An Analysis of Tea Room Spatial Composition Architectural Design from the Perspective of Spatial Production Theory

Yage Liu*

College of Engineering, City University of Hong Kong, Hong Kong 999077, China

*Yage09232023@163.com

Abstract. This paper adopts Henri Lefebvre's trialectic theory of spatial production as a lens to explore design strategies and methods for traditional Chinese tea rooms, integrating Wassily Kandinsky's spatial composition. The architectural design background of the tea room is deeply influenced by traditional Chinese culture. In the realm of perceived space, designers are encouraged to seek a new ambiance for interior spaces through the arrangement and combination of points, lines, and planes, endowing the act of tea drinking with a spatial aesthetic and ambiance. Within the cognitive space, the design should leverage the tea room's green environment and interior design to serve as a spiritual haven for individuals, facilitating the exchange of emotions. In the experiential space, designers ought to strategically plan the tea room's usage flow to enhance the spatial rhythm, enabling users to rely on their subjective imagination for a deeper experience. Through the design and use of space, convey a philosophy of life and the pursuit of a better life.

Keywords: Architectural design, Tea Room, Spatial Composition Design, Trialectic Theory of Spatial Production, Henri Lefebvre, Wassily Kandinsky

1 Introduction

In the wake of rapid urbanization and the relentless pace of modern life, the quest for mental tranquility has become paramount. Amidst this backdrop, the traditional Chinese tea room emerges as a bastion of cultural heritage and psychological respite. This study bridges the gap between the accelerating demands of urban living and the serene reprieve offered by tea culture. The design of tranquil tea rooms holds strategic significance and represents a novel approach and new thinking in promoting China's exquisite traditional culture within the realms of architectural design and spatial production theory. It poses the question: How can the architectural design of tea rooms, grounded in the rich tapestry of Chinese tradition and informed by Henri Lefebvre's trialectic theory of spatial production, foster mental well-being in today's society? By delving

into the interplay between space, culture, and psychology, this paper seeks to under-score the significance of tea rooms as more than mere venues for gustatory indulgence but as vital spaces for social connection and mental rejuvenation.

In the context of China's rapid urbanization and construction development, influ-enced by the wave of global economic integration, numerous issues have arisen in the design of domestic tea rooms. The inability to integrate foreign advanced con-cepts with traditional Chinese culture has led to a mere replication rather than a meaningful synthesis. Addressing these concerns, this paper adopts the perspective of Henri Lefebvre, the father of urban critique theory, and his trialectic theory of spatial produc-tion as outlined in "The Production of Space"[1] to explore optimized design strategies and methods for tea rooms in to-day's fast-paced society. These spaces serve as sanc-tuaries for mental relaxation, and the paper seeks to enhance their role in the context of architectural design and spatial production theory.

2   The Trialectic Theory of Spatial Production

Lefebvre's theory of spatial production posits that the genesis and evolution of spatial relationships fundamentally reflect interpersonal connections. He asserts that humans, as agents of productive activity, not only possess and create space but also have the capacity to transform it during its utilization. The trialectic theory of spatial production, developed by Soja[2], delineates space into three dimensions: the perceived, the con-ceived, and the lived. The perceived space is the space directly experienced in practice, a material space based on the empirical description of things. The conceived space is built upon the perceived space, forming a conceptual and spiritual space, often associ-ated with power and order. The lived space is the space of life and experience, dynam-ically connecting and transcending the binary opposition of real and imagined spaces. These three spaces have a dialectical relationship: the perceived space forms the foun-dation of the conceived space, which in turn is controlled by the order of the conceived space; the perceived space permeates into the lived space, which resists or transcends the practices of the perceived space and the dominance of the conceived space with new contradictions and forms emerging in daily life. Currently, Lefebvre's theory of the production of space is applied in the design of sports stadiums for rapid conversion, hotels, urban planning, and more[3].

