

# Can Visitors Interpret Artistic Styles?

Elena Pol

Universidad Autónoma de Madrid  
Madrid, Spain

Mikel Asensio

Universidad Autónoma de Madrid  
Madrid, Spain

## Introduction

Terms such as Roman, Romanesque, Gothic, Renaissance, Baroque, Romanticism, Impressionism, etc., are common descriptive categories of artistic content. Style concepts anchor the descriptive and explanatory character about artwork in a variety of situations and are also directed toward a variety of receivers, from students, to visitors of all ages and all educational levels.

Artistic style is one of the main ways of organizing exhibits in museum galleries. The use of the style concept is frequent because it was one of the first notions developed by art historians. This concept, like Riegl presented in the nineteenth century, is a mental abstraction created by and based on the study of thousands of pieces of art which are compared, grouped, and classified through the selection of common characteristics.

Our research explores how visitors perceive different kinds of artistic representations and which elements they interpret from masterpieces. Our work offers three studies about artistic style. We used a novice/expert and crosscultural experimental design. Students from different education levels, from primary schools (novices) to master art students (experts) were selected. We developed the study in two countries (Spain and Mexico) because we wanted to control for instructional and cultural influences in the interpretation process.

## Previous studies

Unfortunately there is little research about the topic of art styles. Early experimental psychology research demonstrated the existence of differences between people and their perception in stylistic identification tasks. No correlation between qualities «perceived» in stylistic identification or taste, and variables such as sex, personality, ideology, age, etc. were found. Some of the research noted that people with prior art education answered differently than people with no prior education in the arts (Francés, 1979). Although there are several studies about teaching art (see for example the discussion in Clark, 1994, about differences between American, Canadian and European perspectives) and about materials and methods for teaching art (Michael, 1993), there are few research studies about learning art (Eisner, 1972; Jones & McFee, 1986; Gardner, 1990). Thus, it is not unusual that we find few references when we explore concrete/specific problems like the learning of artistic style. Gardner himself asked for permission to describe a group of studies done almost twenty years ago about distinguishing artistic styles (Gardner, 1990). Solso (1994), without citing specific research, introduces some reflections about artistic style in the framework of the formation of mental schema, similar to the first argumentation of Gombrich (1959) about developmental comprehensive schemas. All of these reflections show the difficulties in the comprehension of artistic concepts, especially the concept of style (Parsons, 1987). Some authors have applied these considerations in the museum context. Davis & Gardner (1993) and Csikszentmihalyi & Robinson (1990) have talked about the difficulty of understanding artistic processes. Housen (1992) developed studies with naive visitors about the development of aesthetic responses. Most of the research suggests the necessity for further study about the complexity of these comprehension processes.

## Methods

Artistic style is one of the most important concepts in art history. It is immensely important in education programs and in the diffusion of art, and it is frequently present in museums and exhibits. However, as we have seen, there is limited research relating style to art comprehension and learning. This is one of the reasons our research explores visitor

perception of different kinds of artistic representations and which elements of art are more readily interpretable. We are also interested in evaluating the importance of instructional level as it relates to the comprehension of stylistic categorization. One of the variables most frequently cited in the comprehension of art has to do with the cultural context. We designed our research to better understand the nature of this important variable along with instructional level.

### Sample

We used a novice/expert experimental design from a crosscultural point of view. We selected 89 people from different educational groups, from two different countries (Spain and Mexico), and from different art knowledge categories (ranging from more naive to more expert). The resulting sample contained ten Spaniards and ten Mexicans from Primary School 6th (11 years old); ten Spaniards and ten Mexicans from High School 9th (14 years old); ten Spaniards and ten Mexicans from Senior Year (17 years old); five Spaniards with special instruction about art; eight Spaniards and ten Mexicans who had no university art degrees (adults); and six Spanish and five Mexican Art Historians with masters degrees in Art History and experience in teaching art in secondary schools.

