Aesthetic Understanding as Informed Experience:
The Role of Knowledge in Our Art Viewing Experiences
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Abstract

The Model of Aesthetic Understanding as Informed Experience examines aesthetic experience from an educational perspective: it identifies the kinds of knowledge involved in aesthetic encounters with visual art, and it also identifies the types of learning that can occur at each stage in this process. The process of aesthetic understanding is conceptualized as a two-phased type of informed experience. In the first phase, the viewer encounters the work of art through a process of experiential learning. During the second phase, the viewer confronts a related body of theoretical knowledge. This combined use of experiential and theoretical learning often leads to a more complete understanding of the art object. In addition to introducing the Model, this article presents the findings of a qualitative study undertaken to provide empirical evidence for the principal components of the Model. Of the 26 informants participating in the study, a large majority engaged in an aesthetic appreciation process that involved both experiential and theoretical learning.
AESTHETIC UNDERSTANDING AS INFORMED EXPERIENCE:
THE ROLE OF KNOWLEDGE IN OUR ART VIEWING EXPERIENCES

Thinking calls for images, and images contain thought. Therefore, the visual arts are a homegrown of visual thinking (Rudolph Arnheim, 1969, p. 254).

A common misconception about the nature of art and of aesthetic appreciation is that these activities are essentially a question of "feeling", as if tuning in to the right feeling will automatically lead to a full understanding of the work of art. Another widespread misunderstanding essentially reduces art viewing to a simple question of perception, as if looking long and hard is always enough to apprehend the work of art's message. Fortunately, a growing body of research into adults' art viewing experiences is debunking these widely-held beliefs as oversimplifications of the art viewing process. We can now assert, with a good degree of certainty, that our art viewing experiences solicit four key areas: the affective, perceptual, communicative, and cognitive dimensions of human experiencing (Csikszentmihalyi & Robinson, 1990). Therefore, we would be hard pressed not to agree with Rudolph Arnheim's reflections, presented above, on the important role of thought in shaping our artistic and aesthetic experiences.

While acknowledging at the outset the essential roles of affect, perception, and communication in our art viewing experiences, this paper focuses more specifically on aspects of the intellectual dimension of this experience. First, we will present and discuss a model that we have developed over the last several years. This model identifies the kinds of knowledge and learning involved in art viewing activities. Second, we will present the results of an empirical study conducted to provide support for the model. Finally we will briefly discuss the model's usefulness for the purposes of aesthetic education.
The Model of Aesthetic Understanding as Informed Experience

The Model of Aesthetic Understanding as Informed Experience (Lachapelle, 1994) provides an explanation of the process of understanding and appreciating a work of art from an educational perspective: it identifies the types of knowledge involved and it also pinpoints the kinds of learning at each stage in the process leading to an understanding of the aesthetic object.

In this model, the process of viewing and understanding a work of art is visualized as a two-phased type of informed experience. Through a process of experiential learning, the viewer first encounters the work of art and formulates an initial interpretation. Then, through a process involving theoretical learning, the viewer compares his or her first interpretation with a related body of external, scientific information. This second step in the learning process leads to a reconstruction of knowledge about the work of art. Tandem use of the two processes assists the viewer in furthering his or her understanding of the art object; it also promotes growth in his or her art viewing skills. In the course of each new encounter with an aesthetic object, the interplay of experiential and theoretical learning leads to additional development of the viewer's background knowledge in art, resulting in better preparedness to successfully engage the next work of art (Lachapelle, 2000, p. 128).

Theoretical Foundations of the Model

Three different theories informed the development of the Model. These are Csikszentmihalyi & Robinson's Model of Aesthetic Experience by Interaction (1990), Gérard Artaud's Model of Learning by the Integration of Knowledge (1989) and Kolb & Fry's Model of Experiential Learning (Kolb & Fry, 1975; Kolb, 1984).

By using anecdotal evidence obtained from a group of fifty-two museum professionals, Csikszentmihalyi and Robinson were able to identify the four major dimensions of aesthetic experience: intellect, communication, perception and emotion. Each one of these dimensions constitutes, to some extent, a challenge that the work of art
addresses to the viewer. According to these researchers, the intellectual dimension of aesthetic experience consists of all aspects of the viewer's attempts to use knowledge in order to find meaning in the work of art (Csikszentmihalyi and Robinson, 1990, pp. 27-71). Csikszentmihalyi and Robinson also propose a model that describes the aesthetic encounter in terms of an interaction between the viewer, the work of art, and the artist. To this encounter, the viewer brings his skills in aesthetic appreciation; these may be more or less developed according to the viewer's training and previous viewing experience. The work of art also plays a role in the encounter as each work of art, with its specific characteristics, challenges anew the viewer's know-how according to the four dimensions identified above. In this model, the work of art is said to incorporate all its possible meanings including those "that transcend, in one way or another, the artist's intentions and the limitation and convention of his or her historical period that yet are open to interpretation and understanding by the beholder" (p.135). Finally, the quality of the aesthetic experience is said to relate directly to the viewer's ability to engage in a meaningful dialogue with the work of art according to the above four dimensions, and to the extent that the viewer's understanding concurs with the meaning vested in the work by the artist. The degree of overlap between the viewer's skills, the art work's specificities, and the artist's intentions determines the extent and nature of the aesthetic experience (pp. 133-137).

