A Study of Communication in Turning "Poetry" into "Painting"

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Abstract. This study proposed a research framework to study the communication of turning poetry into painting by using 21 paintings with their poetic titles. A total of 57 graduate students participated in the study. Subjects were asked to evaluate the fitness of paintings with their poetic title based on the six functions of communication theory. The results showed that the approach can be applied for evaluating the painting effectively and provide artists with an idea how to concentrate their efforts at the creation stage, and it is easy to communication with audience. In addition, the research framework seems to be a better way to explore the understanding of turning poetry into painting, which is clearly worthy for further research.

Keywords: Communication · Cognitive human factors · Poetry · Painting

1 Introduction

Recently, artistic literature citizens apply to a variety of artistic media, symbols, and metaphors; in order to independently create and perform expressions about their own ideas and communicate their life experience. For every artist was first an amateur (Emerson 1883), thus, the arts are the media which provide powerful and essential means of social communication. Taking poetry as an example, poetry is a form of verbal art that uses the aesthetic qualities of language. Poetry has been more generally regarded as a fundamentally creative act employing language. Poetry uses forms and conventions to suggest different interpretations of words or to evoke emotive responses (Lin et al. 2015). On the other hand, painting and graphic design are the forms of visual

art, which is a mode of creative expression consisting of representational, imaginative, or abstract designs produced by the application of color to two-dimensional artwork. Turning poetry into painting deals with complex objects which are interdisciplinary in their own nature. This nature appears to be suitable for an opening to "read" in different ways and multiple perspectives are available to analyze them (Chen et al. 2014, 2015).

In the early 20th century, artists began to experiment with nonrepresentational art, in which formal qualities such as line, color, and form were explored rather than subject contents. Today, painting vacillates between representational and nonrepresentational forms (Beatty 2011; Beatty and Ball 2010; Mare 2010). Frankel (1957) stated that in Chinese literary tradition, the Chinese character of "writing" has been used in the dual sense of "to write" and "to paint", and that the expression of "to look" at a painting literally means "to read" a painting. The idiom of "idyllic" (詩情畫意, shiqinghuayi), which literally means a quality suggestive of poetic and picturesque, used as the criteria to evaluate a Chinese painting (Yeh and Lin 2014; Yeh et al. 2014).

A poem creates visual images in the reader's mind, just as a painting creates images in the viewer's eyes. A great painting has much more below the surface than the first impression. When a viewer is faced with a painting, the audience is presumably required to interpret the elements provided by decoding and then constructing meaning by encoding (Fiske 1990). Thus, the audience has to discover or construct a meaning and then attribute that meaning to what is in the painting (Laude and Denomme 1972; Cantoia and Antonietti 2000). A poem is a painting made with words. In the analysis of poems and paintings, it is important to consider whether or not the texts are situated in the poems in a way that is analogous to the illustrations of the paintings (Laude and Denomme 1972). It has been argued that the idea of turning poetry into painting should be interdisciplinary, as well as mentally challenging and creative (Michel 1999). Mare (2010) explored whether or not visual images and works of art can be "read," and raised important questions as to whether the description and interpretation of a work of visual art can be referred to as the "reading" of that work.

Thinking about art as a process of social communication, this article intends to understand how the relationship between the artist and the audience has potentially altered in social communication. For the communication between artist and audience, three levels are identified to the study of communication, namely technical, semantic and effectiveness levels (Fiske 1990; Lin 2007). Based on the communication studies and previous studies (Lin 2007; Lin et al. 2015), therefore, this study proposed a research framework which could be used for a continuous research of a deeper understanding to explore the nature of turning poetry into painting.

