

# For the Subjective Evaluation Items of the Pencil Still Drawing Evaluation System

**Yoshiko FURUSHO**

Department of Art and Design

Yokohama college of Art and Design (Yokohama Art&Design), Yokohama, Japan

Tel: (+81) 45-963-4104, Email:yoshiko@sc5.so-net.ne.jp

**Abstract.** In the evaluation of the drawings, the evaluator to express the characteristics of the work using a variety of assessment words. These evaluation word is a word to describe the impression that was obtained evaluators, it does not mean there is a theory and distinct evaluation criteria for the impression. However, at the time of the conclusion of something people from the fact that out the results on the basis of something of the system, there should be some sort of rating system in performing the evaluation of the drawing.

Instead of assessing the only perceptions of motif shape in this research, to build a drawing evaluation model close to human evaluation sensory system, the final purpose of the construction of a system to perform the evaluation and learning support and management. Introduction to clarify the items that should be emphasized was extracted of assessment words by subjective evaluation and technical book of drawings that have been carried out normally. In this paper, when evaluating the pencil still life drawing, to clarify whether and paying attention that for any such items in the subjective evaluation, showing a first step in the evaluation model creation.

**Keywords:** Evaluation System, Subjective Evaluation & Objective Evaluation, Pencil Still Drawing

## 1. INTRODUCTION

By the development of computers and networks, obtain information has become easy. In the people's lifestyles has diversified, they want to a spiritually rich and high life.

Exhibition with a focus on well-known works of art are widely implemented. But in the school education subject is on the downward trend to cultivate the sensitivity, appreciation and techniques.

On the other hand, a lot of research in relation to sensibility has been carried out. Impression human beings feel is very vague and subjective. The sensibility information processing is approach to such vague sense. Then I set to target the evaluation of still life pencil drawing as the subject of this research.

Drawing is the fundamental element in Art Education and it is important for the acquisition of basic ability to drawing. Students are expected to acquire the ability by drawing a sketch. For example, "Perspective", "Stereoscopic effect", "correct shape", etc. In art education not possible to avoid drawing. In addition, the novice student skills up are necessary to repeat the evaluation and drawing.

In the evaluation of the drawings, the evaluator to

express the characteristics of the drawing using an assessment words. These evaluation word is a word to describe the impression that was obtained evaluators, it does not mean there is a theory and distinct evaluation criteria for the impression. However, the research of sensibility information processing is present a lot. And also People are concluded on the basis of the something system. So, even when performing the evaluation of the drawings, there should be something evaluation system.

Research of drawing evaluation have not pick up the impression of drawing as one of the information. However it was only few research. In this research It is not to evaluate only shape of the motif. I construct a drawing evaluation model closer to the human evaluation sense and sensibility information processing system. The final purpose of the construction of a system to target the evaluation and learning support and management.

1st step of research, reveal of the items for subjective evaluation subjected to evaluation extraction of evaluation words by subjective evaluation and technical book of drawings. The challenges of the future research gather information such as features in the drawing and terms for items obtained in the scoring scheme by drawing evaluation is conducted, is used during the evaluation.

In this paper shows to clarify when evaluating to the pencil still drawing, paying attention that for any such items in the subjective evaluation, showing a first step in the evaluation model creation

## 2. ABOUT DRAWING

As follows from 「Drawing of the basis for the Tokyo National University of Fine Arts and Music, art school enrollment」 (Suido Bata Academy of Fine Arts,1985), the basic elements of the drawing are.

- What is in the form “shape”
- What kind of light and dark which is the state “light and dark”
- What is made of a material (substance) “material”
- What space exists? “Space”

If you subdivide the above elements "form" Muscle (mass) and texture (volume), the "structure" is the proportion (proportional) and state (motion / moveman). In addition, "light and dark" is classified in tone. And "material" is classified as a texture (visual material feeling tactile material sense) and sense of color, "space" depression of the motif, the space that exists between the gap and, if there is in the space that exists to wrap the motif.

The book (Suido Bata Academy of Fine Arts,1985), the motif, there is a following description.

- A single motif (those of one of the basic form body what a structure / 2 form of basic form body what a structure / three or more of the combined structure)
- Multiple motifs
- The concept of space

In the case of a single motif, and it is an important point to analyze whether the motif is made from any kind of basic form body. It is drawn for the motif composed a plurality to basic form.

And it is assessment for be centered on the axis every single form and axis. If even in a complex structure, it was stated the importance of it to find out it is a combination of the basic form body be decomposed

If the case of multiple motif, not only the position relationship and shape of the motif but also multiple motif requires is consideration of the space surrounding it space can not be taken directly but It is possible to capture the space as depth to clue the context of individual motifs. As a

concept of space, is possible recognition of a certain space from the information of texture and height, etc. of the motif of the gap and individual motifs. In this research based on these information, I define of the sensitivity information.