The viewer's art appreciation skills are an essential factor in determining a successful outcome for art viewing activities. These skills are acquired and developed over time and with successive viewing experiences. The acquisition of such skills present specific challenges when the learner is an adult. According to the psychologist Gérard Artaud, in learning situations, adults must face and resolve the dilemma that arises from the confrontation between "a body of knowledge coming from an external source and the questions and intuitions that surface from within". More specifically, "the problem relates to the student's appropriation of knowledge" (Artaud, 1989, p. 115) [original translation].
Furthermore, the adult learner is never totally uninformed about a subject. It is clear that the "knowledge to be transmitted is not the only one to be taken into account; it interacts in permanence with this other knowledge that the student has constructed from his or her previous experience" (p. 121) [original translation]. Artaud identifies two types of knowledge, "experiential knowledge" and "theoretical knowledge", as the raw materials for adult learning.

Experiential knowledge "carries with it a whole series of representations that are developed internally starting from...[the learner's] interaction with reality and the prevalent cultural models that have informed his or her way of seeing and understanding" (p. 122) [original translation]. This knowledge is fragmentary and remains unorganized. The learner's attempts to inventory his or her experiential knowledge on any given subject usually raises numerous questions that, given the limitations of personal knowledge, remain unanswered. Thus, the learner must turn to an external, more perfected, body of knowledge in order to explore the problem from a new perspective. In contrast to experiential knowledge, theoretical knowledge is a body of knowledge that "has been developed by someone else" and originates from outside the learner. It is logical, coherent, well articulated and its structure is scientific in character. "It helps the learner to distance himself or herself from his or her own experience by proposing a panoramic view of reality" (p. 128) [original translation]. In the approach proposed by Artaud, the confrontation of experiential knowledge (inventoried during the first phase of the learning process) with theoretical knowledge is not an end in itself, but rather a second phase of learning. A third phase, "integration", aims to promote the emergence of new knowledge through the process of the "recreation of knowledge". This process represents "a passage from an initial symbolization to a more elaborate symbolization [through] the clarification of the content of the initial intuitions, a revised formulation of questions from a different point of view, the disclosure of the implications of this new knowledge in life and in action" (p. 141) [original translation].
The nature of the adult learning process described by Gérard Artaud is dynamic and constructive. In many respects, it brings to mind the way in which art viewing experiences involve an active exploration that eventually leads to an interpretation of the art object: art viewing and appreciation are also dynamic and constructive. Learning in the museum, however, is not a simple question of the transmission of knowledge from an authority to a learner, whether through books or other means. It is a self-guided, active learning experience in which the learner constructs new knowledge based on an encounter with an art object and other related sources of information. It is a form of experiential learning in the truest sense. Experiential learning is understood to be "learning in which the learner is directly in touch with the realities being studied. Experiential learning typically involves not merely observing the phenomenon being studied but also doing something with it, such as testing the dynamics of the reality to learn more about it, or applying the theory learned to deliver some desired result" (Keeton & Tate, 1987). Kolb's (1975, 1984) Experiential Learning Model provides an explanation of the cycle by which this kind of learning occurs. This model proposes a process of learning consisting of four distinct cyclical stages. In each stage, the learner applies different abilities and skills in order to support of his or her learning. The first stage consists of a concrete personal experience of the object or subject of inquiry. During the second stage, the learner reflects on his or her stage-one experience. In stage three, the learner connects his or her reflections to generalizations about the phenomena in question. In the fourth stage, these abstractions are put to the test in new and different situations. Finally, these fourth-stage experiments lead to the beginning of a new learning cycle, which is then repeated. "In order for learning or change to take place, the four stages of the cycle must be integrated; for example, an experience which is not reflected upon or is not tested in actual practice, is lost as potential learning" (Melamed, 1985, p. 1798). Kolb's conceptualization of experiential learning, therefore, emphasizes reflection and application as necessary for the integration of experience into the learner's existing body of knowledge.
A similar concept to Kolb's notion of integration is proposed by Csikszentmihalyi and Robinson. In devising the term informed experience to describe the special nature of aesthetic experience, Csikszentmihalyi and Robinson have opened the door to a new understanding of that experience. The term suggests an important connection between two components: information and experience. That is, an aesthetic encounter always involves interaction between these constituents. "The most basic avenues for facilitating meaningful encounters with works of art seem to derive from the interpenetration of knowledge and experience. If they are to obtain maximum benefit from the experience, viewers simply cannot enter the museum empty handed" (1990, p. 169).

Objectives in Proposing a New Model

Csikszentmihalyi & Robinson's Model of Aesthetic Experience by Interaction (1990) is a very useful theory for understanding the nature of aesthetic experience on a macroscopic level. It identifies the four major dimensions of aesthetic experience; it also clarifies how the artist's and the viewer's interpretations intersect and overlap within the much broader social context of the art work's existence as an independent cultural artifact. However, Csikszentmihalyi & Robinson's model does not propose an explanation of the individual behavior by which viewers come to interpret and appreciate works of arts. It is an explanation, at this level of understanding, that would be most useful to educators for teaching their students how to look at and interpret works of arts.

Existing models of adult learning do not provide an adequate explanation of the learning process that underlies art viewing experiences. Artaud's (1989) model of the recreation of knowledge explains the process of the transmission of knowledge as it happens within a traditional academic setting, such as a university. There is no construct in his model to account for experiential learning as a dynamic process: that is learning based on an experience as it happens. Artaud's model addresses the problem of experiential knowledge in a limited way; he restricts his definition of experiential knowledge to designate only the
body of knowledge that the learner has already acquired through experience prior to entering university. This is an important distinction because, in the museum, experiential learning has a different connotation: it is the practical object-centered learning that occurs "on the spot" and in "real time" as the learner encounters the art object. Furthermore, Artaud's model is intended to address the problems associated with textbook-based learning. Whereas, an aesthetic encounter in the museum is focused mainly on an art object, not a text. In the context of museum learning, this actual encounter between viewer and object is highly valued; without it there can be no aesthetic experience and, therefore, a model of museum learning must take into account this object-centered nature of the experience.

