# Petits Propos Culinaires 104

Essays and notes on food, cookery and cookery books

### ESCOFFIER AND A SPOONFUL OF UMAMI

### Peter Hertzmann

he first time I cracked open my copy of the Cracknell and Kaufmann translation of the fourth edition of Escoffier's *Le Guide Culinaire*, I opened the book to a section labelled 'Essences'. The concept at first seemed logical: 'As the name implies, essences are stocks made in a reduced form so as to retain a very pronounced flavour. The text goes on to recommend celery, mushrooms, morels, and truffles as typical sources for producing essences. (This was 1984, I was over a decade away from learning why Escoffier didn't classify morels as mushrooms.) The paragraph ends with the thought that 'the usefulness of essences becomes meaningless where the basic stocks themselves contain the desirable quantities of strength and flavour; therefore, it is judged unnecessary to give more than one recipe. Escoffier then provides a recipe for a fish essence which is nothing more than a standard *fumet de poisson*.

As I fingered my way through much of the book, I never saw another reference to mushroom essence. I found no recipe for it. No recipe seemed to call for its use. Why mention it in the text if you're not going to use it? What was logical about mentioning mushroom essence, but never going into more detail? Then I forgot about it.

Like a scary childhood memory, every once in a while in the thirty years since that first encounter, I'd think about mushroom essence. A little while ago, when I was staring face-on at a modern approach towards mushroom essence, I decided some research was in order.<sup>5</sup>

When he wrote the first edition of *Le Guide Culinaire*, two decades before the fourth, Escoffier seemed more positive about the use of mushroom essence.<sup>6</sup> In that edition he mentions essence de champignons a total of 27 times, often as an addition

to *sauce allemande* before using the combination in a recipe's preparation.<sup>7</sup> The amount of essence used was rarely trivial. In the recipe for *crème à l'anglaise*, a savoury cream sauce rather than the today's sweet-custard sauce, a decilitre each of butter, consommé, and mushroom essence are called for along with the two decilitres of cream.<sup>8</sup>

Like the fourth edition of the book, there are no instructions as to how to prepare a mushroom essence, but now when I look through the recipes from the fourth edition, I find that every recipe calling for mushroom essence in the first edition also does so in the fourth. Plus, there are similar calls for mushroom essence in Escoffier's 1919 shorthand recipe book *L'Aide-Mémoire Culinaire*.

Since Escoffier failed to yield a recipe, I decided to try his younger contemporary, Prosper Montagné. The 1938 *Larousse Gastronomique* has listings for twelve essences based on various principal ingredients plus four recipes for chemical versions of banana, cherry, raspberry, and redcurrant essences. To Some of the listings include recipes, but the listing for mushroom essence only says: 'N'est autre chose que la cuisson des champignons fortement réduite. S'emploie pour aromatiser les sauces.' (This is merely the liquid, greatly concentrated, in which mushrooms have been cooked. It is used for flavouring sauces.)<sup>11</sup>

A quick look in Montagne's earlier tome finally yielded not one but two recipes for mushroom essence. The first is credited to Marie-Antonin Carême, and appears to be a duplicate of the recipe that appears in his *Traité des essences*. The words are the same, but the order is changed slightly, possibly due to a modernization of the language. Montagné also provides a second, simpler recipe whereby equal weights of mushrooms and white stock are simmered until the liquid is reduced by half. The solids are then strained out and the liquid saved.

Carême's original recipe is fairly straightforward:

Après avoir émincé deux maniveaux de champignons, vous les mettez dans une casserole avec deux grandes cuillerées de consommé, le jus d'un citron, une pointe de sel, de poivre fin, de muscade, et un peu de beurre, faites mijoter et réduire à petit feu; ensuite vous ajoutez une grande cuillerée de blond de veau et une idem d'essence de jambon; après quelques bouillons, vous passez l'essence au tamis de soie.<sup>14</sup>

## Which I roughly translate as:

Slice two baskets of mushrooms. Add them to a saucepan along with two large spoonfuls of consommé, the juice of one lemon, a pinch each of salt, fine pepper, and nutmeg, and a little butter. Cook over low heat, reducing slowly. Add a large spoonful of blond veal stock and the same of ham essence. Strain through a silk sieve.

The recipe turns out to be straightforward and easy to follow as long as you know that in Carême's time, a *maniveau* (basket) held 250 grams of mushrooms of a size such that a single basket held twelve to fifteen mushrooms.<sup>15</sup> It also turns out that this may be the earliest printed recipe labelled as mushroom essence. Carême used mushroom essence as an ingredient freely in books published as early is 1815, but failed to provide a recipe until his last book.<sup>16</sup>

This is not to say that essences were not used before Carême. François Massialot uses *essence de jambon* (ham essence) three times in *Le Cuisinier Royal et Bourgeois* in 1693.<sup>17</sup> Vincent La Chapelle, writing forty years later, uses *essence de jambon* over one-hundred times in *Le Cuisinier Moderne*.<sup>18</sup> Meat essences were quite common in the eighteenth century, and they are used in several recipes in many of the period's major books.