2   Framework for Turning "Poetry" into "Painting"

Based on Lin's studies (2007), a framework was proposed for turning poetry into painting as shown in Fig. 1 which consists of three main parts: poetic works, creation model and artwork. The creation model focuses on how to extract the semantic features from poetic works and then transfer these features into the painting. The creation model consists of three steps; *identification* (extract semantic features from original poetry), *translation* (transfer them to drawing elements) and *implementation* to finally create a painting. The
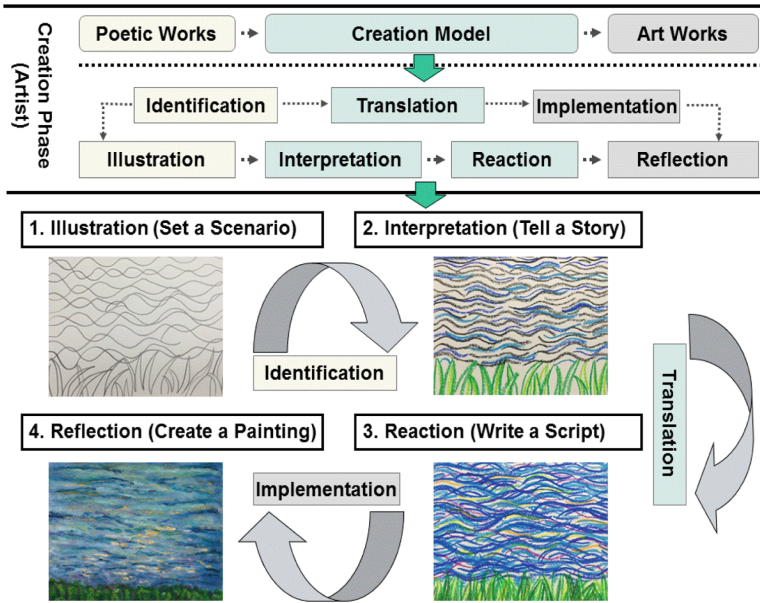
Fig. 1. Framework for turning "Poetry" into "Painting"

creation model is described as follows: (1) Identification phase: The semantic features are identified from original poetry, then painter uses their experience to obtain, evaluate, and utilize drawing elements from the poetry. (2) Translation phase: painter translates the semantic features to the painting within a chosen poetry. The painter achieves some depth and experience of practice in these semantic features and produces artwork for the interaction between artist and poetry. (3) Implementation phase: the implementation phase expresses the drawing elements with the semantic features, the meaning of poetry, an aesthetic sensibility, and the flexibility to fit the painting with the poetry.

Based on the creation model and previous studies (Michel 1999; Lin 2007), the turning poetry into painting model is used by scenario and story-telling approaches. In a practical process, four steps are used to design a cultural product, namely; illustration (set a scenario), interpretation (tell a story), reaction (write a script), and reflection (create a painting) as shown in the bottom of Fig. 1. The four steps of the cultural product design process are described as follows: (1) Illustration/set a scenario: this step seeks to analyze the semantic features in order to determine the key features to represent the scenario. (2) Interpretation/tell a story: based on the previous scenario, some interactions should be explored in this step. According to the interaction, a user-experience approach is used to describe the features of the painting by a story-telling. (3) Reaction/write a script: this step is to develop an idea sketch in text or pictograph form based on the developed scenario and story. During this step, the scenario and story might require modification in order to transform the semantic meaning into a painting. (4) Reflection/create a painting: this step deals with previously identified semantic features and the context of the painting. At this point, all semantic features should be listed in a matrix table which will help artist check the cultural features in the creation process (Lin 2007).

Turning poetry into painting involves complex issues that are interdisciplinary in nature. This nature appears to be suitable for "reading" in different ways, and multiple perspectives are available through which to analyze them. Based on the above discussions, the research framework can be used in a continuous search for a deeper understanding of the nature of turning poetry into painting, in which some conjectures can be tested.