3   Analysis of the Spatial Composition Design of the Tea Room Based on the Trialectic Theory

In this study, spatial practice within the tea room is depicted as a tangible environmental space that can be delineated and perceived, emphasizing the materiality of the tea room's space. Spatial representation refers to the conceptualization of space under the guidance of interior and landscape designers involved in the tea room's design. The final aspect is representational space, or lived space, which is open and inviting, allow-ing users to immerse themselves in both real and imagined spaces, providing a respite

from the hustle of fast-paced life and the homogeneity of international urban architecture, and offering a sanctuary for self-healing in the comforting environment of the tea room. As users of the space, tea drinkers engage in spatial practice, interacting with the space. These three elements—spatial practice, spatial representation, and lived space—interact and interpenetrate, forming a trialectic relationship.

3.1   Perceived Tea Room Space

The tea room space we inhabit influences our tea-tasting experience, with the spatial sequence formed by the intricate joining of surfaces, adorned with the conceptualization of lines and points, exemplifying the practice of fundamental point-line-plane spatial composition. The spatial perception required for the tea room is one of tranquility and harmony, where disarray and chaos are not recognized. Following the footsteps of the design master Kandinsky (Figure 1.a)[4], elements of point, line, and plane from his creations (Figure 1.b) are extracted. From the simplicity of point-line-plane spatial composition, a construction of modest interior space suitable for the tea room is sought, using the most basic functional space as the receptor of perception, endowing the primary users of the space with a tea-drinking ambiance.

1a   1b
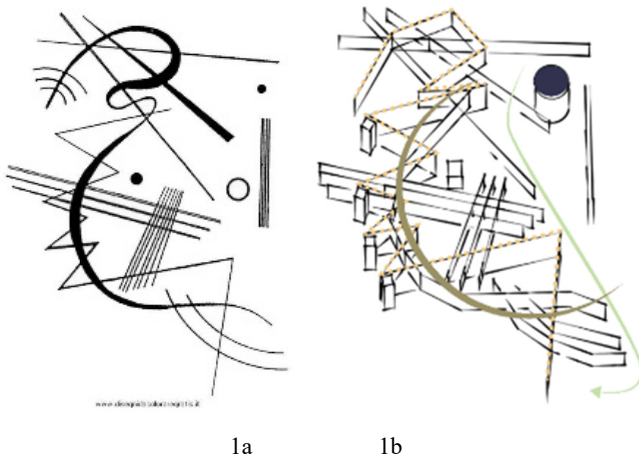
(1a. Photo credit: Kandinsky 's rawing [4], 1b.Photo credit: Author's drawing)

Fig. 1. Point-Line-Surface spatial composition

In the tea room, spatial division is achieved through intervals of lines, enhancing the main flow and subtracting and splitting along the three folds formed on Kandinsky's plane. Through experimentation and contemplation, the primary aim of the tea house design is to preserve the main thematic tone while endowing tea drinkers with self-perception of the tea room space, fostering autonomous exploration. The perceived space is influenced by cultural, social backgrounds, and individual experiences, hence different tea drinkers may have varying perceptions of the same tea room space. By establishing emotional connections through design elements, an environment is created

that stimulates the users' emotions and imagination, allowing them to experience inner peace and Zen while tasting tea, thus humanizing the space through personal perception[5].

3.2   Cognitive Tea Room Space

Within the realm of conceived space, to accentuate the concept of the tea room, it is essential to shape the cognitive perception of the tea drinkers. Tea, integral to the design of the tea room, is symbolically represented by the drying of tea leaves on the facade, conveying an understanding and expression of the tea room space[6]. The symbolic use of tea leaves grants cognition to the tea room in the most direct manner, integrating it with the overall external environment. The tea room's architecture maximizes the use of the surrounding environment, merging the building with its immediate natural setting. The visual cognition of laying out tea leaves extensively unifies the understanding of space with the act of tea tasting, achieving the ultimate cognitive goal of relaxing and connecting with nature within the tea room. These elements in figure 2 reflect the spirit and philosophy of the tea room.
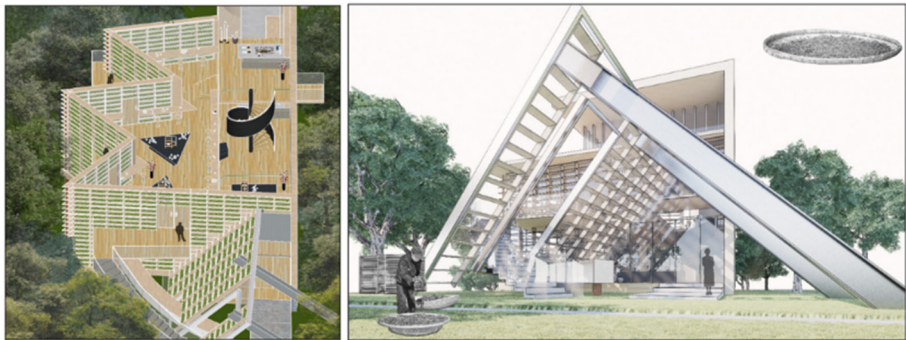

