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# APDDv2: Aesthetics of Paintings and Drawings Dataset with Artist Labeled Scores and Comments

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## Supplementary materials

Paper ID 2541

### 1 Detailed explanation of the 10 aesthetic attributes

2 **Theme and Logic.** "theme" refers to the central idea that a work intends to convey, encompassing  
3 the main content. "Logic" pertains to the consistency between the artistic expression and the theme,  
4 as well as the appropriateness of the composition, layout, and color coordination. Theme and logic  
5 signify that the central idea and main content of the work align with the theme, and the artistic  
6 expression is consistent with both the theme and the logical structure.

7 **Creativity.** "Creativity" denotes the possession of innovative and imaginative qualities in a work,  
8 capable of breaking traditional conventions. Creativity includes elements such as reverse criticism,  
9 absurd satire, humorous self-deprecation, and allegorical warnings.

10 **Layout and Composition.** "Composition" refers to the overall form and structural relationships  
11 presented in an image, encompassing its visual effects and serving as the graphic organization of  
12 form. It constitutes the plane organization of morphology. Layout, on the other hand, represents the  
13 underlying logic of Composition, serving as the manifestation of Composition's essence.

14 **Space and Perspective.** "Space and perspective" encompass layered spatial arrangements, contrasts  
15 in proximity, including effects such as near-large, far-small, near-long, far-short, near-observed, and  
16 far-hidden. Perspective is a fundamental factor in portraying the three-dimensionality of objects  
17 and creating spatial effects in painting. It involves principles such as size diminution with distance,  
18 realistic proximity and distant illusion, and basic perspectives such as one-point, two-point, and  
19 three-point perspectives.

20 **Sense of Order.** "Sense of order" is a crucial manifestation of visual form perfection, coordination,  
21 and overall unity. It revolves around the inherent consistency among various elements, visible or  
22 concealed, contributing to the visual diversity. These consistencies encompass morphological, spatial  
23 quantitative, orientational, and the regular motion of forces generated by the combination of form  
24 and space.

25 **Light and Shadow.** "Light and shadow" serve roles in decorating space, connecting the image,  
26 suggesting themes and space, and segmenting the image. Variations in light and shadow construct  
27 visual rhythms and cadences, enhancing the visual appeal of the composition. Different light and  
28 shadow effects can convey diverse textures, with detailed portrayal enhancing the realism of the  
29 image.

30 **Color.** "Color" has the ability to evoke emotional atmospheres, and a well-thought-out color palette  
31 can achieve superior visual effects. Techniques for expression include contrasts in temperature (cool  
32 and warm tones), complementary color contrasts, contrasts in brightness, and contrasts in purity. The  
33 tonality should accentuate the theme, maintaining harmony in color relationships.

34 **Detail and Texture.** High completeness in the image, vivid and specific details, delicate textures,  
35 contribute to an enhanced sense of realism. In Chinese painting, attention is placed on imbuing life  
36 into every detail.

37 **Overall** "Overall" coherence and a clear theme are emphasized. Chinese painting emphasizes the  
38 combination of form and spirit in the overall presentation.

39 **Mood.** "Mood" refers to the poetic space in a work that presents a blend of scenes, the coexistence of  
40 reality and illusion, and a lively rhythmic charm, which unifies emotion and reason. Chinese painting  
41 emphasizes tranquility, emptiness, and spirituality in creating mood.

## 42 **2 Detailed explanation of the 24 artistic categories**

43 **1. Oil painting - Symbolism - Landscapes:** Figurative oil painting with landscapes as the main  
44 subject.

45 **2. Oil painting - Symbolism - Still life:** Figurative oil painting with still life as the main subject.

46 **3. Oil painting - Symbolism - Portraiture:** Figurative oil painting with portraiture as the main  
47 subject.

48 **4. Oil painting - Classicism - Landscapes:** Semi-abstract and semi-figurative oil painting with  
49 landscapes as the main subject.

50 **5. Oil painting - Classicism - Still life:** Semi-abstract and semi-figurative oil painting with still life  
51 as the main subject.

52 **6. Oil painting - Classicism - Portraiture:** Semi-abstract and semi-figurative oil painting with  
53 portraiture as the main subject.

54 **7. Oil painting - Romanticism - Landscapes:** Abstract oil painting with landscapes as the main  
55 subject.

56 **8. Oil painting - Romanticism - Still life:** Abstract oil painting with still life as the main subject.

57 **9. Oil painting - Romanticism - Portraiture:** Abstract oil painting with portraiture as the main  
58 subject.

59 **10. Sketching - Symbolism - Landscapes:** Figurative sketching with landscapes as the main subject.

60 **11. Sketching - Symbolism - Still life:** Figurative sketching with still life as the main subject.

61 **12. Sketching - Symbolism - Portraiture:** Figurative sketching with portraiture as the main subject.

