Application of Narrative Significance to Cultural Product Design Education

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Abstract

The narrative significance can be an innovative element in the cultural product design process. Inquiry into a local cultural code narrative and a survey of its significance can serve as a reference for students who plan to design legendary story products in Taiwan. The findings of this study can also contribute to the assessment backwards design by linking the narrative significance of cultural symbols with experiences related to the connotations and denotation of products.

This paper proposes a framework for examining the influence of students' own culture on narrative significance and its application to design works. Through understanding the thinking and experience of a people at the level of reflection, students are able to understand the significance of design education in combination with design applications. By “Design Culture” course students looked for narrative significance in love stories. Through a literature study, they read about legends narrated by individual experiences and analyzed them according to the West and East story components. Thus, through a symbolic expression of the social behavior we believe that we can better understand the composition of culture through the lens of narrative significance.

Highlights

Intercultural study continues to be an important art and social science concept of design education.

Vision: Provide meaning, design strategy and symbol-oriented design for cultural product design. The narrative significance is also concerned with the design communication in Taiwan.

Introduction

Narrative significance offers powerful ways to conceptualize the complexity of human thinking. Such ways do not stress causality by simple antecedents, but offer non-positivistic explanations and unique modes of understanding. Narratives are variously understood and interpreted according to an individual's range of familiarity with the cultural registers in which they are situated. Backward design of narrative significance can provide a communication media in design education. Backward design is a method of designing educational curriculum by setting goals before choosing the instructional methods and forms of assessment. Backward curriculum design typically involves these stages [1]. This study discusses the features of narrative significance mainly through text analysis. We focus on the dimensions of backward design in particular as a way to reinterpret the purpose of narrative significance in design applications. Identify the results desired: What is it the students must know and be able to do?

Specify appropriate evidence of results: How can we know if students achieved the desired results? Based on what?

Specify enabling knowledge and skills: What is the necessary knowledge (facts, ideas, principles, etc.) the students must acquire to achieve the desired results?

What are the necessary skills (program strategy methods) the students must master to demonstrate effective implementation?

Design an appropriate sequence enabling the work activities necessary to develop goal-oriented knowledge and skills: What methods can make activities designed to enable students to experience the most interesting and appropriate concepts?

Specify the needed teaching and coaching: What do I need to teach to determine effective implementation? What needs to be collected or what cultural materials need to be provided to ensure maximum execution outcomes?

Among the vehicles of narrative are articulated language, whether oral or written, pictures, still or moving, gestures, and an ordered mixture of all these materials [2]. We also turn to Bruner's [3] well-known distinction between "paradigmatic" and "narrative" modes of thought. While a paradigmatic mode of thought leads to "good theory, tight analysis, logical proof and sound argument," a narrative model gives rise to good stories, gripping drama, believable (though not necessarily "true") historical accounts. It deals in human or human-like intentions and actions and the vicissitudes and consequences that mark their course. Narratives are the fertile ground in which language learners, particularly those who have or are experiencing asymmetrical relations of power and legacies of discrimination, can link to the past and yet explore new identity formations and possible worlds through their imagination [4]. At this moment, "story" is the pivot of design emphasizing "meaning" to bring affection. Past images and imaginative space are described through the product. The promise and appeal of a narrative lies in its familiarity as a basic mode of human
communication. Because people communicate with one another and learn about the world around them largely through stories, it is a comfortable way of giving and receiving information [5]. For the purpose of this study we define narrative as "a representation of connected events and characters that have an identifiable structure." This definition integrates key narrative elements as described in the about discussion of design communication and captures a wide range of narrative types such as "story exchange" (using forms of communication such as stories, textiles or social issues). The definition of a narrative and how to examine it has been a matter of debate [6-9] distinguished between "stories" and "narratives," arguing that people tell stories and researchers, through detailed analysis, discern narratives or ways of structuring stories. Recognizing that people interpret their lives according to the cultural narratives available to them, narrative analysts focus not only on the "simple" telling of stories but also on the story's underlying assumptions [10]. That is, a story about someone's subjective or "private" experience is often interpreted with reference to larger socio-cultural dynamics and discourses [8].

The life experience of society is complex and contradictory, and narrative is well suited to expressing that complexity and contradiction.

