

1976

Testing in the Arts: Aesthetic Perception is a Part of Human Intelligence

Warren Sylvester Smith
Pennsylvania State University

Follow this and additional works at: <https://scholarworks.wmich.edu/perspectives>



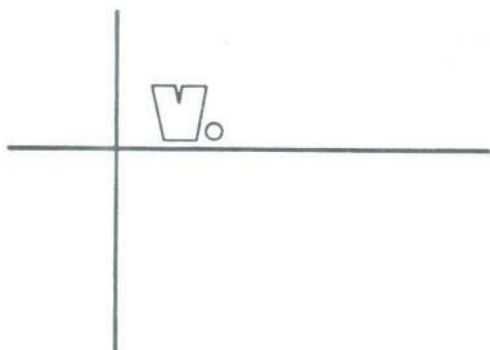
Part of the Higher Education Commons, and the Liberal Studies Commons

Recommended Citation

Smith, Warren Sylvester (1976) "Testing in the Arts: Aesthetic Perception is a Part of Human Intelligence," *Perspectives (1969-1979)*: Vol. 8 : No. 2 , Article 7.

Available at: <https://scholarworks.wmich.edu/perspectives/vol8/iss2/7>

This Article is brought to you for free and open access by the Western Michigan University at ScholarWorks at WMU. It has been accepted for inclusion in Perspectives (1969-1979) by an authorized editor of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



Testing in the Arts: Aesthetic Perception Is a Part of Human Intelligence

Warren Sylvester Smith

Simply stated like this, who would argue about it? The recognition of forms and patterns — visual or aural — the sensitive distinction among colors, the interpretation of movement or gesture — all of these are patently human accomplishments, and mastery of them is generally recognized as evidence of a kind of superiority. The statement would seem more commonplace than revolutionary.

But, as with many a principle honored in the abstract, putting it into educational practice *would* be revolutionary. Although the notion of measuring intelligence is no longer fashionable, our aptitude and achievement tests do imply two major facets of intelligence: quantitative and verbal.

On the basis of testable skills in these areas students are rated as being at certain grade levels, and accepted for higher education, and for entrance into graduate or professional schools. There can be little doubt that the sheer testability of these skills has already influenced the nature of all our institutions for generations to come. No one apparently is going to demand of our future leaders that they be sensitive to rhythms or dynamics or the organization of space, but you may be sure they will have undergone on many levels sophisticated examinations in language and computation. And this at a time when young people are absorbing more and more information by direct perception of sights, sounds, and movements. I am referring not only to the obvious intrusion into our consciousness of television and films, but to the subtler encroachments of packaging, advertising displays, architecture and

environmental design, art galleries (including Woolworth's), music (stereophonic, quadrasonic, or whatever all-enveloping sound is yet to come), and picture publications from *Penthouse* to the deceptively misnamed comic books. Are we to have no grammar by which to comprehend these experiences, no guides as to how to perceive them?

The probable reply of the orthodox educationist would be that increased attention is being given to these phenomena, and that their importance to society is recognized; but since they are, strictly speaking, neither teachable nor testable, they lie beyond the range of the central educational process. The fine arts are, he would assure us, the flower of our culture and should be encouraged. The arts of the past can be "studied" — that is to say we can learn of the lives and times of the artists, stories of the development of music, of painting, of theatre, of the dance, and so on. It is proper, therefore, to consider them as illustrations of the culture of their times.

In all these approaches, the arts become subsidiary to the formal disciplines — to literature, to history, to sociology, to psychology. The position of the artwork itself is rarely central. Masterpieces of the theatre, as a flagrant example, are tamed for classroom consumption as English literature. Now and then, perhaps, under an unusual teacher, art or music — even more rarely dance — will become a real experience in the classroom. When such an unlikely situation does occur, it is probably for a small minority who are presumably learning how to paint or sing or dance. Similarly something vital may occur in the rehearsal process for a play. But as far as *responding* to the arts, students may as well be told, "You're on your own. You get only incidental help from the establishment."

