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GENERATIVE DESIGN IN CULTURAL FLUX: SPATIOTEMPORAL DYNAMICS AND VALUE METRICS

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Abstract

Culture, as the core dimension for value manifestation in generative design, exerts decisive influence on design morphology through its spatiotemporal attributes and structural characteristics. Within contemporary cultural contexts, generative design exhibits dynamic volatility: temporally, it manifests as a dialectical unity between functional iteration and spiritual inheritance; spatially, it forms an interplay between the embeddedness of local cultures and the perceptibility of globalization; and systemically, it confronts the evolutionary challenge of transitioning from static to dynamic paradigms in image dissemination during the internet era. This study aims to construct a culturally driven value assessment system for generative design, focusing on two core objectives: first, breaking down semantic exchange barriers between professional and non-professional groups, and second, establishing a quantifiable measurement model for generative design's value dimensions. Under the theoretical framework of cultural volatility, a mixed-methods approach is adopted: Cultural Element Deconstruction: Applying grounded theory to decode design samples, building analytical models for temporal volatility, spatial volatility, and internal-external volatility; Value Matrix Construction. The study found that: 1) cultural volatility drives design evolution through the 'function-spirit' double helix structure; 2) the cultural adaptability of generative design in the spatial dimension verifies the dynamic balance mechanism between localisation and globalisation. This research advances a systematic methodology for evaluating generative design's cultural value, offering insights for balancing technological innovation with cultural sustainability in AI-augmented design ecosystems.

Keywords: culture; generative design; spatiotemporal dynamics; value metrics

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Introduction

According to generative design is formed by the values in its cultural context, which is the decisive role of culture in design. The characteristics of generative design and the formation of its value in a cultural context. Regarding the cultural, Raymond Williams statement that we use the word culture in these two senses: to mean a whole way of life—the common meanings; to mean the arts and learning—the special processes of discovery and creative effort.

The success of a design is determined by many factors. Its subjective success, such as a design that satisfies people, is difficult to quantify and relies more on subjective feelings; its objective success emphasises the quantifiable results and practical effects of the design, usually based on data, standards or market performance. But whether they are subjective or objective, they can be included in a cultural system.

The culture has a negative right to the feasibility of the design. The same is true for generative design. Before designers can transform the world, they need to have a clear understanding of how it lives. This understanding allows designers to contemplate their own identity, the significance and value of the environment they inhabit, and to use this knowledge as a driving force for design.

As an emerging technological approach, generative design based on parameters or AI possesses unique processes, subjects, and outcomes. For example, professionals and non-professionals can collaborate on design through AI; AI, as a delegated entity, is capable of self-evolution; and the results can be continuously iterated, with no strictly defined final outcome.

Culture, as a composite indicator, still exerts a constraining influence on generative design. In the past, culture could outright reject a single design—for instance, the skull motif is generally unpopular in most parts

of the world (except among users in Mexico and Gothic enthusiasts). Today, digital design allows for continuous optimization of outcomes through iteration, with cultural attributes serving as a set of constraining parameters that guide the broader direction of the results. For example, «auspiciousness» is represented by different color symbols in different cultures, and generative design can automatically adjust its parameters based on the target region of a project to achieve color matching.

We will further elaborate on the characteristics of generative design within a cultural context.

Materials and methods

This paper attempts to establish a theoretical framework of cultural volatility: deconstructing the cultural elements of design samples through rooted theory, establishing analytical models for temporal volatility, spatial volatility, and internal and external volatility; secondly, evaluating the communicative efficacy of the semantics of the design; and finally, constructing a value assessment matrix for the core indicators.

We argue that generative design in cultural contexts is fluctuant for the following reasons:

1) Time Fluctuation

We discuss the role that design has played in the ongoing evolution of the entire lineage of human history in a temporal dimension [1, p. 125]. At the vertical level, it is important to mention the functional dimension and the spiritual (fulfillment of needs) dimension of design [2, p. 120]. The functional dimension of design is unidirectional, as the evolution of function is accompanied by the advancement of time and technology. Functionality often means increased productivity. Unless there is a temporary regression in the event of a catastrophe, but in general, productivity is rising. The manufacture of cars, for example, has changed little over the centuries in terms of their function as a means of travelling for people, and an extra four-wheel drive or whether they are internal combustion or electric has little to do with culture. Any technology can be surpassed iteratively or even disappear at any time with the development of the times. Therefore, the functional dimension of design is unidirectional.

