Changing the wine perception in restaurants through a multisensory experience

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Abstract

This project concerns the rare opportunity that people have to taste different grapes of wine before ordering a bottle in a restaurant. Therefore, usually they take the advice of the waiter instead of sampling several wines and making a decision based on their flavor preference. Moreover, the knowledge of the members of a group of people may influence the decision-making. Commonly, the person with the most wine-expertise does the grape’s selection, that from the perspective of an equitable wine-experience, making it difficult for the group to exchange opinions and leading to biased choice. From these assumptions the aim of the project is settled. The challenge is to design a wine system that enables the group as a whole to explore the wine’s qualities and give their opinion regardless of their previous wine-knowledge and expertise, instead based on their feelings in the trial. In short, a wine tester that non-expertise users may appreciate. In order to better understand the users’ perception, a multi-sensory wine workshop was conducted. Pairs of cross-modal relations were studied: smell-sight, taste-touch and a final wine-memory experience. Offering new insights into ways of communicating wine.

Keywords

Wine, multi-sensory design, body language, interaction, sense

Project’s Concept

The project is developed within a course of the Design for Interaction Master at TU Delft. The evolution of the concept, thus, follows the subject’s process. Starting from the study of users’ interactions in a framed context of self-selection, the designer set up further research based on the initial findings. The project’s aim is then explorative, and focuses its efforts on designing an interactive-base working with users as experts in the domain of their own experiences.

The research topic was selected due to the designer personal interest and experience in the food industry. The experience of working in a family restaurant motivated the concept to focus around food, beverages and their connection with the experience of drinking wine. From a waitress’ viewpoint it is easy to observe consumers and in turn get direct access to their comments. Beyond users’ basic needs there are behaviours, comments and actions. This sort of data involves latent information, which is less accessible but more meaningful, that may be used to find new design directions not yet explored.

As a designer, I like to see experiences as opportunities that must be appreciated as qualitative data. Every happening enriches one’s personal background, and hence knowledge. A designer might use them as a kick off, to wonder and draw new questions; that form the basis of further research.

Under the above philosophy of designing, the project’s goal is stated. Its aim is to improve the current users’ wine experience in a restaurant.
context, by offering a new way of trying the wine that involves all the senses. Thus, instead of one, the user would have five receptors to apprehend the wine’s information. Therefore, in order to understand better how users perceive a wine’s properties, interviews to professionals, literature research and a workshop experience were carried on.

However, when concerning wine consumers, there are a few points that should be taken into account. The users’ expertise is the most important aspect to define the target. There are many wine related products designed for users with a medium-high level of knowledge, but there is a scarcity of products designed for people with little to know wine knowledge, to provide easier access to wine and involve them in its experience. There is a gap when it comes to trying wine in restaurants, users cannot explore different types when ordering a bottle; there are no small samples they can savour. The only means they have to access wine information is through the sommelier, or waiter in his absence, who can help them in the selection. But such a discussion would not be at the same level, as the knowledge of the new-wine user and the professional is not the same. Therefore a wine tester, which enables users to explore the wine through a wide range of qualities, like textures, flavours or smells, was designed. From these initial sensory explorations, the user might get curious and try to look for more information, even discuss with the sommelier about the qualities he has experienced and request a professional explanation.

Method

The project’s development was divided in different phases: firstly a literature review and primary research is conducted; secondly, the project’s idea definition was formed — ‘a restaurant wine tester that enables the user to taste the wine before ordering a bottle, and involving all the users senses in the process’. However, to get to know the users’ wine perception and how cross-modal relations work in wine tasting a wine workshop with non-expertise users is carried out. The workshop focuses on the possibilities of describing wine in different ways apart from words. By offering the users a range of pads of materials and pictures to describe the feeling they experience when trying each grape. As a final stage, based on the workshop results and applying them to the project’s concept, an iterative prototyping phase from rough models to the final working prototype was conducted.

