A bittersweet brew: exploring the role of nostalgia in speculative rituals

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ABSTRACT

An increasing number of researchers are employing speculative design to examine our delicate food production system and the pressures we place on it. Coffee, in particular, has been shown to be highly sensitive to climate change. In this research through design inquiry, we explore the role of nostalgia in speculative rituals to promote reflections on our current practices related to coffee making and drinking. It aims to challenge the status quo to surface the embedded social and cultural values as well as sociopolitical tensions. To make sense of this space, we create an experiential futures exhibition contextualised in the year 2050, and synthesise three fabulations: (1) It's all gone, (2) Collective nostalgia, and (3) I need closure. Our discussions in this pictorial unpack the interconnectedness of personal and collective identities, material cultures, social structures, and broader societal issues, offering invitations to design researchers to explore alternative ways of engaging with speculative rituals through scent-evoked nostalgia.

Author Keywords

Speculative design; Worlbuilding; Nostalgia; Ritual; Imaginaries; Coffee-drinking and making

INTRODUCTION

What would life be without coffee? - King Louis XV of France is said to have asked, then added "*But then, what is life without coffee*?" [12]. Imagining life without coffee right now is for many of us, almost impossible.

27th of June 2024 – It is no uncommon sight; terraces bustling with people sipping coffee, workplaces adorned with branded coffee mugs on every desk, and stations filled with travellers dashing by, coffee cups in hand. The beloved beverage that graces our mornings and fuels our conversations is more than just a drink. With 2.25 billion cups consumed around the globe daily [2], it has been integrated within diverse cultural threads [11] and fuels a purpose that extinguishes beyond superficial perception. But what if an established habitual routine that has been integrated into society, and has enveloped into the renowned coffee-culture on a global scale, ceased to exist?

Coffee production is threatened by climate change and socioeconomic factors. Rising temperatures and shifting weather patterns disrupt coffee growing regions like Brazil and Vietnam, reducing both yield and quality [15, 37]. Pests and diseases further jeopardize crops [5]. A glimpse into this potential yet unfavourable outcome is provided by research published in PLOS One, which suggests that regions suitable for coffee production could shrink with 54-60% by 2050 if global temperatures rise; "Crop disease, infestation and premature ripening will become more likely, resulting in a lower quality of coffee produced in lower volumes" [34]. Socio-economic challenges, such as fluctuating coffee prices and inadequate farmer support, undermine the livelihoods of small-scale producers, leading to decreased investment in sustainable practices [26].

Such phenomena, especially in the context of coffee production threatened by climate change and socio-economic factors, help us reflect on the role of design as a crucial mediator addressing the problem-solution dichotomy. In this project, we employ speculative design methodologies to address this. Speculative design offers a valuable approach by envisioning and materialising potential futures, thereby illuminating current issues and prompting discourse on sustainable practices [29]. By imagining an alternative future without coffee, we aim to challenge the status quo and employ design probes in the form of rituals to investigate such complex issues serve as tools for reflection and debate, encouraging participants and viewers to engage with potential futures in a more concrete and personal manner [4]. Through this design exploration, we we aim to delve into how tapping into nostalgia can evoke emotional responses, demonstrating how speculative design can intersect with human experience on a personal level. Nostalgia often has flavours of sadness [49] and a mixture of bittersweet emotions [8]. Nostalgia is a research interest in many fields including design research [20], where focus is to use media to evoke nostalgic emotions. Examples include using media to support nostalgic experiences [3], and presenting nostalgic media in various environments like museums [44] or elderly homes [36]. In this this research through design inquiry, through worldbuilding, reflective activities, and a personal ritual, we investigate

how can nostalgia play a role in speculative rituals to promote reflection on the contemporary practices of coffee-drinking and making to surface the embedded social and cultural values we share and sociopolitical tensions that arise?

As part of the course 'Researching the Future Everyday' at the Technical University Eindhoven, an experiential futures project was developed, utilising design in an exhibition format to evoke, materialise, and influence imaginaries. Visitors of the year 2050 were guided through a cabinet of rarities displaying historic coffee-related products, a self-reflective questioning pinboard, and a closing ritual where they created their own nostalgic scent blend. This led to a three-part experience, now referred to as fabulations. To analyse the outcomes of the questions of fabulation 2 and the observations during the closing ritual of fabulation 3, inductive reasoning was employed to prevent a biased evaluation procedure. Finally, this report discusses the emergent themes and tensions observed during the exhibition.

BACKGROUND

1. Expanding the notions of human-thing relationship

Artefacts are not merely passive items in our daily lives, but active participants in the construction of our social and emotional worlds. Ian Hodder, in his book [23], explores the concept of entanglement, which highlights the intricate and reciprocal relationships between humans and objects, illustrating how material culture shapes and is shaped by human behaviour and social For centuries, the two most commonly grown coffee beans, C. arabica and C. robusta, have been cultivated in the equatorial regions of the Americas [2], and have been utilized as the sole resource for preparing coffee. It is these seeds from the Coffea plant species that result in coffee having that darkly colored, bitter, and slightly acidic taste. Additionally, it has a stimulating effect on humans, primarily due to its caffeine content. As a result, coffee as a beverage, especially due to its unique resource and interwoven nature in society, can be considered a phenomenon with far-reaching implications for the future. Considering this forecast, and knowing that C. Arabica accounts for approximately 70% of the total world production, the initial stages of potential future implications would hit hard and fast on a global scale [34]. Conversely, C. robusta, which can be cultivated with lower production costs, and is more resilient to less favorable soil and climate conditions, may not be able to compensate for this extensive loss. Instead, producers may turn to additional resources, such as avocado or cashews to replace the conventional coffee bean [34]. Though this scenario may seem unimaginable now, the future of coffee remains uncertain and no longer assured marking a pivotal juncture between centuries of entrenched coffee culture and the unpredictability of forthcoming outcomes.