Kolb's (1975, 1984) model of experiential learning does describe experiential learning in dynamic terms. Kolb's conception of the process of experiential learning can be superimposed onto the process of aesthetic experience, and as such can provide insight into the mechanisms that might underlie aesthetic understanding. However, Kolb juxtaposes with his model a taxonomy of learning styles, in which each step in the experiential learning process is associated with a different, preferential, learning style. In adopting the position, summarized here by Sugarman (1985), that "few people are equally effective at and comfortable with all these processes" and that "people have preferred and habitual ways of learning" (p.265), Kolb casts doubts on his model's applicability as a prescriptive method for use in aesthetic education. Each successive step in the process of experiential learning is contingent upon mastering a different learning style; this implies that, by themselves, individuals cannot successfully negotiate all parts of the learning process described by Kolb. Kolb, therefore, is proposing an approach to experiential learning that is more appropriate for a classroom setting, because learning using this approach requires a cooperative, group effort. Furthermore, if Artaud's model does not account for experiential learning as a dynamic process, then Kolb's model is open to the criticism that it does not account for the role that theoretical bodies of knowledge play in the process of
aesthetic learning. As we will soon see, a model of aesthetic learning -- if it is to provide a
prescriptive means by which to teach about the appreciation of all kinds of art (including
non-western and contemporary art) -- must take heed of the need to accommodate
theoretical knowledge at some point in the learning cycle.

Introduction to the Model

Before presenting our model, it will be useful to briefly clarify of our objectives in
proposing it. The model of aesthetic learning that we are proposing here is not intended to
supersede the models of aesthetic experience and adult learning discussed in this article but,
rather, to compliment them. We are proposing a new approach to conceptualizing adult
museum visitors' aesthetic experiences. This model is different from others in that it
focuses particularly on the learning process which, we believe, is imbedded in all aesthetic
experiences. In order to describe this learning process, the different kinds of knowledge
implicated in aesthetic experience are identified, and the manner in which they interact is
outlined.

Knowledge is defined as "an individual's personal stock of information, skills,
experiences, beliefs, and memories. This knowledge is always idiosyncratic, reflecting the
vagaries of a person's own history. This use of the term knowledge contrasts with the use
of the term in the field of epistemology, where knowledge often refers to justified true
beliefs and is reserved for universal, or absolute, truths. Rather, in the [psychologically
oriented] literature we are reviewing here, knowledge encompasses all that a person knows
or believes to be true, whether or not it is verified as true in some sort of objective or
external way" (Alexander, Schallert, & Hare, 1991, p. 317). For the purposes of this
model, aesthetic experience is defined as an individual response to a work of art without
undue regard for the quality of that response. Therefore, the responses of novice and
expert viewers alike are considered to be essentially aesthetic in nature if they pertain to
works of art. Aesthetic experience is further defined as a learning process by which the
viewer, in encountering an art object, constructs new knowledge about the object in
question and, in occasional ideal situations, about the nature of art itself. An aesthetic experience leads to an aesthetic understanding of the work of art that the viewer can then share with others.

Our model addresses the problem of the interaction of two very different kinds of learning, whose deployment in tandem has tremendous potential for fostering aesthetic development. The first part of the model circumscribes the experiential learning that occurs when the adult learner encounters the art object. Experiential learning is central to the conceptualization of learning proposed in this model. Works of art must be experienced. Learners must not only look at the work of art, but they must also take the time required to really see it and respond to it. For these reasons, reading about a work of art, in a newspaper review for example, may not constitute an aesthetic experience. And, although reproductions can stand in as acceptable substitutes for two-dimensional works of art, they are only second best to the actual work itself.

The second part of the model defines the meta-level theoretical learning that takes place if the learner confronts the knowledge that results from his or her experiential encounter with external sources of knowledge. This external knowledge is essentially scientific in nature: it is, as Artaud (1989) defined it, a logical, coherent and well articulated body of knowledge. The adult learner can encounter this theoretical knowledge in a variety of ways: it may come to him or her in the form of a lecture by a curator or an artist; it may be accessed by reading an exhibition catalogue, a hand-out provided by the museum, or a series of wall panels included in an exhibition; it may be located as the result of a search for information at a library. In sum, there are various ways in which a learner can access theoretical information. However, this phase of learning (contrary to the first phase) can take place either in the presence or in the absence of the work of art. It is also essential to note that the objective of this second phase is to generate a new understanding about the work of art from both the insights provided by experiential learning and the intellectual distancing provided by theoretical information. This new understanding results from the
interaction of these two bodies of knowledge, yet it is different and distinct from either of these original sources.

Insert Figure 1 here.

Components of the Model

Experiential Learning.

In the first phase of the model, experiential learning (part "A" of Figure 1) occurs as the viewer encounters the work of art for the first time. Subsequent and additional experiential learning takes place each time the learner returns to the work of art in order to view it again. Experiential learning is the result of the interaction of two types of knowledge: mediating knowledge and objectified knowledge.