3 Methodology

This study involved using questionnaires, interviews, matching test and fuzzy ratings to explore the social communication and cognition of turning poetry into painting. Three different sessions were used as shown in Fig. 2. Session 1 explored a literature review and established a research framework. In Session 2, a practice of turning poetry into paintings was conducted to test the utility of the framework shown in Fig. 2. Then, a rating approach was used to evaluate the paintings with their poetic title in Session 3. Multivariate data and protocol analysis were applied to study the social communication and the recognition of turning poetry into paintings will be explored (Lin et al. 2015).
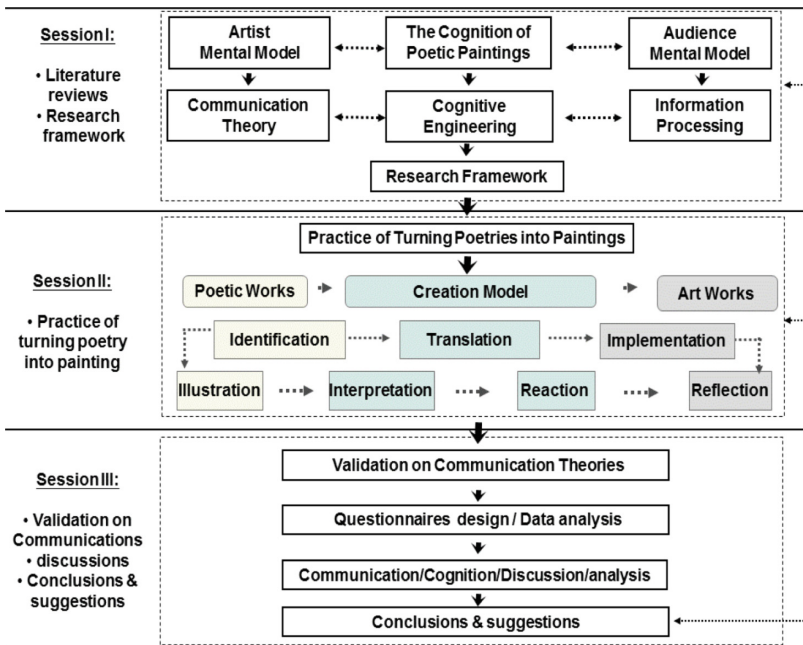
Fig. 2. Method for studying the communication of turning poetry into painting

3.1 Research Framework

An artwork must reach three functions to express its significance through the symbol system including (1) Signification: the art work can express a kind of significance; that

is, the artist's intentions can indeed be expressed through the art work; (2) Expression: the art work may represent the artist's feelings; that is, through the art works, the artist's imaginations thoughts and feelings can be reproduced; (3) Communication: the results of signification and expression can be sent to the viewer only when the artist's thoughts and the viewer's ones are identical (Fiske 1990; Jakobson 1987).

In the communication model, Jakobson (1987) proposed six constitutive factors with six functions in an act of communication. The six constitutive factors are as follows: addresser, addressee, context, message, contact, and code. Each of these factors determines a different function in each act of communication: emotive, conative, referential, poetic, phatic, and metalingual. For the mental model of cognitive engineering, Norman (2013) proposed a conceptual model that includes three parts: design model, user's model, and system image. For emotional design, Norman (2002) proposed three levels of processing: visceral, behavioral, and reflective for emotional design. Therefore, a research method combining the previous studies was proposed to explore the issue of turning poetry into painting as shown in Fig. 3.
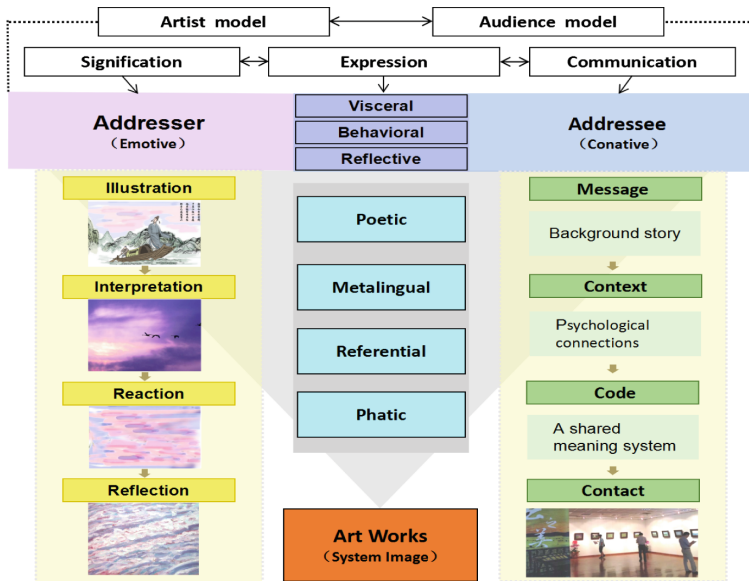
Fig. 3. Research framework for study turning poetry into painting