Design meets not only people's functional needs, but also points to their spiritual needs. And spiritual needs often need to conform to the definition of culture. The design under the cultural vision pursues to bring people a constantly changing sense of satisfaction in seeking a certain spiritual power. Relatively speaking, the spiritual dimension of design is repetitive, and the reason is that culture itself will not directly iterate and disappear [3, p. 6]. For example: Although we will describe the cultures of certain historical periods as backward and barbaric, such as tribal culture, primitive culture, slave culture, and some religious cultures that do not conform to the scientific spirit, although people generally believe that these outdated and "backward" cultures are not worthy of adoption in modern society [4, p. 105]. But this does not prevent designers from taking them as materials and substituting them into the creation of carriers such as film, television, literature, and games. The advantages of doing so are that, on the one hand, by substituting the historical view, people may gain a more objective understanding of the inevitability of some historical choices in the social context of different eras, allowing them to better immerse themselves in the personal experience of cultural products; on the other hand, it can meet people's needs to escape boredom and pursue novelty.

As a result, from a cultural standpoint, generative design might be defined as organic [5]. This type of design is continually evolving, and trends are constantly moving. However, this type of change has very little impact on technology. The advancement of design technology is cumulative, positive, and difficult to reverse. While changes in design culture are both old and modern. Culturally, we can need design to reflect on the human social structures that were lost thousands of years ago, or we might look ahead and envisage our future lifestyles.

2) Spatial Fluctuation

In the first place, culture dasein is a place where things aren't clear. The qualities or factors of the cultural space that people are used to in their daily lives do not stand out. Culture is hidden within the meals, signs, slogans, furniture, performances, decorations, and other items that fill our daily lives[6].

Culture is real and can have an effect on people. It is very important in forming their morals, ethics, and rules of behavior. But, even though everyone lives in a different culture, the word «culture» doesn't come up as much during the week, just like the word «air.»[7, p. 314]

We will not use the term «culture» until we deliberately learn a foreign language, seek out a restaurant with an exotic flavor, watch TV dramas and movies from other countries, or travel across provinces in a large country like China where there are significant differences. As a result, «culture» is invariably coupled with the term «difference». This sense of resemblance and difference emphasizes the unique worth of culture.

Secondly, the *dasein* of cultural space has perceptibility. Henri Lefebvre pointed out that social practice generally takes the use of the body as a prerequisite: the use of hands, limbs, and sensory organs. Therefore, social practice constitutes what is perceivable, that is, in the psychological sense, it is the practical basis for perceiving the external world.... In terms of experience, its complexity and strangeness have reached a very high level, because this is precisely where «culture» intervenes through symbolism based on traditions with the illusion of its immediacy, and these traditions can often be traced back to a long time ago [8]. Therefore, generative design needs to closely connect people's senses with the surrounding environment, and let the five senses blend harmoniously and dynamically with the environment.

Furthermore, Henri Lefebvre believes that globalization is rooted in industrialization and fundamentally coincides with modernity: 'From special cultures (humanism and classicism, and their abstract universality; peasant culture; bourgeois culture; proletarian culture; national culture) to the 'world' or world culture, it initially consumes and destroys all past and extinct cultures on a global scale. Henri Lefebvre interprets cultural space within the framework of history and the present.

As a design element, we think that culture is often broken down into a kind of design element and is, in the end, just an upper-level architectural event of late capitalism. Demonstrations that use culture to protest against the government in a capitalist society are now turned into a collection of high-class goods that can be bought and sold. When

punks fight against the Queen, they end up where they belong as images of the Queen [9, p. 218]. It's as if the more they fight, the closer they get to each other.

In generative design with a neutral point of view, culture can also be a big part of letting modern people connect to the history of the past through space. If we don't have to go to the museum to remember the past, we can always use the visual memories that are all around us. This is a good way to show what the spatial fluctuation of generative design is.

When we talk about cultural space again, its main goal is to help people and the world become one tightly linked and unbreakable whole.

The spatial comparative importance of the culture becomes prominent while establishing various paths of design from a starting point. The spatial significance of the culture in question is to emphasize the distinctiveness and significance of the contemporary spiritual space inside that culture, as well as its inherent relevance to the globe.

