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**The Typologies of Cognitive Dissonance
and the Self-Guided Adult Visitor:
Assessing Interpretive Aids in a Fine Arts Museum**

Lise M. Dubé

A Thesis

in

The Department

of

Art Education

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
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ABSTRACT

The Typologies of Cognitive Dissonance and the Self-Guided Adult Visitor: Assessing Interpretive Aids in a Fine Arts Museum

Lise M. Dubé

Cognitive dissonances can occur when self-guided visitors confront art works in museums which do not agree with their previously held cognitions. As a result, visitors can experience frustration and anxiety because they are unable to find immediate sources through which they can resolve their dissonances. Recently, there has been increased interest by museum educators to develop and place multi-media interpretive aids directly in gallery spaces to better assist the high percentage of visitors who circulate through museums unsupported by planned programs and tours. After reviewing the Typologies of Dissonance and the interpretive aids currently in place in a Fine Arts Museum, this study examines whether or not these aids are able to assist in the resolution of visitors dissonances and thereby promote learning through the acquisition of new experiences and/or knowledge.

To Shaun for seeing in me what I can often not see in myself.
Your generosity of spirit, creativity, and unwavering
commitment to your friends inspires me everyday.

To Neil for not only knowing I should do it, but for
always believing I could do it.

and

To Dad for always supporting my decisions, encouraging my
independence, and welcoming my curiosity.
I carry you always in my heart.

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Chapter 1

The Museum as a Learning Experience Introduction

How do visitors learn in art museum settings? Are we able to assess learning in such situations? How do we know what information visitors require to enhance their experience of an art work? How much additional information is needed, or is too much? Or, what happens when a museum fails to provide enough support material to help self-guided visitors resolve any questions that may arise while they are viewing art works or circulating through the museum? Should visitors leave the museum with more questions than when they arrived and a desire to learn more? Should they leave feeling unsatisfied, discouraged, and even a failure because they do not perceive themselves as having benefited in any way from their experience? A museum visit is meant to be rewarding, uplifting, enriching, and educational.

The museum offers a place where the opportunity for learning presents itself through the using of one's imagination, opening oneself to new things, discovering rare, surprising, valuable or little known objects, acquiring knowledge, improving and verifying it, reflecting or gaining a deeper understanding of the meaning of things. (Dufresne-Tassé and Lefebvre, 1994, p. 478)

How then can we ensure visitors leave having engaged in a meaningful, beneficial experience that promotes learning through the acquisition of new experiences or knowledge?

As a museum educator my primary responsibility is to visitors: adult, child, family, or school-group. My position within the museum is to design

and implement educational programs to ensure visitors leave feeling satisfied intellectually, emotionally, and yes, even physically. I facilitate a dialogue between the art works and visitors. Whether I am with a group or an individual I am trained to assess and respond to their needs. I can draw on my many resources to enhance their interaction with, and response to, the art works they are viewing using a variety of teaching methods. But what about those visitors who enter the museum with no desire to participate in guided tours or programs? How can I as an educator ensure they are provided with enough support material to respond to questions or conflicts that may arise during their self-guided visit? How too, can I predict those needs?

Museologists John Falk and Lynn Dierking (1995) state:

Assessing how and what people learn in museums has been a long-standing unresolved issue within the museum profession. After nearly three quarters of a century of inquiry, understanding the long term impact of the museum experience continues to be the most difficult aspect of visitor research. (p. 10)

Most of the difficulty lies in the inherent complexity of the museum environment and the diversity of visitors that frequent museums. Visitors are faced with a substantial amount of new information and decisions they must make as soon as they enter the building: Where do I pay? How do I find the exhibition I wish to see? What does the word "genre" mean? How should I move through the gallery space? Why did the artist paint like this? Is there anywhere to sit down? Where are the washrooms? From the mundane to the complex, these questions demonstrate the diverse needs of museum visitors. Researchers Eisner and Dobbs (1988) elaborate:

Most visit the museum less than once each year. Over ninety percent of them come on their own and visit the galleries unaccompanied by docents, lecturers or group leaders. They tend to have achieved high levels of schooling, but modest levels of art education. They not only come on their own, they tour on their own, and the extent to which they are able to experience the works on display depends on the particular works they encounter, the backgrounds they possess, and what the museum does to provide assistance. (p. 7)

Taking into account these characteristics and the complexity of the museum visit it is not surprising that each individual has their own agenda, expectations, and experiences that must be accounted for when trying to assess and promote learning in a museum setting.

