

IMPACT OF ENVIRONMENTAL CONTEXT ON WINE PERCEPTION AND ENJOYMENT

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ABSTRACT

This small-scale experiment is aimed to investigate the influence of the environmental context on the perception and enjoyment of wine. Forty-two participants were recruited to taste the same wine in three distinct environments. To control for any lingering taste effects, participants gargled with tap water between each room change. Quantitative assessments were conducted to evaluate participants' perceptions of taste, aroma, and overall enjoyment. The results indicate that environmental context can have a significant effect on wine perception and enjoyment, suggesting that sensory experiences are intertwined with the surroundings in which they occur.

01 INTRODUCTION

The relationship between sensory perception and the environment in which it occurs has been the subject of growing interest in recent years. It is well-established that external factors, such as lighting, music, and ambiance, can influence the perception of taste and aroma in food and beverages (Spence, 2014). However, limited research has explored the impact of environmental context on the perception of wine, a complex sensory experience that combines taste, aroma, and visual cues. This experiment seeks to fill this gap by investigating how different environments affect participants' perception and enjoyment of wine.

02 METHODS

PARTICIPANTS

A total of 42 participants (21 males, 21 females) aged between 25 and 55 were recruited for this experiment. Participants were required to have a moderate level of wine consumption experience.

MATERIALS

- A single bottle of red wine with known characteristics (variety, vintage, alcohol content).
- Three different rooms designed to create distinct environmental contexts (Room A: Energetic setup, Room B: Relaxed setup, Room C: Neutral setup).
- Tap water for gargling.
- Standard wine glasses for each participant.
- Evaluation forms with a set of quantitative questions.

PROCEDURE

1. Participants were advised about the structure of the experiment and provided informed consent.
2. Participants were introduced to the wine.
3. Each participant was asked to taste the wine in three different rooms (Rooms A, B, and C) in a randomized order.
4. Between each room change, participants gargled twice with tap water for 10 seconds to neutralize their palate.
5. In each room, participants had 5 minutes to drink the wine in isolation, without communication.
6. After tasting the wine in each room, participants completed evaluation forms that included quantitative questions assessing factors such as taste, aroma, and overall enjoyment.

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SPACES

ROOM A (HIGH ENERGY)

This space mixes elements of cottage-core with a chinoiserie inspired bistro feel for a high energy, eclectic interior that is filled with colour, shape and pattern. The space is given a dramatic feel with a combination of dark painted walls and large-scale striped ceiling canopy in bold black and white stripes. The eclectic mix of furniture, accessories and lights includes patterned chinoiserie shades and chairs with bistro type tables embellished with colour.



Textiles enhance the maximalist feel, with striped cushions layering onto a tiled floor that delivers large scale pattern and colour. Oversized plants fill up the space enhancing a bold eclectic space that is filled with energy.



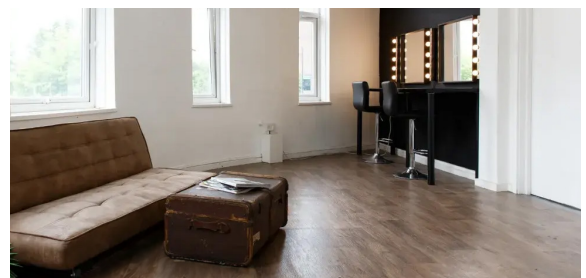
ROOM B (RELAXED)

This space is a restored has many original period features. This lends it a casual industrial feel with raw and painted brickwork on the walls, poured concrete floors, wooden interior fittings as well as metal framed Crittal windows that let in an abundance of natural daylight. The space is decorated with a jungle of live plants, which enhance the natural materials within the space to create a calm and peaceful environment.

The industrial feel is heightened with the furniture and light fittings that includes metal chairs and wooden trestle style tables as well as bare bulb fittings. This space is a calming natural environment that brings nature indoors, creating a sense of serenity and calm that is enhanced with a casual and rustic finish. It creates a cocooning space that inspires people to invite in friends.

ROOM 3 (NEUTRAL)

This space was identified to provide a base level for the experiment. A simple space that contained minimal interior elements. Neutral colours, lighting, standard fittings, and no additional dressings beyond seats and a table.



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03 RESULTS

The results of the experiment demonstrated a significant effect of environmental context on participants' wine perception and enjoyment. Measuring the results highlighted significant differences in taste, desire to serve to a friend, and overall enjoyment scores across the three rooms.

Post-hoc analyses revealed that:

- Room A (Energetic) was associated with higher taste (22%) and enjoyment (32%) scores compared to Room B (Relaxed) and Room C (Neutral).
- Room B (Relaxed) yielded intermediate scores, with no significant differences from Room C in taste and aroma and but higher score for desire to serve to a friend (29%) and how the wine looked (14%)
- Room C (Neutral) received the lowest scores for taste, aroma, and overall enjoyment compared to the other two rooms.

Additional findings from the experiment found that perception of wine balance was the same across all 3 rooms (61.5%) and the strength of the wine was also uniform across all 3 rooms.

04 DISCUSSION

The findings of this experiment suggest that the environmental context can significantly impact the perception and enjoyment of wine.

The energetic setting (Room A) appeared to enhance participants' sensory experiences, leading to higher ratings for taste and enjoyment. In contrast, the neutral setting (Room C) appeared to diminish sensory perceptions, resulting in lower scores across the majority evaluated factors.

