- Appelbaum, Robert. “Rhetoric and Epistemology in Early Printed Recipe Collections.” *Journal for Early Modern Cultural Studies*, vol. 3, no. 2, 2003, pp. 1–35.

Whitaker, Arnold. *Oxford's English Cookery Books to the Year 1850*. London, 1913.

Attar, Dena. "Keeping up Appearance: The Genteel Art of Dining in Middle-Class Victorian Britain." *The Appetite and the Eye: Visual Aspects of Food and Its Presentation within Their Historic Context*, Edited by C. Anne. Wilson, Edinburgh University Press, Edinburgh, 1987, pp. 125–140.

----- . *Wasting Girls' Time: the History and Politics of Home Economics*. London, Virago, 1990.

----- . *A Bibliography of Household Books Published in Britain, 1800-1914*. London, Prospect Books, 1987.

Bakewell, Robert. "The Chemistry of Cookery." *The British Mothers' Journal*, London, 1861.

Barker, Mary Anne. *First Lessons in the Principles of Cooking*. London, Richard Clay And Sons, 1886.

Barker. *First Lessons in the Principles of Cooking: in Three Parts*. London, Macmillan and Co., 1874.

Beetham, Margaret, and Kay Boardman, editors. *Victorian Women's Magazines: an Anthology*. Manchester, Manchester University Press, 2001.

Beetham, Margaret. "Of Recipe Books and Reading in the Nineteenth Century: Mrs Beeton and Her Cultural Consequences." *The Recipe Reader: Narratives, Contexts, Traditions*, Edited by Janet Floyd and Laurel Forster, University of Nebraska Press, Lincoln, 2003.

- . "Of Recipe Books and Reading in the Nineteenth Century: Mrs Beeton and Her Cultural Consequences." *The Recipe Reader: Narratives, Contexts, Traditions*, edited by Janet Floyd and Laurel Forster, University of Nebraska Press, Lincoln, 2003.
- Bernays, Albert James. *Household Chemistry: or, Rudiments of the Science Applied to Every-Day Life*. London, S. Low, 1852.
- Blackburn, Helen. "Article IV." *The Englishwoman's Review*, London, Issue LII, 1887.
- Bloom, Lynn Z. "Consuming Prose: The Delectable Rhetoric of Food Writing." *College English*. 70.4, *Special Focus: Food*. Mar. 2008. pp. 346-362.
- Brake, Laurel, and Marysa Demoor. *Dictionary of Nineteenth-Century Journalism*. Gent, London, 2009.
- Buckmaster, John. *Buckmaster's Cookery: Being an Abridgment of Some of the Lectures Delivered in the Cookery School at the International Exhibition for 1873 and 1874: Together with a Collection of Approved Recipes and Menus*, George Routledge, London, 1874.
- Cassell's Dictionary of Cookery. With ... Plates, Etc.* London, Cassell, Petter & Galpin, 1875.
- Cheeke, Stephen. *Writing for Art: the Aesthetics of Ekphrasis*. Manchester, Manchester University Press, 2008.
- Clarke, Meaghan. "'Bribery with sherry' and 'the influence of weak tea': Women Critics as Arbiters of Taste in the late-Victorian and Edwardian Press." *Visual Culture in Britain* 6.2. Winter, 2005. pp. 139-55.