Therefore, the spatial fluctuation of generative design is mainly manifested in the fact that the design is able to generate changes on the basis of a dynamic measurement according to people's implicit needs, sensory needs, and comparative needs for the cultural space, and efficiently and flexibly adapts to each moment of change.

3) Internal and external fluctuation

Creating design fluctuation allows individuals to choose between maintaining a familiar way of life or pursuing an unusual state of existence, by modifying their own condition through the design of various spatial environments.

The study of fluctuating generative design is important because it aims to disrupt the stagnant state and challenge the traditional approach of art history and visual culture research, which mostly centers around the analysis of static images. Instead, it seeks to shift the focus towards the dynamic and constantly evolving nature of visual culture.

The Internet has expedited the spread of significant images, leading to an unparalleled expansion of visual culture, as shown in Figure 1. From a generative perspective, the increased speed of communication has resulted in the progressive transformation of visual memory from

being fixed and unchanging to being dynamic and constantly changing. However, this is a gradual process of evolution.

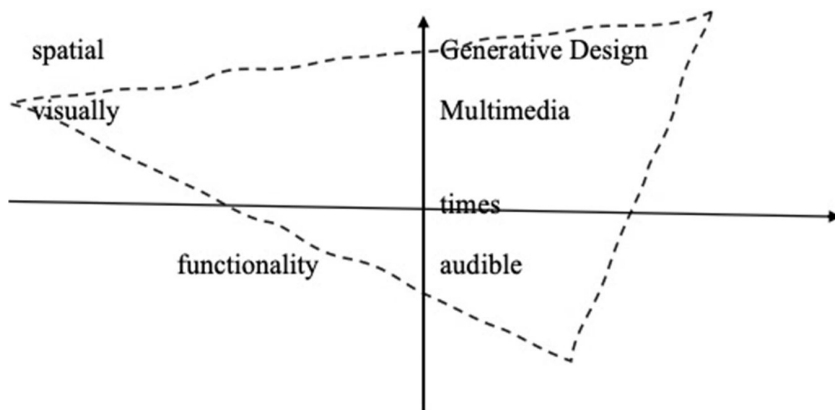


Fig. 1. Source: Illustrated by Weng Wei, *The Cultural Triangle of Design*, 2024

The reliance on technology to implement design is the fundamental principle behind function-as-design. This principle applies to all forms of design, not just those that are visually or audibly perceived. All design manifestations depend on the underlying functionality and technology to operate.

However, the fact that the underlying functionality is generic also means that it is not considered a fundamental aspect of design culture.

Results and discussion

Based on the parameter establishment completed in the above elements, we assess the dissemination efficacy of the design semantics; and finally, we construct a value assessment matrix for the core metrics [10, p. 41]. We discuss that generative design has the following characteristics:

Uncertainties

The main problem posed by randomness is one of uncertainty. We need distinguishing uncertainty:

Objective Uncertainty. Technical uncertainty, or objective uncertainty. Uncertainty was a negative aspect present in the initial phases of

artificial intelligence (AI), particularly in expert systems. The computer is regarded as a strictly logical apparatus due to its low-dimensional functions, which leave no space for creativity or ambiguity. Only a limited number of random variables were utilized, making it challenging to manage their weights effectively. After all, no one wants a rocket that doesn't launch and go into orbit on a set course.

AI research is now focused on developing computable models, measuring the psychological metrics utilized in decision-making, and mathematically modeling the degree of pertinent metrics.

Boltzmann Machines (Its predecessor was Hopfield networks) have changed the direction of machine learning, it Embracing chaotic neural networks, rather, machine begin to grasp and apply the underlying probabilistic laws of the world around us. Hopfield networks artificially set the nature of numerical weights, log probability maximization can be used to simulate focus training, but this also invariably increases the high probability of the output result, which is still essentially overfitting; The Boltzmann machine tries to make the output more random, the hidden neuron setting is interesting but don't forget that the brain neurons are not hidden, in fact the result of the randomness and the number of hidden neurons and their attributes are set in an inclusive relationship, the output result is a subset of the full range of possibilities so it is also not really random, but more like pulling from a subset. what the RBM improves is the efficiency [11, p. 147].

