

The Anatomy of a Metaphor Simple Seating Facility Furniture with Narrative Methods

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Abstract. This research is a continuation of previous research regarding the creative process in designing simple sitting facility furniture in Furniture Design Class 1, UNIKOM's Interior Design Study Program using the narrative method. The purpose of this research is to describe the results of the creation process and analyze the stages in the creation process. This research will analyze the stages in the creativity process which aims to get a formulation of how the stages in design use the narrative method with design exploration using a metaphorical approach. The metaphorical approach taken is an approach related to the anatomy of a metaphor product. This formulation will be used as a reference for furniture courses 1, 2, 3 in particular and in general for curriculum enrichment of UNIKOM's Interior Design Study Program in interior design studios. This study used a participatory method, with a sample of works by students (14 students) in furniture class 1 UNIKOM Interior Design Study Program, for 10 weeks, with research details: stage I exploration of form and Stage II exploration of factors of construction, beauty and function, as well as Stage III, is the stage of the formulation of stages in designing with the Narrative method. Stage IV, translating the source and the targets according to their narrative. Product metaphors distinct entities, a product (target) and a remote entity (source), through physically mapping () certain properties of the latter to the former. Two entities and a mapping is not enough to be a metaphor, there should be a "meaning transfer" provided by their association. Product metaphors differ from verbal metaphors in terms of (1) target and source merging, (2) mapping being designers' task, (3) multimodality, and (4) source concreteness. The structure of product metaphors, the characteristics of a metaphorical association and mapping in products, and the differences of product metaphors from their linguistic counterparts will be explained with various examples. The association of a target and a source can be based on: Innate, universal knowledge—which would lead to *embodied metaphors*, Cultural, expert knowledge—which would lead to *learned metaphors*.

1. Introduction

Anthony C. Antoniades stated in "Poetics of Architecture, Theory of Design" that architects have used metaphor as a channel to architectural creativity throughout the century. It has been discovered to be a powerful channel, more beneficial to the creator than to the user or critic." (Antoniades, 1992, P:30)," and Antoniades also mentions on the same page ".... metaphor can be useful in achieving the "new" at many points in the building and design/conceptual process [1]. According to the preceding statement, metaphor can generate a new form.

Yin Zhu, Xiaochan Yin, and Xiaoyong sho explain the Metaphora approach in designing furniture in the Modern Era, dividing the metaphor into two categories: metaphor of similarity of signifier and metaphor of signified. However, the research that has been conducted has used predetermined themes, such as the Chinese song "Jixiangsanbao" (which means "the lucky family of three" in English). As a result, the prototype produced is more limited. [2]. H. Casakin also discussed the use of approaches to metaphor design in the studio versus traditional

methods. Metaphor, he wrote, is a tool for solving design problems. He did not explain the metaphorical approach in the same way that he did the narrative approach. [3]. Similar to H. Casakin's research, Richard Coyne, Adrian Snorgrad, and David Martin conclude that 1) there is a close relationship between design and metaphor that provides insights into effective design education; (2) metaphor operates through privilege, directing concern, and the identification of difference; and (3) design involves the generation of action within a collaborative environment in which enabling metaphors can freely play. They do not discuss the design process with a narrative approach [4]. Robert Tully defined narrative imagination as a design imperative. He discussed the role that narrative imagination plays in design education and design in general, and he stated that in order to encourage the highest level of creativity and innovation from our future generations of students and graduates, we must begin to enable the narrative imagination to take them on previously unimaginable journeys of discovery. He only says that the narrative imagination can boost creativity, but he doesn't go into detail about the metaphor in the narrative imagination. [5].

In the literature studying linguistic metaphors, the term mapping is also used for referring to the transfer of source properties to target, but at a "conceptual level" (Gentner, 1988; Gentner & Wolff, 1997; Holyoak & Koh, 1987; Lakoff & Johnson, 1980; Vosniadou, 1989). As a linguistic metaphor consists of an association of two words (e.g., "Every child is a snowflake"), clearly we cannot talk about a physical transfer from source to target. Mapping here refers to the act of establishing a conceptual correspondence between these words, i.e., every child is unique, delicate and precious as a snowflake. Products are, however, tangible entities. In order to construe a product metaphor, designers are required to make the appearance of a source visible in the appearance of its target. For this reason, product metaphors involve two distinct kinds of mappings from source to target: a conceptual mapping as in linguistic metaphors to build the metaphorical link between target and source, and a physical mapping to manifest this link in tangible form.