### Material and Procedure

We designed three different tasks, ranging from the more classical to the more innovative, using different materials and different experimental situations. We selected both Mexican and European art works. The materials used had good color reproduction and were approximately double the size of a postcard. The research tasks were performed one after the other in educational institutions in Mexico and in Spain.

Task 1: *Aesthetic selection*. We showed 37 modern and contemporary Mexican and European painting reproductions of different styles and asked people to choose the ten that they liked the most and the ten that they liked the least in a descending order.

Task 2: *Open grouping*. With the same reproductions we asked the subjects to group according to their criteria. This allowed for groupings that we could not have preconceived and provided valuable information with regard to the way people evaluate art and allowed us to record their criteria.

Task 3: *The problem solving*. In this task we presented several reproduction groupings by artistic criteria and asked people to solve seven art recognition problems (five multiple choice and two of elimination) and six construction problems (Figure 1). Items #1 to #5 consisted of three pieces that share some determinate characteristics, but with one missing. We presented three possible alternatives to complete the initial whole. For the items #6 and #7 five different pieces are presented, all sharing determinate characteristics except for one. And, the third part, items #8 through #13, was a construction task requiring that six or eight pieces be arranged in compatible groupings with a stated rationale. People was required to justify each response.

## Results

### How Well Did Participants Perform the Tasks?

Both quantitative and qualitative results have implications for art, aesthetics, and education. We will make some observations regarding these findings which are significant to museums (the whole description and analysis of results can be see in Asensio, Pol & Sánchez, 1995; a more educational perspective can be found in Pol & Asensio, 1996). We used diverse kinds of rationale and statistical analyses for the codification of all answers from participants doing the tasks. We were very interested in checking the quantity and the quality of the answers with regard to the numbered responses, and the explanations for relating some works with others.

First, we will discuss the analysis of correct answers according to disciplinary criterion (quantitative analysis). Figure 2 summarizes the medians of correct answers the different groups with over a maximum of 20 possible correct answers. Results show that stylistic identification is very difficult. The correct answer level is very low. Second, as anticipated, those with more knowledge did better. There are important differences between the groups that received specific instruction in art history and the others: a clear difference is evident between the two groups in the last year of Spanish high school (in Spain students can choose among different courses, one group selected courses in science while the other group selected humanities including one art history). One can observe the same results among the Mexican subjects. The difference between the two groups of more art educated subjects is explained by the fact that Mexican

education includes both European and Mexican Art while Spanish education ignores Mexican art.

### How Were Tasks Resolved?

After we categorized all responses, results indicated consistency among all items and groups in accordance with respondent expertise. From the analysis we established four qualitative levels of answers by their structural and conceptual complexity:

- Level 1: *Approximate answer*: This level included simple answers that refer only to one kind of element or dimension such as form, topic/content, technique, material, etc. Participants did not perform any kind of analysis with regard to the chosen element.
- Level 2: *Development answer*. This level included a transition answer which refers to a certain analysis about the chosen element, or the mention of more than one element or dimension.
- Level 3: *Elaborate answer*: This level included a complex answer that considered more than one element, compared elements, or compared one element with a pattern.
- Level 4: *Synthesis answer*. This answer included some synthesis or analysis about various elements or dimensions with a unique interpretation, that may have coincided, although not necessarily, with the identification of the criterion used.

We were interested in three principal questions:

- 1) Will there be differences between groups with different expertise?
- 2) Will there be differences between groups of people with different cultural backgrounds?
- 3) Can we find differences for the different kinds of art works reviewed?

Figure 3 shows the results of three different scores: (a) the mean for Mexican items, (b) the mean for European items, and (c) the mean for all items. We found significant differences between groups with different

expertise. Experts always obtained better results than novices. We did not find differences between cultural groups.

