

The Application of Chinese Poem “*Yu Mei Ren*” in Design

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Abstract. The purpose of this study, alternatively, is taking inspiration for culture creative design from an invisible culture element, the Chinese poetry. With its external form and internal meaning, poetry is applied and transferred to design, using their common structural features. This study developed a model for transforming poetry into creative basic design and Art. The procedures require three essential phases of visualizing abstract concepts, concretizing visual components, and utilizing 3D products. Implementation steps include selecting themes, analyzing application types, transferring design elements, concretizing design elements, enforcing external functionality, utilizing for everyday life, experiencing design aesthetics, and achieving goals for cultural creative design. In conclusion, this study contributes to academic study, education for cultural creative design, development of cultural creative industries, and culture preservation. With a well-established research framework, this study integrates relevant theories, research methodology, and implemented case studies to turn the originally “emotional” poetic content to a “rational” and logical step-by-step process, and thus acquires its academic significance. Following the concrete transfer design model, design students will be effectively instructed and inspired in applying cultural creativity for expressing abstract poetic concepts. As for cultural creative industries, this model derived from theories of transfer design and supplemented with illustrative implemented cases, will provide them a specific and feasible reference for practical applications in highlighting emotional experience and cultural elements in their products. After a thorough investigation of the “traditional” poetry, cultural elements are now transferred to poetry-related “modern” creative design in this study. Hereafter, with active participation of the new-generation designers inspired by this implementation model, the glorious traditional Chinese culture elements will be carried on and extended.

Keywords: Poetry · Cultural creative · Design application

1 Introduction

This study investigated the origins of traditional Chinese culture, one characterized as deep and profound, through elements found in its poetry. The meaning of the poetry, whether explicitly or implicitly expressed, was used as the design concept of cultural creative products in the field of creative design as well as the impetus for Taiwanese designers to create cultural creative designs. Traditional poetry and literary composition in rhyme reflect the cultural wisdom of ancient Chinese poets and serve as great inspirations for contemporary creative designs. Regarding related studies on the design application of elements found in poetry, Beatty (2011) published articles such as “The Intersection of Poetry and Design” and “Similarities Between the Design Process of Poetry and Design,” in which the perspective of “writing poetry” was used to examine the sources of inspiration, problems encountered and resolved, and works revised during the poetry-writing process. The relationship between poetry and design was examined by comparing the principles that governed them. By contrast, in the current study, the objective was to investigate how creative ideas found in poetry were applied to creative designs. A series of studies from 2011 onward has revealed that designs made by applying cultural concepts found in poetry differ when the “transformation of cultural concepts” differs. The “shape” and “essence” of poetry were used to analyze key imageries in the poetry, in which shape was defined as real and tangible forms, whereas essence was defined as abstract ideas. The shape and essence of poetry were subsequently used to decide the color, texture, and shape of the design works. The transformation of cultural concepts was divided into four types, namely “from shape (in poetry) to shape (in design works),” “from shape to essence,” “from essence to shape,” and “from essence to essence.” The six viewpoints of poetry were based on the six viewpoints principle proposed in *The Literary Mind and the Carving of Dragons* (Chapter: Companion) and were used to evaluate the six aspects of poetry, namely *weiti* (poets’ use of explicit expressions), *tongbian* (whether poets can use the methods passed down from the past as well as innovate such methods in their poetry), *qizheng* (whether poets can produce diversified works and maintain their unity), *shiyi* (whether the people or things depicted in the works are vivid and able to reflect real life situations or transmit ideas), *gongshang* (the flow of the language in the poetry), and *zhici* (the meaning and characteristics of the poetry and whether they can reproduce the imageries that have been formulated in the mind). The six viewpoints served the following functions when poetry was transformed into design works: (i) showed the shapes, patterns, and structure to be used; (ii) provided design principles; (iii) innovative use of emotions and implied meanings; (iii) accentuated texture and colors; (iv) engendered a dynamic atmosphere; and (6) illustrated key characteristics. In this study, *Yu Mei Ren*, written by Li Yu, was used to demonstrate the aforementioned transformation.

2 Concepts Adopted in the Application of Elements Found in Poetry

Poetry and design are a form of communication. According to Jakobson, six elements must be present for communication to transpire. These six elements are “addresser,” “context,” “message,” “contact,” “code,” and “addressee.” Poets are unique addressers. They are emotionally affected by the world (the context), and the experience leads to their affections (the message). They use contacts transmitted through sound or light (e.g., air, speakers, book pages, and audiovisual equipment) as well as words of poetry (the code) to send messages to people who can appreciate the poetry (the addressee). All six dimensions must be in place to produce a favorable communication process. Without great poets, spatiotemporal environments, ideas, tools, languages, and audiences, the communication cannot be comprehensively understood. Similarly, designers are affected by their environments (the context), and the experience leads to their creative works (the message). They use colors, shapes, and materials (the contact) as well as design methods (the code) to produce design works for consumers (the addressee). The comparison shows that poetry and design share similar methods of communication.