62 **13. Sketching - Classicism - Landscapes:** Semi-abstract and semi-figurative sketching with land-  
63 scapes as the main subject.

64 **14. Sketching - Classicism - Still life:** Semi-abstract and semi-figurative sketching with still life as  
65 the main subject.

66 **15. Sketching - Classicism - Portraiture:** Semi-abstract and semi-figurative sketching with portrai-  
67 ture as the main subject.

68 **16. Sketching - Romanticism - Landscapes:** Abstract sketching with landscapes as the main subject.

69 **17. Sketching - Romanticism - Still life:** Abstract sketching with still life as the main subject.

70 **18. Sketching - Romanticism - Portraiture:** Abstract sketching with portraiture as the main subject.

71 **19. Traditional Chinese painting - Meticulous - Floral and avian:** Figurative traditional Chinese  
72 painting with floral and avian themes as the main subject.

73 **20. Traditional Chinese painting - Meticulous - Portraiture:** Figurative traditional Chinese  
74 painting with portraiture as the main subject.

75 **21. Traditional Chinese painting - Meticulous - Mountains and water:** Figurative traditional  
76 Chinese painting with mountains and water as the main subject.

77 **22. Traditional Chinese painting - Freehand - Floral and avian:** Abstract traditional Chinese  
78 painting with floral and avian themes as the main subject.

79 **23. Traditional Chinese painting - Freehand - Portraiture:** Abstract traditional Chinese painting  
80 with portraiture as the main subject.

81 **24. Traditional Chinese painting - Freehand - Mountains and water:** Abstract traditional Chinese  
82 painting with mountains and water as the main subject.

### 83 **3 Labeling System**

84 To ensure the effectiveness and smooth operation of the scoring process, we have specifically devised  
85 an online Labeling System tailored for the APDDv2 dataset. Throughout the development phase of  
86 the system, we employed the VUE3 and Ruoyi open-source frameworks for frontend construction,  
87 while the backend was developed using the Spring Boot framework. In terms of the database, MySQL  
88 and Redis were chosen. To enhance operational efficiency, the system is deployed on a cloud server  
89 using Docker containers. On the user side, namely the evaluators, they possess permissions for  
90 personal profile management, image scoring, and individual scoring record management (URD). The  
91 final user-generated scoring annotations are persistently stored in the "image-ratings" table within  
92 the "image-rating" database, and the scoring annotations can also be exported in JSON format. This  
93 design aims to ensure the high efficiency and seamless operation of the scoring workflow.

94 Before the formal commencement of scoring, we meticulously organized the tasks for each evaluator,  
95 delineating responsibilities such as the involved art categories, the number of images, and time  
96 constraints. Additionally, we convened a comprehensive assembly, gathering all evaluators, where  
97 detailed instructions on the utilization of the Labeling System and key considerations during the  
98 scoring process were thoroughly presented.

### 99 **4 Training details of the ArtCLIP model**

100 For each image  $I_i$ , two different aesthetic attributes are first selected from the list of aesthetic attributes.  
101 Then, two comments are sampled from the corresponding attribute category comments  $C_{aij}$ . During  
102 training, images with only one comment are removed from the multimodal IAA database.

103 Due to the non-uniform architecture of CLIP across different modalities, cross-modal composition  
104 is achieved through early fusion. Specifically, the image embedding  $x_i$  is combined with the text  
105 embedding  $x_a$  using a residual module. The fusion function  $F(\cdot, \cdot)$  is used to adjust the image  
106 embedding:

$$f_{\theta}(x_i, x_a) = FC [\text{Norm}(x_i) \oplus \text{Norm}(x_a)]^T \quad (1)$$

$$F(x_i, x_a) = x_m = x_i + f_{\theta}(x_i, x_a) \quad (2)$$

107 where  $FC$  is a linear projection,  $\text{Norm}$  is l2-normalization, and  $\oplus$  is concatenation. The combined  
108 multimodal embedding is  $x_m$ . This approach is inspired by prior works that compose multimodal  
109 features, capturing aesthetic attributes-relevant semantics.

110 We perform contrastive learning by pulling together positive pairs and pushing away negative pairs.  
111 For each pair, the multimodal-to-text loss function is computed as follows:

$$L_{mac \rightarrow t} = -\log \frac{\exp(\langle x_m, x_t \rangle / \tau)}{\sum_{j=1}^B \exp(\langle x_m, x_t \rangle / \tau)} \quad (3)$$

112 Among them,  $\langle x_m, x_t \rangle$  represents the cosine similarity, i.e.,  $\langle x_m, x_t \rangle = \frac{x_m^T x_t}{\|x_m\| \|x_t\|}$ , where  $\tau$  is the  
 113 temperature parameter, it is set to 0.07 during the training process. The text-to-multimodal loss  
 114 function is:

$$L_{t \rightarrow mac} = -\log \frac{\exp(\langle x_m, x_i \rangle / \tau)}{\sum_{j=1}^B \exp(\langle x_m, x_j \rangle / \tau)} \quad (4)$$