### Criteria more frequently used to analyze art works

With the open grouping task we checked the interpretation of art works in a problem solving situation, wherein people solved problems in different situations. This task completed the information we obtained from the previous task, but with a different structure and content. As in the previous task, we expected to find important differences in the use of instructional or cultural criteria. We expected that the novice's criteria would differ from that of the experts, and that the criteria of the experts would be more complex and sophisticated.

We did our analysis relative to each group and we established comparisons by level and by country. The criteria we found were very close to that of previous research. Figure 4 illustrates the comparisons between expert and novice in order to show the extremes of the level of instruction continuum. The results indicate important differences between the two groups. Novices used topic criteria preferentially and experts used style criteria, with very significant statistical differences.

On the other hand, no statistically significant differences were found when results were compared by cultural contexts: Mexican and Spanish groups obtained similar results in each instruction level. Cultural context does not seem to be a significant variable when we interpret artistic works.

### What About Aesthetic Preference?

We also analysed what kind of interpretative criteria were used when people liked or disliked art pieces. We found significant statistical differences between aesthetics preferences with respect to expertise level. Novices preferred art works based on the analysis of the contents. By contrast, art experts use criteria based on the style or the technique of the piece. When we performed Analysis of Variance tests with the instruction level variable we found the following probabilities: Form ( $P=.0001$ ), Colour ( $P=.0039$ ), Technique ( $P=.0001$ ), Topic ( $P=.0002$ ), Realism ( $P=.0003$ ), Style ( $P=.0001$ ), Sensations ( $P=.0107$ ), Idea ( $P=.0595$ ). All of them are significant at  $p<.01$ , except the criterion of Idea. Likewise there were non-significant differences with respect to the country variable. When we performed Analysis of Variance tests by country variable, we found

non-statistical differences at  $p < .01$  in any case: Form ( $P = .6035$ ), Colour ( $P = .4729$ ), Technique ( $P = .1781$ ), Topic ( $P = .2587$ ), Realism ( $P = .0351$ ), Style ( $P = .0858$ ), Sensations ( $P = .5629$ ), Idea ( $P = .0365$ ).

The comparison between the use of different criteria among differing groups is very clear. Figures 5 and 6 show these comparisons in the four principal criteria. The first is the use by different groups of *style* and *subject matter*. As can be seen in Figure 5, novices use *style* infrequently as an aesthetic preference criterion. Experts however use *style* a lot. On the other hand, responses about *topic* are frequent in novice responses but not among experts. Clearly, experts and novices were using very different criteria in determining their artistic preferences.

Figure 6 is the use by different groups of *technique* and *feeling*. From the nine initial criteria we grouped as 'technique', the responses to 'form' and 'color' yield very similar results and are complementary aspects of artistic technique. For similar reasons, we grouped initial criteria into 'feelings' from responses of 'sensations' and 'ideas'. Figure 6 shows the relationship between these last criteria. In *technique* and *feelings*, results are very similar to that of *style*, with very little use by novice respondents of this kind of aesthetic preference criterion. However, as expertise increases, responses also increase. We anticipated these results about *technique*, since experts know more about artistic procedure and they can apply their procedural knowledge to analysis of paintings, sculptures, or architecture. Perhaps the results about *feeling* responses are more surprising, because several aesthetic theories suggest that people could actually feel the art regardless of instructional level.

## Conclusions

First, there is evidence that the notion of style is complex and difficult. There exist a low level of answer that requires the analysis, elaboration, or the identification of the styles proposed.

Second, specific instruction in art history definitely influences perception of style. The results indicated that people with low specific instruction level use subject matter criteria to determine analysis and affinities between artworks. When the artistic manifestations proposed did not facilitate subject matter analysis it converts into a fundamental dimension of *form* in order to analyse the artwork. Experts used criteria that permits more complex analysis based on the characteristics of the *style* or the *technique* of the piece. The fact that subject matter is the

criterion used more by non-experts for making aesthetic judgement can help us to understand why, for example, non-figurative contemporary art is the domain of the experts.