Working with visitors on a daily basis I witness many of the frustrations and difficulties they experience while in the museum. Whether they are simply unable to find the entrance to an exhibition, or whether they have questions regarding the artworks on display, in my experience, self-guided visitors are often left to deal with their questions and concerns on their own. These questions

...on the whole, ...reflect some sort of cognitive and emotional engagement, which gets blocked each time the visitor fails to find a reply in the exhibition hall: it is an investment that can not be pursued, due to the lack of conditions for doing so.
(Dufresne-Tassé et al., 1994, p. 477)

Visitors' inability to reconcile their questions is largely due to the lack of self-directed interpretive materials provided by the museum for visitor use while they are in the galleries. Often in exhibitions there are few interpretive aids beyond basic labels and traditional didactic panels for visitors to access as they pursue answers to their questions. "Visitors' unresolved quest for answers thereby results in a demanding, anxiety provoking, problematic, and

frustrating experience which does not provide any [educational] benefit to the visitor” (Dufresne-Tassé et al., 1994, p. 478). These casual observations took on an even greater significance when I was engaged as a research assistant for one component of a large inter-university project studying the psychological functioning of adults in three different settings: a botanical garden, an art museum, and a history museum. (Dufresne-Tassé et al., 1994) Through my involvement with this research initiative aimed at studying the cognitive dissonances experienced by self-guided museum visitors, my suppositions evolved into tangible areas of investigation that resulted in this inquiry.

Chapter 2

A Foundation From Which to Work Theoretical Underpinnings

“In order to understand the process of learning one has to study how the visitor functions during the museum visit” (Weltzl-Fairchild, Dufresne-Tassé and Dubé, 1997, p. 159). One component of the larger inter-university project sought to identify the conflicts, or cognitive dissonances adult visitors encounter while viewing works of art in a museum setting. (Weltzl-Fairchild et al., 1997) The recorded and transcribed verbalizations of ninety visitors who toured the permanent collection of a Fine Arts museum formed the basis of the data collected with the theory of cognitive dissonance providing the theoretical framework for the analysis.

Festinger (1957) defines cognitive dissonance as “the existence of non fitting relations among [two] cognitions” with cognitions being broadly defined as “any knowledge, opinion, or belief about the environment, about oneself, or about one’s behavior” (p. 3). Festinger (1957) cites two common circumstances which lead to a state of dissonance:

1. New events... or new information may become known to a person, creating at least a momentary dissonance with existing knowledge, opinion or cognition concerning behavior. (p. 4)
2. When an opinion must be formed or a decision taken, some dissonance is almost unavoidably created between the cognition of the action taken and those opinions or knowledges which tend to point to a different action. (p.5)

Once one enters into a state of dissonance there is immediate action to either reduce, avoid, or resolve the dissonance. According to Festinger, (as cited in

Weltzl-Fairchild et al., 1997, p. 160)

...this can be achieved in one of three ways: a) by changing one or more of the elements involved in the dissonant relation, b) by adding new cognitive elements, or c) by decreasing the importance of the elements involved.

Through this process one can move to a state of consonance or cognitive coherence. (Zusne, 1986) How then does the theory of cognitive dissonance apply to the analysis of adult learning in museum settings?

In the...project, interest [was] in the global functioning of the adult visitor in the... museum. Dissonance [was] an element in the verbalizations of these visitors. This caused us to question how these conflicts were played out in the museum visit. What were the causes of these dissonances? Were there resolutions to these and if so, how did the visitor resolve the dissonance? If on the other hand, there was no resolution, what was the cause of this? Were these dissonances amenable to a resolution? Do these in fact provide opportunities for learning...? If it does, how does learning come about? If it doesn't, why not? (Weltzl-Fairchild et al., 1997, p. 160)

The results derived from the ninety transcripts analyzed (Table 1) revealed that dissonances are grouped around certain issues: information (previous knowledge), expectations of the museum experience, issues related to the art works themselves, and personal taste "with few of the dissonances resolved by the visitor during their visit often due to a lack of [available] support [materials]" (Weltzl-Fairchild et al., 1997, p. 164).

Reviewing the Typologies of Cognitive Dissonance (Table 1) it is apparent that some of the dissonances experienced are more resistant to resolution as they are based on issues of idiosyncratic taste. But what about those dissonances that offer the possibility of resolution? Can museums play a role in assisting visitors to resolve these conflicts? What if museums,

through evaluation, identify commonly experienced dissonances and seek to develop interpretive aids with content driven by these issues? What if these interpretive aids were placed directly in the galleries to allow visitors to access them at their discretion? Would museums then begin to better meet the educational needs of self-guided adult visitors?