3.2   Practice of Turning Poetry into Painting

The amateur painter Ms. Lee conducted the practice of turning poetry into painting. The painter was asked to read the paper entitled – Turning Poetry into Paintings: An Experiment in Visualization by Michel (1999) and two related papers (Hsu et al. 2011; Lin 2007). Then, the twelve abstract paintings were painted according to the selected poetry following the four steps of illustration, interpretation, reaction and reflection for turning poetry into paintings. She developed the poetic title based on the framework
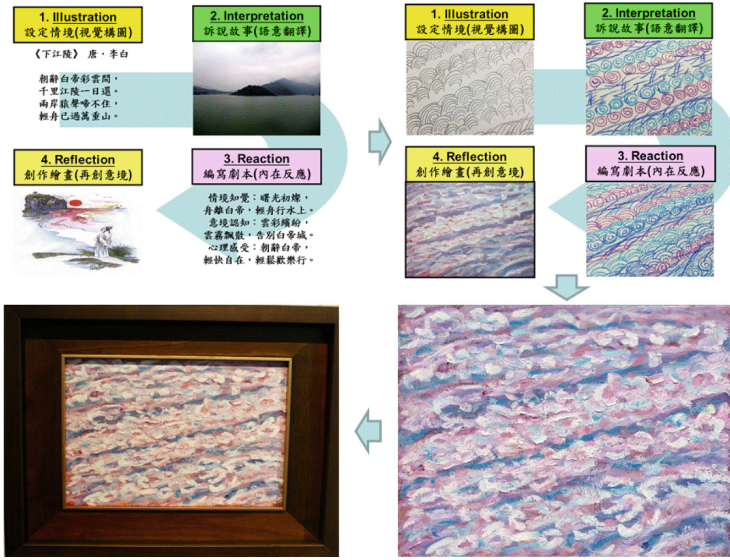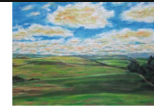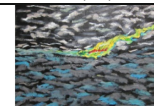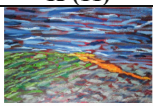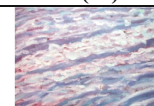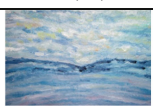
Fig. 4. The process of turning poetry into painting

Table 1. Twenty-one stimuli paintings

A-(1)	B-(2)	C-(3)	D-(4)	E-(5)
F-(6)	G -(7)	H-(8)	I-(9)	J-(10)
K-(11)	L-(12)	M-(13)	N-(14)	O-(15)
P-(16)	Q-(17)	R-(18)	S-(19)	T-(20)
U-(21)	The poetic titles were listed in Lin et al. 2015.			

shown in Fig. 1 and expressed her own feeling of the painting and focused on whether the poetic title expressed the mood of the painting. For example, Fig. 4 showed the process of turning a poem entitled – *I set out with a farewell to Bai-Di Town glittered with morning clouds*, to a painting (Lin et al. 2015).