Mediating Knowledge. Our encounters with works of art are never neutral or objective. We bring to an aesthetic experience a whole set of previous art-viewing experiences and numerous assumptions about the nature and functions of art. These assumptions are derived mainly from former viewing experiences and from what we have learned about art through training or through the social process of acculturation. In an encounter with a work of art, we bring all our personal and professional past. Memories may be awakened by salient features of the work, and these will probably alter the experience. In addition to our assumptions and past experiences, we also apply our skills in looking at and understanding works of art, and our knowledge about the history of art, aesthetics, art criticism and art production.

Mediating knowledge, then, is the personalized body of knowledge that the viewer brings with him or her to the aesthetic encounter. It is comprised of the assumptions, the skills, the personal experiences, and formal knowledge — all acquired prior to the experience immediately at hand — that relate directly or indirectly to our personal practice of aesthetic appreciation. We have called this body of knowledge mediating knowledge
FIGURE 1
The Model of Aesthetic Understanding as Informed Experience
because of the role it plays in our aesthetic encounters. As this name implies, mediating knowledge is an intermediary that "stands" as a link between us and the art object. It assists us by providing a pathway and a structure for our exploration of the art object yet, in some respects, it hinders any possibility of experiencing the art object "directly" or objectively.

Differences in each person's "store" of mediating knowledge account for a major part of the variations in the nature of aesthetic experiences from one person to the next. Indeed, it is essentially differences in mediating knowledge that determines whether or not a viewer will be able to initiate and then sustain an aesthetic encounter with a particular art object. Therefore, a work of art may prove an exciting challenge for one viewer while, at the same time, rebuffing another, inadequately prepared one.

Throughout this presentation of the Model, we will provide an example of each major component by presenting an excerpt taken from our research data bank. In this example, an informant, named Paul, comments on his exploration of a photographic installation, in 1993, at the National Gallery of Canada, documenting Krzysztof Wodiczko's 1986 project for the Venice Biennale entitled *Projections on Venice*. For his participation in the Biennale, Wodiczko projected various photographic images of military armaments, as well as other objects, onto the surfaces of a number of architectural landmarks in Venice. The first excerpt below is indicative of Paul's use of mediating knowledge in exploring the work.

I was attracted upon seeing, upon glancing into this gallery, by the works of Krzysztof Wodiczko because they represent an architecture that I'm somewhat familiar with—the architecture of Venice.... In fact, I didn't notice [at first] that these were by Wodiczko.... What eventually hinted to that fact were the details of the photographs [projected] on the architectural structures. Wodiczko is known for his use of slides, [for his use] of enormous projections that he projects onto buildings, also of
monumental scale, that transform both the images that he projects and the buildings and architectural elements that receive them [original translation] (Lachapelle, 1993, p. 266).

In sum, as in the example above, mediating knowledge is the knowledge that viewers bring with them to the aesthetic encounter. Mediating knowledge provides viewers with their initial access to works of art.

Objectified Knowledge. Contrary to the subject-centered nature of mediating knowledge, objectified knowledge is located in an object: it is the knowledge that the work of art makes concrete and perceptible. In other words, the work of art is objectified knowledge. We have chosen this term to describe the art object, because it describes the manner by which the artwork stores and conveys knowledge. The verb "to objectify" is defined as follows: "to treat as an object or to cause to have objective reality; to give expression to (as an abstract notion, feeling, or ideal) in a form that can be experienced by others" (Merriam-Webster's Collegiate Dictionary, 1993, p. 801).

More specifically, objectified knowledge consists of the ideas and feelings that are communicated by the artist through the process of creation and dissemination of his or her work of art. Each aspect of the work of art conveys meaning, and therefore each is a source of objectified knowledge. Knowledge is embodied in a work of art each time the artist makes a decision regarding the work's message, subject matter, stylistic qualities, structure, medium, format, materials, and production processes.

The idea that the work of art embodies thought -- and, therefore, knowledge -- is supported by the work of other researchers. Rudolf Arnheim has argued forcefully for a definition of intelligence that includes visual perception and that also accepts visual representation, whether in the form of a scientific diagram or a work of art, as both the product and the material of intellectual activity.

The aesthetic element is present in all visual accounts attempted by human beings.... The value of visual presentation is no longer contested by
anybody. What we need to acknowledge is that perceptual and pictorial shapes are not only translations of thought products but the very flesh and blood of thinking itself and that an unbroken range of visual interpretation leads from the humble gestures of daily communication to the statements of great art (Arnheim, 1969, p. 134).

The work of art encapsulates, in the form of objectified knowledge, the intentions and thought of the artist who created it. The objectified knowledge that is the work of art determines the initial parameters for the aesthetic encounter between the viewer and the aesthetic object. It is in response to the specificities of the object encountered that a viewer begins to construct an aesthetic understanding of the work of art.

*Constructed Knowledge.* When a viewer encounters a work of art, an aesthetic experience begins to unfold in much the same manner as a dialogue between two individuals except that, in this case, the exchange occurs between a viewer and an aesthetic object. Through aesthetic dialogue, the interaction of two bodies of knowledge—mediating knowledge and objectified knowledge—produce a new kind of knowledge. This new knowledge embodies the meaning that the viewer has constructed about the work of art and, for this reason, we have called this third and distinct kind of knowledge: *constructed knowledge.* Constructed knowledge is a highly individualized form of knowledge; it consists of the personal meaning that the viewer has assigned to the work of art based only on his or her experiential encounter with it. Apart from the objectified knowledge contributed by the work of art itself, no other external source of knowledge has contributed, at this point, to the construction of the viewer's interpretation of the work of art. Therefore, constructed knowledge consists of the personal meaning that the viewer constructs to resolve the problems of understanding posed by the encounter with the work of art. Constructed knowledge is a result of a creative process based on imagination. Because the aesthetic experience has remained so far a private experience, the solutions that constructed knowledge provides to the questions raised by the work of art need only, for
the time being, satisfy the viewer. This is possible only because the viewer has yet to confront his or her ideas about the work of art with anyone else's. The personal interpretation embodied in constructed knowledge may or may not correspond, in whole or in part, to the artists' intention in producing the work of art or to anyone else's understanding of it. Constructed knowledge consists of a viewer's personal understanding of a work of art but, yet, it is not pure fabrication. It is, more precisely, the viewer's recreation of the work of art based on both fact and imagination: the facts apparent in the work of art and the intuitive insight provided by the viewer's imagination. It is also the final outcome of the first phase of the aesthetic understanding process: experiential learning.