115 Finally, we minimize the multi-attribute contrastive learning loss  $L_{mac}$ , which is the sum of the losses  
 116 for all positive pairs in a batch of size  $B$ :

$$L_{mac \leftrightarrow t} = \frac{1}{B} \sum_{i=1}^B (L_{mac \rightarrow t} + L_{t \rightarrow mac}) \quad (5)$$

117 Given image embeddings obtained from the image encoder of ArtCLIP denoted as  $x$ , the predicted  
 118 aesthetic distribution is calculated as follows:

$$p_i = \text{MLP}(x), \quad (6)$$

119 where MLP represents a multi-layer perceptron consisting of a linear layer followed by a softmax  
 120 layer. We utilize the Mean Squared Error (MSE) loss to measure the distance between the predicted  
 121 aesthetic distribution  $\hat{p}$  and the true distribution  $p$ , defined as:

$$\text{MSE} = \frac{1}{N} \sum_{i=1}^N (\hat{p}_i - p_i)^2, \quad (7)$$

122 where  $N$  is the number of samples,  $\hat{p}_i$  is the predicted aesthetic distribution for the  $i$ -th sample, and  
 123  $p_i$  is the true aesthetic distribution for the  $i$ -th sample.

## 124 5 Some figures

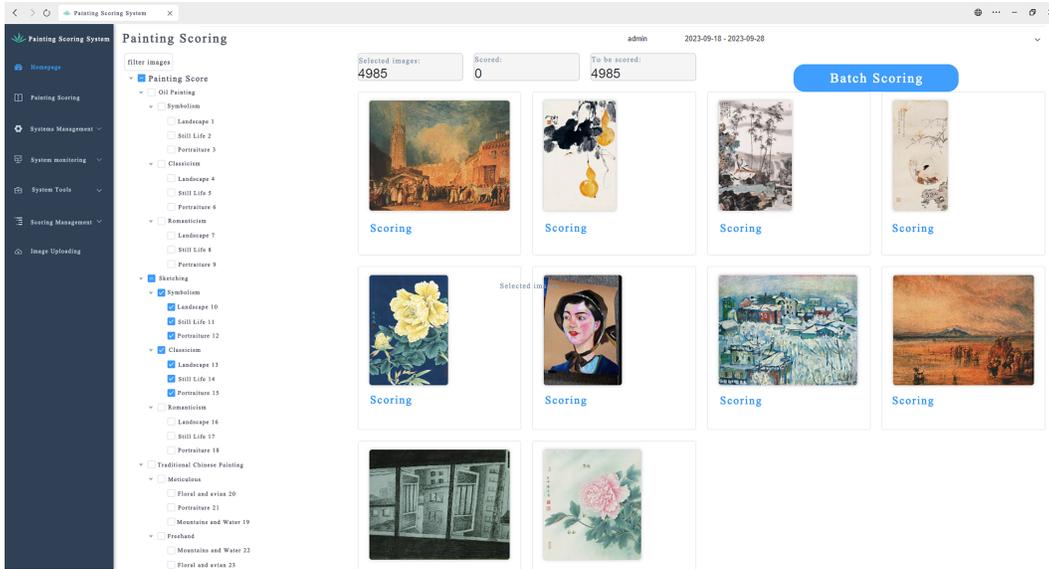


Figure 1: Labeling System Interface 1: Individual system accounts and passwords have been allocated to each evaluator. Once logged into the system, evaluators can selectively filter image categories based on their task requirements, facilitating efficient bulk assessments.