As with mushroom essence, I found no French sources from the seventeenth and eighteenth centuries willing to disclose a recipe for ham essence. Luckily, Hannah Glasse alleviates the situation:

Take the fat off a Westphalia ham, cut the lean in slices, beat them well and lay them in the bottom of a stew-pan, with slices of carrots, parsnips, and onions, cover your pan, and set it over a gentle fire. Let them stew till they begin to stick, then sprinkle on a little flour and turn them; then moisten with broth and veal gravy; season with three

or four mushrooms, as many truffles, a whole leek, some basil, parsley, and half a dozen cloves; or instead of the leek, you may put in a clove of garlic. Put in some crusts of bread, and let them simmer over the fire for three quarters of an hour. Strain it, and set it by for use.<sup>19</sup>

Even though Glasse provides a recipe for ham essence and uses the results in a number of recipes, she also provides an alternate recipe in the book's preface that is based on the use of bacon. She concludes the recipe with, 'This falls short of the expense of a Leg of veal and a Ham, and answers every Purpose you want.'<sup>20</sup> Whether made from ham or bacon, the result is that the essence is nothing more than a broth or stock.

By the beginning of the nineteenth century, other ingredients were commonly used as a base for essence. André Viard specifies essences prepared from wild game, vegetables, chicken, and duck.<sup>21</sup> Evaluating the two essence recipes that Viard provides, it is easy to see that these essences are concentrated broths made from the principle products.<sup>22</sup> After Fouret adds 850 recipes to Viard's original book, essences prepared from wild game, vegetables, chicken, turkey, anchovies, duck, common lemons, and citrons can be found.<sup>23</sup> Note that although this book is published five years after Carême mentions mushroom essence multiple times in a book, and Fouret has quite a variety of essences, mushroom essence is still the lone province of Carême.

At this point all these meat essences really seem to be rich or concentrated stocks or broths. Viard goes as far as including *essence* in the title of a recipe but then refers to the essence as *fumet* twice in the recipe instructions.<sup>24</sup> Maybe this is another example of the essence being no more than a rich broth or stock?

Certainly, Carême's mushroom essence is in reality a mushroom-flavoured meat broth. Later recipes for mushroom essence, such as Dubois and Bernard's and Gouffé's, also intended for use in a professional kitchen, follow this pattern.<sup>25</sup> Additionally, Dubois and Bernard write that the liquid exuded from just heating mushroom scraps is superior, but it can be diluted with broth as well.<sup>26</sup>

In contrast to his professional counterparts, Louis-Eustache Audot, writing for cooks working for middle-class families, presents a recipe for mushroom essence that involves salting mushrooms to release their liquid followed by flavouring and bottling the liquor to be used at a later time to flavour sauces.<sup>27</sup> Joseph Roques points out 'On le retrouve dans l'essence de champignons, connue chez les Anglais sous le nom de Ket-chop ou Soyac' (Remember that mushroom essence is known in English as ketchup or fish sauce).<sup>28</sup> Audot's preparation is essentially a mushroom ketchup, and is preceded possibly by Fouret's recipe for Ket-chop, ou Soyac.<sup>29</sup>

The first mushroom-ketchup recipe, or at least one labelled as such, appears to be Richard Bradley's from 1728, of which the earliest version I have seen is 1736.<sup>30</sup> In the recipe, mushroom gills are slowly heated. As they begin to give off some water, the gills are pressed to squeeze as much juice as possible from them. After straining, the liquid is diluted with port wine and flavoured with mace and cloves.

Elizabeth Raffald's 1769 recipe for mushroom *catchup* uses salt to draw the liquid from the mushroom.<sup>31</sup> Mushrooms and liquid are then placed in an oven to draw out further liquor before the mixture is strained. The resulting liquid is salted and flavoured with ginger, cloves, black pepper, and allspice prior to bottling.

About the same time Carême is mentioning mushroom essence for the first time, William Kitchiner published his recipe for mushroom catsup with the observation: 'You have here the quintessence of mushrooms, and a tablespoon of it will impregnate half a pint of sauce with the full flavour of them, in much greater perfection than can be obtained either from pickled or dried powder of mushrooms'.<sup>32</sup> Kitchiner comes full circle equating mushroom catsup to mushroom essence.