* **ARABICA VS ROBUSTA** KNOW THE DIFFERENCE COFFEA ARABICA ALTITUDE USED FOR 袋 TEMPERATURE CAFFEINE 8 12 RESISTANCE HROMOSOMES 0 ... PRODUCTION PRICE Variana aromaz, from fruity-flaral fill dark-chocolate COFFEA CANEPHORA (also known as Robusta ALTITUDE USED FOR Ö TEMPERATURE e la Y RESISTANCE CHROMOSOMES . 28 PRODUCTION PRICE An intensive, aromatic taste with a full body.

Figure 1. (2018) Arabica vs Robusta by Pio Gastro Bar & Bistro, retrieved from *https://piogastrobistro.com/pratikb ilgiler/arabica-versus-robusta/*

nature [44]. These experiences form the essence of our identity, shape who we are, who we have been, and importantly, who we have the potential to become [17]. This emphasises that we do not only form bonds with other humans around us, but also deep relationships and attachments to established practices, physical environments and systems we live in and with [28, 38]. These attachments extend the meaning of self implying that materials can become a part of who we are and can constitute our self identity [9, 18, 38].

structures. Further, Hodder temporally examines artefacts showing how development of technology and culture are intertwined [23]. Material culture delves into how the spaces we inhabit as being autobiographical representations [21], the significance of objects in everyday life [19], how mundane objects become evocative of life events offering comfort during significant life transitions [45], and how heirlooms provide an understanding of the distant pasts [31]. Autobiographical memories refer to memory that is specific to the self and personal in Human-thing relationships are not isolated, but part of a network which can be physical or conceptual, entanglements that extend beyond items to systems of objects and practices. Using an autoethnographical approach to build on this understanding, we aim to examine and reflect on how physical artefacts can serve as powerful tools in preserving and evoking memories. By exploring the reciprocal connection between us and our material world related to coffee practices, we seek to uncover the nuanced ways in which items related to practices of coffee making and drinking, shape and are shaped by our personal and collective identities. By critically engaging with the emotional and cultural significance of such artefacts, we want to explore how the extinction of coffee can impact our sense of self and cultural memory.

2. Crafting futures by reflecting on the past

Design fiction is a uniquely productive approach towards speculative inquiries. It extends the speculative aim of design-its future orientation-into more reflective realms that critically challenges assumptions we hold about design. This offers design researchers an approach for critical speculative inquiries [48]. Wakkary et. al. emphasise that actual situated artefacts in the everyday can offer for speculative and critical inquiries in design making everyday setting sites for speculative and critical inquiries [48]. Further, embodied speculation approaches offer ways to identify social opportunities and ethical implications of possible futures [40]. By offering an enriched problem definition, it can help shift focus towards real-life concerns and contexts [13, 50]. Additionally, Robertson and Wagner advocate for ethical approaches to participatory design which emphasises on reflective engagement with participants. This involves recognizing participants' agency and fostering emancipatory participation, ensuring their voices and experiences shape the design process meaningfully [35].

These perspectives are highly relevant focusing on a reflective approach being essential for speculative design. By adopting a reflective approach we aim to bring to the foreground ethical, reflexive, and emancipatory approaches. We hope to align this with the aim of creating meaningful interactions with the material world and its cultural significance. By engaging participants in reflective exercises, the objective is to uncover the deep emotional and cultural significance of coffee, as well as the broader social implications of its absence. Through these reflections, we aim to uncover the broader implications of coffee's extinction, touching on themes such as social structures, societal problems, inequality, post-colonialism, and personal values and practices. This project aims to highlight the interconnectedness of personal habits, social structures, and broader societal issues.

3. Rituals for meaning making

Theory in sociology claims the context of recollection changes the reconstruction of memories, arguing rituals are fundamental for the transmission of collective memories in the form of tradition [22]. Some of the most important cultural evolutions have involved the invention or re-imagination of rituals or routines. According to anthropologists and historians, humans have a long history of designing rituals [10]. Certain design fiction prototypes help speculate about 'interaction rituals' through particular interfaces [32]. Rituals generate emotions and are symbolic actions that transcend the obviously visible and bring higher meaning to experiences [10, 27]. Kluber et al. [27] outline six principles for designing rituals. They emphasise balancing the privateness and publicness of rituals, suggesting that while rituals may be intimate, their public display enhances visibility and perceived power. Customisation and uniqueness are important, allowing users to personalise rituals to express themselves. The rituals should embody societal values, with symbolic components that foster transcendent experiences. Structuring and creating extraordinary experiences make rituals feel special and temporally significant. Ensuring physical and psychological accessibility is crucial for reminiscence. Lastly, rituals should stimulate participation, inviting others to join and repeat the activity, making it a collective and cultural phenomenon.

In accordance with Coops at al., we want to acknowledge emotions of people when letting coffee go, we want to create a space to address diverse knowledge, opinions, worldviews, and emotions to initiate an open and honest exchange with one another [18]. Further, we consider rituals to be fluid, a "series of actions or activities from which experiential meaning emerges" [30] (p.1) to express personal and collective values [18]. Through creating a ritual, we want participants to be able to make sense of and find meaning in what is happening or has happened and explore what the interactions in the ritual feels like, both with other participants and actions, and how it can support us in the process of meaning making.