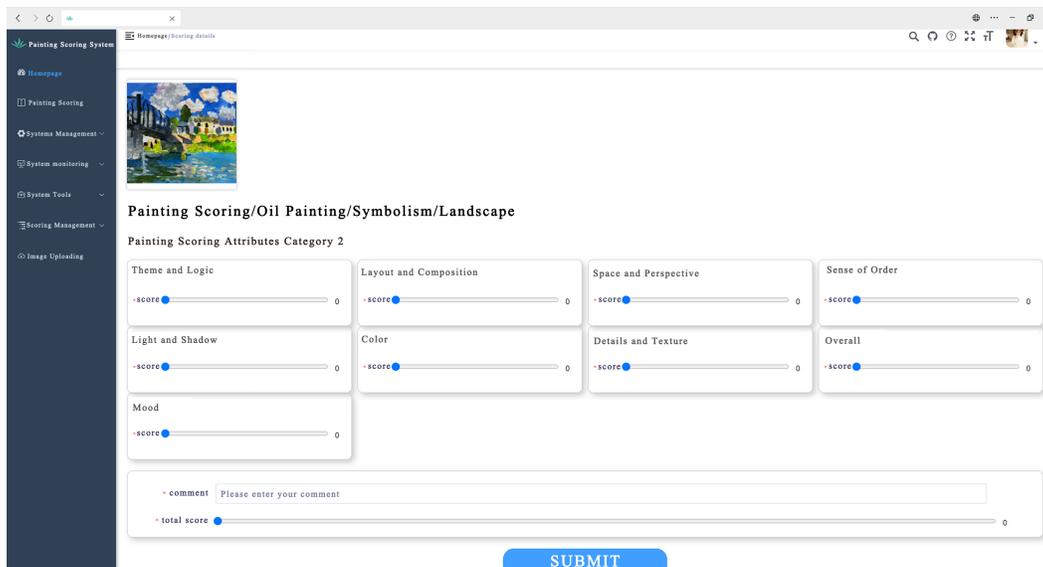


Figure 2: Labeling System Interface 2. The total aesthetic score ranges from 0 to 100, while aesthetic attribute scores range from 0 to 10. Evaluators assign scores to the artwork by sliding the score bars for both the overall and individual attribute scores.

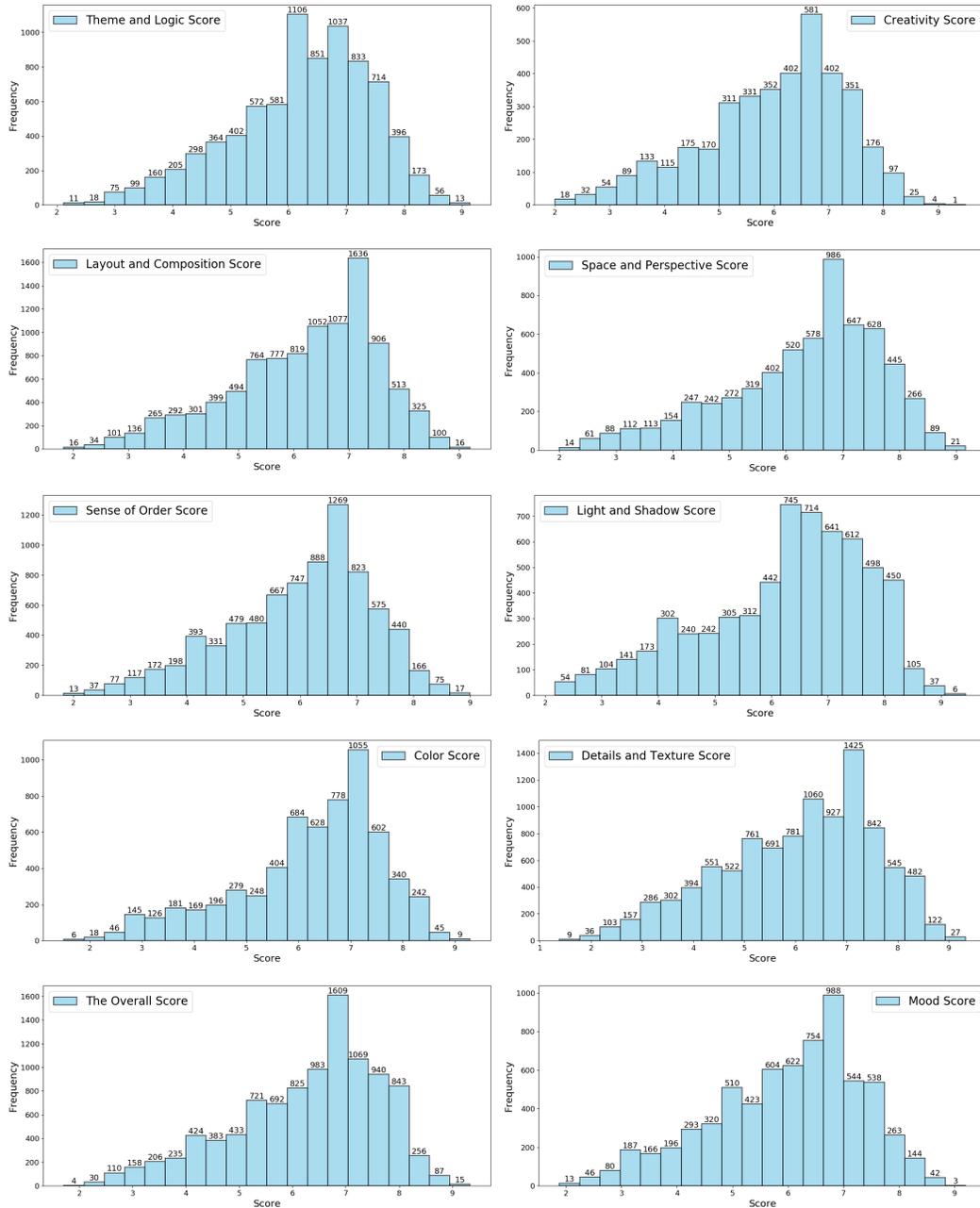


Figure 3: Distribution of scores for the 10 aesthetic attributes in the APDDv2 dataset. The horizontal axis in the histogram represents the score and the vertical axis represents the number of images.