Third, people who were non experts in art preferred works where the subject matter was familiar and enjoyable. Non-figurative art was rejected by non experts because it lacked content (the work «says nothing»). Apparently, not recognizing the content impedes the realisation of any another kind of consideration. Experts can «read» a number of other aspects (style, technique, etc.).

Fourth, as the level of expertise increases, feelings and aesthetic preference responses also increase. The results about feeling responses is surprising, because a lot of aesthetic theories suggested that people could actually feel the art regardless of specific art knowledge. Our results indicated that artworks provoke feelings when a person is sufficiently sophisticated, when she or he has been instructed, and when he or she can interpret the piece in different ways. What we cannot interpret or understand we will refuse.

To summarize, specific knowledge in Art History is the key variable dominating artistic analysis and aesthetic response, even over individual, developmental or/and socio-cultural variables. We believe that if we want people to enjoy art more it is incumbent upon us to offer the opportunities to understand art in greater and greater depth. There are increasing numbers of people who believe that our emotions in concert with cognition, (for example, Gardner, 1990) and that art appreciation depends of our knowledge about it. If we like to change attitudes about art we should be teaching art.

When almost 40 percent of U.S. secondary and college students think that two of the most important visual artists of this century, Picasso and Matisse, lived in the 17th and 18th centuries, we must ask about their understanding of cultural aspects of art and art history (Eisner, 1972). We should think about the necessity of educating as well as exhibiting and conserving, to create and disseminate information that connects with the interest and knowledge of the visitors. Usually, museums only address the needs of experts and not those of non-experts — those who comprise the majority of visitors.



## References

- Asensio, M., Pol, E. & Sánchez, M.E. (1995). *Procesos de Aprendizaje e Instrucción en la Producción y la Comprensión del Conocimiento Artístico: las relaciones de las áreas de Expresión Visual y Plástica y de Ciencias Sociales, Geografía e Historia en la Enseñanza Secundaria*. Madrid: CIDE. Ministerio de Educación y Ciencia.
- Clark, R (1994). *Art Education. A Canadian Perspective*. Toronto: Ontario Society for Education Through Art.
- Csikszentmihalyi, M. & Robinson, R.E. (1990). *The art of seeing. An interpretation of the aesthetic encounter*. Malibu: J.Paul Getty Museum.
- Davis, D. & Gardner, H. (1993). Open windows, open doors. *Museum News*, 72 (1), 34-37, 57-59.
- Eisner, E. W. (1972). *Educating artistic vision*. New York: Macmillan Publishing.
- Francès, R. (1985). *Psicología del arte y de la estética*. Madrid: Akal.
- Gardner, H. (1990). *Art Education and human development*. Los Angeles: The Getty Center for Education in the Arts.
- Gombrich, E.H. (1959). *Art and Illusion*. Oxford: Phaidon Press Limited.
- Housen, A. (1992). Validating a Measure of Aesthetic Development for Museums and Schools. *ILVS Review*, 2(2), 213-237.
- Jones, B.J. & McFee, J. K. (1986). Research on Teaching Arts and Aesthetics. In M.C. Wittrock (Ed.), *Handbook of research on teaching*. N.Y.: McMillan.
- Michael, J. A. (1993). *Visual Arts. Teacher Resource Handbook*. Thousand Oaks, CA: Kraus International Publications.
- Parsons, M. (1987). *How we understand art*. New York: Cambridge University Press.
- Pol, E. & Asensio, A. (1996). El aprendizaje de los estilos artísticos. *IBER Revista de Didáctica de las Ciencias Sociales, Historia y Geografía*, 8, 25 - 42.
- Solso, R.L. (1994). *Cognition and the Visual Arts*. London: MIT Press.

