Barcode Symphony: Sonification of Consumerism

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Abstract

"Barcode Symphony" is an artwork that challenges contemporary consumerism placing a critique of our daily transactions and the commodification of goods. The artist collects everyday invoices, and transforms the mundane barcode numbers into an auditory experience using p5js. This data-sonification process invites the audience to engage with the underlying rhythms and melodies hidden within the seemingly mundane aspects of consumer culture. "Barcode Symphony" prompts contemplation on the impact of consumerism on our lives, encouraging a deeper reflection on the significance of each transaction and its collective resonance in our society. Through the fusion of technology, data, and artistic expression, the artwork challenges viewers to reconsider their relationship with consumption in the modern world. As we navigate the intricate symphony of consumerism in the 21st century, this paper engages with Zygmunt Bauman's insights on its contemporary dynamics, providing a creative lens through which to examine and critique the modern consumerist experience.

Keywords

Barcode, Symphony, Data-sonification, p5js, Consumerism, Invoices, Contemporary art, Critique, Transaction, Auditory experience, Data sonification, The contemporary dynamics of consumption, Consumerist syndrome.

Introduction

In the context of examining the relations between production and consumption, this paper draws inspiration from sociological perspectives, particularly Zygmunt Bauman's [1] exploration of what he terms 'the consumerist syndrome.' Bauman's conceptualization delves into the contemporary dynamics of consumption, distinguishing it from earlier notions such as Veblen's conspicuous consumption.

Bauman's 'consumerist syndrome' is characterized by the pursuit of instant satisfaction, a desire deeply rooted in the landscape of liquid modernity. Unlike the 20th-century view that considered consumer activities as derived from basic needs, Bauman proposes a paradigm shift, asserting that modern consumption is now propelled by infinite desire. The choices of the contemporary consumer unfold against a backdrop of unfulfilled options, reflecting the complexities of navigating a liquid modern society.

This paper aligns with Bauman's critique by using "Barcode Symphony" as a lens to explore the nuances of consumerism. The transformation of daily invoice data into a sonification experience echoes Bauman's examination of consumption [1] driven by desire rather than necessity.

The project invites contemplation on the choices made in a consumer-driven society, encapsulating the essence of the consumerist syndrome. Furthermore, the paper considers Bauman's notion of using consumption as a form of resistance, a concept that resonates with the potential for artistic expression to challenge and reshape our perspectives on consumer culture. However, it critically reflects on this idea, acknowledging the complexities and limitations of using consumption as a mode of resistance in the contemporary sociological landscape.

As we navigate the intricate symphony of consumerism in the 21st century, this paper engages with Bauman's insights, providing a creative lens through which to examine and critique the modern consumerist experience. The reflections within the artwork and the broader sociological discourse prompt consideration of the condition of sociological activity today, offering a dynamic perspective on the interplay between production, consumption, desire, and resistance in our liquid modernity.

In the realm of contemporary art, the exploration of consumerism takes on various forms, challenging artists to critically engage with the ephemeral nature of materials. This paper delves into aspects of the artwork titled "Barcode Symphony," a project that confronts the complexities of consumerism through a fusion of technology, data-sonification, and artistic expression. Drawing inspiration from the works of Cao Shu [2] and Xu Bing [3], two influential artists known for their unconventional approaches to materials and symbols, "Barcode Symphony" embarks on a journey to unravel the hidden narratives within the everyday artifacts of consumer culture.

Cao Shu's [2] artistic philosophy, centered around the transient and ephemeral nature of materials, serves as a foundational concept for this project. Notably recognized for his work with dust on car windows, Shu's emphasis on finding significance in the overlooked and fleeting aligns seamlessly with the transformation of daily receipts into a musical narrative. As we explore the ephemeral essence of consumerist remnants, Shu's influence becomes a guiding force in the endeavor to reevaluate and elevate the mundane.

In a parallel vein, Xu Bing's [3] groundbreaking exploration of language and symbols as carriers of deeper meanings resonates with the transformation of numerical data from receipts into a unique musical language within "Barcode Symphony."

Xu Bing's renowned work, such as "Book from the Sky," underscores the potential of manipulating textual and symbolic elements to convey hidden messages.

This paper draws upon Bing's artistic discourse to prompt contemplation of the layers of meaning embedded within everyday materials, inviting a critical examination of the narratives concealed within the artifacts of consumerism.

As we navigate the intricate intersection of technology, art, and consumer culture, "Barcode Symphony" emerges as a dynamic exploration that pushes the boundaries of conventional artistic expression. The synthesis of Cao Shu's emphasis on the transient and Xu Bing's innovative use of symbols contributes to a nuanced understanding of how this project critically engages with consumerism. Through this paper, we embark on a journey to unravel the complexities of modern consumption, decoding the musical language woven into the very fabric of our daily transactions.