This study drew on these questions as it sought to apply the theoretical perspective of cognitive dissonance as identified in the Typologies of Cognitive Dissonance (Table 1) to an actual situation in which interpretive aids are in place within a gallery for use by self-guided adult visitors. This would allow for a determination of whether or not the availability of interpretive aids to visitors could assist in the resolution of their cognitive dissonances as identified and thereby promote learning within the museum context.

Table 1
Typologies of Cognitive Dissonance

Dissonance	Type
<p>1. Dissonance between previous knowledge, label and artwork.</p>	<ul style="list-style-type: none"> a. Conflict between previous knowledge and perception of the art work. b. Conflict between label and perception of artwork. c. Conflict between previous knowledge and label
<p>2. Dissonance between the visitor's expectations and the aesthetic event.</p>	<ul style="list-style-type: none"> a. Conflict about the quality of the visit. b. Conflict about the museum's role. c. Conflict about the art object (Notions of Beauty and communication) d. Conflict about the museum's organization.
<p>3. Dissonance perceived within the art object.</p>	<ul style="list-style-type: none"> a. Conflict perceived concerning the criteria of realism. b. Conflict perceived between parts within the art object. c. Conflict perceived between the symbolic message and the means of expression.
<p>4. Dissonance based on the visitor's personal, idiosyncratic taste.</p>	<ul style="list-style-type: none"> a. Conflict between the visitor's taste and some part of the visual language of the art work. b. Conflict between the visitor's taste and the content of the art work. c. Conflict between the visitor's taste and the artist's style.

(Weltzl-Fairchild et al., 1997, p. 162)

Chapter 3

Museums, Learning & Adults A Review of the Literature

While this study finds its theoretical underpinnings in cognitive dissonance there is a broader context which must be examined and discussed in order to firmly establish the position of this investigation within a larger framework. At the foundation of this study is the notion that art museums can and should serve not only as places of pleasure and enjoyment for visitors, but also as places where informal learning can occur. Although this position was briefly explored in the introduction, it will be further elaborated on through a review of the literature that supports this position.

Currently there exists no consensus as to the educational role of art museums despite the focus museum professionals place on its importance. There are still many who are traditionalists or “purists” within the field. These museum professionals view art museums as places of conservation, collection, and preservation. They maintain that learning occurs simply through the displaying of the art works and the opening of the front doors to allow in the public. By contrast, in recent years there has been a surge by museums to increase their educational mandate and simultaneously expand their audience. This “realignment of practice” has been widely discussed and documented thus creating a vast body of literature on the subject.

In order to synthesize the extensive and varied amount of documentation currently available on the educational function of museums,

this literature review focuses on areas that lend support to the theoretical underpinnings and provide an overall positioning of this study within the museological field. In brief the areas of discussion will focus on:

- The Educational Mandate of Art Museums: A Current Perspective
- The Museum as a Learning Environment
- Adult Learners in the Museum
- Creating Learning Opportunities for Self-Guided Adult Visitors

With the framework of this study established, an elaboration of the actual research initiative undertaken will then be presented together with a summary and discussion of the findings.

The Educational Mandate of Art Museums: A Current Perspective

From the traditional notion that museums are only responsible for the acquisition, conservation, and exhibition of art works to the more recent implementation of multi-media and new technologies practices within exhibits, there exists as many opinions and thoughts on museums' responsibilities with regards to promoting learning opportunities for visitors as there are museums in North America. Searching for a cohesive view on learning in museums transforms itself anew with each museum and with every museum professional encountered.

Each museum situation tends to be unique in terms of the educational decisions made. Institutions are distinctive in terms of their subject matter, size, location, funding, missions and mandates, goals and methods, and people working to produce specific environments. Each situation seems to be full of complexities and differences in values and perspectives, and each provides alternative solutions to producing effective environments for casual visitor experiences. (Soren, 1992, p. 91)

The educational mandate of museums remains a domain subject to a multitude of interpretations even with the emergence of leadership documents such as the American Association of Museums' 1992 report *Excellence and Equity, Education and the Public Dimension of Museums* which was "the first major report on the educational role of museums ever to be issued by the American Association of Museums" (p.3). In 1994, the Canadian Museums Association also embarked on such an initiative by establishing an educational task force to prepare a Canadian perspective on the educational mandate of our museums. To date there has been no formal publication or statement to clarify their position, however it is believed that it will not vary greatly from the American Association of Museums' report. Although these initiatives seek to clarify the current educational responsibilities of museums in a policy oriented manner, they can not ensure that they will be embraced by the museum community nor that the standards they have recommended will be implemented by all museums. The level of acceptance and implementation really depends on the individual museum professional who receives the recommendations and ultimately must integrate them into the educational practice of their particular museum.