## 3. DEFINITION OF SENDIBILTY INFORMATION

I defined information obtained from sensory stimuli or stimuli received from an impression, or from viewing a drawing based on past experiences, as sensitivity and considered evaluation criteria for evaluation of drawings. I gathered together evaluation words used in evaluating a drawing and words used in criticism with sufficient consideration to ensure that none were omitted and defined the evaluation words used in the study after organizing these words.

While many books have been published on pencil drawings, in most cases their content mainly concerns drawing technique for a single motif, and many describe evaluations of such techniques. Leaving aside correlation among multiple motifs, there are numerous words used to evaluate a single motif. In this study we have been able to identify evaluation words for use in evaluation of drawings from books used as reference for drawing pencil still drawings, regardless of individual technique (Kuse 2009)(Ito et al 2010) etc.) and categorized these using the KJ method, making it possible to sort evaluation words by technical aspects as a result. Table 1 lists evaluation words by technical aspects.

Other important points in a drawing are the correct balance between the shape of the motif and its size, as well as expressing the feel of the materials. By changing the evaluation axis for technical aspects, they can be sorted in the following way: power of observation (color, texture), power of depiction (presence), power of composition (composition), and power of expression (shape, volume of work).

A study by Sakai et al [4] determines evaluation items by sorting them through the KJ method from free ideas. It chooses 10 items such as framing, visual horizontality, and correctness of perspective for technical evaluation of a drawing (Table 2) and 20 items such as expansive, interesting, and weight for assessment of its impression (Table 3).

In this study subjects were asked to describe their own opinions through writing freely on technical and impression aspects regarding the five subjects of composition; shape; lightness/darkness, color, and texture; space and stereoscopic effect; and presence, volume of work, completeness, etc. The subjects were 11 University faculty members who had received specialized education in drawing, and the faculty members' specialties were wide ranging, including oil painting, crafts, design, and basic

education.

Using the KJ method to integrate the responses obtained through free writing, we identified indicators for determining sensitivity information when evaluating a

drawing. First of all, Table 4 and Table 5 show keywords obtained on the subject of composition.

Table 1: Axis of evaluation by technical aspects

1	Composition (height and width of motif, positional relationships)
2	Depth (spatial layout, sense of distance)
3	Stereoscopic effect (correct shape, outline, silhouette, unevenness)
4	Texture (difference by motif)
5	Breadth of tone (light, medium, dark)
6	Grey balance (richness of tone, contrast)
7	Shading (refraction of light, transparency, highlighting)
8	Vanishing point (aggregation of lines, center line)
9	Use of drawing implements (pencil thickness, use of kneaded erasers)
10	Overall ability (details of drawing)

Table 2: Technical evaluation items for a drawing (Sakai et al [4])

1	Framing (fitting on the page)
2	Visual horizontality (whether it is slanted)
3	Correctness of perspective
4	Correctness of reproduction of motif shape
5	Correctness of sizes and ratios among motifs
6	Correctness of depiction of sense of materials
7	Breadth of tone
8	Richness of types of tone
9	Use of characteristics of materials (pencils, charcoal, supports)
10	Details of drawing

Table 3: Items for assessment of impression of a drawing (expressive language) (Sakai et al [4])

1	Expansive	11	Precise
2	Interesting	12	Intellectual
3	Weight	13	Energetic
4	Original	14	Powerful
5	Vivid	15	Stable

6	Well made	16	Good depiction of light and dark
7	Warm	17	Strong
8	Tense	18	Transparency
9	Feeling of space	19	Good depiction of texture
10	Feeling of volume	20	Sensitive

Table 4: Evaluation axes for composition (technical aspects)

1	Balance (fitting on page, size of motifs on page, depth, margins, etc.)
2	Correctness of perspective (including layout utilizing perspective)
3	Size of motif (including comparison to other motifs)
4	Layout, angle of view (does the layout reflect and understanding of the nature of the motif?)

Table 5: Evaluation axes for composition (impression aspects)

1	Too much to one side or the other (trimmed too much)
2	Has sense of scale (too big, too small, snug)
3	Has individuality (is commonplace)
4	Has sense of air
5	Comfortable (has sense of visual beauty and composition)

Next, Table 6 and Table 7 show keywords obtained on the subject of shape.