The study was based on the Lee's 21 paintings as shown in Table 1, which includes nine landscape paintings (A1 to I9) and twelve abstract paintings (J10 to U21). The nine landscape paintings, which were comprised of nature scenes containing clouds, were used as the base from which the author proposed poetic titles related to clouds. The key factor for the proposal of these poetic titles was that they had to help the audience to more easily understand the mood of each painting. Therefore, in creating the titles, the first thing that had to be done was to associate viewers' main visual impressions of the paintings with their life situations. Meanwhile, the poetic titles developed by the author were also recognized by the painter as sufficiently similar to the painter's intentions (Lin et al. 2015).

3.3 Validation on Turning Poetry into Painting

This study involved using questionnaires' interviews and design and recognition. Two schools and fifty-seven college students served as the subjects. Based on the research framework (Fig. 3), questionnaire used the six functions of communication theory to rating the fitness of painting with its poetic title as shown in Table 2. Question is a numerical open-ended question, the first item in the question asked the fitness between the painting and its title from 0% (not fit) - 100% (complete fit) to fill in; the remaining six questions are about the feelings of the intensity from 1 (not agree) to 100 (very agree) to fill in, so do the questionnaire data input by the original value of the statistical analysis. All subjects were university student volunteers from the northern and southern regions of Taiwan. A total of 57 subjects: 24 males and 33 females between the ages from 28 to 41 participated in the study. Subjects were told the purpose of the experiment. Then they were asked to rate each painting with its poetic title according to the questions (Chen et al. 2014, 2015).

Table 2. The rating of fitness of idyllic image and six functions

* I set out with a farewell to BaiDi Town glittered with morning clouds, to a painting.

1. Rating the fitness of "Idyllic image" between the painting and title.

2. Rating the fitness of "Emotive" between the painting and title

3. Rating the fitness of "Poetic" between the painting and title.

4. Rating the fitness of "Referential" between the painting and title

5. Rating the fitness of "Phatics" between the painting and title.

6. Rating the fitness of "Metalingual" between the painting and title

7. Rating the fitness of "Conative" between the painting and title.

4   Results and Discussion

4.1   Comparisons Between Landscape and Abstract Paintings

The mean and standard deviation of fitness of idyllic image are 76.20 and 11.90. For the six functions, their mean and standard deviation are Emotive (73.7/14.5), Poetic (73.4/12.0), Referential (69.2/12.9), Phatic (68.5/14.2), Metalingual (68.5/13.2) and Conative (72.1/12.8), respectively. Through the Pearson Correlation analysis, the functions of communication to each other were positively related as showed in Table 3. The stimulus paintings include landscape paintings and abstract paintings. Through the independent t-test analysis, in order to analyze whether there are differences in the cognition of communication elements between landscape and abstract paintings, as shown in Table 4. For the total image of idyllic, the result showed significance which indicates that the idyllic image of landscape painting is better than that of abstract painting (80.0 vs. 72.4; $t(57) = 6.50$, $p < 0.001$). For the six functions of communication, the results (Table 4) showed the differences between the landscape and abstract paintings are significant, and the fitness of the landscape paintings are obviously higher than those of the abstract paintings.

Table 3. The correlation analysis of the communication functions

	Idyllic	Emotive	Poetic	Referent.	Phatic	Metalin.	Conat.
Idyllic	1						
Emotive	0.71**	1					
Poetic	0.73**	0.83**	1				
Referential	0.66**	0.81**	0.79**	1			
Phatic	0.70**	0.82**	0.85**	0.90**	1		
Metalingual	0.73**	0.78**	0.80**	0.90**	0.91**	1	
Conative	0.72**	0.85**	0.90**	0.84**	0.88**	0.88**	1

**Correlation is significant at the 0.01 level (2-tailed).

Table 4. Paired samples t-test of landscape painting (L) and abstract painting (A)

	Mean difference (L vs. A)	T-test
Idyllic image	80.0 vs. 72.4	6.50***
Emotive	75.9 vs. 71.6	3.05**
Poetic	76.1 vs. 70.7	4.40***
Referential	71.3 vs. 67.0	3.00**
Phatic	72.1 vs. 64.9	5.85***
Metalingual	71.8 vs. 65.2	4.46***
Conative	75.2 vs. 69.0	4.17***

