

The effects of the glass on the perception of the whisky flavours.

Introduction:

The image of whisky drunk in a nice crystal and round “tumbler” glass with quite often a few ice cubes present is the traditional companion of the whisky bottle on commercial advertisements. The tumbler is esthetically very pleasant, widely available and the most commonly used glass amongst the occasional whisky drinkers. The “Copita”, the traditional glass for drinking sherry, has been used for many decades by the master blenders and new and various glasses are now available on the market. With whisky connoisseurs and enthusiasts getting more interested in single malt and in their flavours, new types of glasses have been created during the last decade. The question of the choice of glass on the perception of the flavours of the whisky is still open. After having done a few pilot tests with friends, I decided to assess the effects of the type of glass on the nosing appreciation on one single malt whisky. The results of this test are presented and discussed below.

Procedure:

A total of 7 glasses (see photos on Figure 1) have been filled with 1 cl of Glenfarclas 8 YO, 40% and the additional glass contained a comparator, 1 cl of Highland Park Single Cask 7473, 15 YO, distilled in 1990. The comparator was reduced from 59.8% to 40%. The colour of the two whiskies were comparable. The test was conducted on the 12th of April 2007 at Le Cellier de Bonne-fontaine, La Chaux-de-fonds, Switzerland, (www.lecellier.ch) in a room dedicated for whisky tasting and without any odours or smell that could effect the perception of the flavours. A total of 17 persons were asked to rate arbitrarily each glass from 1 (very bad) to 10 (superb). The 17 persons represented a panel of men and women of different age. The “testers” were blinded and did not know the content of the glass, nor the number of different whiskies served. The only information that they received was “The glasses do not contain all the same whisky”. All the glasses were hand washed and rinsed before use to avoid off-notes from the washing product.

Results:

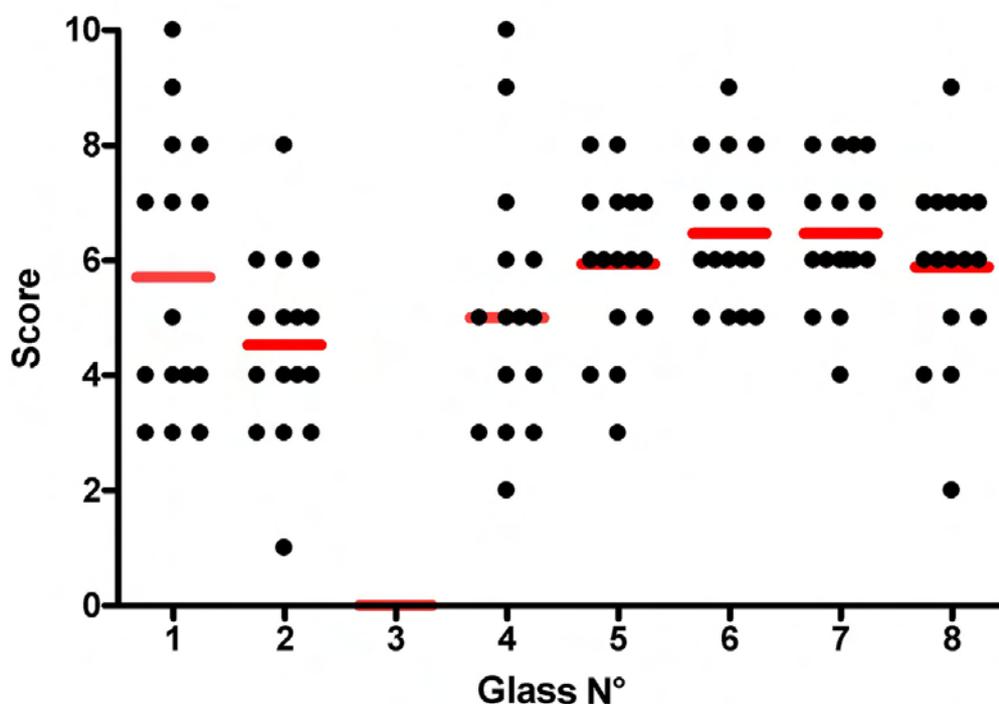
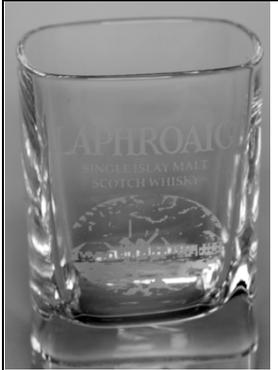


Figure 2: The content of each glass (see Figure 2 for the photograph of each glass) was nosed and their individual evaluation was scored between 1 (very bad) and 10 (superb). Each dot represents an individual evaluation and the red bar represents the mean value. N=17. The glass number 3 was the comèparator and therefore not represented.