Narrative significance offers a way of thinking about backward design that is based on using stories to communicate information or media in design education. A symbol is an object that represents a visual image, belief, or material entity. Symbols take the form of visual images and are used to convey ideas and beliefs. Most people are accustomed to using narrative significance when they recount instances in their own lives to other people. Narratives are often used to recount a story, but they also can be used to argue a given point, convey information or provide valuable context that explains an action or idea. Narrative significance is often used to influence the opinions of objects, both in general interpersonal communication and in thinking. Many aspects of personal identity are defined by one's experiences and the social impacts of those experiences. Sharing them with others through narrative communication is a common and important social process by which people learn about the lives and experiences of others. Narratives are often used to influence the opinions of others, both in general interpersonal communication and in advertising. One of the simplest purposes of narrative communication is recounting past events. Many aspects of personal identity are defined by one's experiences and the social impacts of those experiences. Thus, sharing them with others through narrative communication is a common and important social process by which people learn about the lives and experiences of others. Further, narrative significance is the best communication media between the designer and ordinary people, from which imagination generates layouts in the development of design education.

Narrative Processing: Re-defining the Value of Culture Products in the Semiotics

Symbols could be words, gestures, pictures or objects that carry a specific meaning within a culture [11]. Those who share the culture may be the only ones who can recognize the meaning of a particular symbol. People alive or dead, real or imaginary, possess attributes, which are highly regarded within a culture, where they are seen as role models for behavior. Values are the core of a culture and are broad tendencies to prefer certain states of affairs to others. Values are feelings with a plus and minus side that deal with evil vs. good, dirty vs. clean, ugly vs. beautiful, etc. Values are processed within a narrative. The human mind is exceedingly capable of grasping the salient features of complex situations and social relationships, which are captured in such words as ‘value’, ‘significance’, ‘import’, ‘bottom line’, or, in a word, ‘meaning’. It is my conclusion in this essay that meanings exist only in the mind, where they take the place of the internal representations that computers use [12]. With the design of a cultural product, the application of "words" is discussed from the perspective of the emotional value reflecting signifier features and signified value through narrative processing. Narrative processing is able to create meaning because of the structure of narratives. This structure provides a temporal and relational organization and a basis for causal inference. Narrative thought first organizes events in terms of a temporal dimension: the events occur over time [3]. Narrative researchers may interweave their own personal experiences in their findings along with the stories that they tell about their participants' experiences [13]. Time is configured in narratives as episodes which structure time into a beginning, middle and end. Narrative thought also structures elements into an organized framework that establishes relationships between the story's elements and allows for causal inference. Stories consist of goal-directed action-outcome sequences [14]. Pennington and Hastie [15] called this structure an "episode schema": initial events create responses in characters that can be physical, psychological or both. As a result of these responses the characters develop goals that lead to courses of action, which result in certain outcomes.

The narrative mode of thought does not necessitate that individuals form elaborate, complex novels in their minds. Rather, when engaged in narrative processing, people think about incoming information as if they were trying to create a story. For example, imposing a beginning, middle and end, attributing causality, etc. In day to day living individuals continually attempt to impose a narrative structure on occurrences in order to understand them. The emphasis of this paper is on the narrative mode of thought as a process, not as a mental representation or memory structure. Narratives are similar to the general concepts of schemas or scripts in that they are organizing mental structures or frameworks [16]. However, the term schema, which refers to the general knowledge a person possesses about a particular domain [17] is a more general concept. Narratives have a more narrowly defined form and function. Narratives are also different from scripts, which represent commonly experienced events as an abstraction [18]. Narratives pay attention to specific details and unusual events in order to explain and interpret such events. In fact, stories conforming strictly to scripts have been given low story ratings by subjects [19].

Under the Shank and Abelson [20] view people match incoming narrative information to episodes stored in their memory in order to comprehend the information. The matching process focuses on key story elements: goals, actions and outcomes, although if no matches are found for these elements, people can also search for other cues as well (for example, type of protagonist, setting, etc.). Story understanding consists of three possibilities. One, the new story matches an already established story in memory, reinforcing one's beliefs about that story. Two, aspects of the new story are used to update missing aspects of the story it most closely matches. Three, the narrative processing provides further evidence for stories previously only tentatively understood. Therefore, narratives help people interpret the world around them to create imagination and learning. Therefore, narrative processing assists in developing culturally creative products and exploring the cultural value of the semiotics.
How cultural values relate to product design

The cultural values of our society frame the narrative significance of messages that in turn sell products, services, and ideas by reinterpreting the dominant trends in order to put a positive spin on what we do. The product design process in industrial design is not exclusively controlled by such known physical conditions as structural strength, material properties or production constraints. Rather, it appears to also be influenced by unknown and hard-to-manage factors, such as the designers’ own culture and values, their sense of connectedness with the product being designed, their emotions, aesthetic preferences and other nonphysical aspects [21].

