Application of Housen’s Model of Aesthetic Development in Higher Education: An Exploration of Cognitive Aspects during Art Appreciation

A Riswarie, I Damajanti, I Adriati
Aesthetics & The Sciences of Art Research Group, Faculty of Visual Art and Design, Bandung Institute of Technology, Jalan Ganesa 10, Bandung 40132, Indonesia

a.riswarie@fsrd.itb.ac.id

Abstract. Studies in psychology of art appreciation have been conducted at different times since the beginning of 20th century. The aims of such studies include finding out audience experiences in viewing an artwork, whether it is more rational or emotional. However, there is an inadequate amount of evidence-based research conducted in Indonesia from which further studies can emanate. This paper aims to initiate evidence-based study on art appreciation for Indonesian population. Specifically, it investigates how the experience of art appreciation differs between Visual Art and Non-Visual Art students in an Art Psychology class of 2017/2018, at Bandung Institute of Technology (Mean Age=21.25, SD=0.66). This study draws on the actual end-of-semester exam using Housen’s model of aesthetic development. Data is analyzed using a comparative method informed by the model and scored using percentage and frequency to represent the proportion of valid corresponding responses. Main findings of this study highlight comparable experiences in art appreciation between Visual Art and Non-Visual Art students. The results correspond to the influence of exposure to art criticism and the Visual Art students’ rational approach to art appreciation. They also show that art appreciation enables students to exercise their cognitive aspects during meaning-making activities.

1. Introduction

1.1. Art Appreciation and Its Contributions for Human Civilization
Throughout a long history of human civilization, art-making has never ceased to exist. Denis Dutton (2010) argues that the first ever work of art was made even before Homo Sapiens existed. His studies of Aesthetics stem from a Darwinian idea; he posits that humans are instinctively attracted to works of art for its “virtuoso display”, which he compared to Darwinian “fitness signal” in theory of sexual selection [1]. Ellen Dissanayake (1999) shares Dutton’s sentiment; she argues that the drive to make art is inherently human and is evident even across different cultures. She posits that art provides a space where people can explore abstract concepts, like death, in a safe yet meaningful way [2].

In the field of psychology, studies in art appreciation started as early as the 19th century, before modern psychology and at the same time as the thinkers of Enlightenment era put forward the idea of autonomous art and modern Aesthetics. Theodor Lipps (1903) a German philosopher/psychologist, adopted Robert Vischer’s earlier notion of “empathy” or “Einfühlung” (feeling into). In his paper, he elaborated the concept of “aesthetic empathy”. Later on, Freud (1928) assumed this notion in his ideas
of psychoanalysis. In “Jokes and Their Relation to the Unconscious”, he used the term “Einfühlung” to describe a process known as “ideational mimetics”. Lipps’s theory of aesthetic empathy echoed Aristotle’s ancient notion of “catharsis”, which he used to explain audience experience during plays of tragedy. Both concepts imply that in growing empathy while viewing works of art, one can work safely on different emotions.

On the other hand, the studies of psychophysical properties on art appreciation are known as experimental aesthetics. Ellen Winner (1982) compiled a chapter titled “The Audience” which discusses these experiments [3]. Notable psychologists and theories she discusses include Gustav Fechner’s “Aesthetics from Below” (1867), Daniel Berlyne’s “The Arousal Theory” (1971), Nelson Goodman (1968), Hans Eysenck’s “Individual Differences in Aesthetic Response” (1972), and Rudolf Arnheim’s “Art and Visual Perception” (1969). Art appreciation offers the space to focus on an artwork where one can exercise their mental ability. Ziegfeld (1953) proposes that art appreciation offers at least five purposes, which include “to develop an understanding of the validity of the aesthetic experience and the capacity for aesthetic response” and “to enrich and deepen the individual’s experience of the world in which he lives through an understanding of contemporary art forms” [4]. Similarly, Yenawine (2013) underlines cognitive aspects, which include “personal association, questioning, speculating, analyzing, fact-finding, and categorizing” that come into play when finding meaning in an artwork [5]. Unfortunately, most of the time our experience with art might not be fruitful. De Botton and Armstrong (2013) argue that the root cause of our incapability to engage with an artwork is not within the individual, but rather in the way that art is taught throughout our school years [6].