In AI, uncertainty specifically refers to the reality that an AI system is typically unable to possess perfect and all-encompassing knowledge about the outside world.

Numerous factors, like data noise, unclear information, or the intrinsic unpredictability of some systems, multiple aspects are included: data (noisy, missing, unbalanced, underrepresented), models (rationality of model selection, overfitting, treating parameters as probabilistic distributions, underfitting, under-recognition), and even human-intentionally-created counter-sample perturbation attacks. the intrinsic unpredictability of some systems, may be to blame for this.

Artificial intelligence (AI) has developed a number of techniques to cope with this uncertainty.

Using the CAN model from the hot art generation as an example Based on Martindale’s «artistic arousal» idea, Ahmed Elgammal and other AI academics presented the Creative Adversarial Network (CAN) model because they believe that Generative Adversarial Networks (GAN) only combine different artwork styles and lack creativity.

Martindale’s «artistic arousal» idea served as the foundation for their Creative Adversarial Network (CAN) model.

This demonstrates the idea of cultural determinism, which holds that «culture is highly adaptive to technology» and that it is our responsibility as humans to develop strategies for making technology less unpredictable and more stable and controlled. As shown in figure 2.

	👍 Benefits	👎 Drawbacks
Techno-determinism	Ability to forecast future developments, comprehend technological progress, and handle productivity and efficiency.	Tendency toward simplicity, disregard for human agency, and fatalistic outlook.
Cultural-determinism	Emphasis on the human condition and conviction that culture is extremely malleable to technology, with the potential to steer it toward contextual awareness.	Reluctance to adapt, variability, difficulty in generalizing, and predisposition toward staticism.
Eclecticism	The area of design synergy is growing in importance. Since technology is always evolving, it's important to understand the difference between subjective and objective uncertainty. Both bring us to understanding generative design as a creative process.	

Fig. 2. Comparison of the Advantages and Disadvantages between Technological Determinism and Cultural Determinism

Subjective Uncertainty. Conversely, subjective uncertainty is the mistrust of computers that results from humans entrusting highly subjective aspects of mental behavior, like creativity, to an artificial intelligence agent. It is also possible to claim that stimulus can be created by taking advantage of this mistrust:

(1) Uncertainty Of Creative Ideas. AI uses big data to generate design proposals, which are essentially data-mixed copies of existing artists' works. When artificial intelligence processes big data, it learns various features contained in a large number of artworks, such as color combinations, composition methods, line styles, and thematic elements. For example, an artificial intelligence model used for generating paintings, after studying thousands of Impressionist paintings, learns the unique handling of light and shadow and the bright combination of colors in Impressionist paintings. When generating new works, it does not directly copy one or several paintings. Instead, based on these learned features, it makes new combinations and creations through algorithms, resulting in new works with unique styles.

During the generation process, artificial intelligence decides how to combine these learned features based on probability models and complex algorithms. Taking the generation of text design plans as an example, a natural language processing model will generate new copywriting descriptions according to the probability of the occurrence of words and sentences and semantic relationships in the training data. These generated results are not simply a patchwork of existing texts, but under the guidance of probability and algorithms, they form new, coherent, and meaningful content, which may contain novel ideas and perspectives.

Artificial intelligence is not limited by traditional human thinking patterns and experiences and can discover some patterns and combinations that are difficult for humans to detect through analyzing massive amounts of data. For instance, in industrial design, artificial intelligence can attempt millions of different combinations of product shapes and structures in a short period. Some of these solutions may be ones that human designers have never thought of before, and they are innovative and unique, rather than being simple repetitions of existing works.

Artificial intelligence can quickly generate diverse design plans according to different needs and scenarios. For example, in advertising design, aiming at different target audiences and product characteristics, artificial intelligence can generate advertising ideas with different styles and themes. These ideas are generated according to specific parameters

and requirements, rather than being blind imitations of existing advertising works.

Although the design plans generated by artificial intelligence may be similar to artworks in form, they lack the emotions, personal experiences, and subjective feelings that human artists invest in the creative process. Artworks often carry the thoughts, emotions, and unique perceptions of the world of the artists, which is currently something that artificial intelligence cannot fully replicate. The works generated by artificial intelligence are based on data and algorithms. Although they may have a certain degree of aesthetic appeal and practicality, there are differences in connotation and depth compared to the original works created by human artists.