<b>Score</b>	26.46	39.29	47.9	58.89
Theme and Logic	2.86	/	4.86	5.44
Creativity	/	/	/	5
Layout and Space and Perspective	3.29	3.86	4.71	5
Sense of Order	3	3.71	4.43	/
Light and Shadow	3.14	/	5.14	5.22
Color	3.29	3.29	4.57	/
Details and Texture	3.43	3.86	4.57	5.67
Overall	3.29	3.43	5	5
Mood	3.14	3.57	4.71	5.11
	2.86	/	4.86	5.56
<b>Artistic Category</b>	Oil Painting-Symbolism-Still Life	Oil Painting-Symbolism-Portraiture	Oil Painting-Symbolism-Landscapes	Oil Painting-Romanticism-Still Life
<b>Score</b>	61.11	74.29	83.3	90.83
Theme and Logic	5.89	7.43	/	8.67
Creativity	5.44	/	/	/
Layout and Space and Perspective	5.56	7.57	8	9
Sense of Order	/	7.29	8.17	9
Light and Shadow	5.78	7.43	/	9
Color	/	7.57	8	9.17
Details and Texture	5.89	7.14	8.33	9
Overall	5.56	7.86	8.5	9
Mood	6.62	7.71	7.83	9.33
	/	6.68	/	8.83
<b>Artistic Category</b>	Oil Painting-Romanticism-Portraiture	Oil Painting-Classicism-Still Life	Oil Painting-Classicism-Portraiture	Oil Painting-Classicism-Landscapes
<b>Score</b>	25	39.17	45.8	57.5
Theme and Logic	/	3.83	4.5	5.33
Creativity	/	4	/	5.5
Layout and Space and Perspective	3.38	3.63	4.83	5.5
Sense of Order	3.25	/	4	/
Light and Shadow	/	3.17	3.83	5.67
Color	/	/	4	/
Details and Texture	2.5	/	4.17	4.5
Overall	2.88	3.67	4.67	5.67
Mood	3.12	3	4.33	/
	/	3.67	/	/
<b>Artistic Category</b>	Sketching-Symbolism-Portraiture	Sketching-Romanticism-Still Life	Sketching-Symbolism-Landscapes	Sketching-Romanticism-Portraiture
<b>Score</b>	65.83	77.5	82.5	92.5
Theme and Logic	6	6.5	7.83	/
Creativity	5.83	/	/	/
Layout and Space and Perspective	6.5	7.17	8	8.17
Sense of Order	/	7.17	8.5	9
Light and Shadow	6.17	6.83	8	/
Color	/	8.17	7.33	8.67
Details and Texture	5.67	/	8.17	8.33
Overall	6.5	7.83	8.33	8.67
Mood	6.17	8.17	7.83	/
<b>Artistic Category</b>	Sketching-Romanticism-Landscapes	Sketching-Classicism-Landscapes	Sketching-Classicism-Still Life	Sketching-Classicism-Portraiture
<b>Score</b>	16.67	24.17	33.3	48.33
Theme and Logic	2.83	3	4	4.83
Creativity	2.33	3	3.83	5.33
Layout and Space and Perspective	2.5	2.67	3.83	5.17
Sense of Order	/	/	/	/
Light and Shadow	1.83	2.83	4	4.67
Color	2	2.67	3.5	4.17
Details and Texture	1.5	2.17	3.17	4
Overall	2	3	4	4.83
Mood	/	2	3.33	/
<b>Artistic Category</b>	Traditional Chinese Painting-Freehand-Portraiture	Traditional Chinese Painting-Freehand-Mountains and Water	Traditional Chinese Painting-Freehand-Floral and avian	Traditional Chinese Painting-Freehand-Portraiture
<b>Score</b>	58.33	65	75.8	88.33
Theme and Logic	6.33	/	7.83	8.5
Creativity	/	/	/	/
Layout and Space and Perspective	5.5	7.17	7.5	8.33
Sense of Order	5.83	6.5	7.17	8.33
Light and Shadow	5.83	/	7	8.17
Color	5.67	6.17	6.67	8.17
Details and Texture	5.83	6.33	7.33	7.67
Overall	6.17	6.17	8.17	8.5
Mood	5.5	6.83	7	8.17
	5.67	/	7.67	8
<b>Artistic Category</b>	Traditional Chinese Painting-Meticulous-Mountains and Water	Traditional Chinese Painting-Meticulous-Portraiture	Traditional Chinese Painting-Meticulous-Floral and avian	Traditional Chinese Painting-Meticulous-Mountains and Water

Figure 4: Examples of APDDv2 dataset.