Fig. 2. Tea room blends in with the natural environment (Photo credit: Author's drawing)

As urban development progresses, modular international standard architecture increasingly captures our visual landscape. The distinction between spiritual and material needs is intimately connected with cognitive space, and the swift evolution of social civilization drives a corresponding increase in people's spiritual demands. Balancing spiritual and material needs within the tea room, while stimulating cognitive emotions and transforming the space into a spiritual product through the subjective exploration of tea drinkers, presents a significant challenge in the cultural design of tea rooms today.
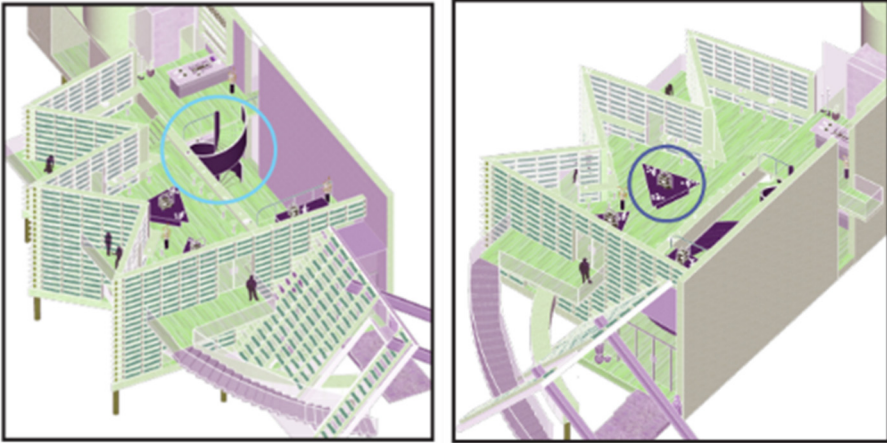
Fig. 3. Tea room interior design (Photo credit: Author's drawing)

In the design of the tea room in Figure 3, elements of circular planes are utilized to create a spiral staircase through natural flow lines, connecting the first and second floors and forming an interior circulation space. A blank wall spanning both levels is used for projections. Triangular tables placed on the first floor not only fit the spatial form but also perfectly suit the corner turns of the walls. Tables designed along the walls cater to sunlight, allowing tea drinkers to enjoy the natural scenery outside the window. At this moment, the tea room serves not only as a shelter in terms of spatial form but also as a vessel for special emotional exchanges, deepening understanding through continuous cognition to facilitate a free interaction between the self and the tea room.