Whether referred to as mushroom essence, ketchup, or catsup, this flavour enhancer made from mushrooms continues to appear frequently in printed cookbooks and now online. Some modern recipes are adaptations of much earlier examples.<sup>33</sup> Some of the recipes are modernized versions where the finished product is now the solids of the mushrooms rather than their released

liquid.<sup>34</sup> Some recipes have no relationship to the original forms of mushroom essence or ketchup other than name and having mushrooms in their ingredients list.<sup>35</sup>

In it's most basic form since first appearing in the eighteen century, mushroom essence or ketchup has always been the liquid released from mushrooms due to the application of heat or salt or both. Variations from one recipe to the next have consisted of what is added or removed from the liquid. The resulting concoction was then used to enhance the flavour of other preparations.

When I was *stage*-ing in restaurants in France and Switzerland, something I had occasion to do a dozen times between 1997 and 2006, almost all the restaurants I worked in had at least two things in common: at least one Michelin star and a large container of Maggi-brand instant chicken-soup powder on a high shelf in the kitchen.<sup>36</sup>

On more than one occasion, I saw a cook add additional flavour to a dish that seemed a bit flat. A couple of fingers were dipped into the package of Maggi, and a generous amount was sprinkled over the culpable preparation. I asked a few of the cooks why they used the Maggi instead of salt. The reply was always that the powder in that package seemed to bring out some flavours better. I would point out to them that one of the primary ingredients was *exhausteur de goût* (taste enhancer), another term for *glutamate monosodique* (monosodium glutamate). They would shrug their shoulders.

I had always heard that mushrooms were high in glutamates, the amino acid that triggers the *taste*-mGluR4 receptor on our tongues. It's the receptor that responds to the taste we now call umami.<sup>37</sup>

Mushrooms contain about 180 milligrams of free glutamate per 100 grams of total material.<sup>38</sup> That's about one-sixth as much as a hunk of well-aged Parmigiano-Reggiano, one of the most 'umamiest' of foods, but it's more than most fresh vegetables, fruits, or meats.

It's is hard not to notice the parallel between eighteenth- and nineteenth-century chefs adding a few tablespoons of one of their essences to a dish and a modern cook dipping into the Maggi can for a helping a powdered glutamates. Could these modern French chefs be using Maggi instant soup like Escoffier used mushroom essence? The analogy is hard to ignore. In each case, the cook is simply adding umami to a dish. When Escoffier added his mushroom essence was he just adding umami?

#### NOTES

- Auguste Escoffier, H.L. Cracknell (trans.), R.J. Kaufmann (trans.), Le Guide Culinaire (New York: Mayflower Books, 1982).
- 2. Escoffier, p. 7.
- 3. In my experience, when French-language cookbooks refer to *champignons* they are using the term as shorthand for *champignons de Paris*, the common, immature, white or brown mushroom (*Agaricus bisporus*).
- 4. Escoffier.
- 5. Amuse-bouche, Intermèdes, et Mignardises, 'thé aux champignons (mushroom water)' <a href="http://www.hertzmann.com/articles/2015/aim/index.php?id=01244">http://www.hertzmann.com/articles/2015/aim/index.php?id=01244</a> [accessed 23 March 2015].
- 6. Auguste Escoffier, *Le Guide Culinaire, aide-mémoire de cuisine pratique* (Paris, Aux Bureau de l' « Art Culinaire », 1903).
- 7. Escoffier, pp. 105–7, 117, 139, 158, 203–5, 225, 411, 413–4, 423, 444, 471, 480, 483–4, 509, 520, 549, 569, 571, 575, 578, 658.
- 8. Escoffier, p. 158.
- 9. Auguste Escoffier, L'Aide-Mémoire Culinaire (Paris, 1919).
- 10. Prosper Montagné, Larousse Gastronomique (Paris: Libraire Larousse, 1938) p. 451.
- II. Prosper Montagné; Prosper Montagné, Charlotte Turgeon (ed.), Nina Froud (ed., trans.), Patience Gray (trans.), Maud Murdoch (trans.), Barbara Macrae Taylor (trans.), Larousse Gastronomique (New York: Crown Publishers, Inc., 1961) p. 405.
- 12. Prosper Montagné, Prosper Salles, *Le Grand Livre de la Cuisine* (Paris: Ernest Flammarion, 1929) p. 489.
- 13. Marie-Antonin Carême, *L'Art de la Cuisine Française au Dix-neuvième Siècle* (Paris: Au Dépôt de Libraire, 1854) vol. 3, pp. 257–8.
- 14. Carême.
- Armand Husson, Les Consommations de Paris (Paris: Guillaumin et Cie, Libraires, 1856) p. 392.
- 16. Marie-Antonin Carême, Le Pâtissier royal parisien ou Traité élémentaire et pratique de la Pâtisserie (Paris: J.G. Dentu, 1815) pp. 64, 66, 74, 76, 79, 93, 103–4, 129. In Marie-Antonin Carême, Le Maître-d'hôtel français (Paris: Didot, 1822, vol. 1), Carême calls for essence a total of 85 times, and mostly without specifying the principle ingredient.
- 17. François Massialot, Le Cuisinier Royal et Bourgeois, qui append à ordonner toute sorte de Repas, & la meilleure maniere des Ragoûts les plus à la mode & les plus exquis (Paris: Chez Charles de Sercy, 1693).
- 18. Vincent La Chapelle, Le cuisinier moderne, qui aprend à donner toutes sortes de