1.2. Teaching Art Appreciation for Students in Higher Education

Since late 1990s, Visual Art Department in Bandung Institute of Technology has run a class in Art Psychology, where students can explore psychological aspects in art creation. Its primary focus is on what motivates artists to create artworks and what kind of mental processes happen during the creation. Art Psychology is developed from the study of Aesthetics, specifically empirical aesthetics which investigates the correlation between art and human activities.

Although the class has always been offered to students within the Faculty of Art and Design, it only became available for other study programs throughout the university in late 2000s. It was then deemed necessary to tailor the subject to accommodate the needs of students from different academic backgrounds. Additionally, it was a good opportunity to introduce artworks and art activities to a wider audience. Art appreciation, therefore, is inserted into the curriculum. Similar to the discussion on art creation, it emphasizes on what motivates people to appreciate artworks and what kind of mental processes happen during the activity.

Art appreciation is seen as a larger context than art criticism; it is implied that the goal of art criticism is to provide a rational basis for art appreciation [7]. At one point in their undergraduate study, Visual Art students are obliged to take the subject of Art Criticism where they evaluate artworks in the context of Aesthetics. There are two prominent theorists from which the art criticism methods are studied, one of which is Terry Barrett (1994). His principles highlight the importance of art interpretation. He argues “interpretations imply a world view”, which he elaborates as using theories to base an interpretation of an artwork [8].

Authors employ a modification of Abigail Housen’s stages of aesthetic development for art appreciation practice. Housen is a cognitive psychologist who has done researches for over 20 years on the impacts of exposure to viewing art on people’s viewing experiences. She used an unobtrusive measure of interviewing and observing an audience in front of a particular artwork. In her most prominent paper (2000) titled “Eye of the Beholder: Research, Theory and Practice” [9], she proposes a theory of aesthetic development stages in relation to how a person makes sense of an artwork. She argues that each stage is attributed by a particular set of qualities, which is determined by empirically-derived analysis of the transcribed interviews with a research subject. Her goal through continuous application of VTS method is to further the subject’s aesthetic development stage. She finds that there is a correlation between one’s aesthetic development and their growth in critical and creative thinking.
Although the study of art appreciation has begun long before VTS, the field of experimental aesthetics in Indonesia remains deprived. Most of the studies in this field grow from a pedagogical stance, which is different from a psychological viewpoint. This study is evidence-based and aims to investigate and compare the experience of art appreciation between Visual Art and Non-Visual Art students in Art Psychology class at Bandung Institute of Technology in the academic year of 2017/2018. Furthermore, it shall explore possible causes of the comparable results and discuss the findings which may generate further studies in the field.

2. Methods
This study draws on the actual end-of-semester exam given to students taking Art Psychology in the academic year of 2017/2018. It employs Housen’s model of aesthetic development as its primary framework. Students were instructed to visit an art exhibition where they choose one artwork to write about. This type of exam, which demands students to write a report based on their experience during art appreciation, has been administered for the last three academic years. However, the emphasis of using Housen’s model has only been stressed this year.

Previous studies that used Housen’s model of data gathering: e.g. Riley, Ring, Duke (2005) [10] and Moorman (2013) [11] reported its validity in art appreciation study among medical and nursing students. However, we chose to modify some aspects of the Housen’s method in the present study due to time constraint. Firstly, instead of using stream-of-consciousness interview, the students were asked to write down their response using prepared guiding questions. Secondly, in the Housen’s method, response analysis was done solely by the researchers, whereas in this study the subjects are asked to analyze their own response to the artwork using Housen’s stages of aesthetic development. Each student writes a report using a structure following the stages, namely accountive, constructive, classifying, interpretive, and re-creative. Other modifications are applied to the content of Housen’s model to accommodate Non-Visual Art students who do not have prior knowledge in art during any stages of their academic years and to accommodate the less amount of time. On Housen’s stage III (classifying), subjects are presumed to adopt the analytical stance of an art historian wanting to know the context of where and when the artists live and compare a particular artwork with their other ones; whereas on the modified version, students are asked to explore the context behind an artwork and compare it with previous work of art which has similar contexts. Finally, there are two main questions in the Housen’s model: “what is going on here?” and “what do you see that makes you say that?”, whereas in the modified version there are several guiding questions for each stage:

| Stages     | Questions                                                                 |
|------------|---------------------------------------------------------------------------|
| Accountive | 1. What do you see in this picture?                                        |
|            | 2. What do you like from it?                                               |
|            | 3. How does it make you feel?                                              |
| Constructive| 1. Are there anything that remind you of yourself?                          |
|            | 2. If yes, how so? And where did you get the knowledge from?               |
| Classifying| 1. Are there any previous artworks that affect you similarly?              |
|            | 2. How does that artwork relate to you?                                    |
| Interpretive| 1. Are there anything that seem like a symbol to you?                     |
|            | 2. What does that symbol represent?                                        |
| Re-Creative| 1. Looking back at or re-thinking about the artwork, are there any more meanings that emerge? |
|            | 2.                                                                         |

For the purpose of this study, the students are divided into two groups: Visual Art and Non-Visual Art students. Despite their background in visual literacy, students from Design study programs are
clustered with other Non-Visual Art and Design students; considering that they are not familiar with art criticism. Gathered data is then analyzed using a comparative method informed by the model, and categorized into different qualities on each stage based on their written expressions. To match a response into a certain category, authors find keywords and compare similarities with sample responses from Housen’s study. These evidences are then scored using percentage and frequency to represent the proportion of valid responses in correspondence with Housen’s qualities on each aesthetic development stage found in each group of students. Finally, the findings are discussed using qualitative method to enable adequate exploration of possible causes of the differences in students’ experience of art appreciation.

3. Results
There were 129 students from different study programs all over the university registered in the classroom, with distribution as shown below:

| Study Program | Number of students |
|---------------|--------------------|
| Visual Art    | 20                 |
| Design (Craft, Interior Design, Visual Communication Design, Industrial Design) | 63 |
| Science (Mathematics, Physics, Astronomy, Chemistry, Biology) | 35 |
| Engineering (Forestry Engineering, Water Resources Engineering and Management) | 3 |
| Business and Management | 10 |

Out of the total number of students, 127 submitted their report; seven of which could not be processed as data due to their invalid responses (not following the required structure). There are overall 120 analyzed reports in this study; 16 from Visual Art group and 104 Non-Visual Art Group.

Table 3 presents key findings based on Housen’s model and using comparative method between Visual Art students and Non-Visual Art students. The percentage (%) represents the proportion of responses that match Housen’s stages and qualities, except for stage III (classifying) which uses parameters from the modified version as explained in the method section. The frequency (f) shows the number of students per total in each group. Due to the limit of dissemination, it omits detailed responses and classify similar keywords into the same category. For example, “Piko is one of my favorite artists” and “unlike other artworks in the exhibition, this is not titled ‘Untitled’… which is why I like” are both categorized under “judgements based on preference” in stage I (accountive).

| Table 3. Compared results between Visual Art and Non-Visual Art students using Housen’s model |
|---------------------------------------------|---------------------------------------------|
| Stages & Qualities       | Visual Art Students | Non-Visual Art Students |
|                           | %  | f     | %  | f     |
| I. Accountive             |    |       |    |       |
| Formal aspects            | 100% | 16/16 | 92.31% | 96/104 |
| Imaginative observation   | 56.25% | 9/16 | 63.46% | 66/104 |
| Incorporated people/objects into a narrative | 56.25% | 9/16 | 52.88% | 55/104 |
| Judgements based on preference | 50% | 8/16 | 28.85% | 10/104 |
| Emotions                  | 87.5% | 14/16 | 91.35% | 95/104 |
II. Constructive

| Reference point | 100% | 16/16 | 93.27% | 97/104
| Lack in realism | 25%  | 4/16  | 23.08% | 24/104
| Interest in artist’s intentions | 50%  | 8/16  | 22.12% | 23/104

III. Classifying

| Contexts | 87.5% | 14/16 | 71.15% | 73/104
| Previous work of art | 62.5% | 10/16 | 43.27% | 45/104

IV. Interpretive

| Interactive and spontaneous encounter | 87.5% | 14/16 | 85.58% | 89/104
| Subtle comparisons and contradictions | 68.75% | 11/16 | 61.54% | 64/104
| Symbols | 62.5% | 10/16 | 67.31% | 70/104

V. Re-Creative

| Seeing the artwork with a life of its own | 52.65% | 9/16 | 22.12% | 23/104
| Imaginative contemplation | 68.75% | 11/16 | 69.23% | 72/104
| Reflection of universal concerns | 43.75% | 7/16 | 51.92% | 54/104