Regardless of the goals of the leadership reports, what has become increasingly obvious in recent years, is that a great many museums in North America and elsewhere are actively taking on the responsibility of promoting learning for self-guided visitors. Much of this activity has been prompted by museum professionals' realizing visitors want, need, and deserve more than

what they have been offered in the past. White walls, silent spaces, and artspeak are no longer acceptable. In 1988 researchers Eisner and Dobbs stated, "Visitors need bridges that will help them experience the works on display" (p. 15). Whether the term bridges, supports or aids are used, what is clear is that the literature considering how museums are responding to self-guided visitors' needs, has become more prevalent in professional publications in recent years.

A survey of several professional journals (*Museum News, Muse, Museums International, Curator*) reveals numerous examples of strategies implemented by museums from Glasgow to Calgary. (Spalding, 1993; Janes, 1994; Worts, 1997) These examples clearly indicate new approaches in the creation of enhanced learning support for visitors. Whether these changes are precipitated by new funding mandates which place emphasis on an extended educational dimension within the museum, or by a genuine desire of museum professionals to better support visitors, what holds true is that visitors are beginning to benefit in tangible ways.

Even with this increased emphasis on the educational mandate of museums there still remains numerous gaps in the knowledge about how, and what people actually learn in museums.

Previous attempts to define and measure learning in museums have lacked both a clear focus and a well formed theoretical underpinning. Consequently, understanding of even the most fundamental questions about learning in museums remains elusive. (Falk and Dierking, 1995, p. 9)

Much of what has been studied to date focuses on school age children's

learning within the museum and on educator led programs and tours. (Canadian Museums Association, 1989; Sheppard, 1993; Durant, 1996; Sode Funch, 1997) In recent years a body of research has emerged focusing on the learning implications of museums with regards to self-guided adult visitors. (Eisner and Dobbs, 1988; Falk and Dierking, 1992, 1995; Gardner and Davis, 1993; Dufresne-Tassé and Lefebvre, 1994) As previously stated, these visitors comprise the largest group of museum-goers. If museums are to better meet their educational mandates they must be able to address the needs of this large part of their visitorship while at the same time embrace the distinctiveness of each museum learning experience.

The Museum as a Learning Environment

What gives museums a unique presence within the educational realm is that learning opportunities stem from visitor interaction with real objects. Both art works and artifacts present a starting point from which communication, dialogue, and learning between visitors and objects/art works can emerge. Hooper-Greenhill (1991) elaborates:

Working with real things enables all kinds of thinking to occur, including making comparisons, remembering, making relationships, classifying, interrogating, moving from concrete observations to abstract concepts, extending from the known into the unknown, and from specific observations to generalizations. The unique feature of this occurrence of these processes in museums and galleries is that they happen spontaneously in conjunction with an almost involuntary use of the senses. Learning becomes less contrived, more enjoyable and genuinely exploratory. (p. 102)

Researchers Falk, Dierking and Holland (1995) also support this perspective

stating that "...museums provide direct experience with real objects in an appropriate context... and museums are perhaps most uniquely, places for active personal exploration" (p. 19).

The uniqueness of each visitor's direct interaction with objects and art works further complicates the discussion of learning in museums because the traditional models used in formal education, primarily based on extrinsic motivation, do not apply to museums "where without external means to compel a visitor's attention, [visitors] must rely almost exclusively on intrinsic rewards" (Csikszentmihályi and Hermanson, 1995, p. 68). Mistakenly, in searching for a means of understanding learning in museums, museum educators often turn to leading learning theorists of the twentieth century for theoretical support: Piaget's theory of re-equilibration (1985); Dewey's theory of experiential learning (1934); and Knowles' work in adult education (1977). While their work provides insights into how people actively process collected information and "how [people] use this information to build complex, internal structures called schemata" (Falk and Dierking, 1995, p. 11) it does not necessarily translate from structured learning environments to the informal nature of learning in museums. Still "knowledge about how people learn and how best to communicate information to them is paramount in the planning and implementation of teaching techniques [in museums]" (Sternberg, 1989, p. 155).