Figure 1: Different levels of cultural manifestations [21].

The outcomes of product development processes are shaped by the interplay of several actors: designers, manufacturers, product users, marketers, engineers and so on. In other words, product design is a function of these contributors. It has been well evidenced that culture and cultural values play influential roles in almost all aspects of human life [22]. This suggests that designed cultural products exhibit relationships of narrative significance. The concept generation process in product development is, for the most part, initiated by an industrial designer who conjures up diverse ideas about a new product. During this stage, images and ideas, which are considered to approximate the designer’s mentality or impressions, are engendered [23]. Extensive literature supports the notion that cultural integration plays a noteworthy role in the effective design of products. How do designers use narrative significance to assist the process of thinking about design? Carlson [24] calls this process cultural creep, suggesting that designers intrinsically enforce their own pre-existing framework on a new product based on their past experience, rather than invent new frameworks. The relationship between the designers’ own culture and the cultural value that they create can be investigated within the research field of narrative significance. Hofstede [22] argued that every person carries within himself or herself patterns of thinking, feeling and potential acting that were learned throughout their lifetime. Hofstede itemized the main manifestations of culture, as values, rituals, heroes and symbols, indicating that symbols express the most superficial while values comprise the deepest layer of culture. His ‘onion diagram’ (Figure 1) illustrates the cultural layer concept.

Sign-signified: A Resource for Design Innovation and Inspiration in Design Education

Narrative significance can be a resource for design innovation and inspiration in design education. The study of design innovation, as in the work of Razzaghi and Ramirez [21], takes culture into account during design activities. This kind of study can pave the way to the diversification of ideas to satisfy user needs, consequently leading to innovation. In this way, culture can be a resource for inspiring design. De Souza [25] emphasized the necessity for diversity in humankind based on cultural differences and maintained that culture can generate this required diversity. Souza regarded culture as one of the fundamental issues in understanding design polymorphism, which is the theory that a single product can assume several distinct forms. Narrative significance can also play a role in the intuitive use of products. In a sense, human intuition relates to our conception of things, which has been already built up within our own cultural contexts. This can be demonstrated, for instance, by the opposite ways meaning turns in different products. In other words, during the early phases of the design process, students can challenge creativity and are easily allowed to be at their most creative and innovative. During the middle and final phases, the design activity is more convergent, with meaning and narrative processing pushing the designers towards the physical constraints of manufacturing and marketing. We explain design choices in the conceptualization stage, which is the phase under qualitative investigation in this study, rather than the design drill stage. Roland Barthes [26] wrote of three ways in which myth might be read. The first is to focus on the mythic signifier as an inextricable whole, thus believing in the myth. Secondly, concentration may be attached to sign of the first system which has been transformed into the empty signifier of the second-level system. The third way that myth may be read is in looking at a full signifier. Specifically, the myth signifier can be used as narrative applied to express narrative processing in design education.

Relationship between cultural significance and product processing – what makes a cultural product

Colette Dauite’s [27] analysis of significance adds to ways of appreciating the complexity of narrative meaning by focusing on evaluative language. People have access to evaluative strategies available in his or her familiar culture. There is ample prior evidence that evaluative devices create material bridges between the narrative and the context of telling, reading, or imagining. A previous study of cultural design, described code as follows: “In the realm of design and shaping, the specific shaping language, shaping grammar and even the particular symbolic connotation that takes form as a result of the sense of value due to individual culture and cultural habits, called cultural codes.” In other words, it means expressing a design work as a complete story that has the complete structure of a beginning, the progression and an ending. Moreover, this story conveys the “concept” of the creator. This approach can be used to stimulate curiosity, generate a suspenseful or surprising effect, produce conflict, create a barrier, make a breathtaking impression, etc., to set up one or more events.