The next citation from Paul's encounter with Krzysztof Wodiczko's Biennale project provides an example of the constructed knowledge that results from the interaction of the viewer's mediating knowledge and the work of art's objectified knowledge.

I imagine that is what Wodiczko wanted to do: to merge his images with the architecture to perhaps reveal its oppressive character. That brings to mind all kinds of ideas about the relationship that exists between the architectural environments with which people surround themselves and the actual people who live there [original translation] (Lachapelle, 1993, p. 272).

Theoretical Learning.

For some museum visitors, the aesthetic encounter with a work of art ends once constructed knowledge about the work of art has crystallized as a result of experiential learning. This is unfortunate because it is only in very exceptional cases that experiential learning, by itself, contributes to meaningful advances in viewers' aesthetic development. We believe that when experiential learning is combined with theoretical learning, the result is a potent partnership for fostering not only aesthetic understanding but also aesthetic development itself. In conceptualizing this model, we have chosen to separate, for the sake
of clarity, experiential learning and theoretical learning into two successive phases of learning. In fact, we are proposing that educators, who wish to use this model as a methodology for teaching aesthetic understanding, maintain this separation. Apart from the fact that this makes the process of aesthetic learning easier to grasp, there is another tremendous advantage in maintaining a clear distinction between experiential and theoretical learning. There can be no substitute for attentively looking at the work of art; yet, at the same time, few visitors are so self-sufficient that they can do without any sources of external information. Adult learners initiated to a two-phase process of aesthetic appreciation will fully realize the importance of both kinds of learning. They will be less inclined to overestimate the value of one over the other and, hopefully, they will continue to give equal weight to these two different and complimentary ways of accessing the work of art. In doing so, they will be ensuring their own long-term aesthetic development.

However, having made this point, we acknowledge that spontaneous museum visits are not always structured in such a coherent fashion. Theoretical learning sometimes gets thrown into the experiential learning phase, as visitors read wall texts, paddle boards, museum handouts, and copies of exhibition catalogues. However, to teach this as a way of proceeding can only add confusion to the way in which, ideally, a work of art should be approached.

constructed knowledge. The result of the experiential learning that took place during the initial encounter with the work of art, constructed knowledge, can now be used by the viewer as a reference to encounter external sources of information about the work of art. Through this second encounter (part "B" of the model), the viewer takes advantage of the insight and knowledge of others in order to further his aesthetic understanding about the work of art.

theoretical knowledge. In the context of a museum visit, the information available to the viewer can take many different forms: the artist's written account of his or her own work, the curator's formal justification for an exhibition, the complex treatise of a scholar,
the carefully constructed argument of a critic, the journalistic exposé of a reviewer, the synthesis of the museum educator's didactic text, and the informative excursion led by the museum guide or docent. Within the parameters of this model, the term theoretical knowledge is used to designate a very specific body of knowledge. This body of knowledge exists independently from the work of art, even though it refers to it. Theoretical knowledge, therefore, is to be found mainly in the texts that results from the intellectual work of curators, historians, critics, educators and reviewers. Sometimes, artists also engage in this kind of intellectual activity but, in doing so, they tend to leave behind their role as artists and adopt, instead, the frame of mind of a scholar.

For the purposes we are considering here, theoretical knowledge must retain some important characteristics, if we are not to loose sight of the role of theoretical learning in fostering aesthetic development. Theoretical knowledge is organized according to traditional disciplinary boundaries relating to the scholarly study of artistic production, art history, art criticism, and aesthetics. Theoretical knowledge must be logical, unified and well articulated. It must provide the concepts that will assist the viewer to separate fact from fiction, to eliminate any stereotyped ideas from his or her thinking, and to go beyond premature conclusions and initial, tentative, inferences about the meaning of work of art. In sum, theoretical knowledge must provide the means by which the viewer achieves a new and more satisfying understanding of the work of art based on a synthesis with the evidence observed in the work of art. Theoretical knowledge helps the viewer to stand back from his or her initial viewing experience in order to see the work of art more clearly. It provides "the bigger picture": a panoramic view of the work of art and situates it within the context from which it originated (Artaud, 1985, pp. 26-27; 1989, p. 128).

To continue with the example presented so far, the following citation reveals that Paul has read and is beginning to consider theoretical information presented in a wall text included as part of the photographic installation documenting Wodiczko's project.
In a text, he [Wodiczko] explains his work. And, for him, those images are intended in part to reveal the role that Venice has today and the function it once had in relation to the invention of the camera obscura.

(Lachapelle, 1993, p. 272)

Once the learner has mastered the concepts presented in the body of theoretical knowledge, he or she can then review the constructed knowledge arising from the earlier encounter with the work of art. This review is conducted in light of the viewer’s recent access to theoretical knowledge and, as it proceeds, an entirely new form of knowledge results from the integration of constructed knowledge and theoretical knowledge.