Regarding poetry content, in addition to investigating explicit expressions or implied meanings, selecting appropriate implications as the key implication is crucial to successful transformation. The use of the key implication method was inspired primarily by the keyword method. In 1978, Pressly and Levin adopted the concept of mental image to examine the effect of the keyword method on learning. The term *mental image* signifies the image that appears in the mind of people when reading an article and an image that enables them to experience the feeling of virtually being in the environment depicted by the article. Pressly and Levin proved that the use of keywords to produce mental images can help improve memories and that concrete words are more effective at generating mental images and more easily remembered compared with abstract words. This finding indicates that the use of the keyword method depends on the mental images to be generated. Furthermore, if the learning content is on specific fields, abstract forms, or subjects of which learners have no prior knowledge, the keyword method becomes even more critical during the early stages of transformation learning. This is because keywords expand the imagination of learners regarding the content and because they imperceptibly enables the interactions between old and new messages. In this study, the keyword method was used to develop key implications that were subsequently used to transform poetry. The key implications improved the readers’ memories of poetry, facilitated the continuity of poetic culture, and rendered the abstract words of poetry concrete, which enabled them to be manifested in actual design works (Fig. 2).

Yuan (1996) proposed that imageries in poetry can be divided into five categories: nature (e.g., astronomy, geography, animals, and plants), society (e.g., war, serving as officials, hunting and fishing, and weddings and funerals), humans (e.g., the four limbs, facial features, organs, and psychology), artificial objects (e.g., buildings, artifacts, clothing, and cities), and imaginary things (e.g., immortals, ghosts, the supernatural, and the underworld). In addition, Yuan stated that “an object can create many

interesting and charming imageries.” Images can be used to transmit and present objective knowledge or elicit and convey subjective feelings. Objective knowledge can be described by nonverbal media, whereas subjective feelings create imageries because writers incorporate feelings into the images. Poets use concrete images as the medium to convey feelings, and readers experience these images through vision, hearing, smell, taste, and touch, which triggers associative thinking and enables them to resonate with the poets. Therefore, by analyzing the five senses and the mental images created in the minds of readers by applying the five imagery categories (e.g., nature, artificial objects, and imaginary things), they facilitate the visualization of abstract concepts and enable these concepts to be transformed into designs.

3 Theories and Steps to Transforming Poetry into Designs

Regarding the theories for transforming poetry into designs (Ye, 2014; Joseph, 1996; Chen, 2004; You, 1997; Chen, 2010; Lin, 2007), in addition to studying creation theories, those on the cognitive process in educational psychology must be examined. These theories facilitate the understanding of the process involving the transformation of abstract ideas to concrete objects. Regarding the design method, theories pertaining to design procedures and design operations were adopted to facilitate the visualization of abstract poetry-related concepts, concretization of visual design elements, and introduction of design elements for daily use. Related theories are organized and described in Fig. 1 as follows:

Design Theories for Poetry Transformation	Visualization of Abstract Concepts	Concretization of Visual Design Elements	Introducing design elements for daily use
Procedural model of the design process (Joseph)	Concept stage	Implementation stage	Detail modification stage
Model of design and creative operation (Chen)	Operation stage	Design-related references	Create creative works
Design representation method (You et al.)	Associative thinking: artists describing and presenting concepts that they have in their mind	Transformation: imageries transformed into vocabularies of basic shapes	Implementation: the finalization of designs and completion of associative thinking
Visual thinking stages (Chiu)	Senses at work stage	Symbol representation stage	Integrated and concrete operation stage
Literature-based creation thinking (Chen)	Basic skills: observation skills, abilities to relate and imagination	Special abilities: identify the theme and gather materials, develop a literary structure, and establish a style	Integration ability: the ability to enable the three types of skill to “interact” with each other and the mastery of these abilities
Procedures to designing poetry education (Lin)	Sharpening the perception ability senses	Strengthening the ability to relate the objective with the subjective	Breaking through the wall of common sense

Fig. 1. Theories and procedures for transforming poetry to design (organized in this study)