<b>Total Aesthetic Score</b>			<b>38.33</b>		<b>45.83</b>		<b>56.67</b>
<b>Aesthetic Attribute Score</b>	T&L		4.5		4.83		/
	Cre		/		/		/
	L&C		4.5		4.67		5.5
	S&P		3.83		4.5		5.67
	SO		4.17		4.83		/
	L&S		4.33		4.17		5.83
	Col		3.67		4.17		5.5
	D&T		3.67		4		4.67
TO		4		4.67		4.67	
M		4.17		4.33		/	
<b>Language Comment</b>		The picture is not neat enough, the reflection color is too solid and somewhat abrupt, and the colors of the lake, water, and sky are differentiated.		The overall theme is not clear, the picture is too messy, the color is a bit gray, and there are some details of trees and leaves added.		The combination of white and green colors makes the entire picture more clear, but the color connection is poor.	
<b>Artistic Category</b>		Oil Painting-Classicism-Landscapes		Oil Painting-Classicism-Landscapes		Oil Painting-Classicism-Portraiture	
	<b>63.33</b>		<b>75.71</b>		<b>80.71</b>		<b>87.86</b>
	/		7.71		8		8.29
	6.17		7		8.14		7.86
	5.67		7		6.71		8.43
	/		/		7.71		/
	5.38		7		8.29		8
	6		/		8.14		/
	5.5		6.86		7.71		8.29
	6.5		6.71		7.57		8.14
	/		7.14		7.71		8.14
Harmonious and unified color matching, insufficient emotional expression of characters, lack of depth and delicacy.		The color tone of the picture is unified, the spatial hierarchy is rich, the artistic conception of the picture is good, and the main body forms color blocks.		The color scheme is rich, and the spatial hierarchy is also sufficient, lacking a finishing touch.		The theme of the picture is prominent, and the use of complementary red and green colors creates a strong visual impact. White and yellow flowers balance the picture, with rich details and a perfect composition that highlights the main subject.	
Oil Painting-Symbolism-Portraiture		Oil Painting-Romanticism-Portraiture		Oil Painting-Symbolism-Still Life		Oil Painting-Romanticism-Still Life	
	<b>15.71</b>		<b>27.5</b>		<b>36.43</b>		<b>48.33</b>
	3		4.17		4.43		4.83
	2.57		3.5		3.43		/
	2.57		3.5		3.17		4.67
	/		/		/		4.67
	2.14		3.17		3.17		4.67
	/		/		/		4.5
	/		/		/		/
	1.86		2.85		3.29		4.33
	2.29		3.5		3.57		4.67
	/		/		/		4.33
The picture is too simple, without any visual appeal, and the picture is sloppy. Not serious enough.		The intended image is not clear, the image is grayed out, and the relationship is somewhat flat.		Inaccurate form, chaotic relationships, and gray. flower Disorderly order.		The composition of the picture is relatively reasonable, but the details are slightly insufficient, lacking light and shadow details, and the picture lacks a primary and secondary relationship.	
Sketching-Romanticism-Portraiture		Sketching-Romanticism-Portraiture		Sketching-Romanticism-Portraiture		Sketching-Symbolism-Landscapes	
	<b>55</b>		<b>65</b>		<b>73.33</b>		<b>89.17</b>
	6		7.33		7.17		7.83
	/		/		/		/
	5.67		6.67		7		8.5
	5.83		5.67		7.33		8.17
	5.67		6.17		6.5		8.33
	5.17		6.67		7.33		8.33
	/		/		/		/
	5.5		5.67		7.17		8.5
	5.5		6.17		7.33		8
	5.5		5.83		5.83		7.83
The composition of the picture is relatively reasonable, but the details are slightly insufficient, lacking light and shadow details, and the picture lacks a primary and secondary relationship.		The geometric shape of the screen performs well, with proper handling of light and dark transitions and a strong sense of three dimensionality. However, the processing of image details is relatively lacking.		The picture has a certain light and shadow effect, the overall architectural drawing is accurate, and spatial perspective can be carefully considered.		The visuals are rich in details, with a certain degree of thematic and imaginative elements, and the visuals are good on both sides.	
Sketching-Symbolism-Landscapes		Sketching-Symbolism-Still Life		Sketching-Classicism-Still Life		Sketching-Classicism-Still Life	

Figure 5: Examples with language comments of APDDv2 dataset.