The result shows that Visual Art students were able to better express their experience during art appreciation, especially in several qualities across the stages. Significant differences between both groups can be seen in the quality of exploring the artist’s intentions, comparing with previous artwork, and seeing the artwork with a life of its own. It can be assumed that it is resulted from the exposure to artistic creation they have received due to academic demands. However, Non-Visual Art students were better at expressing several more subjective qualities, such as imaginative contemplation, emotions, and reflection of universal concerns. Presumably, these results represent the hesitation Visual Art students might have in correlation to their capacity in art criticism, whereas Non-Visual Art students might feel more at liberty in expressing their opinions without fear of being judged. This also shows that art appreciation was able to give Non-Visual Art students some space to organize their personal thoughts into informed opinions. Other qualities show slight differences between both groups, which can be interpreted as an indicator that, despite their academic background, the majority of students have similar cognitive potentials required for art appreciation.

There are other results that cannot be presented in figures on this paper, but are available for limited access from authors. For example, when analyzing emotions triggered from looking at the artwork, Visual Art students group and Non-Visual Art students group show the same word as the highest response, which is “attracted”, with 25% and 31.6% respectively. “Curious” is the second highest response from both group, with 18.75% and 20%. Intense emotions, such as “anxious”, “disturbed”, “invigorated”, “intimate”, and “amazed”, are found in responses written by Non-Visual Art students, as opposed to “cathartic” as the only term that is used by a Visual Art student to describe an intense emotional response from viewing the artwork.

Another interesting finding can be seen from the responses of stage II (constructive) related to reference point. This quality indicates the stance from which the observations are made. Visual Art students are heavily informed by their academic background, hence most of them (18.75%) use their prior knowledge in art as their reference point. Visual perception informs most Non-Visual Art students (23.71%); meaning that they truly engage with the visual aspects of the artwork without using any prior knowledge or personal experience. Other reference points, such as religion and tradition/culture can be found in responses from Non-Visual Art students but not in the other group.

4. Discussions

Main findings of this study highlight comparable experiences in art appreciation between Visual Art and Non-Visual Art students. They correspond to how influential exposure to art criticism is to the Visual Art students’ rational approach to art appreciation, as Barrett implies in his principles. Both tendencies in aesthetic empathy (Lipps, Freud) and experimental aesthetics (Fechner, Arnheim) in art appreciation
are apparent in students’ responses. Responses that reflect aesthetic empathy can be found on stage IV (interpretive) and stage V (re-creative). For example, a response found on stage IV (interpretive) is “the artwork conveys that even simple things tend to hold complexity… unfamiliar things tend to stir anxiety and disturbance” clearly displays the student’s total engagement with the artwork. This response transcends psychophysical experience and tends to be more philosophical. On the contrary, responses that reflect experimental aesthetics can be spotted on stage I (accountive) and stage III (classifying). An example of stage I response is “(it has) random composition that is pleasing to the eyes”. These results also agree with Ziegfeld and Yenawine’s premises that art appreciation enables students to exercise their cognitive aspects, at least personal association, questioning, and speculating, during meaning-making. Secondary findings on stage IV (interpretive) are in line with Dissanayake’s theory that art helps to explore abstract ideas. A response example is “he wants to show that worldly matters take up so much space, that the afterlife can only be tucked here and there”.

5. Conclusions

In summary, this study gives a foundation for further evidence-based studies in the field of art psychology, cognitive psychology, and experimental aesthetics; specifically in art appreciation. It shows that even students without prior knowledge in Visual Art were able to engage in an artwork and use their experience to exercise cognitive aspects. Most importantly, the results show that Housen’s model of aesthetic stages is helpful in guiding the students during such activity. The framework provided from the modified version has also successfully led them to actively construct their own thinking.

However, one limitation of the present study has to be considered. Some parts of the Housen’s model being used were modified from the original version. It could be argued that the two versions were not paralleled. Therefore, there needs to be improved studies in the future. Firstly, it is worthy to compare results from different condition of this modified method to validate its reproducibility and consistency. Secondly, another study preferably designed with RCT method needs to be done to compare results from the original method and the modified one. Lastly, adding a pre-/post-test to this study design shall give insights into which variables are positively affected by the applied model.

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