It should not be surprising, then, that young people on their own often do acquire remarkable sophistication in the arts that naturally appeal to them — for the most part, contemporary ones. In the arts of the film, pop music, and the comic book they could almost certainly teach their teachers. But because they are often grossly ignorant about the arts generally, and have had no formal opportunities to respond to them, or to give thought to values and standards, their sophistication is of questionable use to them, in their own cultural development. All this reveals a tragic, if understandable, lack of comprehension on the part of educators as to what the arts really are, and what part they are destined to play in any future society.

Let me make a modest beginning by challenging the notion that response to the arts is not testable. Here we face immediately the lack of a basic grammar. When we mention "arts" the educator is likely to assume that we must deal straightaway with interpretations and values. We must say that this painting has "survived," implying that the one that has not survived is hardly worth looking at; that this is "good" music, implicitly relegating the "other" kind to a lower level; or that this play is "ennobling," and that one "depressing," and so on. For the assumption is also that it is necessary to determine what an artwork *means*. It must be declared a symbol for some emotional or social or intellectual quality. In other words, the educator customarily regards the realm of the arts as a completely affective world in which he has no right to dictate the "proper" response.

As to this last, he is, of course, entirely correct. But perception precedes interpretation and value judgment — or should — and aesthetic perception is at least in part a cognitive process, and is consequently as testable as any other humanistic discipline. We do not, after all, in language testing, ask whether Wordsworth is better than Keats. We ask, primarily, whether the student can

comprehend what he reads. In any kind of formal testing, we cannot escape entirely from the world of words, and even in testing for aesthetic perception it is necessary to tie some commonly accepted terms to the art response in order to ask the essential questions: "Do you see and hear what is there?" and "Do you have a name for it?" Such an approach does not eliminate interpretation and value judgment, but it properly postpones them, and it introduces to the student a basic aesthetic grammar, a set of tools with which to deal with the audio-visual phenomena that surround and may possibly overwhelm him.

Over the past decade I have been developing a pattern for such testing as part of a basic undergraduate course in the arts — a mass course for the general consumer. My testing assumes an elementary vocabulary of art terms, but very little else. It is the kind of testing that might well parallel so-called aptitude tests in other areas. In developing the tests described in this article I have largely followed the same procedures one would use to develop any objective instrument. I checked the range of difficulty of the questions, and I studied computer printouts which gave me correlations between the students' success on each question and their total scores on that test — a figure which expresses the degree to which each question has helped distinguish the high-scoring students from the low-scoring ones. All this has resulted in a "Kuder-Richardson 20 Reliability" of about .80 — a reasonable reliability, I am told, for a non-scientific subject.¹

Though these tests were, as I said, devised to measure progress in a specific course of study, I believe that the method could have considerably wider application. Up to the present, I have limited the testing to six general areas: painting, sculpture, music, film, theatre, and dance. And since even in their cognitive aspects the arts always deal in relationships rather than absolutes, all the questions are based on comparisons.

Choose, for example, a pair of paintings that offer both interesting similarities and differences. At least some of the following observations should be applicable:

- The one may be more representational — or abstract — than the other.
- The one may have a more clearly defined focal area than the other.
- The one may be more dynamic than the other.
- One — or both — may contrast biomorphic forms with rectilinear ones.
- One may make more obvious use of value contrasts than the other.
- One may use a wider spectrum of hues than the other.
- One may use colors of higher chroma than the other.
- One may use more linear — or aerial — perspective than the other.
- One may present a more obvious surface-texture than the other.

These are merely examples of the kinds of information that can be perceived and labeled. Different items will suggest themselves for different artworks. Obviously if an unambiguous question cannot be framed — one that would

¹In these matters I have had the help and advice of the Examination Services of the Pennsylvania State University, and especially of its director, Dr. David Stickell.

satisfy any reasonably informed and sophisticated viewer — it should not be used (or, if inadvertently used, should be eliminated on the next round!) Back of each such question lie the larger ones: Can you see what's there? Can you name it?

Questions can be constructed as multiple choice, but I have been more successful in devising unambiguous questions on a true-false format. Patterns may vary to fit the examples, as

A uses more linear perspective than B.

A uses linear perspective, but B does not.

Both A and B use linear perspective.