*Reconstructed Knowledge.* Reconstructed knowledge is the name that we have given to the distinct type of knowledge that is created by a process of interaction between constructed and theoretical knowledge. As the name suggests, the knowledge constructed during the phase of experiential learning is reconstructed in light of the new understanding provided by a theoretical framework. Reconstructed knowledge is akin to the integrated knowledge that, in Artaud’s (1989) theory, results from the integration of a learner’s corpus of experiential knowledge with a newly acquired body of theoretical knowledge. However, reconstructed knowledge differs from integrated knowledge in that one of its initial components—constructed knowledge—is the product of a complex and dynamic experiential learning process that began just minutes, hours or days earlier. Furthermore, the theoretical learning process that leads to reconstructed knowledge is a continuation—a second phase—of the learning initiated earlier by the encounter with a work of art. Finally, in the process of aesthetic learning, additional phases of learning (part "C" of the model) are possible if the viewer decides to return to the work of art to view it one or more times. When the learner returns to the work of art for another viewing, the reconstructed understanding of the work of art can be strengthened and fine-tuned by confronting it to the actual work of art itself.
Here is an excerpt from Paul's account of the final outcome of his attempt to fully understand and appreciate Krzysztof Wodiczko's *Projections on Venice*. This last excerpt presents the reconstructed knowledge about the installation that Paul has formulated as a result of the confrontation between his earlier understanding of the piece (constructed knowledge) and the information (theoretical knowledge) he encountered by reading the wall text in the exhibition.

[Venice] was, I agree, a merchant city, but it also was a place of, a warmongering city. Also, as shown by the Arsenal, it also was an empire whose strength was based on, well, brutal force also....I think that what Wodiczko does is, in part, to confront the past with the present and to show them side by side in the same architectural setting and all that. She [Venice] has become, in Wodiczko's own words, a sort of tourist destination, a "Disneyland", where tourists armed with their guide books attempt to be moved by its artistic masterpieces [original translation] (Lachapelle, 1993, p. 273).

The concept of reconstructed knowledge presented in this model is also understood to be the locus of the social meaning of the work of art. Through the reconstruction of knowledge, the viewer's personal meaning for the work of art (embodied in constructed knowledge) enters into a dialogue with the public meaning of the work of art conveyed by disciplinary (theoretical) knowledge. The result is a new meaning for the work of art: one that, at least in part, is socially shared by the viewer and all other contributors. The viewer has become part of a much larger social interchange: an enterprise that is focused on the extraction and explication of a common understanding of the work of art. In a sense, the viewer has shed the constricting parameters of the former, strictly personal, explanation of the work of art in order to embrace a new, potentially more rewarding, socially-shared interpretation. However, in doing so, the viewer does not discard the personal meaning constructed during the experiential learning phase. Personal meaning is embedded in the
new socially-shared interpretation: both now reside within reconstructed knowledge. The preservation of personal meaning during the construction of social meaning gives to the new interpretation of the work of art a strength of conviction that can only come from having personally experienced the work of art. In this way, the reconstruction of aesthetic knowledge almost always results in a gain in understanding and appreciation.

**Empirical Evidence in Support of the Model**

**Objectives of the Study**

Over a three-year period, we conducted a qualitative study to verify whether the aesthetic responses of a group of viewers actually featured the types of knowledge and learning described by the Model.

**Method**

**Participants.** In total, 30 adult volunteers took part in the study. All of the informants were either graduate-level university students or senior undergraduate students in the final year of their program of studies. Of the 26 case studies retained for analysis, 20 were collected from women and 6 were from men. Seventeen of the 26 informants either had completed or were about to complete university level training in the visual arts, 8 were students in various programs in education, and 1 was undertaking independent studies.

**Overview of the protocol.** Each informant participated in an individual data collection session that lasted two hours. Data was collected using a procedure (validated in a previous study) known as Informant-Made Video Recordings (Lachapelle, 1999). Each individual session consisted of the following activities: (i) instruction in the use of a camcorder, (ii) production of a short practice video, (iii) production of two five-minute video tapes about two different works of art, and (iv) completion of a short biographical questionnaire.

**Materials.** For the production of their video-taped responses to works of art, informants choose two works of art from a set of 12 reproductions of painting and
drawings. The set of reproductions included historical and contemporary examples of Canadian, European, American, Indian, and Inuit art; it also comprised figurative and abstract works. Each reproduction was accompanied by an extended label which included the artist's name, origins and time period, the title and date of the work of art, a description of the materials and original size of the work, and a short text that provided additional information about the work. The optimal length of this text was deemed to be 100 words or less based on the findings of research by J.E.V. Temme (1992).

All of the informant-made video tapes were recorded using a SONY CCD-TR940 Hi-8 camcorder.

Procedures. The informant was shown all of the reproductions one by one and asked to make a selection. The chosen reproduction and its label were then displayed on a blank wall in the research lab. First, the participant was asked to view the reproduction for five minutes. Then, he or she was asked to respond verbally to the work of art in a 5 minute video-taped recording. More specifically, the researchers asked the informant to retrace and document the steps he or she took in order to explore and understand the work of art in question. When the informant was ready to begin video-taping a response, the researchers left the room until the taping was completed. The procedure described here was repeated once using a different reproduction.