While these educational theorists have contributed invaluable insights into how people learn, it is often difficult to directly apply or translate those

insights into a museum context as there now exists a clear distinction between schools as formal learning sites and museums as informal learning sites. (Carr, 1992) As informal learning sites,

...museums...foster autonomous individual learning, emphasize timelessness and breath, and accept diverse learners, but they offer neither evaluations nor credentials, they do not require attendance by law or other authority, and they emphasize objects and experiences in the world outside. Cultural institutions are lifelong learning environments: their contents and messages attend to human beings across the life span....These criteria often help to define the educative characteristics of cultural institutions.... (Carr. 1985, p. 54)

This exploratory or informal learning within museums according to Falk, Dierking and Holland (1995):

...is an accepted phenomenon among people in the museum community, even though we may have different definitions of what it means... Informal learning is becoming an important catch phrase for the significance and value of a museum visit. (p.18)

Carr (1992) further elaborates this differentiation by describing cultural institutions as an open invitation to the self-directed learner where the learner, in the cultural institution, is responsible for the quality of both questions and answers. If sites can have an impact on how people learn, then, as Dufresne-Tassé (1995a) concludes, the application of the principles of andragogy (adult education) to museum situations is misleading because "in academic and popular education, adults study to satisfy a need or to solve a problem, while in a museum they act for pleasure" (p. 251). Pleasure, in this instance, is broadly defined to include aesthetic pleasure, self-fulfilling pleasure, pleasure in using intellectual skills, pleasure in overcoming difficulties and pleasure from contact with something new. (Dufresne-Tassé,

1995a)

The work of Dufresne-Tassé and Carr form an important link in correlating museums as informal learning sites to the educational needs of self-guided adult visitors. Both researchers discuss the functioning of adults within the museum with Dufresne-Tassé (1995a, 1995b) emphasizing visitors' psychological functioning and Carr (1985, 1992) examining cultural institutions as structures for cognitive change through self-directed learning. In addition, differentiation between adults, teenagers, and children in reference to learning must be made as the needs and demands of each group vary greatly.

To children experience is external, something that happens to them; to adults personal experience has defined their individual identity. Because adults have a richer foundation of experience than children, new material they learn takes on a heightened meaning as it relates to past experiences. (Jensen, 1982, p. 28)

Here the recognition of the adult visitors' needs become clear and support the notion that adult interactions or experiences are very different from those of children thus eliciting their own distinctive needs.

Adult Learners in Museums

Adults lead more complex lives, have less leisure time, and more responsibilities than children and adolescents. It is these basic characteristics that begin to distinguish their needs as adult visitors in museums to those of other audiences. With regards to learning, "adults have [also] been beyond the reach of formal educational instruction for longer periods" and while fact

oriented information may be appropriate for younger learners in museums, "it is far less appropriate for adult learners, who are usually more interested in going directly to analytical principles: Why does it work? What does it mean to me in my life?" (Huggins Balfe, 1987, p. 21).

On top of supporting the adult's general development, the major role of the museum should be to elicit, maintain, or enhance the adult's autonomy of thought, his critical sense, his creative spirit as it fulfills its task of presenting objects and the knowledge that accompanies it. (Dufresne-Tassé, 1995, p. 382)

As distinguishable and diverse as the characteristics of adult visitors in museums are, so too are the reasons for which they come, their expectations and their needs. Carr (1985) states "the most obvious invitations to cultural institutions come from the objects or content themselves" (p. 53). Being able to see the "real thing" invites visitors to visit, however along with that invitation comes other expectations including the need to be visually stimulated, intellectually challenged, and to have fun. (Falk and Dierking, 1992) These are among some of the more common reasons adult visitors frequent museums. While some or all of these reasons motivate adults to visit the museum, they also expect the experience to have an educational message "and would be disappointed if there were no educational value to a museum experience" (Falk and Dierking, 1992, p. 142).

As early as 1942 Theodore Low (as cited in Carr, 1985, p. 52)

...wrote about the museum as an educative and therefore social instrument, that it 'must be active and not passive, and it must always be intimately connected with the life of the people.' It must concentrate on the unmet needs of the adult public.

Perhaps the best route to meeting the unmet needs of adult visitors within the museum environment is to “shift from a focus on the information museums provide to concentration on the audience of learners they serve” (Davis and Gardner, 1993, p. 34). Huggins Balfe (1987) also supports this notion stating “what is necessary now is a shift in focus from the teachers and the teachings, to a new concentration on the characteristics and needs of would be learners - especially those who are adults” (p. 23).