Since the testing is for aesthetic perception and not for reading comprehension or general cleverness, the statements should be as simple and clear as possible, and in no way purposely tricky. I think it helps the student if the two artworks are kept in the same sequence throughout the series of questions — always mentioning A before B. And I try to avoid negatives. The statement will read that A has more of a quality than B does — rather than that A has less or fewer (so that the student does not have to pursue a line of thinking that goes, "No, it is not true that A does not have a high chroma as B"). There should be, of course, some difficult questions, but they should be difficult because the artworks themselves present subtleties that only a quite perceptive eye can see (or ear can hear) and not because the questions are difficult to comprehend.

A similar set of observations² may form the basis for comparing two pieces of sculpture. They might include as well:

The one may make more use of negative space than the other.

The one may attempt to disguise the texture of the material from which it was made more than the other does.

The one may be more of a closed form than the other.

One may offer more textural variety than the other.

One may be in low (or high) relief as compared to the other.

It may be obvious that the one is cast and the other hewn.

Coloration may depend (in one or both cases) on the material alone, or there may be a pigment or patina applied.

Ideally the student should be able to examine the two pieces of sculpture on which the testing is based, but a valid test can be constructed using slides — preferably showing each work from three or more angles. If slides are used, one must be careful to devise questions on topics that can be fairly asked on that basis. For example, it might be perfectly fair to ask a student to perceive the use of a patina on a metal sculpture if he could see the sculpture itself. Depending on the clarity of the slide, it might be unfair to ask him to make such an identification from the projected image.

In testing for cognitive responses to music, the same process is followed: two carefully chosen selections are played (not longer than two or three

²The reader who has no reason to contemplate the actual construction of such tests may wish to turn to the last five paragraphs of the article. I have assumed, however, that those who read this as a practical as well as a philosophical approach to teaching in the arts may find some use for the detailed suggestions for each of the sections of the test. WSS.

minutes each), and the student is then presented with a series of questions or true-false statements. Since music is purely a time art, a special kind of memory is required to do well on this test. Though the student may consult the questions before he hears the music, he cannot check back with the work as he could with the paintings and sculptures that remained before him as he pondered the questions. This need for a music-memory results, I have found, in generally lower scores for the music portions of the test. However, this need is so important to a full response to music that it is probably the most essential element to test. If the listener cannot remember anything about the first selection by the time he has listened to the second one, a low score is probably valid. What sort of information should the music questions be based on?

The principal melody of the one may be more conjunct than that of the other.

The basic harmony of the one may be more consonant than that of the other.

The meter of one (or both) may be consistently duple or triple. (Unless you are testing music students, it will not be helpful to ask for the identification of more complex meters.)

The timbres (or sonority) of the two selections may be markedly different.

One (or both) may contain polyphonic passages.

One (or both) may be essentially in a major (or minor) mode.

The tonality of one may be markedly more conventional than that of the other.

The overall structures may be verse-chorus, ABA, theme-and-variation, etc.

The one may be more developmental than the other.

One may have clearer articulation than the other.

Two film sequences of about five minutes each will furnish the basis for a further series of questions.³ Though the chosen sequences may be dramatic, I prefer to base the questions for this part of the testing on the more purely filmic aspects, and leave the theatrical elements for the next section of the test.

The one sequence may make more use of the subjective (or motivated) camera than the other.

One (or both) of the sequences may restrict the use of the camera to near-eye-level.

The soundtracks may contain only "actual" or motivated sounds (synchronized dialogue, etc.), or they may contain arbitrary sounds (such as mood music) as well.

If the soundtracks contain music, the films may or may not be "cut to the beat."

One sequence may be markedly more plastic than the other.

³*The American Film*, made for the White House Conference of 1965, lines up five sequences from, presumably, the best American film directors. These offer some satisfactory choices.

One may be more organized along a conventional time sequence than the other.

The editing may achieve a faster rhythm of shots in the one than in the other.

Color may be more obviously used for emotional effects in the one than in the other.

Montage may have been a significant element in the composition of one, or both, of the sequences.

