

1919

## The Correlation of Art and Science in the Museum

Homer R. Dill  
*The State University*

*Let us know how access to this document benefits you*

Copyright ©1919 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Dill, Homer R. (1919) "The Correlation of Art and Science in the Museum," *Proceedings of the Iowa Academy of Science*, 26(1), 85-91.

Available at: <https://scholarworks.uni.edu/pias/vol26/iss1/11>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

## THE CORRELATION OF ART AND SCIENCE IN THE MUSEUM

HOMER R. DILL

What is it that makes the museum a success? I believe this question may be satisfactorily answered by a careful study of the people who visit museums. Go to some good museum and stroll quietly about among the groups of spectators and listen to their remarks; note carefully the types of exhibits that attract their attention, occasion their comment, and hold their interest. If you are interested and wish to follow up your investigation, go again and as often as you are able. You may thereby get some suggestions for building a museum for the public that never would occur to you otherwise. If you are connected with a museum and have been rash enough to make exhibits of your own it is possible that your pet ideas may receive a distinct shock from the frank criticism of some innocent spectator. Nevertheless, heed well what you may hear, for it is the impression that an exhibit makes on the spectator that counts. No matter how well a group is executed, if it does not tell this spectator the story it was designed to tell, it is a failure.

I remember well my visit to a certain museum where there is an anthropological exhibit. In one of the groups an Indian is represented drilling ivory, using his bow and a piece of metal for the purpose, while close at hand his squaw is engaged in tanning a skin. The group was interesting, and, to my mind, there was no question as to what the Indians were doing. As I was about to leave the exhibit, however, a young lady stopped directly behind me and remarked, "Oh, see the Indian fiddling while his wife is getting supper." After that remark it was obvious that the impression made by the group was misleading. One of the museum attendants informed me later that he had heard people say the same thing a number of times and this despite the fact that the group was well labeled. Labels, we must remember, are only secondary, and are seldom read unless the spectator's interest has first been engaged by the exhibit.

True it is that the public will ask foolish questions and make absurd remarks. All of these, however, should be duly considered.

The exhibitor must keep in mind the fact that his work is to be seen through the eyes of the public and that many things clear to his mind, or to the minds of others in the same work, may not be at all clear to those whom he would instruct by means of his exhibits.

Art students often visit our museum for the purpose of drawing and designing from the mounted specimens. One young lady, a college senior, asked me how we managed to kill the mammals and birds in just the positions in which we wanted them for our exhibits. On another occasion we had placed a miniature model of a bison group in the large case that was to be used for the group itself when finished, stating the facts plainly on a label. During the few days that the model was on exhibition a number of people remarked that they did not see why we used such a large case for such a tiny model.

If it is your fortune to have a competitor, listen to his criticisms, even though they be bitter, for he will seek out every fault and point out much that would be overlooked by a more kindly critic. In short, let us have that sense of the value of criticism which prompts the successful moving-picture actor to drop into some theater to see himself on the screen and hear what people have to say about him.

During a visit to the Panama Pacific Exposition in San Francisco, I had an experience which verified a thing that for many years I have believed to be one of the most important features in exhibit work. The first day of my visit found me in the Agricultural Hall standing before an elk group mounted by Mr. James Clark. As I was admiring the work I noticed a dignified old gentleman, of the Oliver Wendell Holmes type, standing nearby. He remarked that it was a fine piece of work. Two days later I was again in the same hall and almost unconsciously I worked my way around to the elk group when to my surprise I found my friend of the previous visit. Smiling he said, "I have interests that bring me to this building, and while I am here I often drop over to admire these animals. Although I know nothing about taxidermy, I do love a work of art whether it is in the form of a picture, statuary, or mounted specimen." On the last day of my visit I once more passed through the Hall of Agriculture, and there, by the elk group, among other spectators, was the old gentleman. I stopped to speak with him, and we agreed that it was the art in the group that made it worth seeing many times. The same spirit was apparent, on a broader scale, among the

great crowds of people who came to the exposition to see the sights. The Joy Zone did not attract the largest number of people, nor were the state exhibits in the buildings overcrowded. It was the esthetic, the beautiful, the artistic, that caught and held the masses. They strolled about the courts admiring the architecture, the beautiful flowers, the colors, and the good music. Twenty, or even fifteen years ago such conditions may not have existed, but I believe that the average intelligent person who visited the great exhibit will say that, aside from any special thing in which he may have been interested, it was the whole exhibit in its artistic aspect that made the most favorable impression.