The process in which designers are inspired and engage in creative thinking is a crucial topic in the field of design research. As described in the general procedural model of the design process (Joseph, 1996), the process of creative operation, in essence, follows a stage-by-stage procedure, which includes a concept stage, implementation (concretization) stage, and detail modification stage. Chen (2004) combined the concepts of circularity of Hegel (1770–1831) and Plato’s anodos to develop the model of design and creative operation. The model showed that designers use the interactions between variables, such as design operation, design-related references, and creating creative works, to make artworks more refined, mature, and complete. In a study on design representation, You et al. (1997) investigated the method by which imageries of products can be transformed to design representation and subsequently proposed a three-stage design method that involved associative thinking, transformation, and implementation (concretization). Associative thinking refers to experiences, ideas, memories, or perceptions that audiences can directly “feel,” which designers describe and present ideal and meaningful concepts (imageries) that they have in their mind. Poets’ use of imagery transformation is often attributed to the associative thinking effect. During the process of creation, associative thinking is a key psychological activity. Hegel believed that all artworks are a product of the mind and that a “subjective force” is required to push the creative activity. Such a creative activity is commonly referred to as an artist’s “imagination.” The key words of the imageries serve as the basis for converting symbols dimensionally. Transformation is one of the key steps during the process of design transformation, which “concretizes” the associative thinking elicited by imageries so that it can be visualized. Associative thinking is transformed from abstract ideas to having basic shapes, and from having basic shapes to three-dimensional (3D) designs (i.e., a model). Implementation (concretization) is the finalization of designs, which indicates the completion of the associative thinking transformation process. After the modified works have been transformed, designers must review and revise related steps used to control the rationality of design elements, the processing of design-related details and the ratio of design elements, and design-related color schemes.

Regarding literature creation, Chen (2010) indicated that people must have basic, special, integration, and various skills to be able to read, write, and engage in various types of learning. Basic skills include thinking abilities, observation skills, ability to memorize, ability to relate, and imagination. Special abilities include the ability to establish a style, select a style, decide the theme and gather materials, use vocabularies, modify phrases, and develop a literary structure. Integration ability includes creativity. By enabling the three types of skill to “interact” with each other, these abilities are subsequently mastered, and step by step they become a thinking system, leading to literature creation. Lin (2007) asserted that the steps to teaching new poetry begin with the perception of objects followed by the formation of inspirations so that the objects and inspirations become one and are reflected in the design of poetry education. Education on poetry transformation is subsequently divided into various stages, such as “sharpening the perception ability senses” to help students be more easily inspired, “strengthening the ability to relate to things” to improve the ability of students to relate the subjective with the objective, and “breaking through the wall of common sense” to induce the poetic thinking skills of students. Related theories pertaining to literature

creations, design procedures, and design operations were used as the preliminary ideas to form the implementation stage of our transformation design. This implementation stage was developed according to the characteristics of poetry, which were divided into three stages comprising visualization of abstract concepts, concretization of visual design elements, and introducing design elements for daily use. The procedures were selecting key implications for the topics to be discussed, analyzing the types of imagery, transforming and summarizing design elements, presenting concrete design elements, employing elements to strengthen design appearance and functions, introducing design elements for daily use, experiencing the aesthetics of emotional designs, and achieving cultural and creative design objectives.

4 Experiencing the Aesthetics of Emotional Designs and Achieving Cultural and Creative Design Objectives

For the visualization of abstract concepts stage, the theories of methods to transform designs described in the previous section were employed to produce a concepts in operation stage. By using methods such as observations, associative thinking, and imagination as well as selecting appropriate poetry, poets trigger the readers' senses of perception, from which imageries in the minds of poets are described and presented. Therefore, when studying poetic culture, related abstract elements, such as senses and imageries, are collected and analyzed to investigate the transformation from poetry to visual designs. Yue (2005) indicated that when attempting to improve the ability of students to remember images, the concept mapping method may be used. This method enables students to use their imagination to create images for abstract knowledge that has no images. When reading text, readers can remember only keywords or concepts before placing them together. The same principle applies to abstract images. For the transformation from poetry to design, the aforementioned methods are used to enable designers to provide additional approaches to inspire the creativity of readers along with the visualization of abstract concepts. Moreover, by using methods such as observation, associative thinking, and imagination, readers are able to understand the environment in which the poetry was written, which enhances the depth of their understanding when visualizing abstract concepts.

For the concretization of visual design elements stage, key implications and imageries obtained from the analysis during the previous stage were transformed using a transformation index. The index differed between varying poetry types. Imageries were transformed into concrete 2D or 3D images with colors, texture, and shapes. These imageries were used as the elements to construct the designs. The characteristics of the poetry were included into the design of objects to help strengthen the ability of the viewers to relate to things. Liou (2012) examined the emotions of designers during the image abstraction process and discovered that they used shapes, texture, colors, environments, and characteristics of elements to depict imageries. Lin indicated that poetic thinking is characterized by writers regarding themselves as observers who transfer their subjective emotions to objective objects. The objects become a manifestation of their emotions, and the two subsequently become one, which enables poetry (a reflection of the mind) to transform into products (an object). By deciphering

the codes hidden in the poetry, readers are able to identify elements of concretization as the proof of concretization of visual design elements, showing how poetry has been effectively transformed into designs and how it strengthens the ability of viewers to relate to things.