Film is the art form that is most readily presented in the classroom through its originally intended medium. If a good print is available, and if there is sufficient blackout, one can reasonably claim that the artwork presented is the one intended by the artists. With color slides and recorded music, one can never be absolutely sure, but though they differ in significant ways from the actual artworks, reproductions of art and music probably retain the essential lines, masses, colors, timbres, rhythms, melodies, harmonies, etc., in sufficient approximation to the originals to serve as the basis for valid test questions. Testing for perception of the performing arts offers special difficulties in this regard. Both theatre and dance require as part of their basic contract three-dimensional space and live moving bodies. Perhaps we should therefore invalidate any test for perception of dance or theatre that cannot be based on live presentations of performing groups of professional calibre. Though I have in my own situation access to such groups, I cannot call upon them to perform the exact sequences required for testing at every time and place that such testing is scheduled. I have therefore compromised to the extent of recording the desired theatrical scenes and choreography on video cassettes.

If one must accept such a compromise — and I see no other practical alternative — the recordings should be, as far as possible, “straight” recordings, so that the student does not confuse the art of the dance or of the stage with the art of the film or television. The TV director must be resigned to making a clear record of another art form, contrary as that will be to his or her every instinct and training.

If, then, two dramatic scenes are recorded as in a theatre, these are the kinds of perceptions to be made — and note that they are of a different order from those listed for the art of the film.

The rhythms of speech may be closer to verse in the one scene than in the other.

The movement-pressures on the actors (from right to left, or left to right, or back to front, etc.) may form different patterns in the one scene than in the other.

The actors' movements may be markedly closer to dance in the one scene than in the other.

The *mise en scene* may be more complete, or more detailed, for the one scene than for the other.

The use of color may be more symbolic or more significant in the one scene than in the other.

The tempo may be more lively in the one than in the other.

There may be more use of properties — or more symbolic use of properties — in the one scene than in the other.

There may be more reliance on verbal imagery in the one than in the other.

The thematic scope may have a markedly greater magnitude in the one than in the other.

For the two dance selections, these would be among the items on which questions could be based:

The one dance sequence may have more of the elements of classic ballet than the other.

The one may be more closely tied to the beat of the music than the other.

The one may rely more on a *mise en scene* than the other.

The one may make more use of virtuoso solo performing than the other.

There may be more dancing on point (or more *entrechats*, or *pirouettes*, etc.) in the one than in the other.

The one may be more closely related to mime than the other.

The one may use the floor as an element in the choreography more than the other.

The one may be markedly more related to ethnic or folk elements than the other.

The one may contain a more obvious narrative line than the other.

Now these, I repeat, are the kinds of questions on which it should be possible for informed people to agree. It does not follow that they are the kinds of questions on which either students or their teachers will want to discourse. It is natural for them to want to place an immediate value on the work, to dwell on its significance, to relate it emotionally to their own lives, and to psychoanalyze the artist. Subjective responses supply, after all, much of the joy of the art experience and cannot be humanly separated from it. But would it not be well if respondents were first more skilled in "reading" the artwork itself, and made more sensitive to the act of perceiving it?

Since this entire process of testing involves considerable trouble, it is fair to ask what good will come of it.

First of all, such testing would add to the existing test batteries an aesthetic factor which they now lack. Whether or not the results would show significant correlation to creative talent or to success in art-related professions cannot be known without accumulating massive data. Certainly the scores of such tests would be more meaningful to deans, department heads, and admissions officers in schools of the arts and various departments of the arts than the present sets of scores which reflect the candidate's skills with words and numbers only. If selections for admission and honors must continue to be made on the basis of testing — and it would seem that this will have to be at least partially the case — then the testing should have some relevance to the discipline. Aesthetic perception does not equal talent, but it is hard to imagine talent developing without aesthetic perception.

But even if such testing is not used directly in selecting or placing students, the student himself is probably curious about how he compares with his peers in the matter of what he can see, hear, and identify in the art experience, and

such comparison may be of practical help to him (and his advisor) in making career decisions.

Finally, what may really be the most significant and lasting reason for administering such tests is what happens to the student in the testing process itself. In the hour or so of actual testing he is made conscious of the process of making aesthetic distinctions. He becomes aware, perhaps, that this is a process that has been going on all his life, but for which he has never been called to account. He is forced to realize that responding to artworks involves a discipline. Some find that they have acquired this discipline unconsciously through a lifetime of exposure to the arts. Other discover that they have absorbed only selected areas. Still others — certainly a majority — discover that this entire world has so far largely escaped them; their formal education has never been focused in this direction; and that to enter that realm will require some effort of their own.