What Wine Will We Want?

Jon Pearce
University of Melbourne
Parkville, Australia, 3010
jonmp@unimelb.edu.au

John Murphy
Design4Use
Abbotsford, Australia
john@design4use.com.au

ABSTRACT
For many, choosing new wines that are not familiar is problematic due to a lack of knowledge of how to describe the sorts of wines that they like. Hence people must rely on labels, cryptic wine descriptions or star ratings. We contend that there is a need to develop a better way of describing wines that works for non-expert wine lovers. To support this, we propose the development of a novel exploratory environment to match people's tastes to wines and hence facilitate the discovery of new wines.

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Wine, exploration, search, recommender system, foraging, preferences, tastes.

ACM Classification Keywords
H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

"I know what I like but I don't know how to describe it!"

How often do you hear it said: *"Ooo! I like that label - let's buy that one"* or *"A couple of gold awards - must be good!"*? Choosing wines can be hard unless you really understand wines and their descriptions. For many of us, we can sip a wine and think, *"yes, love that taste"*, but have much more trouble in answering the sommelier who asks *"And what sort of wine do you like to drink?"*. *"I dunno. Red."* might be a common answer!

The focus of this paper is to discuss descriptions for wines that will help people match their personal tastes to the vast world of wines. We go on to propose an exploratory system that would help people to be able to both find wines that they like and discover new wines that might match their personal tastes.

THE CHALLENGE IN SELECTING WINES

There is a two-fold challenge in communicating about wine: to put into words what you know you like, and to get other people to understand what you mean. If you can't do this then you might rely on other means such as tasting notes, awards or sommelier scores and comments. However, tasting notes are often not that helpful either:

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A stunner, with a gorgeous cassis aroma that soars from the glass, reinforced by a core of cherry and plum pâte de fruit, hoisin sauce, warm ganache and well-roasted apple wood notes. Hefty, but suave and seamless. The finish lets graphite and licorice elements glide through. (Wine No. 7)

You might well ask: do you drink it or apply it?

One might be tempted to look at the awards that a wine has won but, whilst a gold medal in the Olympic Games might mean 'best of class', a gold medal on a wine bottle simply puts it in a higher category, together with many, many other wines. And whilst the score from a reliable sommelier might be a good technical judge of a wine, it might say little about how well it matches to your own tastes.

Traditional search engines are not helpful either since not only does one need to know keywords that precisely relate to one taste in wines, but those keywords will inevitably bring up many irrelevant finds when searching.

If we were to design a system to help with this wine selection problem (be it a web site, app or even a human) its requirements might be as follows:

- gather information on the individual's wine taste preferences;
- match that information to a database of wines;
- present the individual with a range of suitable wines to choose from;
- let the user enter a wine that they know and then see others with similar characteristics;
- add a touch of serendipity that might help the individual discover new wine tastes.

Whatever form this system takes, the outcome needs to allow the individual to easily explore the range of suitable wines and 'play around' with their original preferences. If it were a human, you might ask *"show me some wines that are a little sweeter"*; if it were an app, you might control it by nudging a control a little further in one direction or another.

AN EXPLORATORY SYSTEM

Our proposed approach to this problem of wine selection is to create a system (app) that lets the user describe their tastes from among a small number of pre-defined taste 'spectra'. Each of these spectra would describe one dimension of taste/preference ranging from one extreme to another (e.g. dry to sweet; simple to complex; etc.) and would not present any judgmental qualities (so no good/bad spectra, as we might be asking the winemaker to make this judgement him or herself!). Users would make their choices by adjusting slider controls from one end of each spectrum to the other. The system would then display images of the wines ranked by those that match his or her

tastes the best. By offering further information about the wine, the user could make a judgment as to which ones to choose. This approach is one used in a growing number of systems that extend the traditional *recommender system* concept to encourage the user to *explore* in a well-controlled environment (Marchionini, 2006). Such *exploratory* systems are in contrast to *search* systems in which the user enters keywords and are presented with a list of best matches. The difficulty with search systems is in knowing the best keywords that will return wines to your liking. An exploratory system offers the user a different kind of interaction that can support a much more playful and engaging experience (Pearce et al, 2011).

This particular exploratory approach has been used by the authors in environments that help children explore books (http://bookfish.net.au), teachers explore science resources (http://pstt.ifish.io), even to allow delegates at this conference explore the papers being presented (http://ozchi2016.ifish.io), as well as in many other contexts (examples can be found here: http://people.eng.unimelb.edu.au/jonmp/projects/iFISH).

DESIGNING A WINE EXPLORATION SYSTEM

The main challenge in designing a system as described above is to find a small, discreet set of descriptors that have meaning to a large cross-section of wine drinkers. The set needs to cover the full gamut of descriptions that might be in a drinker's mind. The individual descriptors need to describe a spectrum onto which drinkers can position their own tastes. There are many online resources that describe wine tastes. For example, an infographic at WineFolly.com (http://winefolly.com/tutorial/wine-descriptions-chart-infographic/) lists twelve categories together with a breakdown of each category into five to twenty-five descriptors. These categories are: body; yeast; style; tannin; acidity; alcohol; spice; fruit; flower; herb; oak and inorganic. Using just some of these categories to define spectrum sliders, the user might be offered sliders with which to make their choices such as:

Body: *Thin* <===> *Fat*

Style: *Barnyard* <===> *Refined*

Tannin: *Bitter* <===> *Flabby*

Acidity: *Bright* <===> *Flat*

Fruit: *Jammy* <===> *Apple*

To find a definitive set of categories that has global application requires further research. Previous discussions with several wine 'experts' suggest that the following might be a fairly generic minimal set of descriptors that many drinkers can relate to:

Light bodied <===> *Full-bodied*

Soft finish <===> *Firm and tannic*

Simple <===> *Complex*

Quaffing <===> *Savouring*

High acid <===> *Low acid*

White wines might require a different set from red wines.

To make the user feel more comfortable, and remove any sense of 'wine snobbery', it might be appropriate to use slightly ambiguous or playful words, or even symbols/icons. For example, rather than

Quaffing <===> *Savouring*

maybe it would be preferable to use:

Barby <===> *Use the tablecloth*

or even:

An interesting by-product of systems like these is their intrinsic serendipitous behaviour. It is unlikely that every one of the presented wines will match the settings of half-a-dozen sliders. For example, in the first set of five descriptors listed above, some of wines presented might have a good match with the user's settings for *body*, *style*, *tannin* and *acidity*, but have a very poor match with *fruit*. This is not necessarily a bad thing as it might lead the user to taste wines that he or she would never have otherwise considered.

Some wine descriptors are binary or objective in nature, so some 'filters' might be required for items such as red/white, price, region, etc.

NEXT STEPS

Regardless of whether the intent is to design a system or not, there is value in carrying out research to understand better the ways in which we describe our tastes in wines. We have proposed an approach to this and described a style of exploratory behavior that matches well with wine selection. Further research is required to define the concise set of descriptors to drive such a system. This will enable us to design an exploratory environment that encourages people to discover new wines that align with their tastes and the occasional out-of-the-box surprise that opens up new wine sensations!

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