- repas (Antoine van Dole, Libraire, 1735).
- 19. Hannah Glasse, The Art of Cookery Made Plain and Easy; Which far exceeds any Things of the Kind yet published (London: 1747) pp. 103–4.
- 20. Glasse, p. ii.
- 21. André Viard, Le Cuisinier Impérial, or l'Art de Faire la Cuisine et la Pâtisserie pour Toutes les Fortunes (Paris: Chez Barba, 1806) pp. 38, 56, 241, 243–4, 253, 263, 265, 311, 419.
- 22. Viard, pp. 38-9.
- 23. André Viard, Fouret, Le Cuisinier Royal, or l'Art de Faire la Cuisine et la Pâtisserie pour Toutes les Fortunes (Paris: Chez J.N. Barba, 1820) pp. 33, 43–4, 61, 225–7, 236, 246–7, 280, 291, 373, 459, 492, 508.
- 24. Viard, pp. 244-5.
- 25. Urbain Dubois, Émile Bernard, La Cuisine Classique (Paris: Chez Les Auteurs, 1856) p. 80; Jules Gouffé, Le Livre de Cuisine (Paris: Librairie de L. Hachette et Cie., 1867) p. 405; Jules Gouffé, Alfonse Gouffé (trans.), The Royal Cookery Book (London: Sampson, Low, Son, and Marston, 1869) p. 199.
- 26. Dubois, Bernard.
- Louis-Eustache Audot, La Cuisinière de la Campagne et de la Ville: ou, Nouvelle Cuisine Économique (Paris: Audot, 1846, 30th ed.) p. 148; Louis-Eustache Audot, French Domestic Cookery, Combining Elegance and Economy (New York: Harper & Brothers, Publishers, 1846) p. 67.
- 28. Joseph Roques, *Histoire des Champignons Comestibles et Vénéneux* (Paris: Fortin, Masson et Cie, 1841) p. 225. The equating of *ket-chop* with *soyac* is a bit puzzling unless we assume that both words are being used as synonyms for any ingredient fermented with salt, or more specifically fish as with the Indonesian-Malay word for fish sauce. See Wikipedia, 'Ketchup' <a href="http://en.wikipedia.org/wiki/Ketchup-">http://en.wikipedia.org/wiki/Ketchup-</a> [accessed 23 March 2015].
- 29. Viard, Fouret, pp. 73-4.
- 30. Richard Bradley, *The Country Housewife and Lady's Director in the Management of a House, and the Delights and Profits of a Farm* (London: D. Browne, 1736, 6th ed.) v. 1, pp. 142–3. The 1728 edition and recipe are mentioned in Andrew F. Smith, *Pure Ketchup: A History of America's National Condiment, with Recipes* (Columbia: University of South Carolina, 1969) p. 14.
- 31. Elizabeth Raffald, *The Experienced English House-keeper, For the Use and Ease of Ladies, House-keepers, Cooks, &c* (Manchester: 1769) p. 318.
- 32. Carême, Le Maître-d'hôtel français; William Kitchiner, Apicius Redivivus or The Cook's Oracle (London: Samuel Bagster, 1817) n.p., recipe 439.
- 33. Jane Grigson, The Mushroom Feast (London: Grub Street, 2007) p. 33.
- 34. Helen Witty, Fancy Pantry (New York: Workman Publishing, 1986) p. 211–2.
- 35. Tom Kerridge, *Tom Kerridge's Proper Pub Food* (Bath: Absolute Press, 2013) p. 167. The recipe is for a cream-based mushroom sauce that accompanies a steak.
- 36. In my experience, even if the restaurant used a different brand of chicken-soup powder, the cooks still referred to the powder simple as 'Maggi'.
- 37. Ole G. Mouritsen, Klavs Styrbæk, Mariela Johansen (trans.), *Umami: Unlocking the Secrets of the Fifth Taste* (New York: Columbia University Press, 2014) p. 217.
- 38. The Glutamate Association, 'MSG | Glutamate What foods are glutamaterich?' <a href="http://www.msgfacts.com/nutrition/what\_foods\_are\_glutamate-rich.aspx">http://www.msgfacts.com/nutrition/what\_foods\_are\_glutamate-rich.aspx</a> [accessed 18 March 2015]. Only free glutamates provide umami. Bound glutamates cannot trigger the taste receptors on the tongue.