Research Results

Qualitative information is the focus of researches evaluation, meaning that aspects like users’ comments, gestures or reactions are considered as important as statistical data. The most important findings belong to the analysis of the wine workshop. Although, the specific results are not going to be detailed here, it should be reported that strong connections between materials-tastes and pictures-smells were found. The workshop shows how the participants perceive differences between senses like smell and taste in 5 out of 6 grapes of wine. Eventually, the workshop shows how non-expertise users can appreciate wine qualities, differentiate and describe types of wine with materials they are provided with.

Prototypes

The prototyping starts with rough approximations in size and materials. Then it follows with quick cardboard, elastics and plasticine models. As a result of this initial testing the hanging-system is modified (Figure 1, shows some users’ comments).

The next prototype draws the interaction in terms of body language. This goes from product’s distances to movements, which the users are asked to do in order to use the product once in the context. Hence, as Figure 2 shows, the users represent the interaction in an abstract scenario. As a result the distances between elements are adapted in order to let the users perform more natural movements. Also, a

Figure 1: Shows some rough prototypes and users’ comments from the first testing.
sharing system is designed to enable users to try and exchange impressions about the types of wine and to open a discussion. The sharing-system consists in a code that it is integrated in the interior side of each grape’s packaging, avoiding naming brands that may biased the consumers’ opinion. By the use of this code, the participants can compare perceptions and wine characteristics to reach a consensus on the final wine’s selection in an egalitarian manner.

The last part of the prototyping was simulating the effect of surprise: the impact in the users’ mouth when they introduce and bit the grape, blasting and releasing the liquid wine inside. The selected material for building the grapes is an edible bioplastic. This material can be used in a wide range of thickness, making it feasible to work with films of less than one millimetre and simulate the grape’s skin. Moreover the material is suitable for liquid packaging, with a caducity of over six months and does not posses any flavour; all characteristics that make it suitable for the tester. However, prototyping with this material is outside the scope of this project due to tools and financial matters. Further materials investigation led the prototyping to the use of a food-linked material: a seaweed powder called Agar-Agar. The seaweed is mainly used for what is known as ‘molecular cuisine’. This powder works creating an external film around water-based liquids (see Figure 4) in a sequence of thermal-chemical reactions. The importance in the use of this material for prototyping is that it allows the user to experience the testing in the same manner the final product is intended to be made; experience that was tested by users as well.

Discussion

The Learning Experience

The project should be reviewed in the frame of a learning experience. Exploring how to approach the research process and finding out the decisive role of the users in such approaches has been being one of the most useful experiences of the project. Thus, as an educational experience the wine workshop is the most valuable one. The reasons for such state goes from the workshop’s concept and set up, to the data analysis and understanding of the users’ voice. Hence, comprehending the importance of working in difference layers of researching is also important, in order to identify which one best fits the required data being studied. What is more, demonstrating that the possibility of a multisensory wine perception — initial goal of the project — and its further application to wine-related products is feasible.

The Product’s Feasability

On the other hand, the viability of the product and thus its relevance in restaurants is something I have been tracking since the early steps of the project. Therefore, during its development I have been worried about how restaurants’ owner might see the product. For that reason, a final interview with the owner of a medium-class restaurant (20–30€ per person) took place. The interview suggested that such a product could not be applied to all the restaurants due to its direct budget-dependency. Nevertheless, the interviewee responded positively to the project’s idea and agreed in the opportunity it could represent in having a product like it to improve their customers’ experiences.
Further Steps

Even if the balance of the research and product is positive, I would like to state the interest in doing a further research involving a second workshop experience with only expertise users. This way, a fairer comparison of the users’ perceptual differences would help to assess how far one target group is from the other. Concerning the final product testing with the real material would also be necessary. The final test should be performed in the actual location, a restaurant. Additionally, the availability of resources meant the majority of test subjects were young, most of them students from nearby Universities. A wider range of users, in terms of variety of age, gender and other aspects would be desirable. To conclude, I also want to state that a further study about caducity of the wine inside the grape made of bioplastic should be consider; the current studies with this material prove its use for nearly a year, but it is recommended to do a specific test with wine inside.

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