For the introducing design elements for daily use stage, designers were encouraged to engage in poetic thinking and enable mental images to “interact” with each other so that ideas were fully mastered and became motivations for creating designs for daily use. These design creations were to transcend the limitations and development imposed by rationality and enhance the effectiveness of the design elements. The types and properties of the designs were to be ensured, and detailed design modifications were to be made to complete the poetry-design transformation process to enable the product designs to fully depict the emotions of the poets. In addition, designers had to consider whether the products were convenient to use, easy to operate, pleasing to look at, and truly suitable for daily use. For example, regarding the various household items (e.g., items for use, to be looked at, and to feel), using appropriate designs will make them more pleasing to use, to be looked at, or to feel, which increases the quality of life and enables cultural traditions to be deep-rooted in people’s daily activities, thus achieving the goal of introducing design elements for daily use.

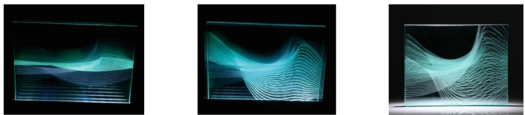
Implementation stage	Implementation procedure	Content of implementation (<i>Yu Mei Ren</i> , written by Li Yu)
I. Visualization of abstract concepts	1. Selecting key implications for the topics to be discussed	“When had the spring flowers and autumn moon end? How much of the past is still known? The Easterly wind swept across the small attic last night; but I couldn’t bear recalling my lost kingdom under the clear moonlight! The carved balustrades and jade ornaments should still have survived; changed only are the crimson faces fair. You ask how much sorrow can one ever unleash? As much as the spring river flowing east!”
	2. Analyzing the types of imagery	The “spring river flowing east” was selected as the key implication for analysis. In the analysis of the imageries, “river” and “flowing” were used to form concrete objects.
II. Concretization of visual design elements	3. Transforming and summarizing of design elements	The “sense of movement” was used to display the flowing of the spring river and crystallized, transparent materials were employed. For the “shape” of the design elements, scenery of the spring river was used.
	4. Presenting concretely the design elements	Regarding the presentation of concrete elements, transparent glasses were used. The phrases “When had ... end” and “how much of the past is still known” were manifested in glasses with multilayered curves and sequentially emerging lights to illustrate a sense of movement, indicating the ebbing of the tide.
III. Introducing design elements for daily use	5. Employing elements to strengthen design appearance and functions	The performance of the design elements was improved and the design categories were identified.
	6. Introducing design elements for daily use:	The various aspects pertaining to the design product was considered; that is, whether they would be convenient to use, easy to operate, and pleasing to look at.
	7. Experiencing the aesthetics of emotional designs	The aesthetic experience in which poetry was transformed into practical design was appreciated.
	8. Achieving cultural and creative design objectives	Deep-rooted traditional culture was used in the creation of contemporary designs.
		

Fig. 2. Example of transforming the poem (*Yu Mei Ren*) into designs

Regarding the key implications to be selected for the topics to be discussed, “spring river rushing east” was selected as the key implication for analysis. An analysis of the imageries showed that movements depicted in the poetry were transformed into the

colors, texture, and shapes of the design products. Regarding the analysis of the imageries, “river” and “flowing” were used to form concrete objects. The “sense of movement” and crystallized, transparent materials were used to display the flowing of the spring river. For the “shape” of the design elements, scenery of the spring river was used. The “river” and “flowing” depicted in the poem were used to form concrete objects with curved shapes. The phrases “When had ... end” and “how much ... is still known” were manifested in glasses with multilayered curves and sequentially emerging lights to illustrate a sense of movement, indicating the ebbing of the tide.

5 Conclusions

In this study, the topics of poetic culture as well as the design and application of poetic culture were studied. The design and application of poetic culture in various areas such as the fields of academic research, design education, and the creative industry as well as in cultural continuity were investigated. The results for the four areas are described presented as follows: (1) The field of academic research: In a systematic and logical research framework, academic research methods and tools are combined with poetry-related theories and case studies to transform emotions depicted in poetry into rational and logical thinking. (2) The field of design education: Concrete poetry transformation design is used to convey abstract emotions to introduce various culture into people’s lives, such as by enabling people to re-embrace the beauty of poetry and forge an awareness of the connection between aesthetics in poetry and in designs, effectively motivating students to use abstract elements and transform them into concrete creative concepts. (3) The development of the creative industry: Theories proposed for poetry transformation designs are employed in actual design projects to encourage designers to examine the significance of poetic culture and to enlighten them about the mental cognitive experience from poetry. The experiences will provide the industry with the references to be used in practice and enhance the emotions and cultural significance conveyed in the artworks. (4) Cultural continuity: The cultural significance of traditional poetry is examined to create related contemporary designs, inducing the active participation of people from the new generation, which subsequently stimulates their creative inspirations and wins their approval of Chinese culture, achieving the goal of preserving Chinese culture.

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