- Colquhoun, Kate. *Taste: the Story of Britain through Its Cooking*. New York, Bloomsbury USA, 2007.
- “Cookery.” *The Ladies’ Treasury*. London, 1887.
- “Cooking at the International.” *The Times*. London, 25 Apr. 1873. pp. 4.
- Cuykendall, Charles. “Romantic Interests: Peacock’s Science of Cookery.” *NYPL Blogs*, 18 Oct. 2013, www.nypl.org/blog/2013/10/18/romantic-interests-peacocks-science-cookery.
- Daston, Lorraine, and Peter Galison. *Objectivity*. New York, Zone Books, 2008.
- Davy, Humphrey. “Elements of Agricultural Chemistry.” *Edinburgh Review*, vol. 22, Oct. 1813 - Jan 1814, pp. 267.
- Dolan, Brian “The Language of Experiment in Chemical Textbooks: Some Examples from Early Nineteenth-Century Britain.” *Communicating Chemistry: Textbooks and Their Audiences, 1789-1939*, Edited by Bernadette Bensaude-Vincent and Anders Lundgren, Science History Publ., Canton (Mass.), 2000.
- Driver, Elizabeth. *A Bibliography of Cookery Books Published in Britain, 1875-1914*. London, Prospect Books, 1989.
- Eamon, William. *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture*. Princeton, NJ, Princeton University Press, 1994.
- Elias, Megan J. *Stir It up: Home Economics in American Culture*. Philadelphia, University of Pennsylvania Press, 2008.
- Field, Simon. *Culinary Reactions: The Everyday Chemistry of Cooking*, Chicago Review, 2011.

- Flint, Kate. *The Victorians and the Visual Imagination*. Cambridge, Cambridge University Press, 2000.
- Golinski, Jan. *Science as Public Culture: Chemistry and Enlightenment in Britain, 1760-1820*. Cambridge, Cambridge University Press, 1992.
- Gooday, Graeme. "Placing or Replacing the Laboratory in the History of Science?" *Isis*, vol. 99, no. 4, 2008, pp. 783–795.
- Gower, Charles Foote. *The Scientific Phenomena of Domestic Life: Familiarly Explained*. London, Longman, Etc., 1847.
- Gratzer, Walter. *Terrors of the Table: the Curious History of Nutrition*. Oxford, Oxford University Press, 2005.
- Gray, John. "The Chemistry of Food and Cookery," *The Girls' Own Paper*, London, 1882.
- Halberstadt, Alex. "Cooking Isn't Easy, and It Isn't Creative." *New York Times Magazine* 11 Oct. 2012:
- Hamilton, James. *A Life of Discovery: Michael Faraday, Giant of the Scientific Revolution*. New York, Random House, 2002.
- Horrocks, Jamie. "The Gospels of Aestheticism." Diss. *Indiana University Bloomington*, 2010.
- "Household Books Published in Britain: 1475-1914." *Household Books Published in Britain: All Volumes*, University of California, Davis, householdbooks.ucdavis.edu/.
- Humble, Nicola. "Introduction." *Mrs Beeton's Book of Household Management*, edited by Nicola Humble, Oxford University Press, 2000.

- . *Culinary Pleasures: Cookbooks and the Transformation of British Food*.
London, Faber and Faber Ltd., 2005.
- Kavey, Allison. *Books of Secrets: Natural Philosophy in England, 1550-1600*. Urbana,
University of Illinois Press, 2007.
- Keene, Melanie. "Domestic Science: Making Chemistry Your Cup of
Tea." *Endeavour*, vol. 32, no. 1, 2008, pp. 16–19.
- King, E.M. "The Science of Domestic Economy." *Victoria Magazine*, London 1875.
- Knight, David. "Communicating Chemistry: The Frontier between Popular Books and
Textbooks in Britain during the First Half of the Nineteenth Century."
Communicating Chemistry: Textbooks and Their Audiences, 1789-1939, Edited
by Bernadette Bensaude-Vincent and Anders Lundgren, Science History Publ.,
Canton (Mass.), 2000.
- Lee, Matt, and Ted Lee. *The Lee Bros. Southern Cookbook: Stories and Recipes for
Southerners and Would-Be Southerners*. New York, W.W. Norton, 2006.
- Leigh, Percival. "'The Mysteries of a Tea-Kettle.'" *Household Words*, vol. 34, 16 Nov.
1850, pp. 498–502.
- . "The Chemistry of a Pint of Beer." *Household Words*, vol. 47, 15 Feb.
1851, pp. 498–502.
- Leonardi, Susan J. "Recipes for Reading: Summer Pasta, Lobster á la Riseholme, and
Key Lime Pie." *PMLA*, 104.3, May 1989.
- Lieffers, C. "'The Present Time Is Eminently Scientific': The Science of Cookery in
Nineteenth-Century Britain." *Journal of Social History*, 45.4, Aug. 2012, pp.
936–959.