UNDERSTANDING NOSTALGIA

Nostalgia is generally defined as the feeling of having lost something important or dear. This manifests as nostalgia for the (personal) past. It is also defined as a joy tainted with sadness [49], often noted for positive attributes such as promoting self-esteem, providing opportunities to form social connections, and an increased sense of meaning in life [39, 51]. It is often connected with fond memories about youth and high school periods. This phenomenon is called Youthful sentiment. This expresses itself in places, TV shows, toys, games and other aspects that people experienced in their youth in a positive way. On the other hand, negative emotions such as sadness, rearet, loss, and loneliness can be associated with feeling nostalgic [24, 51]. It is this mixture of emotions which has led to many definitions of nostalgia. Batcho [8] describes how a once medical term has morphed into a widespread set of emotions. For example, vicarious [42], collective [6], restorative [14], reflective [14], and personal which is defined as autobiographical experiences from memory [42, 43]. Further, it has been researched that nostalgic memories triggered by taste and smell are especially relevant, arousing, and familiar. Scent-evoked and food-evoked nostalgia also confer numerous psychological benefits, including enhanced self-esteem, feelings of social connectedness, and deeper meaning in life. Gustatory nostalgia, a form of nostalgia in relation to food, has insightful linkages between memory and food and extends beyond tasting food [25]. An exploratory study of nostalgic food consumption elicited six themes: childhood, yearning, substitution, homsickness, special occasions, and rediscovery [46].

OUR INTERPRETATION

To provide a unique perspective on nostalgia, and possibly identify key elements within undergoing a nostalgic experience, we performed a reflective study that involved choosing 3 food-related products that evoke a nostalgic feelings (Figure 2). Subsequently, each item was photographed and placed on a Miro board along with explanations detailing what each item is and why it elicited a sense of nostalgia. Upon evaluating the items selected by each of us, it became evident that nearly all of them were not food items, but rather objects associated with the act of preparing or consuming a meal. Examples include a pahsul for cutting vegetables, an Indian coffee set, a steel candy drum, a children's lunch box, and a specific glass bottle containing salt. Moreover, a similarity between cultures and upbringing was recognised between two researchers of Dutch nationality: the lunch box and drinking bottle set. Both researchers chose lunchboxes and drinking bottles in the same style, which can be attributed to these aesthetic sets being a trend among children approximately 20 years ago – The Mepal set introduced in 2004 [33]. This indicates that the items were not only recognizable through personal use but also familiar within the environment, as hundreds of these sets were visible in sight multiple times during the day in primary schools. Additionally, cultural influences emerged in our evaluation. For instance, someone who wasn't raised in a school where these lunchboxes were popular might not share the same nostalgic connection. Conversely, this was highlighted by one member of our group with an Indian cultural background, who had nostalgic associations with items unfamiliar to the Dutch researchers. An explanation was necessary, highlighting the vast differences in cultural practices, such as the skill required to use the pahsul with one's feet and the tradition of pouring coffee from one cup to another to cool it down. As a result, these differences prompted us to evaluate the elements influencing



our selection of these items, aiming to understand the underlying factors that contribute to the formation of nostalgic connections. This evaluation revealed the following elements in our selection:

- There is an emotional connection present, mostly due to deeper social connections with other individuals
- The nostalgia brings you back to a positive memory/ experience from the past
- Recognition when specifically one item stands out among other 'non-relevant' items to the nostalgia connection, almost evoking the emotion of surprise
- The items haven't been seen or touched in a significant period of time, such as many years. Conversely, some items that have been used since childhood and are still in use today did not bring up the same nostalgic feeling

In conclusion, this reflective study highlights the interplay between memory, identity, and material culture. By examining objects related to food we find nostalgic, it underscores how mundane artefacts become vessels of personal and collective memory. This phenomenon is rooted in the philosophy that nostalgia is not just a longing for the past but a complex emotional state that reconnects individuals with their cultural heritage and personal history. The exercise's finding that nostalgic items are often tools or objects related to food rather than food itself-reveal how actions associated with these items evoke sensory and emotional memories wich anchored us in our memories. The identification of similar nostalgic items among individuals of shared cultural backgrounds, such as the Dutch teammates' lunchboxes, demonstrates how collective memory shapes and is shaped by communal experiences and sometimes extend to societal norms. This shared nostalgia is indicative of the social nature of memory which influences individual memory. Conversely, the unique nostalgic items from different cultural backgrounds highlights the importance of cultural specificity in understanding nostalgia.

OUR IDEA

The above insights were pivotal in understanding ways to induce nostalgia in our exhibition set-up of a speculative future. As coffee becomes extinct, preserving the artefacts of its preparation and consumption can evoke a rich tapestry of memories, rituals, and cultural practices. Based on our reflective exercise, stories and social construct seemed to be essential in evoking nostalgic emotions. We believe everyone shares social experiences, personal experiences, or fond memories related to coffee, making it an appropriate choice for such a research. Based on our experience, stories served as powerful tools for us to see patterns where there is chaos, and find meaning where there was randomness [52]. This meant that worldbuilding would serve as an essential tool for the visitors to step into the future. aligning with the idea that material culture and ritualistic practices are essential for the transmission of collective memories [16]. Worldbuilding is "the creation of imaginary worlds with coherent geographic, social, cultural, and other features" [47] (p.32). According to Zaidi, worldbuilding can forge a stronger relationship between foresight and design because it is a form of social constructivism and systemic design and instil a sense of completeness [52].

In order to create an engaging experience for visitors and participants, worldbuilding became essential to contexualise a future where coffee and coffee related items and practices have gone extinct. This led to creating stories to help people step into the future. Next to this it was decided to divide the exhibition in three different parts/fabulations: A static exhibition section, a memories and experience-related section and a hands-on workshop section.