Data Analysis

Coding manual. Discourse analysis was the method used for studying the contents of each informant's video recording. Prior to conducting the discourse analyses, the research team generated a coding manual which defined the various types of knowledge and learning predicted by the model. The rules for identifying each type of knowledge and learning were specified in the coding manual: clear reference examples were also provided for each category. Using a different data set from that collected for this study, the coding manual was tested and re-tested a number of times until the research team was satisfied that the guiding principles specified in the manual were clear and complete enough for use in
coding all possible categories of data likely to be encountered in the research data. Eventually, the research team determined that the fourth version of the coding manual was ready for use in conducting the analysis of the study results.

**Coding procedures.** All three research team members participated in the coding of the data collected from each informant. First, typewritten transcripts of the informants' verbal discourse, as recorded on video tape, were produced in order to facilitate the discourse analysis. Second, working separately, the members of the research team coded each informant's transcript. Eventually, the research team met in order to discuss the breakdown of the units of speech and the codings assigned to the speech units by each team member. Consensus among team members was used to determine the decisive breakdown of units of speech and their coding according to the rules specified in the coding manual.

**Results**

**Frequencies of the different knowledge types.** Table 1 presents the outcome of the analysis of informants' discourse. Units of constructed knowledge (CK) were found in all 26 informants' discourse about the works of art. The number of CK units coded ranged from a low of 5 (informant no. 7) to a high of 36 (informant no. 24). The average number of units was 17.15. Units of reconstructed knowledge (RK) were identified in the discourse of all informants except three (informants no. 15, 22, and 24). When identified in an informant's discourse, the number of coded units of RK ranged from a high of 20 (informant no. 6) to a low of 2 (informants no. 16 and 20). The average number of units was 8.23 per informant. Also of significance was the number of units of speech coded as "other" (OT). We will discuss the meaning of these units in the next section. We identified such units in the discourse of all informants, with the exception of informant no. 10. The average number of units coded as OT was 5.69 per informant.

A surprise finding of our study was the identification of units of mediating knowledge during the theoretical phase of learning. This was the case with half of the
informants (13/26). Of these thirteen informants, most used 1 or 2 units of mediating knowledge during their theoretical learning, while three others generated between 3 and 6 such units.

Insert Table 1 here.

**Patterns of learning.** Using the results of the discourse analysis, we were also able to identify a number of patterns in regard to the cycles of experiential and theoretical learning undertaken by each informant. According to the Model, experiential learning is deemed to have occurred when constructed knowledge is formulated by the viewer. Likewise, reconstructed knowledge is the product of theoretical learning and, therefore, the presence of reconstructed knowledge in informants' discourse is a sign that theoretical learning has taken place. Table 2 presents the cycles of experiential and theoretical learning, that are associated with constructed knowledge (CK) and reconstructed knowledge (RK) respectively, as they occurred in the viewing experiences of our informants. The most common pattern of learning identified in our data set was "CK—RK—CK", where a first period of experiential learning is followed by a bout of theoretical learning which, in turn, leads to a second segment of experiential learning. This pattern was found in 7 of the transcripts. In all, we were able to identify 8 different patterns of learning.

Insert Table 2 here.

**Discussion**

Based on the results of the data analysis, we are able to confirm that all informants engaged in experiential learning at some point in their art viewing experience. In doing so, they attempted to apply their own existing knowledge (mediating knowledge) and the
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**Table 1**

*Number of Coded Units*

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\(^A\) The following categories were used for the coding of the data: objectified knowledge (OK), mediating knowledge (MK), constructed knowledge (CK), theoretical knowledge (TK), reconstructed knowledge (RK), and other types (OT).
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Table 2
Patterns of Learning
knowledge encoded in the work of art (objectified knowledge) in order to formulate an interpretation (constructed knowledge) of the work of art. Of the total of 26 informants, the majority (24) explored the work of art by first engaging in experiential learning. A large number of informants (19) undertook two or more periods of experiential learning over the course of their art viewing experience. Three informants (Table 1: informants no. 15, 22, and 24) limited their exploration of the work of art to one single, extended cycle of experiential learning. Upon examination of the biographical data for these three informants, we discovered that all three were visual art experts: they had completed undergraduate studies in art history, art production and art education and all three were in the process of completing graduate studies in the same disciplines. This find has led us to formulate a working hypothesis about viewers with extensive expertise in the visual arts: such viewers may feel more confident about their art viewing skills and, therefore, they may not need to refer every time to external sources of knowledge to inform their interpretations.

Our analysis of the data also reveals that 23 of the informants engaged in one or more periods of theoretical learning during the course of their art viewing experiences. During these segments, 21 informants confronted their initial interpretations (constructed knowledge) of the works of art with the external, text-based information (theoretical knowledge) made available in the extended labels. In doing so, they formulated new and more perfected interpretations (reconstructed knowledge) about the meaning of the art works. For two informants, the direction of the cycle of learning was reversed. Informants no. 9 and 10 engaged first in a period of theoretical learning followed by one or more periods of experiential and theoretical learning.

During the discourse analysis, we also uncovered a number of speech units which did not refer directly to the work of art or to art-related sources of information. The majority of these units—which we coded as "Other" (OT) units—addressed the informants' growing awareness of their own art viewing process (an average of 3.31 units per viewer).
As for the rest of the units coded as OT (an average of 2.38 units per viewer), we found that the informants used these units of speech to orient their viewing activities. These units related to informants' plans, intentions, and movements and, as such, they were intended to provide a structure to their art viewing activities. In the graphic representation of the Model (Figure 1), the metacognitive body of knowledge, that viewers construct about the processes underlying their aesthetic experiences, is represented by the larger outer spiral. Metacognition is probably the most important form of knowledge that viewers use in order to foster their ongoing aesthetic development. In formulating this knowledge, viewers likely take stock of their strengths and weaknesses and, in the process, formulate objectives for their ongoing development in regard to their aesthetic experiences.

