The cheeseboard in Dutch fine dining restaurants, II: Integration of the cheese course into the menu

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In Dutch fine dining restaurants, the customer who orders a cheeseboard as part of the dessert is served an assortment of cheeses without regard to the dishes that preceded the cheese. The present paper tries to contribute to a more logical order of main dish and cheeseboard. A panel of 12 tasters judged the order of 6 cheeses with three dishes: vegetarian, beef, fish. The most appreciated cheeses were different for each dish. A good match in flavour profile between the dish and the best follow-up cheese was found.

Keywords: Fine dining restaurants, menu structure, flavour profiles, flavour styles

Introduction

As stated in the first paper in this series, "Practices and opinions of restaurant professionals", the customer who orders a cheeseboard receives a plate with five or six different cheeses, ranging from young and fresh to blue mould cheeses and old hard cheeses of high flavour richness. Generally, restaurants do not take into account which dishes preceded the cheeseboard. One should not be amazed at being served a light young goat's milk cheese after a game dish. The present paper explores if it is possible to integrate the cheese course in a more meaningful way into a menu than the usual approach. The hypotheses to be tested in the present research are:
1. Different main dishes would be best served by different follow-up cheeses for the dessert
2. The flavour profiles of a main dish and the most appropriate follow-up cheese are close to each other.

Literature review

In enjoying food and beverage, flavour plays a key role. The flavours of foods and their perception by humans, however, are hard to describe. The work of Klosse (1998, 2004, 2014) on this problem has resulted in the model Flavour Style Cube (FSC). This model has briefly been presented in the preceding paper, "Practices and opinions of restaurant professionals". Also, two important elements of a flavour profile, ripe and fresh tones, have been discussed there.

The problem in the present paper: "Are certain cheeses preferable over others to follow certain dishes with a given taste profile?" can be answered on different levels. First, we approach it from the perspective of everyday life, as described by J. W. F. Werumeüs Buning (1891–1958), a Dutch poet and a journalist who can also be considered as the father of culinary journalism in the Netherlands (Hijmans, 1969, chapter XI, p. 41–45). His essay "Kaas na tafel" ("Cheese as dessert") (Werumeüs Buning, n.d. p. 122–128) states in the first place

that, in contrast to France, cheese as a dessert with a domestic meal was as unusual in the Netherlands around 1940 as it is now common. His proposal is that between the main dish and the dessert, e.g. fruit, there should be the quiet moment for something in between, i.e. some cheese. "For what in the world is more enjoyable than a half-cleared table with cheese, nuts, fruits and the last strains of conversation? And the last good glass?" (p. 125). Werumeüs Buning argues for butter with the cheese, for appropriate bread, for the right wine and for a catholic choice of cheeses, neither only Dutch, nor only French, but always of good quality and with a relationship to the preceding dishes. To him, the transition from the main dish to fruit or a sweet dessert is often too abrupt: "I should prefer a rusk or a slice of rye bread with cheese, and a cup of coffee to conclude, and in between playing with an exquisite apple or pear" (p. 125).

Several researchers on sensory perception have also worked on the effects of the order of tasting in a scientific and systematic way. Something tasted after an item with high flavour richness has lower perceived flavour richness than something tasted after a substance with low flavour richness (Schifferstein & Oudejans, 1996). Zellner, Kern and Parker (2002) did something similar when they compared the appreciation for an item after something else of a higher or a lower quality (although quality in food is an elusive concept itself!). They found that the appreciation for a lower quality item was significantly lower after a high quality item than after something of a lower quality, and that an item tasted on its own would get the right appreciation. Valentová and Pokorny (1998) studied the intensity and acceptability of substances in terms of the basic tastes before and after the panel members had taken oil in the mouth. For salty, the differences were not spectacular, but the intensity of sweet showed a very marked decrease, and the acceptability of acidic increased. Studies of this type confirm the long-standing experience of the food service industry and home cooking, that the sequence of dishes

matters. However, in the natural setting of a meal things can become more complex.