- Manthorpe, Catherine. "Science or Domestic Science? The Struggle to Define an Appropriate Science Education for Girls in Early Twentieth-Century England." *History of Education*, vol. 15, no. 3, 1986, pp. 195–213.
- Marcet, Jane. *Conversations on Chemistry: in Which the Elements of That Science Are Familiarly Explained and Illustrated by Experiments*. London, Printed for Longman, Hurst, Rees, and Orme, 1806.
- Mars, Valerie. "A La Russe: the New Way of Dining." *Luncheon, Nuncheon and Other Meals: Eating with the Victorians*, edited by C. Anne. Wilson, Alan Sutton, Stroud, 1994, pp. 117–156.
- McKeon, Michael. *The Origins of the English Novel, 1600-1740*. Baltimore, MD, Johns Hopkins University Press, 1987.
- . *Theory of the Novel: a Historical Approach*. Baltimore, MD, Johns Hopkins University Press, 2000.
- McLean, Alice L. *Aesthetic Pleasure in Twentieth-Century Women's Food Writing: The Innovative Appetites of M.F.K. Fisher, Alice B. Toklas, and Elizabeth David*. New York, Routledge, 2012.
- Melville, Wayne. "Michael Faraday's Popular Science Lectures, Percival Leigh, and Charles Dickens: Science for the Masses in 'Household Words' (1850-51)." *The Victorian Web*, Victorian Web, 17 June 2010, www.victorianweb.org/authors/dickens/faraday2.html.
- Mendelsohn, Everett. "The Emergence of Science as Profession in 19th Century Europe." *The Management of Scientists*, by Everett Mendelsohn, edited by Karl Hill and Everett Mendelsohn, Beacon Press, Boston, 1963.

- Mendelson, Anne. "The Peacock-Meredith Cookbook Project: Long-Sundered Manuscripts and Unanswered Questions." *Biblion: The Bulletin of The New York Public Library*, 2.1, 1993, pp. 77–99.
- Mennell, Stephen. *All Manners of Food: Eating and Taste in England and France from the Middle Ages to the Present*. Urbana, University of Illinois Press, 1996.
- Merchant, Carolyn. "€ The Violence of Impediments€ : Francis Bacon and the Origins of Experimentation." *Isis*, vol. 99, no. 4, 2008, pp. 731–760.
- Meredith, Mary Ellen. "Dissertations on Cookery." The Whitney Collection of the Manuscripts and Archives Division at the New York Public Library. Indexed as MS16.
- Middlemas, Margaret, and D.H. Fry. "The Identity of Home Economics." *Housecraft*, Pitman, London, 1973.
- Pater, Walter. "The School of Giorgione." *Studies in the History of the Renaissance*, Oxford University Press, Oxford, 2010.
- Pennell, Elizabeth Robins. *The Delights of Delicate Eating*. Urbana, University of Illinois Press, 2000.
- "Popular Cookery." *The Times*. London, 12 May 1873. pp. 9.
- Prettejohn, Elizabeth. *Art for Art's Sake: Aestheticism in Victorian Painting*. New Haven, Yale University Press, 2008.
- Reid, Hartelaw. *Cookery, Rational, Practical, and Economical: Treated in Connexion with the Chemistry of Food*. Edinburgh, 1853.