Sonified Consumerism

Creating data-sonification [4] using p5.js involves converting numerical data from barcodes into an auditory experience. Below is a simplified explanation of the technical steps involved in the process: The first step was to collect daily invoices and extract the numerical data from the barcodes. This could involve scanning or manually entering the numbers.

Map the numerical values from the barcodes to specific musical parameters. For example, you might assign pitch, duration, or volume to different digits or sets of digits within the barcode numbers.

It was necessary to set up a p5.js sketch with the necessary functions, including `setup()` and `draw()`. Ensure that you have an HTML element to display the sketch. Initializing the p5.js sound library for generating audio, it is possible to use functions like `loadSound()` to load audio files or `oscillator` to generate tones dynamically.

To create an algorithm that iterates through the barcode numbers and translates them into musical parameters, the author used loops to go through each digit and generate corresponding tones or musical events. Utilizing p5.js sound functions to generate sound based on the mapped parameters involved playing tones, triggering samples, or creating more complex musical patterns.

Excerpts from the code in P5JS for "Barcode Symphony":

```javascript
// code for data-sonification in p5.js
let barcodeData = "123456789"; // actual barcode data

function setup() {
  createCanvas(400, 400);
  // Initialize audio
  osc = new p5.Oscillator();
  osc.start();
}

function draw() {
  background(220);
  // Data-sonification algorithm
  for (let i = 0; i < barcodeData.length; i++) {
    let pitch = map(barcodeData[i], 0, 9, 220, 880); // Map digit to pitch
    playSound(pitch);
    // Additional mappings for duration, volume, etc.
  }
}

function playSound(pitch) {
  osc.freq(pitch); // Set oscillator frequency
  // Additional sound parameters can be modified here
  // (e.g., osc.amp(volume) for setting volume)
}
```

Developing a compelling visual representation of the sonification process, and incorporating elements like graphs or animations to enrich the overall artistic experience can be the next step. It will be important to integrate user interaction functionalities, providing viewers with the opportunity to actively engage with the artwork. This may include adjusting parameters, pausing, or restarting the sonification, allowing for personalized and immersive exploration.

Final Considerations

"Barcode Symphony" emerges as a multifaceted artistic endeavor that critically engages with the complexities of contemporary consumerism. By transforming the seemingly mundane numerical data from daily invoices into a dynamic auditory experience, the project navigates the intersection of technology, art, and societal reflection. Drawing inspiration from the innovative approaches of artists such as Cao Shu and Xu Bing, the artwork transcends traditional boundaries, prompting a reevaluation of the overlooked remnants of consumer culture.

The use of p5.js as a tool for data sonification provides a platform for the translation of numeric information into a unique musical language. The visual representation and interactive features further enhance the immersive nature of the experience, inviting viewers to actively participate in the unraveling narrative. As viewers engage with the visual and auditory elements of "Barcode Symphony," they are encouraged to reflect on their roles within the broader landscape of consumerism.

The parallels with Cao Shu's emphasis on the ephemeral and Xu Bing's manipulation of symbols add layers of depth to the project, contributing to a nuanced understanding of the narratives embedded within consumerist artifacts. Through the synthesis of these influences, "Barcode Symphony" serves not only as a critique of contemporary consumerism but also as an invitation to explore the potential for artistic expression within the remnants of daily transactions. The project transcends the mere transformation of data into sound and can potentially become a cultural commentary, a sensory exploration, and an interactive dialogue. The project encourages viewers to listen closely, not only to the melodies hidden within barcodes but to the echoes of a broader societal discourse that resonates through the choices we make as consumers.

Acknowledgments

References

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Author Biography

Born in 2003 in Guangdong Province, Mainland China, JunYi Jiang is currently in the third year of undergraduate studies at Roy Ascott Studio Advanced Program in Technoetic Arts in Shanghai. Jiang is on a journey to blend artistic expression with a deep concern for contemporary Chinese societal issues. With a keen interest in the complexities of contemporary Chinese society, Jiang Junyi's focus and extends to themes such as individual and collective consciousness, and the connection between household goods and contemporary art. Jiang aims to bring attention to these critical issues and provoke thoughtful dialogue. As a student of Technoetic Arts, Jiang utilizes a multidisciplinary approach to convey messages and explore the interconnectedness of technology, art, society, and the mind. As JunYi Jiang progresses through the Roy Ascott Studio Advanced Program, her work stands as a testament to the power of artistic expression in addressing pressing societal concerns, making a lasting impact on the intersection of art, human rights, and environmental responsibility.