WHY DID COFFEE GO EXTINCT? In the future there are some problems in regards to production and logistics of coffee. First of all, high caffeine levels within people and addictions are becoming more prominent, and producing coffee has become more expensive due to limited resources in the world. The

high intensity of producing and competition to get hold of the resources has been taken its toll on workers and the environment. Thus multiple governments around the world have decided to ban coffee due to all the negative consequences its existence has. Big consequences because of this were that many people started protesting and rioting because of the disappearing of coffee. Many people felt like governments robbed them of their culture and way of life due to coffee disappearing. They could also never relive precious moments, memories or create more priceless coffee experiences. Other factors like companies that design and make coffee equipment also were not very happy about this as they lost assignments and people lost their jobs. They decided to appeal to the government to come to a solution. These are the reasons why companies and other producers have resorted to create other forms of coffee and resources. They looked at sources like grain which was already used before by companies like zonnatura. Burning grains brings a taste close to coffee without caffeine and without using arabica beans. to produce alternate forms of coffee with less caffeine. Other beans that were less used but a bit more expensive were used for production but only slightly. The Robusta beans could only be harvested in small amounts and by select companies so not everyone could enjoy them. Subsequently different coffee machines were able to be developed and designed so more jobs were made available. Governments also started supporting ideas with these alternate coffee beans and sources. This way people could at least drink their beverages again and start to make new memories with this new form of coffee. But these memories were never the same as the old ones with the original forms and sensations of coffee.

In 2050, climate change has ravaged coffee-growing regions, driving the beloved beverage to extinction. Coffee shops have shuttered, and the daily ritual of grabbing a cup has vanished. "Let's grab a coffee" has become an antiquated phrase. People have adapted by drinking herbal infusions or nutrient-packed energy drinks, but the warmth and comfort of coffee is irreplaceable. Without the communal coffee break, offices feel colder, and less connected. Mornings have lost their magic, replaced by functional but soulless substitutes. Coffee machines, grinders, and mugs have been repurposed as nostalgic decorations in homes, museums, and galleries, relics of a time when coffee was the heartbeat of daily life. The familiar aroma of freshly brewed coffee has become a memory, a whisper of a bygone era. Society mourned the loss of more than just a drink—it mourns a cherished tradition.

Figure 3. Description coffee item 'AEROPRESS'

2004 | AEROPRESS | The emergence of the AeroPress revolutionized the coffee-making process in the 21st century. With its compact design and simple operation, the AeroPress quickly gained popularity among coffee enthusiasts seeking a convenient way to enjoy quality coffee at home or on the go. Its ability to produce rich, flavorful coffee in mere minutes made it a staple in kitchens worldwide. However, as coffee brewing techniques continued to evolve, the AeroPress faced competition from newer brewing methods such as pour-over and espresso machines. Despite this, the AeroPress remains a beloved tool among coffee aficionados, cherished for its reliability and consistency.

Lastly used in 2008 on a camping trip when taking a break from walking a Geo-cashing route

Each artefact describes the identities of its past users and reminds us how cofee was woven into the fabric of everyday social life. Intimate and personal rituals highlight how individual practices contribute towards shared cultural experiences.

The memories associated to each artefact aims to help individuals associate to those around themselves, fostering a sense of shared purpose. Each artefact serves as a bridge to the past, and helps reflect on the social phenomena that these artefacts represent

This cabinet serves as a time capsule of coffee-making artefacts and practices from 2024, each meticulously preserved to illustrate the diverse methods and functionalities of coffee preparation. The collection underscores the significance of coffee as both a daily ritual and a cultural cornerstone, prompting reflections on the value of these activities now lost to time.

Each artefact's story details its materials, skills essential for the operation, and history of its creation. For example, a manual coffee grinder, crafted from steel and plastic, highlights the blend of modern manufacturing technology and traditional coffee making practices. The story of its last use describes a repeated morning ritual, emphasizing the tactile satisfaction of grinding fresh beans by hand.

The extinction of coffee serves as a powerful narrative on ecological fragility and sociopolitical neglect. It raises questions about cultural and and environmental conditions. By showcasing these artifacts, the cabinet encourages reflection on current practices and the potential sociopolitical actions needed to preserve other cultural staples from a similar fate.



Figure 4. Visitor observing fabulation 1 | Cabinet of rarities

The display aims to preserve and commemorate the cultural and social significance of coffee in 2024. By documenting the last memories associated with each artefact, the exhibit highlights the emotional connections and cultural practices that have been lost, prompting reflection on the factors that led to coffee's extinction.

FABULATION 1: IT'S ALL GONE!

FABULATION 2: COLLECTIVE NOSTALGIA

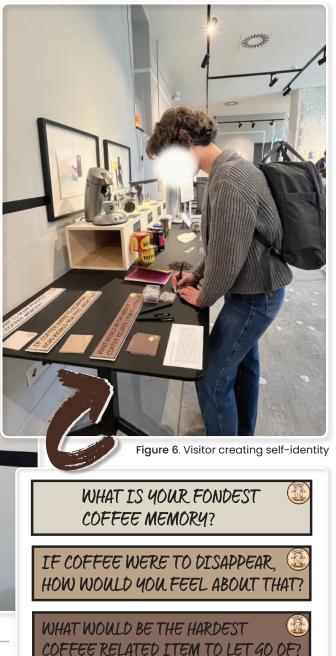
People grieve deeply for coffee, a symbol of simpler times. Photos of frothy cappuccinos and ornate latte art circulate online, stirring bittersweet memories. Coffee enthusiasts hold gatherings to share stories of their favorite blends, the cozy ambiance of cafes, and the joy of the first sip in the morning. Conversations often drift into nostalgia, recalling the warmth of holding a cup on a cold day. Baristas, now out of work, reminisce about their craft and the smiles they brought to customers' faces. Coffee's extinction has left a void, a collective longing for the lost sensory and social experience.