- Rohan, Liz. "A Material Pedagogy: Lessons from Early-Twentieth-Century Domestic Arts Curricula." *Pedagogy: Critical Approaches to Teaching Literature, Language, Composition, and Culture*, vol. 6, no. 1, Jan. 2006, pp. 79–101.
- Ruhlman, Michael. "Why Awards Matter to Me." *Michael Ruhlman*, Michael Ruhlman, 21 May 2012, ruhlman.com/2012/05/why-awards-matter-to-me/.
- Schaffer, Talia. "The Importance of Being Greedy: Connoisseurship and Domesticity in the Writings of Elizabeth Robins Pennell." *The Recipe Reader: Narratives, Contexts, Traditions*, edited by Janet Floyd and Laurel Forster, University of Nebraska Press, Lincoln, 2003, pp. 105–126.
- Schaffer, Talia. *The Forgotten Female Aesthetes: Literary Culture in Late-Victorian England*. Charlottesville, University Press of Virginia, 2000.
- "Schools of Cookery." *The Times*, London, 16 Apr. 1880, p. 10.
- Shapiro, Laura. *Perfection Salad: Women and Cooking at the Turn of the Century*. Berkley, University of California Press 1986.
- Sherman, Sandra. *Invention of the Modern Cookbook*. Santa Barbara, CA, Greenwood Press, 2010.
- Sillitoe, Helen. *A History of the Teaching of Domestic Subjects*. London, Methuem & Co. Ltd., 1933.
- "Social Science." *The Ladies' Treasury*. London, 1 Nov. 1871. pp. 62.
- "Social Science." *The Ladies' Treasury*, London, 1 Nov. 1871.
- Soyer, Alexis. *The Modern Housewife*. New York: n.p., 1851.

Spear, Jeffrey. "The Other Arts: Victorian Visual Culture." *A Companion to the Victorian Novel*, edited by Patrick Brantlinger and William B. Thesing, Blackwell, Oxford, UK, 2002, pp. 189–206.

Stage, Sarah, and Virginia Bramble Vincenti, editors. *Rethinking Home Economics: Women and the History of a Profession*. Ithaca, Cornell University Press, 1997.

Teukolsky, Rachel. *The Literate Eye: Victorian Art Writing and Modernist Aesthetics*. Oxford, Oxford University Press, 2009.

"The Chemistry of Cookery," *The Ladies' Treasury*. London, 1881.

"The Englishwoman's Economist," *The Englishwoman's Domestic Magazine*. London, 1876.

"The International Exhibition." *Routledge's Popular Guide to London*. 1873.

"The International Exhibition." *The Times*. London. 8 Apr. 1873. pp. 8.

Peacock, Thomas Love, George Meredith, and Mary Ellen Meredith. "The Science of Cookery." New York Public Library, Carl H. Pforzheimer Collection, T.L.P. 65

"The Scientific Basis of Cookery." *The Times*. London. 18 Dec. 1883.

Thompson, Benjamin. "On the Construction of Kitchen Fireplaces, Together with Remarks and Observations Relating to the Various Processes of Cookery and Proposals for Improving That Most Useful Art." *Collected Works of Count Rumford*, III, Belknap Press of Harvard University Press, Cambridge, MA, 1968, pp. 57–384.

- Waddington, Keir. "More Like Cooking Than Science: Narrating the Inside of the British Medical Laboratory, 1880-1914." *The Journal of Literature and Science*, vol. 3, no. 1, 2010, pp. 50–70.
- Walsh, J. H. *The English Cookery Book: Uniting a Good Style with Economy, and Adapted to All Persons in Every Clime, Containing Many Unpublished Receipts in Daily Use by Private Families*. London, G. Routledge and Co., 1859.
- "Wanted, a Plain Cook," *The Englishwoman's Domestic Magazine*. London. c.1860.
- Waters, Alice, Patricia Curtan, Kelsie Kerr, and Fritz Streiff. *The Art of Simple Food: Notes, Lessons, and Recipes from a Delicious Revolution*. New York, Clarkson Potter, 2007.
- Webb, Ruth. *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice*. Farnham, Ashgate, 2009.
- Weigley, Emma Seifrit. "It Might Have Been Euthenics: The Lake Placid Conferences and the Home Economics Movement." *American Quarterly*, vol. 26, no. 1, 1974. pp. 79-96.
- Whewell, William. "The General Bearing of the Great Exhibition on the Progress of Art and Science." *Lectures on the Results of the Great Exhibition of 1851*, D. Bogue, London, 1852.
- Williams, Jacqueline Block. "Introduction." *The Delights of Delicate Eating*, University of Illinois Press, Urbana, 2000, pp. xvi-xvii.
- Williams, William Mattieu. *The Chemistry of Cookery*. New York, D. Appleton and Company, 1904.

Wilson, C. Anne. "Introduction." *Luncheon, Nuncheon and Other Meals: Eating with the Victorians*, Alan Sutton, Stroud, 1994, pp. 51–70.