	25.83 3.33 3.17 2.83 / 3.5 / 3 2.83 3.17 3		35.83 4.5 4.67 4 / 4.33 / 4.17 3 4.17 3.67		46.67 5.33 5.17 4.67 / 5.5 / 5 4.67 5 / 5		57.5 6.5 / 6.67 6.17 6 5.33 6 5.17 6 5.83
The picture is very simple, and the brushstrokes are also very beginner like, with a very immature way of shaping. This picture is creative, but lacks the overall composition, with moderate ink color changes and a lack of heavy and burnt ink.		The picture is very simple, and the brushstrokes are also very beginner like, with a very immature way of shaping. Lack of detail, lack of depth, and the picture seems to be unfinished.		A good painting doesn't have any hard injuries to people, boats, water plants, and is harmonious. The ink color is not jumping, but there are no exciting points that make people want to watch in depth.		The picture is very simple, and the brushstrokes are also very beginner like, with a very immature way of shaping. The color of the flowers blends with the background and is not prominent.	
Traditional Chinese Painting -Freehand-Mountains and Water		Traditional Chinese Painting -Freehand-Mountains and Water		Traditional Chinese Painting -Freehand-Portraiture		Traditional Chinese Painting -Meticulous-Floral and Avian	
	63.33 6.33 7.17 6.33 / 6.33 / 6.5 6.33 6.17 / 6.33		72.5 7.5 / 7 6.83 6.83 7.17 7.17 7.17 6.83 6.5		80 / / 8 7.67 7.67 7.83 7.5 7.5 / 7.5		87.5 / / 8.67 8.5 / 8.17 8.33 8.67 8.67 / 8.67
The picture is very delicate, and calligraphy is the finishing touch. Calligraphy and painting complement each other, and the elements in the picture are concise, intuitive, and rich.		The bird's posture is not agile enough, the color depiction is somewhat weakened, the plant lines are not smooth enough, and the color gradient depiction in the picture is proficient.		A very delicate painting with delicately crafted characters that are very interesting, and the ink used is very clever.		A very interesting composition method, with delicate and interesting character portrayal, and very clever ink use.	
Traditional Chinese Painting -Freehand-Portraiture		Traditional Chinese Painting -Meticulous-Floral and Avian		Traditional Chinese Painting -Meticulous-Portraiture		Traditional Chinese Painting -Meticulous-Portraiture	

Figure 6: Examples with language comments of APDDv2 dataset.

Serial No.	Artistic Category	Painting Category	Painting Style	Subject of the Painting	Examples
1	Oil painting - Symbolism - Landscapes	Oil Painting	Figurative and Realistic	Landscapes	
2	Oil painting - Symbolism - Still life	Oil Painting	Figurative and Realistic	Still Life	
3	Oil painting - Symbolism - Portraiture	Oil Painting	Figurative and Realistic	Portraiture	
4	Oil painting - Classicism - Landscapes	Oil Painting	Semi-figurative, Semi-abstract	Landscapes	
5	Oil painting - Classicism - Still life	Oil Painting	Semi-figurative, Semi-abstract	Still Life	
6	Oil painting - Classicism - Portraiture	Oil Painting	Semi-figurative, Semi-abstract	Portraiture	
7	Oil painting - Romanticism - Landscapes	Oil Painting	Abstract	Landscapes	
8	Oil painting - Romanticism - Still life	Oil Painting	Abstract	Still Life	
9	Oil painting - Romanticism - Portraiture	Oil Painting	Abstract	Portraiture	
10	Sketching - Symbolism - Landscapes	Sketching	Figurative and Realistic	Landscapes	
11	Sketching - Symbolism - Still life	Sketching	Figurative and Realistic	Still Life	
12	Sketching - Symbolism - Portraiture	Sketching	Figurative and Realistic	Portraiture	

Figure 7: The first 12 of 24 artistic categories.

Serial No.	Artistic Category	Painting Category	Painting Style	Subject of the Painting	Examples
13	Sketching - Classicism - Landscapes	Sketching	Semi-figurative, Semi-abstract	Landscapes	
14	Sketching - Classicism - Still life	Sketching	Semi-figurative, Semi-abstract	Still Life	
15	Sketching - Classicism - Portraiture	Sketching	Semi-figurative, Semi-abstract	Portraiture	
16	Sketching - Romanticism - Landscapes	Sketching	Abstract	Landscapes	
17	Sketching - Romanticism - Still life	Sketching	Abstract	Still Life	
18	Sketching - Romanticism - Portraiture	Sketching	Abstract	Portraiture	
19	Traditional Chinese painting - Meticulous - Floral and avian	Traditional Chinese painting	Figurative and Realistic	Still life, mainly flowers and birds	
20	Traditional Chinese painting - Meticulous - Portraiture	Traditional Chinese painting	Figurative and Realistic	Portraiture	
21	Traditional Chinese painting - Meticulous - Mountains and water	Traditional Chinese painting	Figurative and Realistic	Landscapes, mainly mountains and water	
22	Traditional Chinese painting - Freehand - Floral and avian	Traditional Chinese painting	Abstract	Still life, mainly flowers and birds	
23	Traditional Chinese painting - Freehand - Portraiture	Traditional Chinese painting	Abstract	Portraiture	
24	Traditional Chinese painting - Freehand - Mountains and water	Traditional Chinese painting	Abstract	Landscapes, mainly mountains and water	

Figure 8: The last 12 of 24 artistic categories.