Upon closer examination of the transcripts, the occurrences of units of mediating knowledge during periods of theoretical learning were found to be related to the connections that informants were making between their past experiences and the text-based information presented in the extended labels. This has led us to conclude that, although particular types are knowledge are used more extensively at certain times in the aesthetic learning process, all the knowledge types remain as permanent references that can be consulted at any point in the learning cycle. In the present study, this has been demonstrated to be the case for mediating knowledge. However, we suspect that this is also true for objectified knowledge. In sum, at any time during the aesthetic encounter, including periods of theoretical learning, the viewer is free to call upon his or her past experience or to look at the work of art in order to extract whatever information is useful in furthering his or her viewing experience. In the graphic representation of the Model, we have chosen a spiral to symbolize the learning process underlying art viewing experiences: a spiral works well to symbolize the additive effect of the different phases of learning. Each new turn in the spiral is possible only because of the learning that has preceded it. However, with each new loop, a better understanding of the work of art is being constructed.
The eight different patterns of learning identified as a result of the discourse analysis (Table 2) implies that the learning pathways used by the informants are essentially idiosyncratic. We suspect that these patterns are also related to the specificities of the different works of art. If that is the case, it is likely that each individual informant's patterns of experiential and theoretical learning would vary according to the content and the challenges presented by different works of art. For example, a very challenging work of art might require that a viewer engage in a greater number of experiential-theoretical learning cycles, in effect, by going back and forth a greater number of times between art viewing and information seeking activities. With a more accessible work of art, one cycle of experiential and theoretical learning might suffice. In fact, our Model allows for such variability in individual learning. The graphic representation of the Model (Figure 1) depicts each bout of experiential or theoretical learning as a single event in a series of ongoing cycles of experiential and theoretical learning that unfolds over time.

Furthermore, the findings of this study (as presented in Table 2) provide evidence to support the notion that most art viewing experiences begin with an experiential (CK) encounter with the work of art. This was the case for the majority of our informants (n=24). However, a viewer can also initiate his or her art encounter by referring to some external source of information about the work, such as an extended museum label. This was the case for two of our informants. In such situations, it is understood that the aesthetic experience is initiated by engaging first in theoretical learning, instead of experiential learning. As long as the viewer eventually proceeds to an experiential encounter with the work of art, these experiences are also considered to be aesthetic in nature. However, according to the definition of aesthetic experience we presented earlier, a learning activity that is restricted to theoretical learning cannot be considered an aesthetic experience, as no encounter with the work of art (or an adequate facsimile) has taken place.
Usefulness of the Model

The Model of Aesthetic Understanding as Informed Experience can be understood to be a descriptive model, in that it circumscribes what actually happens, in terms of learning, when viewers look at works of art. However, in some cases, the theoretical learning that is described in the model may be less likely to occur spontaneously in the natural setting—the museum—for two reasons. First, theoretical information is not always provided by art museums in support of the works of art on display. Second, viewers are not always aware of the contribution that such information can make to their understanding and enjoyment of works of art and, therefore, they sometimes ignore this information, even when it is provided. Ultimately, the model is an account of aesthetic experience not necessarily as it occurs every time, but as it can occur in its ideal form. As a model of the ideal aesthetic experience, it explains how experiential learning can interact with theoretical learning in such a way as to lead to real gains in terms of the learner's aesthetic understanding and aesthetic development.

The Model is also a prescriptive model in that it proposes a particular approach for the teaching of aesthetic understanding to adult learners. As such, it is anticipated that museum and art educators will find the model useful in providing a step-by-step approach to the study of art appreciation. The model promotes the understanding of the art viewing process by providing a kind of map of the cognitive terrain involved and the pathways to be followed in this activity. Researchers, educators and learners can all profit from this kind of information. For example, it is far easier to plan educational activities for the development of skills in aesthetic appreciation, when educators have a clear idea of the objectives that must be met if adult learners are to have successful aesthetic experiences.

Furthermore, the model emphasizes an active approach to aesthetic learning that meets the needs of adult learners. Rather than becoming the passive recipients of interminable art history lectures, adults can learn the skills required for viewing and researching works of art in ways that will maximize their own understanding and
enjoyment. Furthermore, the model acknowledges, through its emphasis on mediating knowledge during the first phase of the learning process, the considerable body of knowledge that adults bring with them to their aesthetic encounters. This acknowledgment empowers the adult learner by placing him or her in the position of a knower. Thus, it encourages the learner to build on what he or she already knows. It also encourages the learner to take charge of his or her own aesthetic training from an early point in any learning program.

Finally, the teaching of aesthetic appreciation by adherence to the principles laid out in the model will promote, in the long term, the independent learning of adult viewers. More precisely, the teaching of the theoretical learning phase, as an essential part of the process of aesthetic experience, will ensure that the adult learners exposed to these notions acquire the research skills necessary for the continuous updating of their own skills and knowledge in aesthetic appreciation. In doing so, these learners will act as the guarantors of their own aesthetic development.
References


Author Note

Richard Lachapelle, Department of Art Education; Deborah Murray, Department of Education; Sandy Neim, Montreal, Canada.

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Endnotes

1 Four case studies were not subjected to analytic procedures. Of these, three case studies were excluded because, at the request of the participants, the sessions were conducted in French instead of English. One case study was excluded because the informant had clearly misunderstood the research instructions.