Table 6: Evaluation axes for shape (technical aspects)

1	Correctness of perspective (whether there is any visual irregularity)
2	Modulated through appropriate intonation of lines (whether outlines stand out)
3	Basic proportions of motifs
4	Correctness of scale (power of observation, relative size and ratios of multiple motifs)
5	Strength of presence

Table 7: Evaluation axes for shape (impression aspects)

1	Whether it depicts an interesting scene rather than just tracing a shape
2	Has modulation
3	Impression of relative sizes of motifs (whether it looks irregular)

4	Whether the motions and rhythms of outlines are attractive
5	Whether it shows a consciousness of horizontality and verticality

Next, Table 8 and Table 9 show keywords obtained on the subjects of light and dark, color, and texture.

Table 8: Evaluation axes for light and dark, color, and texture (technical aspects)

1	Expression of breadth of color of motif (saturation, number of colors, use of different pencils)
2	Expression of brightness of local color (use of different pencils)
3	Depiction of different shades (use of different pencils)
4	Expression of effects of light (direction, strength)
5	Expression of texture (differences in softness and hardness, roughness and fineness of foundation, depicting not just lightness but strong contrast)

Table 9: Evaluation axes for light and dark, color, and texture (impression aspects)

1	Consciousness of brightness and darkness
2	Sense of gentleness and strength
3	Has beauty of gradations
4	Has presence
5	The texture of the motif is sublimated from the texture of the pencils

Next, Table 10 and Table 11 show keywords obtained on the subjects of spatial and stereoscopic sense.

Table 10: Evaluation axes for spatial and stereoscopic sense (technical aspects)

1	Perspective (aerial perspective), angle, whether there is any special distortion
2	Expression of background and shades of motif
3	Whether items are present on the same plane (sitting on table top)
4	Whether it has unity, whether it expresses a sense of volume
5	Whether color contrast is expressed correctly and thoroughly

Table 11: Evaluation axes for spatial and stereoscopic sense (impression aspects)

1	Whether the picture has a feeling of tension
2	Whether it has breadth, depth, and a sense of air
3	Viewer not made conscious of the picture's frame

4	Drawn with initiative
5	Layout fits depicted motif

Lastly, Table 12 and Table 13 show keywords obtained on the subjects of presence, volume of work, completeness, etc.

Table 12: Evaluation axes for presence, volume of work, completeness, etc. (technical aspects)

1	Detail of drawing
2	Volume of pencil (density of pencils, rhythm of pencils)
3	Technique, technical ability
4	Completeness (power of observation)
5	Overall balance

Table 13: Evaluation axes for presence, volume of work, completeness, etc. (impression aspects)

1	Picture has tension
2	Is vivid
3	Has an impressive worldview
4	Does not seem out of place
5	Can sympathize

From an overview of this information it is clear that when people evaluate a drawing objectively they do so along similar evaluation axes backed by technique, rather than each evaluator using his or her own separate evaluation axes.

While this study plans to incorporate in its evaluation axes not only technical aspects but impression aspects as well, since it can be expected that many impression aspects could be impacted by technical aspects, it would be desirable to establish evaluation axes without separating them into technical and impression aspects. Ultimately, objective impressions of drawings can be considered to include many things expressed through drawing technique. Plans call for defining the evaluation axes of this study tentatively as the above five items and defining features extracted from drawings individually.

The references should be listed in the alphabetical order of the author names and in the order of the publication years within the same author's works. Each reference should be written in the order of the authors, the

publication year, the title or source. Journal names, names of conference proceedings, and book titles should be italicized and should have the first character of each word uppercased. The article title should be plain and only the first character of the whole title should be uppercased. Full periods should appear after the author names and the article title. The journal volume number should be bold. The issue number within a volume should not be presented unless there is confusion. The styles of references are illustrated as below.

#### 4. Future topics

The motifs used in drawings are three-dimensional information. One topic for future study is the process by which such information is made two dimensional to depict it in a drawing. It should become clear from evaluation experiments how the evaluations of works change through that process.

Also, the single term pencil drawing can refer to drawings made using various types of pencils. By making clear the

relationship between the drawing implements used in expression in a work and the evaluation of that work, we will explore the relationship to evaluation words, the impact on evaluation, and the possibilities for incorporating criticism of the resulting works into our system. Lastly, a topic for the future is extraction of the defined sensitivity information from drawings.

## **ACKNOWLEDGMENT**

This work supported by JSPS KAKENHI Grant Number K1500496.

## **REFERENCES**

- A.Sakai et al,(2001)An experimental Study on Skeches: the Relation between Skill Evaluation and Total Impressiom: Bulletin Nagoya Zokei Junior College of Art & Design 7,83-88,
- Masakazu Ito, Kensaku Fukazawa(2010)Dessan bigina-zu no-to ,Graphic Co. Ltd
- Suidoubata Bijutugakuin (1985)Geidai/Bidai singakunotameno dessanno kiso
- Toshiro Kuse (2009)Su-pa- enpitsu dessan wakariyasui kihonnokihon ,Graphic Co. Ltd