$*p < 0.05, **p < 0.01, ***p < 0.001$

The highest and lowest paintings of fitness rating of landscape and abstract paints are listed in Table 5. For the landscape paintings, the highest rating is painting A-1 and the lowest rating is painting C-3. The paired-sample t-test was used to compare the

Table 5. Paired samples t-test of landscape painting (L) and abstract painting (A)

	Mean (A1vs C3)	t-test	Mean (J10 vs R18)	t-test
Emotive	81.8 vs. 71.6	5.27***	74.2 vs. 68.4	2.54*
Poetic	81.7 vs. 75.0	4.03***	74.0 vs. 70.8	1.62
Referential	80.9 vs. 66.6	6.58***	70.4 vs. 63.3	2.78**
Phatic	76.6 vs. 69.9	3.01**	68.4 vs. 62.6	2.51*
Metalingual	78.0 vs. 67.2	5.00***	68.1 vs. 62.0	3.02**
Conative	81.0 vs. 72.0	3.98***	73.1 vs. 65.3	2.75**

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

difference between painting A-1 and C-3, and the result showed that painting A-1 is higher than painting C-3. In addition, the six functions of painting A-1 and C-3 was compared using the paired-sample t-test and the results showed in Table 5 and Fig. 5. For example, the emotive function of painting A-1 is significantly higher than the painting C-3 (81.8 vs. 71.6; t(57) = 5.27, p < 0.001). The other functions are poetic function (81.7 vs. 75.0; t(57) = 4.03, p < 0.001), referential function (80.9 vs. 66.6; t (57) = 6.58, p < 0.001), phatic function (76.6 vs. 69.9; t(57) = 3.01, p < 0.01), metalingual function (78.0 vs. 67.2; t(57) = 5.00, p < 0.001) and conative function(81.0 vs. 72.0), t(57) = 3.98, p < 0.001), respectively. Thus, for the six functions of communication, the highest degree of fitness with landscape painting are significantly higher than the lowest degree of fitness.
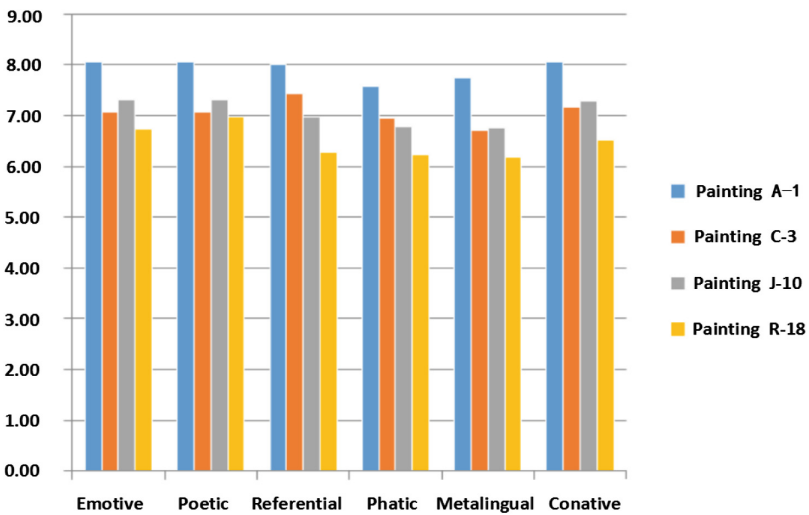

Fig. 5. The comparisons of the six functions of communication

For the abstract paintings, the highest rating is painting J-10 and the lowest rating is painting R-18. The paired-sample t-test was used to compare the difference between painting J-10 and R-18, and the result showed that painting J-10 is higher than painting