It is true that we cannot divide the public into those classes which do, and those which do not, appreciate art. Among the educated people we often find individuals who are entirely lacking in this respect. This is particularly true of individuals who have specialized along scientific lines. On the other hand, we occasionally find, in the most common families, individuals who are artistic and who, in so far as their opportunities admit, are appreciative of art.

The following experience convinces me that even the savage may have latent in him some real esthetic instinct. At one time it was my good fortune to know an old Indian guide named Pete. One day I received a letter from a friend, asking me to see if I could engage Pete as a guide for a hunting party, and with him make a canoe trip of fifty miles and join the company. It was on this occasion that I really got acquainted with Pete. The first day was quite uneventful. Pete seldom talked. I remember my pleasure in watching the graceful, rhythmic play of the guide's muscles as our canoe glided along, the silence broken only by the regular "put-put" of our paddle blades as they cut the water. About sun-down we made camp at a sharp bend in the stream, a site which afforded an unusual view of nearly a mile of mirror-like water, bordered on either side by the rich reds and yellows of a Canadian autumn. As I sat by the camp-fire watching a flock of loons swim past, leaving a tiny ripple that soon melted from sight, and enjoying the beautiful picture, I happened to glance at Pete. He was sitting on the end of a log smoking, and apparently vacantly gazing out over the same scene. "What you see, Pete?" I asked. "Me like to see um nice woods, nice water, all same me like to chase um deer, shoot um deer, eat um deer," was his reply. I understood. Pete loved the esthetic, as well as the hunt that meant a day's sport and a good square meal.

The next day we came to a carry, where Pete informed me that by taking the canoe and our baggage on our shoulders and making an overland trip of a mile, we could save many miles of paddling. So we proceeded through the crisp morning air and at noon we stopped in a hard-wood grove to eat our lunch. The stillness in this grove was oppressive. There was not a sound, until all at once from some distant thicket there came to our ears the clear flute-like notes of a hermit thrush. Pete heard it and a soft smile spread over his wrinkled, copper-colored face as he remarked, "Um bird, he hain't got no cold."

What had been this man's experience that had caused the veil to be lifted, even though slightly, so that this glint of light shone through. It is true that he or his ancestors knew nothing of books. Could it be that the art that is in nature had accomplished this?

Since the successful introduction of the habitat groups into some of the larger museums, there has sprung up all over the country, a desire to have something of the kind in the smaller museums as well; and the work has been undertaken oftentimes without the slightest knowledge of how such work should be done, and in violation of all the laws of art and science. The result is that some of the most hideous productions have been placed on exhibition. There may be some excuse for a poorly mounted specimen in a serial collection, but there is no excuse for attempting to make habitat groups without some special knowledge of the work. No scientist can do the work without a supplementary knowledge of art; nor can an artist do any thing worth while without scientific training in the technique of such work and a real knowledge of the subject to be handled. Beautiful pictures painted from fancy have no more value in a museum than have inartistic groups. Such exhibits ought not to be tolerated for many reasons. They have no educational value; they fill up space that might be used for something worth while; they often waste rare specimens which cannot be replaced, and which on account of improper treatment eventually go to pieces.

No intelligent person questions the importance of having a museum on a scientific basis. The information propagated by a museum should be absolutely dependable. Every setting for a group should tell a true story. A museum, however, can be strictly scientific, and yet fail utterly in its mission. The dreary, monotonous exhibits of the old-fashioned institutions have demonstrated this. The few people who went to the collections were fatigued by their visits. It is true that a part of the weariness

caused by these old exhibits was physical, owing to the poor arrangement of the specimens which made it necessary for the spectator to get into many unnatural positions in order to see the objects and read the labels. I believe, however, that the major part of the fatigue and discomfort came from a mental rather than a physical strain.

A friend of mine who is a hunter and naturalist, once asked me to go with him through one of the older museums in the East. We met by appointment and spent the entire day looking over the various collections. When night came my friend asked to be excused from an engagement for that evening saying that he believed he would go to bed as he was completely exhausted. Now this same friend on a previous occasion tramped miles with me in the woods, climbed trees for birds' eggs, crawled hundreds of yards flat on his stomach after young ducks, and yet when night came was not seriously fatigued.