Concluding responses to 'What is your fondest coffee memory?': Most visitors think about enjoying coffee with friends and family and cherish the moments that accompany it. They also reminisce about meaningful locations such as their homes, countries they hold dear, and specific cafes they have visited. Concluding responses to 'If coffee were to disappear, how would you feel about that?': Visitors mainly said they would feel sad for various reasons. Coffee is part of morning routines; they would miss the smell, traditions, fun moments, rituals, and social interactions more than the taste itself. Additionally, visitors expressed hope for nice alternatives if coffee were to disappear, and that they would seek these out to maintain enjoyable social moments with friends and family. Concluding responses to 'What would be the hardest coffee related item to let go of?': Visitors provided multiple yet similar responses. For example, they mentioned missing the smell and sounds of the coffee machine, their coffee makers, and other coffee-related items. They also expressed missing memories with friends and family, coffee rituals, and the nostalgia associated with coffee and everything it represents.

The second fabulation was created to let visitors think about their coffee related memories through three questions, share them with other people and write them down. These three questions were (1) What is your fondest coffee memory?, (2) If coffee were to disappear, how would you feel about that?, and (3) What would be the hardest coffee related item to let go of? (Figure 5). Visitors could write their answers on notes referring to the three guestions based on the colour of the note (Figure 6). Then they could pin them on a pin-board under the category relating to the three questions (Figure 7). After the exhibition day the answers were read analysed and summarised to find out what people answered mostly to the three questions and what they think about the proposed future regarding coffee and their memories about it.



Figure 7. Pinboard containing answers of visitors



FABULATION 3: I NEED CLOSURE

The world struggles to fill the void left by coffee. The collective yearning has become a source of shared sorrow. To move forward, a ritual is needed—a symbolic farewell to coffee. This ritual serves as a means to honor the past while accepting the present. It provides closure, allowing people to acknowl-edge their grief and let go. Such a ceremony can foster unity, helping society to find new forms of connection and comfort. By creating a space for communal mourning and remembrance, the ritual helps heal the collective heartache, allowing a new chapter to begin in a world without coffee.



With the prospect of coffee becoming inaccessible, a more drastic image was created, envisioning coffee going extinct in November 2026. Consequently, the need to change current habits becomes urgent, and the realization might sink in more deeply than if the prospect were still years away. After engaging with the second fabulation, a self-identity in relation to coffee was established, which was necessary for the third part of the exhibition: undergoing a ritual to find closure on coffee's extinction

Figure 9. Example

The ritual consists of creating a personal nostalgic scent blend in an 80x30 mm glass flask with a cork closing mechanism. An example of a created 'nostalgic scent' is illustrated in Figure 9. Upon arriving, visitors were instructed to sit behind a table that contained the following available items; a collection of empty glass flasks containing a personalization tag, 12 white trays including a distinctive scent related to the coffee-culture (Figure 8), dry-flowers, mortar and pestle, funnels, toothpicks, scissors, and a mug for spilling ingredients (Figure 10). Visitors were provided with practical suggestions, such as adding each scent one by one in the order of the trays, utilizing the funnels to fill up the glass flask, and the option to adjust the ingredients with a toothpick. Additionally, it was mentioned that the nostalgic scent is meant to give the visitor a nostalgic experience whenever the aroma is taken in, meaning that the ingredients the visitor chooses could also include connections outside the sole ingredients of coffee. Think about incorporating the scent of lavender to highlight a cup of coffee experienced in the south of France, or adding strawberry because your child was eating strawberry ice cream at a restaurant while you were drinking your cup of coffee for dessert. Furthermore, participants were informed that they had complete freedom to choose which ingredients to add to their nostalgic scent blend, yet the ground coffee beans should be utilised as the foundation. Lastly, after completing their creation, visitors could personalise their aroma by filling out the 'perfume of' name tag (Figure 9).

Figure 8.12 Ingredients | Scents

Figure 11. Public Ritual arrangement



Figure 10. Dry flowers | Available tools

Upon leaving their seat to signify their commitment to finishing the ritual, they also received a guide. This guide included detailed information for future use, covering topics such as 'Benefits of Using Your Nostalgic Scent', 'Ritual for Maximum Nostalgic Experience', and 'Storage Recommendations'. On the back, it featured all the selected scents and their characteristic nostalgic properties (Figure 13).

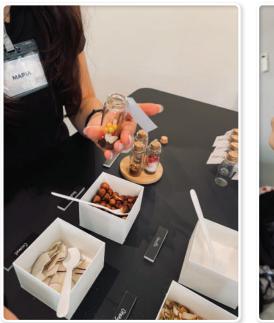




Figure 12. Visitors creating their personal nostalgic scent perfume

RESULTS -During the ritual, the ethnographic technique of observation was employed to gather data. A total of 15 visitors participated in the ritual, leading to the following observations. Despite being provided with practical instructions to follow the order of the trays due to the differing densities of the products, every participant chose to ignore this guideline and filled their flasks based on personal preference. Some created aesthetically pleasing layers, while others purposefully mixed all the ingredients. The number of ingredients varied significantly among participants; some opted for a minimal blend with just three ingredients, while others included as many scents as possible. Some people chose to describe the memory based on which the scent was created, others remained silent, and worked personally. Each visitor's final product looked and smelled unique, with no two results matching (Figure 12). Additionally, before beginning the ritual, visitors often shared their interpretations of how coffee might become extinct or reflected on environmental issues, expressing appreciation for the ingredients currently available. On average, participants took a few minutes to complete the ritual and left with smiles on their faces, indicating they went through a positive experience.



NOSTALGIC SCENT

Thank you for participating in our exhibition and creating your own nostalgic scent blend! This personalized fragrance is designed to transport you back to comforting times whenever you need a touch of the past.