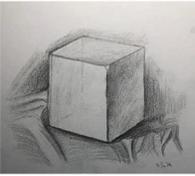
Type of score		Predic	GT		Predic	GT		Predic	GT	
Total Score		82.10	82.50		75.50	75.80		61.30	61.70	
Theme and Logic		/	/		6.85	6.83		6.43	6.50	
Creativity		/	/		/	/		/	6.00	/
Layout and composition		7.37	7.33		7.03	7.00		6.23	6.17	
Space and Perspective		7.48	7.50		6.89	7.00		5.82	6.17	
Sense of Order		/	/		6.97	6.50		6.10	6.17	
Light and Shadow		7.68	7.67		6.93	6.83		5.83	5.83	
Color		/	/		/	/		6.46	6.33	
Details and Texture		7.50	7.83		7.09	7.00		6.28	6.17	
Overall		7.76	7.67		7.13	7.17		6.28	6.00	
Mood		/	/		6.85	6.83		6.30	6.17	
Score		60.00	54.20		33.00	34.20		21.90	20.60	
Theme and Logic		/	/		4.28	4.17		/	/	
Creativity		/	/		3.99	4.17		/	/	
Layout and composition		5.69	6.33		3.43	4.00		2.45	3.25	
Space and Perspective		5.34	5.00		/	/		2.46	2.62	
Sense of Order		/	/		3.77	3.38		/	/	
Light and Shadow		5.27	5.17		/	/		2.76	2.50	
Color		/	/		3.58	3.67		3.51	3.38	
Details and Texture		5.17	5.17		2.72	3.17		2.44	2.50	
Overall		5.33	5.50		3.95	4.00		2.87	2.62	
Mood		/	/		3.31	3.17		/	/	
Score		82.30	84.20		79.00	78.30		70.60	67.50	
Theme and Logic		/	/		/	/		6.68	6.83	
Creativity		/	/		7.58	7.67		6.81	6.67	
Layout and composition		8.12	8.00		7.58	7.67		6.77	6.67	
Space and Perspective		7.86	8.33		7.44	7.50		/	/	
Sense of Order		/	/		/	/		6.58	6.83	
Light and Shadow		8.16	8.17		7.45	7.50		/	/	
Color		/	/		7.67	7.67		6.79	6.67	
Details and Texture		7.90	7.83		7.39	7.17		6.88	6.83	
Overall		7.82	8.17		7.79	7.17		7.01	7.00	
Mood		/	/		/	/		/	/	
Score		63.20	65.80		50.00	47.90		45.50	41.70	
Theme and Logic		6.66	6.67		/	/		/	/	
Creativity		6.49	6.67		/	/		/	/	
Layout and composition		6.47	6.50		5.18	5.71		4.86	4.67	
Space and Perspective		/	/		4.39	4.43		4.16	4.00	
Sense of Order		6.29	6.50		/	/		/	/	
Light and Shadow		/	/		4.40	4.57		4.06	4.00	
Color		6.12	6.50		5.29	5.43		/	/	
Details and Texture		6.59	6.83		4.12	4.43		3.78	3.83	
Overall		6.35	6.33		5.12	4.86		4.58	4.33	
Mood		/	/		/	/		/	/	
Score		77.80	77.50		69.30	70.00		64.30	68.30	
Theme and Logic		/	/		7.29	7.17		/	/	
Creativity		/	/		7.04	6.67		/	/	
Layout and composition		7.69	7.50		6.91	7.00		6.43	6.33	
Space and Perspective		7.70	7.50		/	/		6.41	6.50	
Sense of Order		/	/		7.16	6.67		/	/	
Light and Shadow		7.61	7.67		/	/		6.42	6.67	
Color		7.63	7.17		7.00	6.83		6.57	6.83	
Details and Texture		7.34	7.67		6.87	6.83		6.40	6.83	
Overall		7.64	7.67		7.10	7.00		6.74	6.83	
Mood		/	/		/	/		/	/	
Score		62.40	64.20		56.90	60.00		47.30	47.50	
Theme and Logic		6.16	6.17		5.96	6.14		4.57	5.00	
Creativity		/	/		5.96	6.00		/	/	
Layout and composition		6.45	6.67		5.63	6.00		5.08	4.67	
Space and Perspective		6.37	6.00		/	/		4.70	5.00	
Sense of Order		5.93	6.17		5.92	5.71		4.18	4.17	
Light and Shadow		5.94	5.83		/	/		4.05	4.17	
Color		6.23	6.17		5.14	5.71		/	/	
Details and Texture		5.85	6.00		5.28	5.29		4.30	4.67	
Overall		6.34	6.50		5.82	6.00		4.21	4.33	
Mood		6.31	6.67		/	/		4.40	4.17	

Figure 9: Test samples. *Predicted* represents the predicted score of the ArtCLIP output. *GT* represents the ground-truth score.