(2) Uncertainty About the Value of Creation. The «father of modern design,» British designer William Morris, was so dissatisfied with the rough and ugly industrial goods on display at the first World's Fair in the 19th century that he was incensed enough to open his own design studio. There, he applied his knowledge of good design to improve furniture, raise the cultural significance of industrial goods, and establish design brands. He developed a design brand, enhanced the cultural significance of industrial goods, and improved furniture using his knowledge of excellent design. Since then, the field of design has been distinguished from engineering, architecture, and handicraft in order to focus on creating high-quality goods that better suit human lifestyles.

Let's carry out a mental exercise. If, in not too distant a future, William Morris lives in a world where all it takes to go from concept to production is a conversational robot, then it's likely that he won't become a designer per se, but rather a DIY enthusiast whose idea of plant-textured, personalized furniture is realized thanks to AI. His furniture designs will quickly be imitated by other internet users, even if he may become famous overnight if he posts images on INS. The designer profession is useless in this sense. Because the profession of designer is itself a creative agent.

(3) Extracting Uncertainty as Creative Materia

Glitch-design random design, and other such forms of art can be seen as the subjective sample behavior of unstable computer representations that are taken for using as «styles» by human designers [12, p. 47].

Fault design involves obtaining samples of computer fault manifestations through various means. For example, deliberately causing software or hardware failures and recording the error screens, garbled characters, color distortions and other phenomena that appear on the screen; or searching for existing fault artworks, pictures and videos of fault effects on the Internet to establish a fault material library. Carefully observe the collected fault samples and analyze their unique visual features, such as sudden changes in color, pixel disorder, distortion of graphics, breakage of lines, etc., as well as the emotions and atmospheres conveyed by these features, such as chaos, mystery, a sense of the future, etc. Extract valuable elements from the fault features, such as a certain unique color combination, distorted shape or broken line, etc., and transform them into design materials that can be used. Graphic design software can be used to redraw, adjust and optimize these elements to make them more in line with the design requirements [13]. Integrate the extracted and transformed fault elements into specific design projects, such as poster design, packaging design, web design, etc. The fault elements can be used as background elements to create a unique atmosphere; or they can be applied to the processing of text or images to make the design more personalized and attractive.

Random design utilizes the random generation functions in computer software or specialized random design tools, such as random pattern generators, random color matching tools, etc., to generate various random elements such as graphics, colors, and layouts. In order to make the randomly generated results more in line with the design theme and requirements, certain parameters and rules can be set. For example, limit the color range, the type of graphics, the basic structure of the layout, etc., so that the random generation occurs within a certain framework to avoid the results being too chaotic and meaningless. Select the parts with aesthetic appeal and creativity from a large number of randomly generated elements, and then combine and arrange them to form a new design scheme. Different combination methods can be tried, and observe the relationships and overall effects between them to find the most creative and expressive combination. Random design does not mean relying

entirely on the random generation of the computer. After obtaining the preliminary design scheme, make manual adjustments and optimizations, such as modifying the details of the graphics, fine-tuning the brightness and saturation of the colors, and making appropriate adjustments to the layout, etc., to make the design more perfect and refined.

Whether it is fault design or random design, when using uncertainty as creative material, it is necessary to pay attention to grasping the appropriate degree and avoid overusing it, which may cause the design to lose its readability and comprehensibility. At the same time, it is necessary to combine the design purpose and the needs of the audience to integrate the uncertain elements with the overall design style, so as to achieve a unique and effective design effect.

Therefore, young designers who must «think» ahead of time in order to compete with AI. They need to «think» ahead. They can use speculative design approaches to fictionalize the future and imagine the perfect existence from the bottom up [14, p. 753]. The younger generation has to redefine employment and reject the outdated design framework and preconceptions associated with design careers.

Deeply understand the essence of design. Trace back the history of design and study the classic works from different periods. For example, medieval architecture showed solemnity and grandeur to meet religious needs. Understand how design was born and evolved in response to social, cultural, technical and other factors, and comprehend the core purpose of design, which is to serve human needs and solve practical problems. Avoid being limited by superficial forms.

Abandon conventional questionnaires and interviews, and adopt immersive observation instead. Immerse yourself in the user's life scenarios. When designing household items, live in the homes of target users and observe their daily routines throughout the day. Discover the latent needs that even the users themselves are not aware of, and inject humanistic care into the design, which is beyond the reach of artificial intelligence.