Methodology

Data collection proceeded as follows: the authors conducted three tasting sessions with a panel. In each session, the panel members judged the acceptability of six follow-up cheeses for a main dish of a given flavour profile. The authors selected the dishes and the cheeses and established in consensus the flavour profiles of each, and derived the flavour style according to Klosse (see the previous paper, "Practices and opinions of restaurant professionals" for a description of Klosse's views).

The dishes (Table 1) were:
1. Chateaubriand with red wine sauce and fried tomatoes. Wine sauce and tomatoes provided the contracting element in this dish ("Meat")
2. Trout "en papillote". A fresh cream cheese was added to the fish for fresh tones and extra coating mouthfeel ("Fish")
3. Quiche of green asparagus with truffle mayonnaise. The mayonnaise provided the coating element and part of the fresh tones ("Vegetarian").

For the selection of cheeses, the authors used Koster (2000) and Callec (2001). The six cheeses selected were: Skaepsrond, Roccolo, Lady's Blue, Aged Farmhouse Gouda, Dutch Ricotta and Petit Langres. Some characteristics of the cheeses are in Table 2. Table 3 gives the flavour profiles and the flavour style of the six cheeses.

The panel consisted of 12 members. The authors were not part of the panel. Panel members were Stenden Hospitality Management students, and chefs and waiting staff from restaurants in and around Groningen. The tasting sessions were held in the home of one of the authors in Groningen in May 2013, on each occasion at the same time of the week. In the first session the panel members were given an introduction about flavour and the factors of the FSC model. After an explanation of the outline of the test, the panel members tested the suitability of the six cheeses (Table 2) after the meat dish (Table 1). Each panel member received a scorecard and a plate with the six different cheeses. The panel members did not receive any information about the cheeses, in order to prevent prejudices. Each member received the dish, and after a bite of the meat dish a piece of cheese was taken. On the scorecard each panel member should rank each cheese with a mark from 6 (perceived best as follow-up cheese) to 1 (perceived worst as follow-up cheese). Order of the cheeses was free and returning to a cheese tasted before was possible.

The second and third sessions were devoted to the fish and the vegetarian dish respectively.

For each session, the authors provided freshly bought cheeses, taking care that the characteristics of the cheeses were the same throughout.

For each combination of dish and follow-up cheese, the average score and the standard deviation was calculated.

After establishing the best follow-up cheese for each dish, the two flavour profiles of each combination were compared.

Table 1: The flavour profiles and the flavour style of the three dishes

Dish	Flavour richness	Coating	Contracting	Ripe	Fresh	Flavour style
Green asparagus quiche	8	7	1	6	3	#6
Chateaubriand	8	5	5	8	0	#8
Trout	6	6	3	1	4	#2

Table 2: Characteristics of the cheeses to be judged by the panel as follow-up cheeses

Name	Origin	Milk	Further characteristics
Skaepsrond	Ransdorp, municipality of Amsterdam, the Netherlands	Ewe	Soft white mould cheese, around 200 g; 4 weeks old
Roccolo	Lombardy, region Bergamo, Italy	Cow	Semi-hard cheese, mouldy crust, ripens from outside to centre; 6 months; 2,5 kg
Lady's Blue	Nooitgedacht, Drenthe, the Netherlands	Goat	Blue mould cheese; 3 months; 1 kg
Aged Farmhouse Gouda	The Netherlands	Cow	Hard cheese; 18 months; approximately 15 kg
Dutch Ricotta	Grootegast, the Netherlands	Buffalo	Soft fresh cheese, 2 days
Petit Langres	France, Hte Marne	Cow	Soft cheese, red bacteria, 4 months, 300 g

Table 3: Flavour profiles and flavour style of the six cheeses

Cheese	Flavour richness	Coating	Con-tracting	Ripe	Fresh	Flavour style
Skaepsrond	5	6	1	8	1	#2
Roccolo	4	7	1	4	1	#2
Lady's Blue	9	3	8	6	3	#7
Aged Farmhouse Gouda	6	2	6	5	2	#7
Dutch Ricotta	2	4	2	1	4	#1
Petit Langres	8	5	2	5	2	#6