----- "Supper: The Ultimate Meal." *Luncheon, Nuncheon and Other Meals: Eating with the Victorians*, Alan Sutton, Stroud, 1994, pp. 145–156.

Yoxall, Alisa. *A History of the Teaching of Domestic Economy: Written for the Association of Teachers of Domestic Subjects in Great Britain*. Bath, Cedric Chivers, 1965.

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“Epistemologies of the Kitchen: Art, Science, and Nineteenth-Century British Culinary Writing”

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REVIEWS

Review of *Dickens and the Imagined Child* by Peter Merchant and Catherine Waters, eds. in *Children's Literature Association Quarterly* (Spring 2016).

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New York Public Library Short-Term Food Studies Fellowship. New York, NY. Summer 2014.

Patrick Brantlinger Victorian Studies Dissertation Year Fellowship. Victorian Studies Program, Indiana University, 2013-2014.

Graduate Research Assistantship. English Department, St. John's University, 2006-2008.

Teaching Awards and Honors

Culbertson Award for Outstanding Teaching, Indiana University English Department, 2012.

Readings for Analytical Writing Award for Outstanding Teaching, Indiana University English Department, 2009.

Teaching Fellow, English Department, Indiana University, 2012-2013.

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College of Arts and Sciences Travel Grant, Queens University of Charlotte, 2016.

Victorian Studies Program Travel Grant, Indiana University, 2012 and 2016.

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The Dickens Project Travel Grant, Santa Cruz, CA, 2014.

Prizes and Scholarly Honors

Indiana University Graduate Student Representative. Dickens Universe, Santa Cruz, California, 2014.

Certificate of Graduate Academic Excellence, English Department, St. John's University, 2008.

CONFERENCE PRESENTATIONS

“Lean Out: Anti-Social Housekeeping in Dickens and Rossetti,” North American Victorian Studies Association Annual Meeting, November 2016; Phoenix, AZ

“How to Make a Scene: Visual Cookery in Elizabeth Pennell's *Delights of Delicate Eating*,” British Women Writer's Annual Meeting, June 2016; Athens, GA

"The Mysteries in Our Own Kitchens: Secrecy and the Form of Victorian Cookbooks," Victorians Institute Annual Meeting, October 2014; Charlotte, NC

“Confectionary Chemistry: Scientific Practice and Victorian Food Writing,” Victorians Institute Annual Meeting, November 2013; Murfreesboro, TN

“Cooking Art: Home Media in Elizabeth Pennell’s *Delights of Delicate Eating*,”
Victorians Institute Annual Meeting, October 2012; Richmond, VA

“Cooking Art: Aesthetic Networks in Elizabeth Pennell’s *Delights of Delicate Eating*,” North American Victorian Studies Associate Annual Meeting,
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“Dying to Eat: Decaying Food and Domestic Ideology in “Goblin Market” and
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Teaching Assistant, Indiana University (Fall 2011)

COURSES TAUGHT

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Survey of British Literature II, Restoration to the Present (Queens University of
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section, UNC Charlotte, Spring 2015)

“Me, You, Us, and Them: Modern Love in British Literature” Survey of British
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“Writing about Literature” (1 section, UNC Charlotte, Fall 2014)

“Introduction to Literary Interpretation” (2 sections, Indiana University, Fall 2012-Spring 2013)

“War as Representation and Idea” (Teaching Assistant for Professors Jonathan Elmer and William Rausch. 2 sections, Indiana University, Fall 2011)

Composition and Rhetoric Courses

“The Sports Body” (2 sections, Spring 2017, Queens University of Charlotte).

“‘You Are What You Eat’: Food and Contemporary Culture” (2 sections, Fall 2010, Indiana University; 6 sections, Fall 2014-Spring 2015; Fall 2015 & Fall 2016, Queens University)

Introduction to College Composition (1 section, Indiana University, Summer 2011)

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Co-developer, “The Body in the Mirror: Gender, Race, and Identity” Learning Community, General Education Program, Queens University of Charlotte, Fall 2016.

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