3.3   Experiential Tea Room Space

The practice and experience of space are embodied by each individual who steps into the tea room. The physical layout of the tea room and the behavioral patterns of its users are particularly crucial within the experiential space of the tea room. The tea room space is not merely a passive, man-made container; it is an active component generated by social relationships and activities. The flow of use within the tea room should reflect the dialectical unity of movement and stillness, with spatial arrangements guiding the movement lines of tea drinkers, ensuring they can move naturally and engage in tea ceremony activities. In design, consideration must be given to both the fluidity of the tea drinkers' movement and the comfort of the static experience in Figure 4. The movement should be smooth, avoiding crossings and congestion, to create a tranquil and orderly environment. Thus, the tea room serves as a space for tea-drinking activities and a serene haven for meditation and relaxation.
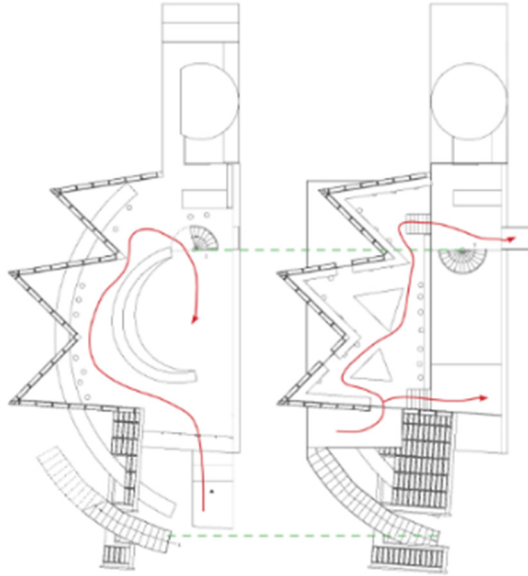
Fig. 4. Tea room flow planning (Photo credit: Author's drawing)

The design of each area within the tea room should align with its functional require-ments, providing adequate space to facilitate interaction and offering an intangible im-petus to the experiential practice of space. While ensuring the openness of the space, the need for privacy must also be considered, allowing tea drinkers to freely transition between socializing and solitude. Based on the various spatial production activities, tea drinkers may reorganize the space as needed to accommodate their preferences.

4   Conclusions

The rapid urbanization of modern society has brought about a renaissance in the design of communal spaces, particularly tea rooms, which serve as sanctuaries for mental re-laxation and cultural engagement. This paper adopts Henri Lefebvre's trialectic theory of spatial production, as presented in "The Production of Space" to analyze the design of tea room spaces through the lenses of perceived, conceived, and lived spaces. It in-tegrates Wassily Kandinsky's concepts of spatial composition to explore how the de-sign transcends mere functionality to foster contemplation, communication, and intro-spection. It underscores a multidimensional approach that harmonizes cultural depth with sensory design, fostering environments that resonate with emotional well-being. The research advocates for user-centric spaces that facilitate contemplation and inter-action, contributing to the discourse on architectural design and spatial production. Fu-ture explorations are encouraged to further integrate traditional aesthetics with modern functionality, enhancing the tea room's role as a haven for mental respite and cultural connection.

References

1. Lefebvre, H., translated by Nicholson-Smith, D. (1991) [1974]. The Production of Space (English Version). Blackwell Publishers, Oxford. https://www.wiley.com/en-gb/The+Production+of+Space-p-9780631181774

2. Soja, E W. (1996) Third space: Journeys to Los Angeles and Other Real-and-Imagined Places. Blackwell Publishers, Oxford. https://www.wiley.com/en-cn/Thirdspace%3A+Journeys+to+Los+Angeles+and+Other+Real+and+Imagined+Places-p-9781557866752

3. Chen, S., Zhang, Z., Yang, J., Wang J., Zhai, X., Bärnighausen, T., Wang, C. (2020) Fangcang shelter hospitals: a novel concept for responding to public health emergencies. Lancet, 395: 1305-1314. https://doi.org/10.1016/ S0140-6736(20)30744-3

4. Kandinsky, W., translated by Dearstyne, H,. and Rebay, H. (1971) [1928]. Point and Line to Plane. Dover Publications, New York. https://store.doverpublications.com/products/9780486238081?_pos=1&_sid=fd3cc7ffe&_ss=r#details-tab

5. Joung, Y. (2020). Creating a design-led guideline on cultural heritage for a new concept of korean tea house in overseas market. In: Karwowski, W., Goonetilleke, R., Xiong, S., Goossens, R., Murata, A. (eds) Advances in Physical, Social & Occupational Ergonomics. AHFE 2020. Advances in Intelligent Systems and Computing, vol 1215. Springer, Cham. https://doi.org/10.1007/978-3-030-51549-2_71

6. Ko, K., Liotta, S-J. (2020). Decoding culture parametrically: digital tea house case studies. Int. J. Archit. Comput., 4(09): 325-338. https://doi.org/10.1260/1478-0771.9.4.325