Previous research on metaphor design and narrative design was conducted separately, but the studies explained that both were very important in the design creativity process but did not specifically address the design of sitting facilities. The purpose of this research is to investigate the process of translating narratives into sitting facilities using the metaphor method. Furthermore, it explains what forms students select based on their story choices. In the previous studies also indicated that the use of two-dimensional and three-dimensional design applications in the interior can make it easier to translate the design's narrative. This study examines how to implement the use of computer applications for furniture design in a design process using the narrative method. Particularly important is the translation of metaphorical narrative elements. It should be noted, however, that simply having a target, a source, and a mapping in between is not enough to qualify something as a metaphor. The use of metaphor must involve some form of meaning attribution, which alters the overall experience of a product (Alty & Knott, 1999; Van Rompay, 2008). To put it another way, the association of two entities should say something meaningful and novel about the product; otherwise, the construction is simply juxtaposition and not a metaphor. A telephone in the shape of Mickey Mouse and a radio in the shape of a car both pretend to be something they are not; their appearances have nothing to do with their function and meaning. The majority of the items we classify as "kitsch" fall into this category. They involve a physical mapping from one entity to another, but not a meaningful conceptual mapping between these entities. However, in a product metaphor, both of these mappings are properly realized; the meaning transfer that is achieved through the association of a specific target and source is a distinguishing feature.

2. Research Methods

2.1. Methods

This study employs a literature review to explain metaphors and narrative through definition terminology. The following step is the observation stage process in creating seating facilities using a narrative approach. At this stage, researchers assist students in developing their stories and translating them into seating facility designs. The next step is to elaborate their story, which will be translated into physical and conceptual levels via aesthetics, construction, and functionality. Finally, the final stage is an explanation of metaphor methods related to narrative on both a physical and conceptual level.

2.2. Sample

This study utilized 14 seating facilities from DI-1 and DI-2 classes during the odd semester of the academic year 2021-2022. The following items are included in the sample: 1) Conceptual Design 2) Prototype (three dimensional rendering)

3. Result and Discussion

3.1. Source and Targets

According to Nazli Cila in "The use of Metaphor in Product Design ". There are three questions about the Metaphor product: 1) What are the two metaphor terms (i.e., target and source), and how do we know? (2) How do we know which domain is the metaphor's target domain and which domain is the metaphor's source domain? (3) Which features can/should be mapped from the source domain to the target domain, and how are they chosen?.

Nazli zila also stated that designers have intentions about what kind of experience they want to provide users through the product when creating a metaphor, and they associate a source with the product based on these intentions. They may have "pragmatic intentions" to achieve instrumental and functional goals, or "experiential intentions" to provide users with aesthetically pleasing, semantically rich, sensorial, or emotionally charged experiences. Hekkert (2008) then identified five reasons why a designer might use a metaphor in Nazli Cila (2013), which are divided into two categories based on these two types of intention.






First, we will address these reasons and describe the different types of intentions that designers may have when using a metaphorical association in their product. Then, we'll go over the different types of target-source associations, which are classified based on the "depth" of knowledge that can be used.








3.2. Translating The Target


Furniture, according to Jerzy Smardzweski in Furniture design (p.49), can be divided into three distinct groups based on purpose, conditions, and nature of use. • offices and public buildings (office furniture, school furniture, dorm furniture, hotel furniture, cinema furniture, hospital furniture, canteen furniture, common room furniture, and so on), • residential rooms in multi-family and free-standing buildings (flat furniture, kitchen furniture, bathroom furniture, garden furniture, and so on), and • transportation (ship furniture, train furniture, aircraft furniture).

In terms of functionality, he divides furniture into the following categories: sitting and lounging, reclining, working and eating meals, learning, storage, multifunctional furniture and complementary furniture. The spatial organization of form, interconnection of main structural components, and architectural structure of the product determine the form and construction characteristics of the furniture piece. Depending on the form's spatial organization. There are three basic furniture schemes: single-bodied, multi-bodied, universal for completion, on a frame, and for hanging.

Seating Facility Models Related to Purpose and Functionality, and Form, and Construction

No.	Chair Furniture		Narrative	Purpose and Functionality	Form and Construction	
					Spatial Organisation of The Form	Modular Design
1.	Revina/ Kuetiaw chair		Eating spicy noodle at at street vendor	- Seating - Resendential	with an open spatial structure	Single Bodied
2.	Rifani / Spilled Chair		Coconut water spilled in to the ground	- Seating - Resendential	with an open spatial structure	Single Bodied
3.	Bethesda / Jubur and Ronyu		Romance between jellyfish and sea turtle	- Seating - Resendential	with an open spatial structure	Single Bodied
4.	Nur Halida/ Butterfly		The story about extrovert person ho like the dynamic and beautifull butterfly	- Seating Resendential	with an open spatial structure	Single Bodied
5.	Adib/ Mobius Throne		The story about bio chemist , combining bat abd human DNA, and become a vampire	- Seating Resendential	with an open spatial structure	Single Bodied
6.	Risa/ The Gorgeous Peacock		The origin of sunflower, The Hawaian Legend Story	- Seating Resendential	with an open spatial structure	Single Bodied