Narrative Analysis: Think Description + Interpretation

Narrative analysis as technology is focused on developing design students’ ability to express life stories and dialogues as design questions to be parsed for significant meaning. Designers not only interpret
stories, rhetoric and dialogue as social truths, but must also experience the narrative for inspiration. Designers have the ability to discovery and self-examine. This allows them to find the design elements from a story and transform problematic events into their tangible inner thinking. This process of concept visualization has great value in the development of a story. The application of narrative to design thinking as the foundation of interactive design takes place after the designer has observed the user's environment and behavior, so that he or she can fully utilize his or her imagination and make up a convincing story or produce a better design. In other words, the designer should also be able to add sensible thinking and expressive thinking in narrative design – sensible thinking that enables the story to touch and enlighten user. The narrative thinking in interactive design focuses on imagination and cultivation of sensibility in particular. Through narrative therapy the designer learns how to listen closely to the user (Figure 2).

Narrative researchers base their inquiries on different theoretical and philosophical views of how people live and think narratively. Research has shown that design with "narrative significance" enables humans to better understand the culture of the group, giving them a more thorough understanding of the culture they live in. Moreover, what "narrative researchers hold in common is the study of stories or narratives or descriptions of a series of events" [28].

Human beings intrinsically seek their identity in order to bring meaning to their lives. It is widely accepted that culture is a vital part of an individual's personality [21]. In other words, culture also provides guidance for the development of design, with the hope of making good use of narrative significance and further developing products with local features. The strategy of transforming the characteristics of traditional regional resources into energetic daily commodities that directly connect memories to stories is adopted to boost the quality of design thinking to obtain the benefits of the flexible application of cultural products.

Experiment: Loving the use of symbols - comparing symbolic narrative aesthetics

"Design Culture" course students looked for narrative significance in love stories. Through a literature study, they read about legends narrated by individual experiences and analyzed them according to the following story components. The questionnaire survey examined two dimensions. First, we investigated the interviewees' viewpoints on six legendary love stories from the West and East. Next, we explored their viewpoints about the designs of the stories by analyzing important components of the stories and establishing an objective basis for comparison. Love until the end of life: Western (WA), Romeo and Juliet; Eastern (EA) The Love Eternal

- Girl pursues the true love and marriage: Western (WB), Pride and Prejudice;

- Eastern (EB), China Daily

The fearless love: Western (WC), Greek mythology: Orpheus;

Eastern (EC) Balenge ka abulru (Tables 1 and 2).

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selfless</td>
<td>Silent love</td>
<td>Fearless</td>
</tr>
<tr>
<td>Strong feelings in dialogue</td>
<td>Plain and direct dialogue</td>
<td>Dramatic plot</td>
</tr>
<tr>
<td>Touch (83.5%)</td>
<td>Admiration (55.6%)</td>
<td>Touch (66.7%)</td>
</tr>
<tr>
<td>Sympathy (10.6%)</td>
<td>Indifference (26.7%)</td>
<td>Joy (21.3%)</td>
</tr>
</tbody>
</table>

Table 1: Semiotic analysis of the text (Statistical analysis of the students' questionnaire responses).

<table>
<thead>
<tr>
<th>Significance</th>
<th>Touch</th>
<th>Pity</th>
<th>Admiration</th>
<th>Apartness</th>
<th>Touch</th>
<th>Happy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Yellow (83.7)</td>
<td>Analogous (66.7)</td>
<td>Red (60.5)</td>
<td>White (65.7)</td>
<td>Yellow (60.2)</td>
<td>Red (66.7)</td>
</tr>
<tr>
<td>Red (10.5)</td>
<td>Blue (17.6)</td>
<td>White (25.5)</td>
<td>Analogous (23)</td>
<td>Red (23.7)</td>
<td>Complementary (22)</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Pile (57.7)</td>
<td>Coarse (52.1)</td>
<td>Metal (70.5)</td>
<td>Plastic (57.8)</td>
<td>Pile (56.7)</td>
<td>Wood (45.7)</td>
</tr>
<tr>
<td>Metal (25.6)</td>
<td>Pile (67.5)</td>
<td>Wood (10.5)</td>
<td>Smooth (83.7)</td>
<td>Metal (42.7)</td>
<td>Smooth (10)</td>
<td></td>
</tr>
<tr>
<td>Line</td>
<td>Straight (65)</td>
<td>Round (88)</td>
<td>Triangle (60.5)</td>
<td>Down the line (80.2)</td>
<td>Straight (55)</td>
<td>Curve line (55)</td>
</tr>
<tr>
<td>Action</td>
<td>Shake (56)</td>
<td>Rotate (17.5)</td>
<td>Combine (66.5)</td>
<td>Moving slowly (66.7)</td>
<td>Shaking (50.5)</td>
<td>Jump (70.5)</td>
</tr>
</tbody>
</table>

Table 2: Integration of cultural symbols of the content (statistical analysis of the design students' questionnaire responses).