In these days when all wild life is rapidly disappearing, when the specimens that we are placing in our exhibits may be the last of their kind to be secured, there is brought home to all of us the importance of permanently preserving them, of being sure that we have taken every precaution for their safety. In these days of experiment and investigation, I believe there is no excuse for a museum man who does not keep up with the times, and permanently and artistically preserve for future generations some of the phenomena of nature that will soon be gone forever.

In early days all kinds of museum material could be collected with little difficulty. Grease-burned skins, museum metal-disease, and other things that now try the soul of a curator were, if not unheard of, at least not generally known. Today the matter of permanently preserving museum material is one of the most serious things that confronts us. Any of the people who lived in the Middle West fifty years ago, can remember the great flocks of passenger pigeons. We have records to show that they were sold in the market for one cent each, and yet today it is impossible to find a perfect skin. How many pigeon skins could a man get if he were to make a standing offer of \$50 per skin? What would one have to pay for the skin of a California condor, an ivory-billed woodpecker, a heath hen, or a Carolina parakeet, and what would be the condition of these skins if he did succeed in finding them? Recently we succeeded in getting three passenger pigeons that had been mounted thirty to thirty-five years ago. These birds we remounted and placed in an exhibit in our

museum. The skins were all badly grease-burned and the oldest went to pieces so that it was necessary to cement the twenty odd parts on a modeled form. From this one skin we took over an ounce of oil besides the fat that was removed by the use of alkalis. How many of us are sure that some of the valuable skins that we are putting into our collections today are not in the same condition? It is not an infrequent thing to have people ask how long these specimens that we are preparing today will last. We like to say, "Indefinitely," and in most cases we can. But the question, "How do you know?" has been a little difficult to answer satisfactorily. We know that the animal oils or fats in skins contain acids that slowly destroy the tissue. In our laboratory experiments we have demonstrated that these oils are readily turned to soap by the use of soda, borax, and talc. The soap and glycerine formed by the process are slightly antiseptic and are not injurious to the skin, but if so desired, they may be removed by washing the skins in water.

We believe that, after the oils have been removed, the skins should keep. Now for the proof!

It was during the summer of 1915 that I visited the Deseret Museum, Salt Lake City. In that interesting collection taken from the cliff-dweller's huts in southern Utah, I unexpectedly found the proof. This material to which I refer, is said by good authority to be from one thousand to fifteen hundred years old. Among the many notable things are two deer skins and the skin of a small blue-bird, all in a perfect state of preservation, even the feathers on the bird being intact. These specimens were dug from the loose soil forming the floors of the huts. This natural soil (according to geologists who are informed on the subject) contains crude soda, potash, and magnesium, and these ingredients have preserved the skins by their action on the oils, the process, although crude, being the same that we are using in our laboratory today. The cliff-dwelling Indian had no idea of permanently preserving the skins when he buried them there. We go to nature for our art; we scrutinize every little detail to make our exhibit a success; and now we find that she has set the pace even in the matter of preserving material. To answer further the question of how long organic material may be preserved we have but to visit the tar pits at Rancho La Brea and see the perfect skeletons two hundred thousand years old.

Is it not the correlation of art and science that will make the museum a success? A man who studies science to the exclusion <sup>6</sup>

of everything else is likely to become cold, unsympathetic, and narrow. The more he specializes the more he isolates himself from his fellows. The man who studies art and nothing else becomes insipid and impractical. But when we combine the two we get art that is useful and science that is broad; we get individuals who can do something worth while; we get the sort of art and science that men like Akely, Knight, and Fuertes have combined in their work. I believe that such a union of art and science is bound to remove the objectionable features of the museum. When we have said good-bye to the T-perches, polished bases, the poorly-lighted cases and dingy walls; when we have given some thought to the decoration of the exhibit rooms; when we have museum men who do their work seriously and for the love of doing a thing well; when we send men into the field who have the power of keen observation, the technique, and the artistic ability faithfully to record the facts that can be obtained only from live animals in their natural environments—then we have secured a means of conveying scientific facts to the public in adequate form. Such exhibits, combining with accurate, scientific information the best that there is in art, will reach not only the student but the layman as well. They will reach where books seldom go to the improving of men's minds and to helping them to higher conceptions and new appreciations of nature and her manifold and marvelous works.

VERTEBRATE MUSEUM,  
THE STATE UNIVERSITY.