7.	Ikbal /The Siamese Double Boys		True story about the identically twins boys	- Seating - Resendential	with an open spatial structure	Single Bodied
8.	Sanisa/ The Devils			- Seating - Resendential	with an open spatial structure	Single Bodied
9.	Tsania/Fun			- Seating - Resendential	with an open spatial structure	Single Bodied
10.	Dunga/ the owl and Lone		The story of loneliness when camping	- Seating - Resendential	with an open spatial structure	Single Bodied
11.	Fatimayya / The Mermaid		The Story about Ariel the mermaid and her friends	- Seating - Resendential	with an open spatial structure	Single Bodied
12.	Triani/ Ear Ring		The story of woman who is clever tricking the evil king, as f she were alredy married	- Seating - Resendential	with an open spatial structure	Single Bodied
13.	Salsabila / Old but Gold			- Seating - Cafe	with an open spatial structure	Single Bodied

14	Chandra/ The Perfect of Love Chair		The love story of a couple who intertwine their love and become a true love that can't be separated.	- Seating - Cafe	with an open spatial structure	Single Bodied
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Tabel from previous research "Interior Computer Graphic in Seating Facility Design with Concept Metaphor of Creativity Process with Narrative Approach " Cherry 2021





3.3. Translating The Source






A designer creates a physical form of an embodied or learned association between a target and a source that corresponds to his or her intentions. He or she projects the "salient" properties of a source onto a target at this stage. The salient properties of an entity are its defining, prominent, and distinguishing characteristics. These are the properties that must be transferred to the target; otherwise, the reference to a specific source will be lost (Glucksberg & Keysar, 1979; Jones & Estes, 2006; Ortony, Vondruska, Foss & Jones, 1985). If one wants to make a metaphorical reference to a cloud when designing a chair, for example, simply painting the chair white will not suffice.

These distinguishing characteristics vary depending on the source, but they can be divided into eight categories. The form, interaction, material/texture, movement, sound, taste/smell, name, or graphics of a source can be projected onto a product.

Seating Facility Models Related to 8 categories , Physical Level and Conceptual level

Products	Form	Interaction	Sound	Movement	Material Texture	Taste smell	Name	Graphics
	<ul style="list-style-type: none"> • Scramble Noodle • Red chili sauce • sticking tongue 	Cooking the spicy noodle and spilled to the ground	-	Messy Noodle in to the ground	Elastics and soft noodle	Hot	-	-
	<ul style="list-style-type: none"> • Dripping coconut water • Coconuts shell 	Drinking coconuts water and spill in to the ground	-	Coconut water spill in to the ground and dripping	Hard coconut shell and coconut water drop	fresh	-	-

	<ul style="list-style-type: none"> • Turtle shell and legs • Leather back turtle shell • Jellyfish body with tentacle 	The relationship between jellyfish and turtle become more intense, and the sadness for both of them	-	Moving together both of them, become one	Transparent, hard shell	Seashore air	-	-
	<ul style="list-style-type: none"> • Butterfly wings • Stilation of butterfly body 	Extrovert person who has similiarity to butterfly form and has social responsibility to others	-	Person who has an ability to take a social responsibility and dynamic activity	Elastics wings, smooths texture, flexibility form	-	-	-
	<ul style="list-style-type: none"> • Vampire fangs • Throne form 	The story about bio chemist, combining bat and human DNA, turn into a vampire	-	The Bio Chemist trying to survive by combining the bat and human DNA,	Hard, sharp	-	-	-
	<ul style="list-style-type: none"> • Sunflower seed • Root of the tree 	The story about the origin sunflower, the Hawai Legend Story	-	The changing sunflower seed to sunflower, and change into tree roots	Smooth, soft, elegance	-	-	-
	<ul style="list-style-type: none"> • Two chair joined in to one chair • Stilation of the chair structure 	The Siamese twins who had 2 head one body	-	The unique twins who have 2 head in one body, they aren't ashamed because of their condition	Hard, tough	-	-	-
						-	-	-

						-	-	-
	<ul style="list-style-type: none"> • The owl head • Twigs form 	The story of loneliness when camping	-	The story a lonely young man when camping accompanied by a lonely owl	Hard, smooth	-	-	-
	<ul style="list-style-type: none"> • The mermaid tail • The blood clam form 	The story about Ariel and friends	-	The story about Ariel the mermaid, taken from Disney Character	Fish tail, soft and tender	-	-	-
	<ul style="list-style-type: none"> • The ear anatomy 	The story of woman who is clever tricking the evil king, as if she were already married	-	The woman pierced her ears to make it look as if she was married	Flexible, hard	-	-	-
						-	-	-
	<ul style="list-style-type: none"> • The stilation of man body • The stilation of woman body 	The love story of a couple who intertwine their love and become a true love that can't be separated.	-	Always together, till death do us part	Tough, hard, soft, tender, warmth	-	-	-

4. Conclusion

Various examples will be used to explain the structure of product metaphors, the characteristics of metaphorical association and mapping in products, and the differences between product metaphors and their linguistic counterparts. The association of a target and a source can be based on either innate, universal knowledge (which leads to embodied metaphors) or cultural, expert knowledge (which leads to learned metaphors). Product metaphors connect two distinct entities, a product (target) and a remote entity (source), by physically mapping the latter's properties to the former. A metaphor requires more than two entities and a mapping; there must also be a "meaning transfer" provided by their association.

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