From the tables, the narrative significance can be found in the stories of selfless giving people deeply moved by fear and silence. We can also see different emotional expressions which form attributes and actions (e.g. straight and jump). Moreover, compassion and cultural representations of red and white cause joy and indifference. Different forms and color qualities from the yellow and blue also produce contrasting relative performances. Julia [29] has argued that just as texts show connections between events over time, narratives reflect...
The human experience in the light of typical human concerns. On the other hand, the experiences and perspectives in students' classroom narratives are likely to be precisely those experiences and perspectives that they want teachers to take into account in lesson and curriculum planning (Figure 3).

![Figure 3: Comparisons of symbolic narrative aesthetics (statistical analysis of students' questionnaire responses).](image)

This study was conducted through a quantitative survey of the context of love story-based language and appropriate story expression. A story transforms images into the text plot with specific symbolic steps based on aesthetic symbols. During the first exploration of the narrative, we asked students to examine the emotional links of stories in order to compare images. After the 27 students finished the stories, the quantitative questions in the survey provided analysis from the perspective of semiotics:

- Unfailing love stories make people feel moved and experience compassion.
- Girls pursuit of true love makes some people feel admiration while other people are indifferent.
- The courage to pursue love makes people feel touched and delighted.

**Conclusion**

In this study, product designers give products new meaning and value through innovative methods. Narrative significance is used as the object of analysis through the narratological methods of language and cultural codes to study design approaches for planned learning in cultural development. In addition to the basic elements of narrative significance, cultural perception, the environment, cultural characteristics and story patterns that carry symbolic cultural significance are also considerations that should not be overlooked.

From the angle of research analysis, expression through narrative inquiry is conveyable. From the analysis of significant narrative examples of future cultural products, the findings of this study revealed the five following principles:

1. Cultural characteristics: Diversified sense of value, tolerance and appreciation of multiple cultures should be integrated in cultural perceptions of narrative significance to display different possible lifestyles and arouse resonance through design.

2. Language deduction: Deduction of narrative significance varies with the social impact of the plot. This should be fully demonstrated in the design process to better exhibit the meaning of emotional expression.

3. Cultural codes: The formation of narrative significance is closely related to the particular local cultural features at the time. It takes a sharp sense of perception and keen sight for students to grasp the cultural pulse. This is also an important element when distinguishing different cultures.

4. Cognitive expression: Emotional expression is important in narrative significance. It is especially obvious with cognitive expression. In action, physical and mental developments are particularly important; while in interaction, the goal is to pursue sensory satisfaction.

5. Sign patterns: Regardless of the mode of expression or application of cultural emotional materials, the purpose of cultural integration and storytelling is to make the narrative significance feasible.

By expressing the meaning of designs with innovative thinking through narrative significance, we can consider whether designed pieces based on literary sources touch students through stories. The point of creation is to express completely the meaning of the story and develop threads and traits of local culture in stories. Hence, studying designers' reading of love can help us interpret past human events, introduce the experiences and cognition of stories into design, and combine methods to analyze design elements in stories. This could enable designers (students) to get close to purpose of design. Concepts such as cultural codes belong to the idea of “post-structuralism” in literature, as well as the “semiotic system” first proposed in the 1970s by Barthes. In design, cultural codes remind designers to analyze cultural differences. From the point of view of language, the denotation of something is signified (signified) to extend meaning (connotation). The symbols of cultural products must be creative; in order for students to grasp the context of cultural product design and understand symbols and operations, the meaning must be conveyed through a shared sense of the narrative significance of the context, which is a form of culture. This is the result of accumulation and succession. Only through narrative significance can the emotional elements in cultural product design be expressed and only through narrative significance is it possible to realize the perception of the environment in culture design. This study constructed a model for analyzing the cultural elements in cultural product design. Narrative significance through language and text are presented to help students find the right emotional expression for the product. Simultaneously, narrative therapy approaches are employed to help students learn to listen closely to users and communicate with them. To this end, we suggest that teachers and students need greater insight into the relationship between the narrative significance of the learner's identity and language investment. Most students adopt simile, but emotional expression related to the value of a story is the priority for the future development of design. Significantly, as learners find their voice, speak out and talk back through narrative significance, they provide powerful testimony to the potential of narratively significant technology to transform educational practice by helping students to learn about and understand desired knowledge.

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