BENEFITS OF USING YOUR NOSTALGIC SCENT

- D Stress Relief: The familiar and pleasant aroma can help reduce stress and promote relaxation
- Spark Creativity: Recalling past experiences can inspire creative thoughts and artistic expression
- 3 Increase Motivation: Positive memories can motivate you to pursue future goals and dreams
- Connection & Belonging: Reliving the past with loved ones can strengthen future bonds and foster deeper connections
- 5 Reinforce Identity: Nostalgia helps reinforce a sense of self and personal history, contributing to a stable identity

RITUAL FOR MAXIMAL NOSTALGIC EXPERIENCE

Brew a scent-less cup of coffee, also known as black coffee. After taking a sip, close your eyes, inhale the aroma of your personalized nostalgic scent, and let the comforting effects of nostalgia wash over you.

STORAGE RECOMMENDATION

We recommend storing your nostalgic scent on a flat surface in a location that holds personal value to you. As a result, the elements within the flask remain in place. Moreover, having assigned a designated area allows you to fall back on the nostalgic experience whenever you need it.









Floral scent Whispering nature

Figure 13. Nostalgic scent guide

The final segment of the exhibition, focusing on a ritual to come to terms with coffee's potential extinction, drew inspiration from Sas and Coman, who emphasize that grief rituals aid in understanding and giving meaning to emotions experienced during significant changes [41]. Such grief rituals ideally encompass three key elements: (1) a continued connection with the lost loved one/item, (2) transition to one's new social role, and (3) transformation of one's sense of self. Within our exhibition, these three elements have been realized by (1) the availability of a personalized nostalgic perfume, (2) transitioning visitors to a new appreciation for alternative scents and experiences, and (3) fostering a deeper self-understanding through the act of creating and reflecting on their unique blend. Consequently, employing grief rituals creates a framework for emotional expression and sense-making during transitions, fostering personal growth through nostalgic practices. Moreover, Dr. Tim Wildschut's research at Southampton University suggests that engaging in nostalgic reminiscence often enhances social connectivity and optimism about the future, as continuity with the past fosters a positive outlook [7]. Accordingly, during the exhibition's ritual, nostalgia was employed to bridge the gap between past and future, leveraging this profound psychological phenomenon.

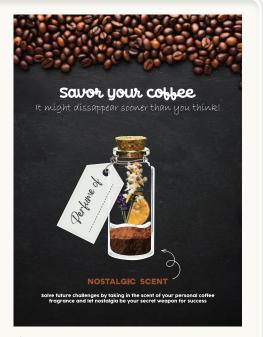


Figure 14. Poster fabulation 3

DISCUSSION

The research conducted through this experiential future project aims to explore how nostalgia can be leveraged in speculative rituals to encourage reflection on contemporary coffee-drinking and coffee-making practices. In order to gain a deeper understanding of the complex relationships individuals and communities have with coffee, nostalgia is employed to reveal embedded social and cultural values and to highlight the sociopolitical tensions that emerge. Yet, the challenge lies in balancing the deeply personal nature of nostalaic experiences with the objective documentation needed for comprehensive analysis. This discussion will explore the findings from the project, addressing how nostalgic elements in the ritual elicited personal reflections, the effectiveness of these rituals in revealing shared values, and the sociopolitical dynamics that were brought to light. Additionally, we will consider the potential improvements and implications for future applications of such speculative rituals.

Utilising the ethnographic observation technique, external information through variables such as individuals' behaviours, facial expressions, and verbal communication could be captured. It was observed that allowing visitors to initially reflect on questions about the potential extinction of coffee (fabulation 2) led them to open up and share their thoughts openly before commencing the ritual of making a nostalgic scent blend (fabulation 3). Common themes such as an appreciation for coffee itself, its social aspects, environmental changes, and the idea that coffee is now deeply woven into society yet often taken for granted emerged, enabling us to identify shared values and highlight the sociopolitical dynamics that surfaced. However, during the exhibition, the internal experiences of visitors had not been documented. Rather, visitors experienced the ritual privately without interference from the study during and after the process. Subsequently, this leads to the gap in understanding the internal processes of how visitors crafted their nostalgic scent blends and which internal states they went through. Questions like "What inspired your perfume creation?", "Why did you select these specific ingredients and what significance do they hold for you?", and "Who is the intended recipient of the perfume?" could have provided valuable insights related to the research question. Answers could have been analysed in order to uncover what ingredients people are most nostalgic about and the various meanings they represent, as well as provide a natural understanding of participants' responses. However, speculation about why it was decided not to include these questions in the exhibition resulted in the understanding that nostalgia can be very individual and private, relating to the assignment we created for ourselves capturing nostalgic elements at the beginning of the course. Therefore, posing such questions during or after the ritual might have been perceived as intrusive and had the potential to disrupt the established experience. Nevertheless, we perceive promise in a proposal to provide visitors with a QR code after the ritual, connecting them to a questionnaire that can be completed voluntarily and anonymously once they are at home. In this manner, the ritual in the present moment is not disrupted, yet insights into internal processes can be obtained. However, we acknowledge that personal information is highly sensitive, and we must approach inquiries about personal history, feelings, and memories with great care. Individuals may harbour emotional or traumatic experiences that they are hesitant to disclose. Therefore, in future exhibitions, we would respectfully invite participants to share their experiences, emphasising that sharing is voluntary and they are under no obligation to disclose anything they are uncomfortable with.

Further discussion points could be raised regarding the aesthetics of the ritual arrangement. As part of a larger exhibition, the ritual occurred in an open setting where visitors passed by and engaged in conversations. One might argue whether these conditions influenced the pace at which participants considered adding elements to their perfume bottles and completed the ritual as a whole. Additionally, visitors might have felt self-conscious, as the values guiding their choices are personal, while the ritual was publicly visible. In future iterations, an environment where participants can engage privately, without external observers, would be ideal. Moreover, it could be argued that visitors had a limited selection of options to include in their perfume, and there might have been instances where someone wished to incorporate a specific nostalgic scent that was not available. Nonetheless, an unlimited source of scents would make associations to the selection difficult, which is why a limited selection, with various choices related to coffee-culture, worked optimally for this investigation.