Actively explore the cultural arts of different countries and ethnic groups. Incorporate the mysterious patterns of African tribes and the Zen aesthetics of Japan into your works, creating a style that is rich in

cultural heritage and has a unique visual impact, and affixing a unique label to your works.

If you love music, you can transform the rhythm of musical notes into the rhythm of lines in design; if you are good at programming, you can apply the logic of algorithms to graphic construction. Leverage your personal characteristics to bring new perspectives and methods to design, and form a unique style.

Take the initiative to learn emerging technologies such as artificial intelligence, virtual reality, and augmented reality, and know their principles and application scenarios. When designing an e-commerce interface, use artificial intelligence algorithms to optimize the page layout and intelligently recommend products based on user browsing data to enhance the user experience.

Study knowledge of marketing, brand management, project management, etc., and understand the value and role of design in the business chain. When participating in brand design projects, start from the brand positioning, design works that are in line with the brand image and are conducive to market promotion, and make design better serve business goals.

Actively participate in various creative design workshops, communicate with designers from different backgrounds, and stimulate inspiration through the collision of ideas. In the workshops, conduct brainstorming sessions around specific themes, try to think about problems from new perspectives, and broaden your design thinking.

Set creative challenges for yourself, such as designing household items from daily discarded items. Break through conventional design limitations, tap into the infinite creative possibilities in the situation of limited resources, and continuously exercise your creative thinking.

Conclusions

Examining generative design within a cultural context reveals the profound value embedded in its inherent volatility and uncertainty. Raymond Williams' dual definition of "culture"—as both a universal way of life and a specific process of creative practice—provides a critical lens for understanding generative design. The success of design remains nested

within cultural frameworks, where both subjective aesthetic experiences and objective functional outcomes must respond to the dynamic constraints and empowerment of cultural systems. Leveraging parametric and artificial intelligence technologies, generative design disrupts the linear logic of traditional design, manifesting a new paradigm characterized by “open processes, iterative outcomes, and pluralistic agency.” Far from diminishing the centrality of culture, this technologically driven dynamism transforms culture into adaptable parameter clusters through mechanisms of volatility, enabling designs to achieve dynamic equilibrium between globalization and localization, historicity and futurity.

Volatility, as the core feature of culturally driven generative design, unveils the dialectical relationship between technological evolution and cultural inheritance. Temporally, the unidirectionality of functional iteration and the cyclicity of spiritual needs form a “double-helix structure”: technological advancement propels functional upgrades, while cultural memory continuously reawakens emotional resonance with historical symbols. Spatially, the “Dasein” of culture, as articulated by Henri Lefebvre, interweaves local symbols with globalized contexts through perceptible daily practices, positioning generative design as a medium connecting individual perception and cultural difference. Internal-external volatility highlights the dynamic shift in visual culture during the internet age, where accelerated image dissemination and mutation drive design from static analysis to dynamic responsiveness. Such volatility not only challenges the static paradigms of traditional design research but also endows design with the qualities of an “organic entity,” enabling its continuous evolution through cultural adaptation and technological breakthroughs.

Uncertainty, as another intrinsic attribute of generative design, illuminates the reconfiguration of creativity in the AI era. Objective uncertainty stems from data noise and model limitations in technological systems, while subjective uncertainty reflects human anxiety toward machine creativity. Extrapolating from William Morris’ case, when AI rapidly actualizes personalized designs, the role of designers must urgently shift from “executors” to “curators”—elevating randomness into cultural

narratives through translation and value judgment. Explorations like the Creative Adversarial Network (CAN) [15, p. 36] demonstrate that true innovation lies not in eliminating uncertainty but in transforming it into a catalyst for cultural expression. Young designers must transcend superficial applications of technological tools, delving into the implicit logic of cultural DNA and infusing algorithmic iteration with humanistic criticality.

Looking ahead, generative design will increasingly serve as both a “mirror” and “propeller” of cultural evolution [16, p. 14]. Its value extends beyond technical efficiency to constructing elastic interfaces for cross-cultural dialogue: capturing cultural volatility through parametric models, bridging cognitive gaps between professionals and laypeople via intelligent algorithms, and ultimately transitioning design from a “problem-solving tool” to a “generator of cultural meaning.” In this process, designers must maintain cultural consciousness, seeking balance between technological rationality and humanistic sensibility to ensure generative design becomes a cultural bridge authentically connecting the past, present, and future.