R-18. In addition, the six functions of painting J-10 and R-18 was compared using the paired-sample t-test and the results showed in Table 5 and Fig. 5. For example, the emotive function of painting J-10 is significantly higher than the painting R-18 (74.2 vs. 68.4; $t(57) = 2.54$, $p < 0.05$). The other functions are poetic function (74.0 vs. 70.8; $t(57) = 1.62$, $p = 0.11$), referential function (70.4 vs. 63.3; $t(57) = 2.78$, $p < 0.01$), phatic function (68.4 vs. 62.6; $t(57) = 2.51$, $p < 0.05$), metalingual function (68.1 vs. 62.0; $t(57) = 3.02$, $p < 0.01$) and conative function (73.1 vs. 65.3; $t(57) = 2.75$, $p < 0.01$), respectively. Thus, for the six functions of communication, the highest degree of fitness with abstract painting are significantly higher than the lowest degree of fitness with emotive function, referential function, phatic function, metalingual function and conative function. Hence, only the poetic function is no different in the abstract painting group that may need further studies to explore.

4.2 Discussion

This study used communication theory as a technique for evaluating paintings which based on the poetry. The rating focused the six functions of communication of turning poetry into painting. The results showed that the six functions of communication could be applied for evaluating the paintings effectively and could provide artists with an idea of how to concentrate their efforts at the creation stage of turning poetry into paint communication easily with the audience. Some results are summarized as follows: (1) There are positive correlations among the functions of communication. The results
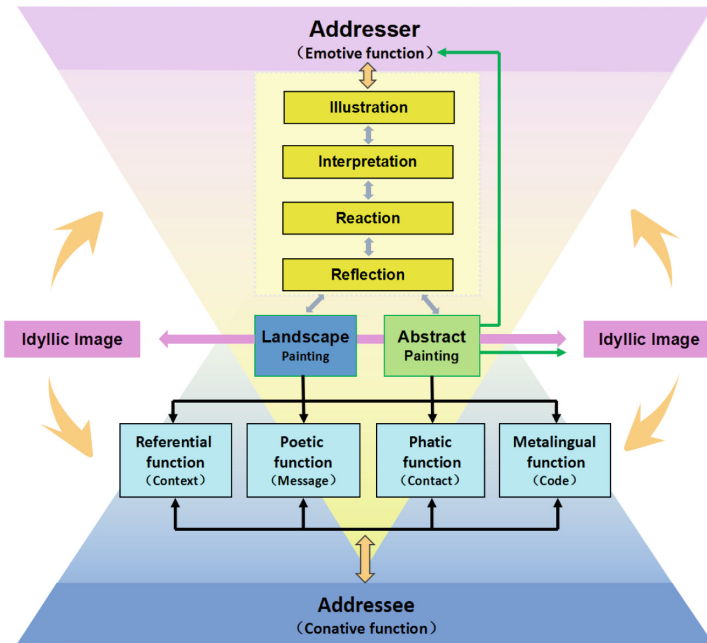

Fig. 6. A framework for exploring the process of turning poetry into painting

show that the emotional, poetic, referential, phatic, metalingual and conative function are related to each other in turning poetry to painting. (2) When compared landscape paintings with abstract paintings, landscape paintings are higher than abstract paintings in emotive function. Thus, how to enrich the artist's emotion for the expression of emotive function needs to be studied in further study. (3) In the study of the degree of fitness between poetry and painting, the functions of communication with the highest degree of fitness in landscape paintings are higher than those with the lowest degree of fitness. But for the abstract painting, the poetic function showed no significant difference that needs to explore the reason for understanding.

5 Conclusion

For the turning poetry into painting, the painter (addresser) wanted successfully communicate with the audience (addressee), and from the functions of communication were studied to understand the conceptual difference between artist and audience. The communication approach appears to have an advantage over the subjective interpretation of artwork. A framework for exploring the process of turning poetry into painting was proposed as shown in Fig. 6.

Although the idea of using a communication approach to explore the evaluation of artwork is quite simple, this study is only the first step in testing the utility of communication functions as an approach for understanding the creation and recognition of turning poetry into painting and is clearly worthy of more in-depth study.

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