Lastly, our interpretation of nostalgic experiences, along with nostalgic objects, indicated that culture, and consequently historical norms and values, play a significant role. Therefore, in future applications, it could be intriguing to explore which scents individuals of certain ethnicities choose and how these scents relate to their personal experiences and memories.

CONCLUSION

To conclude, this project aimed to use nostalgia to create a cabinet of rarities exhibition together with experiences related to coffee/coffee related memories and experiences. This was done to answer the following research question: How can nostalgia play a role in speculative rituals to promote reflection on the contemporary practices of coffee-drinking and making to surface the embedded social and cultural values we share and sociopolitical tensions that arise?. Using an auethnographic and reflective process, we created three fabulations to evoke feelings of nostalgia and allow participants to step into a possible future and prompt reflections on current practices. Overall, this exhibition was received positively and prompted discussions on coffee and its history and perception, as well memories and experiences. People were also very positive about engaging in the ritual to capture the nostalgic scent. It could have been nice to find out more about why participants choose specific ingredients for their perfume. This can be done within future exhibitions and ritual making sessions but has to be done very discreetly to not hurt people as these are personal questions and might be considered as being intrusive. An idea could be to have a specific perfume making workshop session next to the exhibition where a group of people could engage in ritual making and be open about their memories and experiences (if they wish) in a safe and open environment. Other future work could be to keep expanding the

cabinet to include more items from different timelines and also to have more available ingredients for the ritual making. This way, people have more to talk about and engage in, expanding the exhibition and discussion. Lastly we can say that we hope that coffee never disappears but that we shouldn't take anything for granted to stay forever. But even if coffee disappears, that doesn't mean that memories and nostalgia about coffee have to disappear.

REFERENCE

[1] Aktermargia. 2022. Coffee. https://hospitalityinsights.ehl.edu/coffee-culture

[2] Lark Allen. 2024. Coffee Facts Statistics 2024 Report. https://www.driveresearch.com/market-research-company-blog/coffee-survey/

[3] Paul André, Abigail Sellen, Ken Wood, et al. 2011. Making public media personal: Nostalgia and Reminiscence in the Office. In Proceedings of HCI 2011 The 25th BCS Conference on Human Computer Interaction. BCS Learning & Development

[4] James Auger. 2013. Speculative design: crafting the speculation. Digital Creativity, (volume 24, issue 1), 11–35.

[5] Jacques Avelino, Marco Cristancho, Selena Georgiou, Pablo Imbach, Lorena Aguilar, Gustavo Bornemann, Peter Läderach, Francisco Anzueto, Allan J Hruska, and Carmen Morales. 2015. The coffee rust crises in Colombia and Central America (2008–2013): impacts, plausible causes and proposed solutions. Food security 7 (2015), 303–321.

[6] Stacey Menzel Baker and Patricia F Kennedy. 1994. Death by nostalgia: a diagnosis of context-specific cases. Advances in consumer research, (volume 21, issue 2)

[7] Blake Bassett. 2023. Nostalgia in Design: Leveraging Past Memories for Present Engagement. https://medium.com/nudge-notes/nostalgia-in-designleveraging-past-memories-for-present-engagement-5ea548c30d99. [8] Krystine Irene Batcho. 2013. Nostalgia: The bittersweet history of a psychological concept. History of psychology, (volume 16, issue 3), 165.

[9] Russell W Belk. 1988. Possessions and the extended self. Journal of consumer research, (volume 15, issue 2), 139–168.

[10] Catherine M Bell et al. 1997. Ritual: Perspectives and dimensions. Oxford University Press on Demand.

[11] Roberto Bertinetti. 2023. The evolution of coffee culture: From bean to cup to lifestyle. https://hospitality-insights.ehl.edu/coffee-culture

[12] Chris Bodenner. 2020. The War on Coffee. https://www.newyorker.com/magazine/2020/04/27/the-war-oncoffee. The New Yorker

[13] Laurens Boer and Jared Donovan. 2012. Provotypes for participatory innovation. In Proceedings of the designing interactive systems conference. 388–397.

[14] Svetlana Boym. 2007. Nostalgia and its discontents. The Hedgehog Review, (volume 9, issue 2), 7–19.

[15] Christian Bunn, Peter Läderach, Oriana Ovalle Rivera, and Dieter Kirschke. 2015. A bitter cup: climate change profile of global production of Arabica and Robusta coffee. Climatic change 129, 1, 89–101.

[16] Paul Connerton. 1989. How societies remember. Cambridge University Press.

[17] Martin A Conway. 1996. Autobiographical memory. In Memory. Elsevier, 165–194.

[18] Femke Coops, Kristina Bogner, and Caroline Hummels. 2024. Letting go in sustainability transitions: designing spaces for the unavoidable companion of change. In Routledge Handbook of Sustainable Design. Routledge, 493–504.

[19] Mihaly Csikszentmihalyi, Eugene Rochberg-Halton, and Eugene Halton. 1981. The meaning of things: Domestic symbols and the self. Cambridge university press. [20] Rebecca Gibson, Boriana Koleva, Martin Flintham, and Heidi Winklhofer. 2023. Gifting the Past in the Present: An Exploration of Evoking Nostalgia through Hybrid Gifts. In Proceedings of the 2023 ACM Designing Interactive Systems Conference. 1047–1059.

[21] Jennifer A González. 1995. Autotopographies. Prosthetic territories: Politics and hypertechnologies, 133–50.

[22] Maurice Halbwachs. 1992. On collective memory University of Chicago Press. Chicago IL

[23] Ian Hodder. 2012. Entangled: An archaeology of the relationships between humans and things.