Figure 1: Type of glasses used for the test

			
<p>Glass 1: “Shot Glass”</p>	<p>Glass 2: “Whisky Cola Glass”</p>	<p>Glass 3: “Laddie Glass”</p>	<p>Glass 4: “Tumbler”</p>
			
<p>Glass 5: “Tulip glass”</p>	<p>Glass 6: “ISO”</p>	<p>Glass 7: “Cognac Glass”</p>	<p>Glass 8: “Glencairn”</p>

Note: The glasses are not represented at the same scale!

Conclusion: The mean score for all the glasses containing the Glenfarclas was 5.7 and score similarly to the comparator, the Highland Park with a score of 5.5. When looking at the mean value of each glass, 4 glasses had a score superior to the mean, they were the Tulip (Glass 5, score: 5.9 ± 1.4 (mean \pm standard deviation), the ISO (Glass 6, score: 6.5 ± 1.2), the Cognac (Glass 7, score: 6.5 ± 1.2) and the Glencairn glasses (Glass 8, score: 5.9 ± 1.6). The Tumbler (Glass 4, score: 5.0 ± 2.8) and the Whisky Cola (score: 4.5 ± 1.6) glasses were the two worst glasses. When looking at the individual values, the participants to this nosing had the largest divergence with the Shot glass (Glass 1) and the Tumbler (Glass 4).

Discussion:

Amongst the community of whisky enthusiasts and connoisseurs, there has always been some argumentation about the best glass for whisky nosing and tasting. Traditionally, whisky was drunk in tumbler glasses and still often used nowadays in many bars and restaurants, along with the whisky cola glass. The tumbler is also strongly associated with the image of whisky, culturally and on the different commercial advertisement. Amongst the master blender and the whisky community, the Sherry Copita glass was preferred to the tumbler. Very early on and nowadays, at the different whisky events, there is a mixture of Copita, ISO and Glencairn® glasses used.

The appreciation of whisky is quite subjective and this is reflected by the variability illustrated in Figure 2. However, when looking at the general pictures, some trends can be identified. As indicated by these results, the Tumbler and whisky cola glasses performed below average, with some participants commenting the flavours as “Weak” or “Diluted”. These two glasses have in common straight edges of the glasses. The glasses giving the best score were all “tulip-like”, with the base where the spirit is resting is broader than the opening, allowing a concentration of the flavours. The shot glass performed average, probably since the distance between the whisky and the nose was short enough to avoid a dilution of the flavours. Based on this experiment, tulip-like glasses should be preferred over the tumbler and the whisky cola glass. Between the different tulip-like glasses, the ISO and the Cognac glasses performed better (mean score: 6.5) than the Glencairn and Tulip glass. Based on the morphology of the glass, the distance between the nose and the spirit, or the ratio between the base and the opening, no relationship can be identified to explain the observed difference. This might be also due to chance finding.

At the time I started to write this report, another report by the MaltManiac Lawrence Graham was published online (<http://www.maltmaniacs.org/mm103.html#2007-30>) and confirmed the effect of the glass on the appreciation of whisky. In my study, I have only tried to have some relative measure of the effect of the glass on the perception on one type of whisky. Repeating the same experiment with different type of whiskies (e.g., heavily peated, non-peated and non-sherried, at 40% or cask strength), might have lead to different conclusion. In addition, I only investigated the impact of the glass on flavours and not about tasting (i.e., the perception of the aromas in the mouth) could be obtained, since the number of glasses required would have been too large. However, since nosing is an important part of the appreciation of the whisky, comparable results in the tasting could be expected. I performed a similar blinded experiment on a group of 3 friends, including tasting, and surprisingly, the perception of the aromas of the same whisky was sometimes strongly affected by the shape of the glass.

Drinking moderately a good whisky should always be fun, so try to play around with the different glasses that you have at home and determine which glass suits you the best!

Slainthe!

Patrick B.