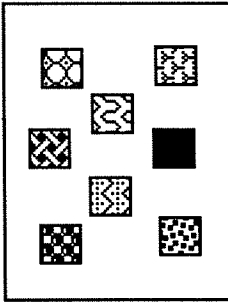
---

### Author Note

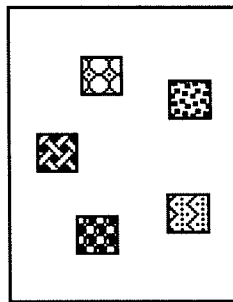
This article was made possible by a grant financed by the Dirección General de Investigación Científica y Técnica (DGICYT), #PB94-0154, titled "Behaviour, Comprehension and Attitudes in Real and Potential Museum Visitors", directed by Mikel Asensio.

Authors' Address: Psychology Department. Universidad Autónoma de Madrid. 28049 Madrid. Spain. Tel: 34 1 3974096. Fax: 34 1 3975215. E-mail: [mikel.asensio@uam.es](mailto:mikel.asensio@uam.es), INTERNET: <http://www.adi.uam.es/~asensio/>

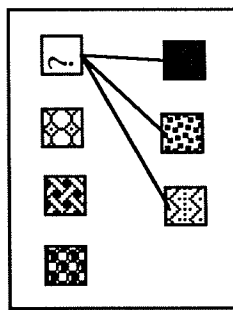
**Figure 1**  
**Items structure in the problem solving task:**  
**multiple choice, elimination, and construction**



Which ones can we put together ?

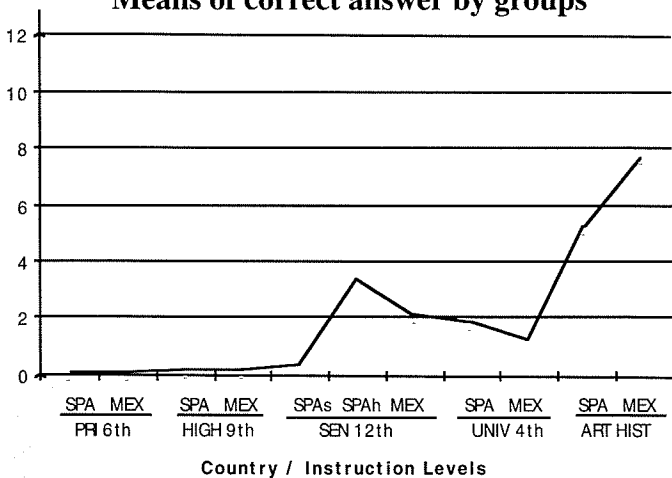


Which one is remaining ?

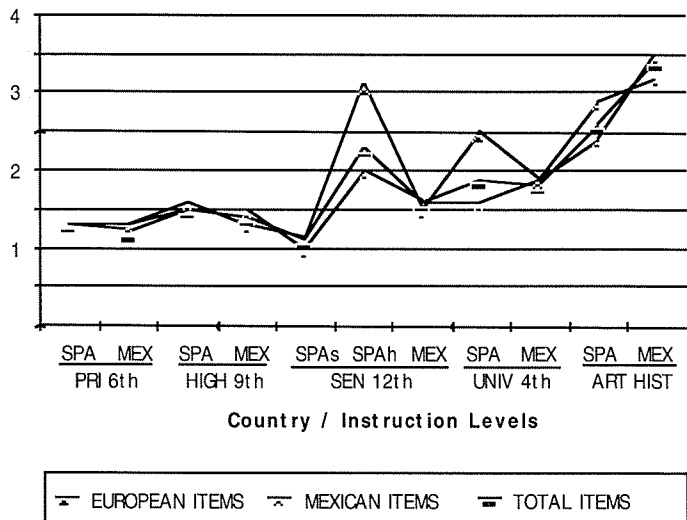


Which one is missing ?