Table 4: Results of the panel sessions

Dish	Average score and standard deviation for each combination											
	Ricotta		Roccolo		Skaepsrond		Gouda		Petit Langres		Lady's Blue	
	Avg	SD	Avg	SD	Avg	SD	Avg	SD	Avg	SD	Avg	SD
Vegetarian	1.67	0.85	*4.0*	*1.35*	**5.25**	**1.01**	3.50	1.32	2.08	0.95	*4.50*	*1.26*
Meat	1.42	0.64	*4.58*	*0.76*	*4.42*	*0.95*	2.67	0.75	2.33	1.37	**5.58**	**0.64**
Fish	2.92	1.26	**5.42**	**0.76**	4.58	1.11	3.50	1.26	2.50	1.76	2.08	1.11

Results

The results of the panel sessions are presented in Table 4. The averages of the scores of the 12 panel members for each combination are given. The data are completed with the standard deviation for each combination.

In Table 4, we find for each dish a different cheese that is the best to eat after the dish concerned. Also, these cheeses have a very low SD, implying that they were chosen with a considerable level of consensus. The scores for these cheeses are in bold print in Table 4.

For each dish, besides the best follow-up cheese, one or two other cheeses were found that were also suitable. They obtained rather a high score and a relatively low SD. The scores for these cheeses are in italics in Table 4. In Table 5, the selections of follow-up cheeses are summarised.

Discussion

From the results, the first hypothesis can be confirmed: for each main dish, clearly the best follow-up cheese could be found. The one or two cheeses that also had a fairly high score for each dish nonetheless were at a considerable distance from the best and had a higher SD, indicating that the level of consensus among the panel members was lower for these combinations.

The panel members had no information about the flavour profiles of the dishes and the cheeses; they had just their own judgment to go by. Comparison by the authors of the flavour profiles of the dishes and the respective best follow-up cheese revealed considerable similarities in the profile of the dish and

the profile of the follow-up cheese selected by the panel. This is illustrated in Table 6

Flavour profiles of the dish and the best follow-up cheese are never identical. But correspondences in flavour richness, coating characteristics and the presence of ripe flavour tones are obvious. Also, the FSC flavour style alone is not decisive for a good match between dish and follow-up cheese.

Clearly, the ricotta did not qualify as a follow-up cheese for any of the dishes due to its low flavour richness and the complete lack of ripe flavour tones.

The Farmhouse Gouda used in this research had only a moderate flavour richness and lacked coating characteristics; this explains its lack of success as a follow-up cheese for any of the dishes.

From the flavour profile, the lack of success of the Petit Langres as a follow-up cheese cannot be explained.

It must be concluded that the FSC model, combined with ripe and fresh tones is potentially a useful tool for predicting the harmony between a given dish and the optimal follow-up cheese. More research is needed but the present research offers a qualified support for the second hypothesis.

Recommendations

In order to reach more conclusive evidence for the effectiveness of the FSC model plus ripe/fresh for finding the best combination of dish and follow-up cheese, more studies of this kind should be performed. Most likely, a previous training of panel members in using the FSC model and making a flavour profile would be useful. In hindsight, it would have been better to let the panel members to also establish the flavour profiles of dishes and cheeses before judging the optimal combinations. The panel of three authors may have been too small.

Meanwhile, for restaurant practice, this research shows the road to a better structure of menus that contain a cheeseboard. When the service staff in general, and especially the waiter who is responsible for serving the cheese board, are aware of good and not-so-good sequences, good advice to the customers will

Table 5: Best and acceptable follow-up cheeses after each dish

Dish	Best follow-up cheese	Acceptable
Vegetarian	Skaepsrond	Lady's Blue, Roccolo
Meat	Lady's Blue	Roccolo, Skaepsrond
Fish	Roccolo	Skaepsrond

Table 6: Similarities in flavour profile between the dish and the follow-up cheese

Dish & Cheese	Flavour richness	Coating	Contracting	Ripe	Fresh	Flavour style
Green asparagus quiche	8	7	1	6	3	#6
Skaepsrond	5	6	1	8	1	#2
Chateaubriand	8	5	5	8	0	#8
Lady's Blue	9	3	8	6	3	#7
Trout	6	6	3	1	4	#2
Roccolo	4	7	1	4	1	#2

lead to a more general satisfaction and some additional sales of the appropriate beverage with the cheese.

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