[24] Susan L Holak and William J Havlena. 1992. Nostalgia: An exploratory study of themes and emotions in the nostalgic experience. Advances in consumer research, (volume 19, issue 1)

[25] Jon D Holtzman. 2006. Food and memory. Annu. Rev. Anthropol, (volume 35), 361–378.

[26] Shalene Jha, Christopher M Bacon, Stacy M Philpott, V Ernesto Méndez, Peter Läderach, and Robert A Rice. 2014. Shade coffee: update on a disappearing refuge for biodiversity. 2014. BioScience, (volume 64, issue 5), 416–428.

[27] Sara Klüber, Diana Löffler, Marc Hassenzahl, Ilona Nord, and Jörn Hurtienne. 2020. Designing Ritual Artifacts for Technology-Mediated Relationship

Transitions. In Proceedings of the Fourteenth International Conference on Tangible, Embedded, and Embodied Interaction. 349–361.

[28] T Lee and M Bonaiuto. (n.d.). Theory of attachment and place attachment. Psychological Theories for Environmental Issues. Chapter 5 (5), 137–170.

[29] Tau Ulv Lenskjold. 2015. Anthony Dunne & Fiona Raby: Speculative Everythin, (volume 3, issue 4), R2–1. [30] Pierre Lévy. 2015. Exploring the challenge of designing rituals. In 2015 IASDR International Design Research Conference.

[31] Katina T Lillios. 1999. Objects of memory: the ethnography and archaeology of heirlooms. Journal of archaeological method and theory 6, 235–262.

[32] Joshua McVeigh-Schultz. 2015. Designing Speculative Rituals: Tangible Imaginaries and Fictive Practices From the (Inter) Personal to the Political. Ph. D. Dissertation. University of Southern California.

[33] Mepal. n.d.. 70 jaar Mepal | Een reis door de geschiedenis | Mepal. (n.d.). https://www.mepal.com/nl/inspiratie/onze-helden/70-jaar-mepal. https://www.mepal .com/nl/inspiratie/onze-helden/70-jaar-mepal. (n.d.).

[34] Jordan Montgomery. 2023. What the coffee industry could look like in 2050. https://newground-mag.com/2023/05/the-coffee-industry-in-2050/

[35] Christina Mörtberg, Tone Bratteteig, Ina Wagner, Dagny Stuedahl, and Andrew Morrison. 2010. Methods that matter in digital design research. Exploring digital design: Multi-disciplinary design practices, 105–144.

[36] Magnus Nilsson, Sara Johansson, and Maria Håkansson. 2003. Nostalgia: an evocative tangible interface for elderly users. In CHI'03 Extended Abstracts on Human Factors in Computing Systems. 964–965.

[37] Oriana Ovalle-Rivera, Peter Läderach, Christian Bunn, Michael Obersteiner, and Götz Schroth. 2015. Projected shifts in Coffea arabica suitability among major global producing regions due to climate change. PloS one, e0124155.

[38] Catherine A Roster. 2014. The art of letting go: creating dispossession paths toward an unextended self. Consumption markets & culture, (volume 17, issue 4), 321–345. [39] Clay Routledge, Tim Wildschut, Constantine Sedikides, Jacob Juhl, and Jamie Arndt. 2012. The power of the past: Nostalgia as a meaning-making resource. Memory, (volume 20, issue 5), 452–460.

[40] Marco C Rozendaal, Marie L Heidingsfelder, and Frank Kupper. 2016. Exploring embodied speculation in participatory design and innovation. In Proceedings of the 14th Participatory Design Conference: Short Papers, Interactive Exhibitions, Workshops-Volume 2. 100–102.

[41] Corina Sas and Alina Coman. 2016. Designing personal grief rituals: An analysis of symbolic objects and actions. Death studies, (volume 40, issue 9), 558–569.

[42] Brian I Spaid. 2013. Profiting from our past: evoking nostalgia in the retail environment. The International Review of Retail, Distribution and Consumer Research, (volume 30, issue 4), 418–439.

[43] Barbara B Stern. 1992. Historical and personal nostalgia in advertising text: The fin de siecle effect. Journal of Advertising, (volume 21, issue 4), 11–22.

[44] Annie Sungkajun and Jinsil Hwaryoung Seo. 2019. Though Miles Apart: An Interactive Art Installation that Evokes Nostalgia. In Proceedings of the 9th International Conference on Digital and Interactive Arts. 1–6.

[45] Sherry Turkle. 2011. Evocative objects: Things we think with. MIT press.

[46] Alexandra Vignolles and Paul-Emmanuel Pichon. 2014. A taste of nostalgia: Links between nostalgia and food consumption. Qualitative market research: an international journal, (volume 17, issue 3), 225–238.

[47] Peter Von Stackelberg and Alex McDowell. 2015. What in the world? Storyworlds, science fiction, and futures studies. Journal of Futures Studies, (volume 20, issue 2), 25–46.

[48] RL Wakkary, WT Odom, Sabrina Hauser, Garnet Hertz, and Henry Lin. 2016. Material speculation: Actual artifacts for critical inquiry. In 5th Decennial Aarhus Conference on Critical Alternatives August. Aarhus University, 97–108. [49] David S Werman. 1977. Normal and pathological nostalgia. Journal of the American psychoanalytic association, (volume 25, issue 2), 387–398.

[50] Danielle Wilde, Oscar Tomico, Andrés Lucero, Kristina Höök, and Jacob Buur. 2015. Embodying embodied design research techniques. In 5th Decennial Aarhus Conference. Aarhus University, 39–42.

[51] Tim Wildschut, Constantine Sedikides, Jamie Arndt, and Clay Routledge. 2006. Nostalgia: content, triggers, functions. Journal of personality and social psychology, (volume 91, issue 5), 975.

[52] Leah Zaidi. 2019. Worldbuilding in Science Fiction, Foresight and Design. Journal of Futures Studies 23, 4. Manuscript submitted to ACM