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References

1. A product design based on interaction design and axiomatic design theory / R. Lu [et al.] // *Procedia CIRP*. 2016. Vol. 53. P. 125-129.
2. Zhao X. Application of 3D CAD in landscape architecture design and optimization of hierarchical details // *Computer-Aided Design and Applications*. 2020. Vol. 18. № S1. P. 120-132. <https://doi.org/10.14733/cadaps.2021.s1.120-132>
3. Kahn J.S. Culture: demise or resurrection? // *Critique of Anthropology*. 1989. Vol. 9. № 2. P. 5-25. <https://doi.org/10.1177/0308275X8900900202>
4. Schwartz N.B. Villainous cowboys and backward peasants: popular culture and development concepts // *The Journal of Popular Culture*. 2010. Vol. XV. № 4. P. 105-113. https://doi.org/10.1111/j.0022-3840.1982.1504_105.x

5. Mehaffy M. W. Generative methods in urban design: a progress assessment // *Journal of Urbanism International Research on Placemaking & Urban Sustainability*. 2008. Vol. 1. № 1. P. 57-75. <https://doi.org/10.1080/17549170801903678>
6. Asakawa K. Flow experience, culture, and well-being: how do autotelic japanese college students feel, behave, and think in their daily lives? // *Journal of Happiness Studies*. 2010. Vol. 11. № 2. P. 205-223. <https://doi.org/10.1007/s10902-008-9132-3>
7. Chandler L. Immersed in design: using an immersive teaching space to visualise design solutions / L. Chandler, A. Ward // *International Journal of Art & Design Education*. 2019. Vol. 38. № 2. P. 314-327. <https://doi.org/10.1111/jade.12191>
8. Tonucci J. Schmid, christian (2022): henri lefebvre and the theory of the production of space // *Raumforschung und Raumordnung*. 2024. Vol. 82. № 5. P. 445-447. <https://doi.org/10.14512/rur.2248>
9. Imhoof D. Beyond no future: cultures of german punk ed. by mirko M. Hall, seth howes, and cyrus shahan (review) / D. Imhoof // *German Studies Review*. 2018. Vol. 41. № 1. P. 218-220. <https://doi.org/10.1353/gsr.2018.0038>
10. Biloshapka V. The value matrix: a tool for assessing the future of a business model / V. Biloshapka, O. Osiyevskyy, M. Meyer // *Strategy & Leadership*. 2016. Vol. 44. № 4. P. 41-48. <https://doi.org/10.1108/SL-04-2016-0026>
11. Ackley D.H. A learning algorithm for boltzmann machines / D.H. Ackley, G.E. Hinton, T.J. Sejnowski // *Cognitive Science*. 1985. Vol. 9. № 1. P. 147-169. [https://doi.org/10.1016/S0364-0213\(85\)80012-4](https://doi.org/10.1016/S0364-0213(85)80012-4)
12. Kemper J. Glitch, the post-digital aesthetic of failure and twenty-first-century media // *European Journal of Cultural Studies*. 2023. Vol. 26. № 1. P. 47-63. <https://doi.org/10.1177/13675494211060537>
13. Breaking from realism: exploring the potential of glitch in AI-generated dance / B. Wallace [et al.] // *Digital Creativity*. 2024. Vol. 35. № 2. P. 125-142. <https://doi.org/10.1080/14626268.2024.2327006>
14. Pilkington O.A. The fictionalized reader in popular science: reader engagement with the scientific community // *Text & Talk*. 2018. Vol. 38. № 6. P. 753-773. <https://doi.org/10.1515/text-2018-0022>

15. Why are antagonistic web-generated artworks more popular than human artists? / Zhang Xianyang [et al.] // Robotics Industry. 2017. Vol. 15. № 4. P. 36-39.
16. Strathern A. Strange parallels: southeast Asia in global context, c. 800–1830. Volume 2: mainland mirrors: europe, japan, china, south Asia, and the islands // Journal of Global History. 2012. Vol. 7. № 1. P. 129-142. <https://doi.org/10.1017/S1740022811000611>

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