**Figure 2**  
**Means of correct answer by groups**



**Figure 3**  
**Mean levels for all groups**



EUROPEAN ITEMS  
  MEXICAN ITEMS  
  TOTAL ITEMS

**Figure 4**  
**Comparison between experts and novices in the use of criteria**

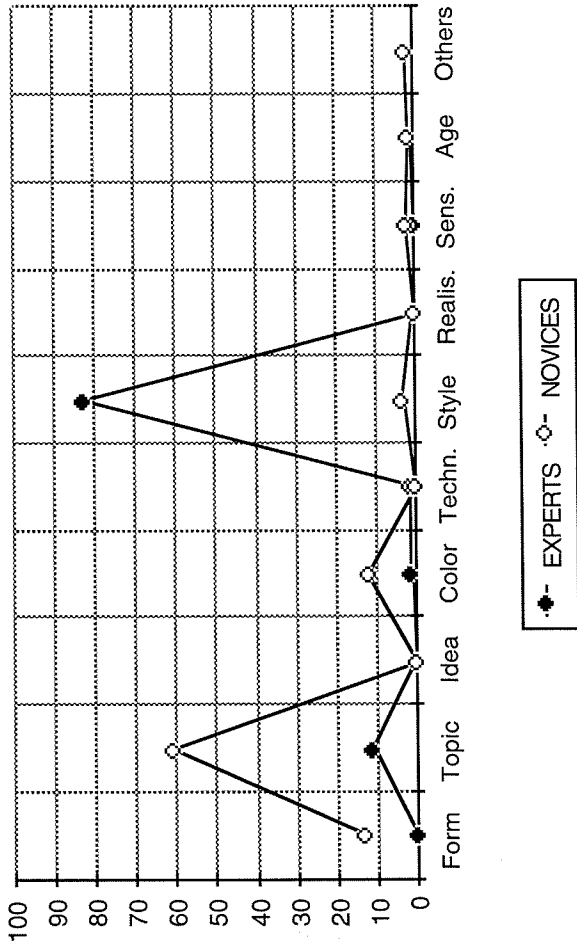
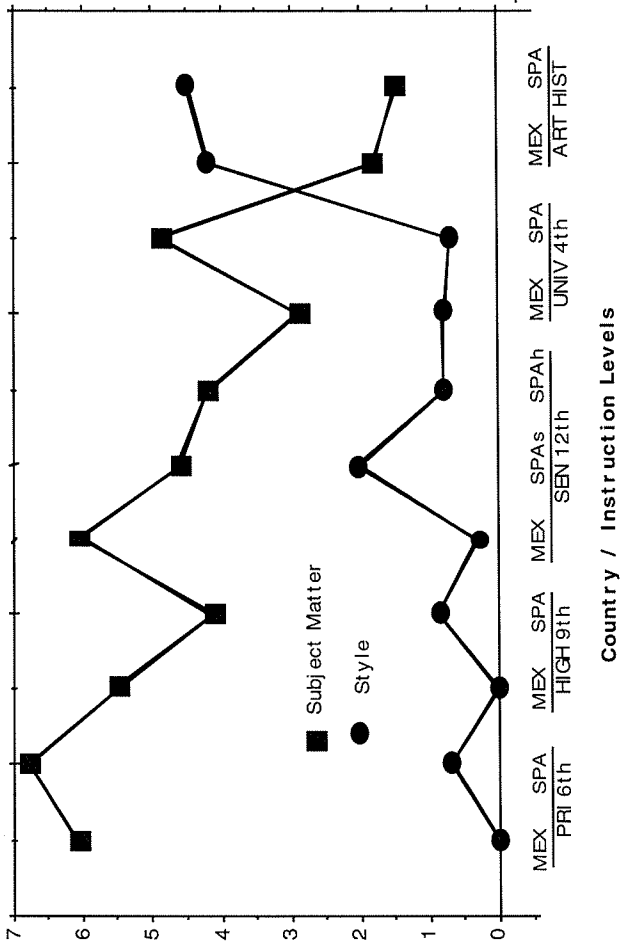


Figure 5  
Comparing Style wht Subject Matter responses



**Figure 6**  
**Comparing Technique and Feelings Responses**