These results align with previous research indicating that environmental cues, such as music, lighting, and colour, can influence sensory experiences (Spence, 2014). The influence of context on wine perception may have implications for individuals, where the design of their domestic environment could be harnessed to enhance the overall wine drinking and social experience. Both the rating for taste and look of the wine were higher in the energetic room in comparison to the neutral room (22% and 24% respectively), and this aligns with research by (Fairchild, 2018) on how wine colour has influence on wine taste.

In terms of other senses, the finish of the wine was rated 11.2% higher in the energetic room versus the neutral room, and the scent was rated as 4.6% higher. While there are a range of mechanisms involved in the interconnection of our senses, this experiment implies that a colourful and vibrant interior is likely to heighten our mood and how we perceive things we consume.

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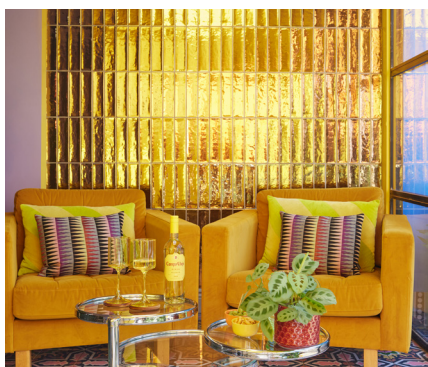
This could be influenced by the colours used in the space, the impact of textures on olfactory perception (Wang, 2018) or the emotions generated by being within the space. Further experiments could be used to isolate specific elements to define the impact they have on a larger scale.

A final consideration is how the environments impacted the perceived value of the wine being tasted, with the more visually appealing environments of rooms A and B increasing the participants estimated wine value by 19% (Room A) and 13% (Room B). This correlates with the body of research on restaurant interiors and their influence on perceived value of consumables within these premises.

Limitations of this study include the controlled nature of the environmental contexts, the limited variety of wine used and the small sample size. Future research could explore a wider range of wine types and include more diverse environmental settings to further elucidate the relationship between interior environment and wine perception.

In conclusion, this experiment highlights the significance of environmental context in shaping the perception and enjoyment of wine. It also highlights how these findings contribute to the growing body of research on the multisensory nature of food and beverage experiences, emphasizing the importance of considering interior environments in the assessment of sensory perceptions.

05 INTERIOR DISCUSSION



The higher energy room enhancing the taste of the wine, as well as the enjoyment people felt when drinking it, ties into some of today's current trends across interiors. This September's edition of *Maison et Objet* in Paris was focused on the theme of joy, embracing the endorphin enhancing effects that an interior can induce. A 'quest for pleasure' manifested in colour and a sense of audacity in interiors and objects. Sensual experience in sound, touch and visuals created statement pieces alongside textures and a focus on immersive whole space interiors. It also echoes a strengthening trend for maximalist interiors, as seen in fabric collections by Liberty as well as Dolce and Gabbana's new home collection previewed this spring in Milan.



Recreating this experience in the home is easier than it looks. To create this sense of excitement and energy that is conducive to enjoyable hosting, carefully selecting small accessories and textiles such as cushions that layer colour and pattern is a good quick step. Using rugs to create statement floor pattern and colour creates a large-scale focal point in a room.

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And using paint cleverly can create a dramatic interior easily- choosing darker colours for the walls, and even creating a statement wall using masking tape to paint bold stripes is an option that will help to heighten the experience guests have of the food and drinks that they experience in a space. Alternatively choosing striped wallpaper can create the same effect. Cane chairs and bistro tables in dining areas can recreate this look easily at home too.

Meanwhile, while the more relaxed feel of the second room didn't contribute as much to an elevated sense of taste, it did improve enjoyment of the wine within the social occasion.

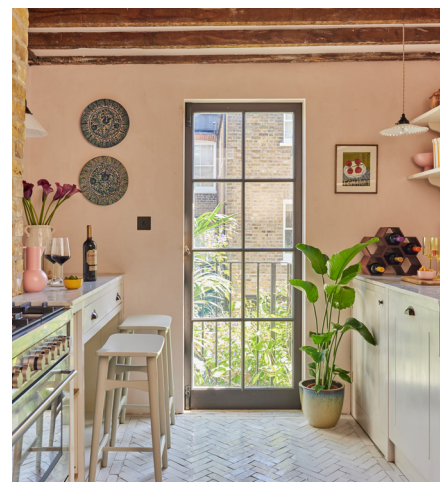
In an increasingly fast paced and digital world, with global tensions and climate change becoming growing existential threats, we are starting to see a move towards creating interior spaces that cocoon us from the outside world and manifest sustainability in visual ways.

This was seen at this year's edition of Milan design week, where biophilia emerged as one of the principal trends. Inspiration from nature in the form of natural materials, planting and living features within spaces was a key theme. Addressing sustainable practices, we're also seeing industrial waste being used in creative ways, and space and products that have a transparency about the materials that they use take on a new beauty.

The first step to recreating this space in a home is choosing materials and colours carefully. Selecting wall colours that mimic natural materials, such as pink plaster type colours can create a great base. Then layering in a mix of industrial inspired furniture with lots of natural materials in furniture and accessories will help to build that space that is perfect for hosting friends in.

Bare bulbs are easy to source these days and they come in all sorts of patterns and sizes - it's a good way to add a bit of industrial into your natural interior. And whilst you can't affect the amount of natural daylight that you have in your space, building in a selection of indirect light sources such as wall lights, uplighters and table lights can create a calming but bright lighting scheme in your space, and one that is easily adaptable to create a variety of moods for hosting friends and sharing drinks with them.

Creating an indoor jungle with layered plants will help to bring the outdoors in, and carefully selecting a mix of planters that include natural materials as well as soft natural colours will finish off a space that has the same sense of calm, nature and serenity.



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