Davis and Gardner (1993) view this re-orientation as a means of “encourag[ing] the viewer to search out the relevant information needed to inform [their] perspective” (p. 36). The museum’s role in this instance would be to not set rigid structures that constrict the visitor, but rather to allow “individual museum-goers the freedom to map their own course making use of the expanse of diverse learning stimuli provided by the museum” (Davis & Gardner, 1993, p. 37). This view places the success of the museum visit directly on the shoulders of visitors with visitors being responsible for the writing of their own script. (Annis, 1980) If adult visitors are to take on this responsibility then what role does the museum play? Does it move into a passive, non-assertive role, or does it need to begin to address more seriously how individually-centered learning can be promoted within the gallery setting?

Creating Learning Opportunities for Self-Guided Adult Visitors

With individually-centered learning placing the responsibility of the visit on the adult visitor, museums must create learning opportunities that can be self-directed by visitors as they move through the galleries. By placing a variety of interpretive aids in the galleries, visitors would be able to script their visit to suit their needs based on their own self-motivation to engage in "active, personal exploration" (Falk, Dierking and Holland, 1995, p. 19). According to researchers Csikszentmihályi and Hermanson (1995), "natural motivation to learn can be kindled by supportive environments, by meaningful activities, by being freed from anxiety, fear, and other negative mental states, and when challenges of the task are met by the person's skill" (p. 68). Csikszentmihályi and Hermanson (1995) also state that "people are more open to learning when they feel supported, when they are in a place where they can express themselves and explore their interests without fear of embarrassment or criticism, or when there are no pre-defined expectations constraining their behavior" (p. 74).

Ultimately, the responsibility falls to museum professionals to design exhibits that foster exploratory, individually-centered learning. The American Association of Museums (1992) states that museums must "offer the opportunity for experiential, emotional, and intellectual learning that is self-directed and voluntary" (p.12). It is here that this investigation positions itself within the literature and finds its foundation in the belief that museums should create environments which meet the diverse needs of self-guided

adult visitors including the promotion of learning opportunities if they are to fulfill their educational mandates. It is hoped that this study will contribute to the body of literature focusing on learning in museums as it seeks to address both the theoretical and practical implications of creating interpretive aids designed with appropriate content that promote self-guided learning opportunities for adult visitors in museums.

Chapter 4

Investigating Current Practices Statement of the Research Question

Neither adults nor children want to be overloaded with facts, figures or information. (Hooper-Greenhill, 1983, p. 129)

Adults often ignore long explanatory labels, and they frequently [do] not participate in interactive exhibits to completion. (Huggins Balfe, 1987, p. 22)

In addition to reading traditional label copy, visitors are or will be active participants in the learning process by means of interactive programs available at kiosks linked to authoring stations, operated by curators and educators. (Anderson, 1994, p. 38)

A vast variety of interpretive aids are currently available to museums for use in exhibitions from cutting edge interactive computer technology to more traditional materials such as didactic panels. Some museums continue to remain loyal to the more subtle traditional approaches by providing very little or no support information for visitors in the galleries. These museums believe in letting the art 'speak' for itself. Meanwhile, other museums choose to make use of visitor friendly technologies by placing interactive computers and audio-visual materials in the galleries for self-directed use.

In traditional interpretive situations, where minimal support is provided by the museum, self-guided visitors are left to direct themselves through their museum experience. Although the aesthetic beauty of an art work is supposed to be enough to engage the viewer, often it is not. "What is noticed is quite the opposite. Visitors feel quite frustrated and annoyed. They feel inadequate and incompetent in front of art works" (Weltzl-Fairchild et

al., 1997, p. 158). If they encounter questions or conflicts of information based on what they are viewing, visitors must take the initiative and seek out, by themselves, answers to their questions. Often museums in these traditional situations do not support visitors with readily available interpretive aids through which they can access information.

Looking for an answer in a museum is not easy because the visitor has to discover things for himself. He must therefore, without help, find an effective method, a relevant content, and check that what he finds is correct. As can be seen, this is demanding and anxiety provoking. Thus if the visitors pursues his questioning, problems and anxiety lie ahead. If he gives up, he experiences frustration....The museum educator would be well advised to anticipate questions regarding his exhibits and should therefore be prepared to provide material that contains an answer. (Dufresne-Tassé, 1994, p. 477)

With the scarce amount of leisure time visitors have, it is highly unlikely they will actually make the time to pursue their questions outside of the museum environment. This pursuit is further deterred by their frustration at their inability to seek answers within the museum setting itself.

In contrast to the traditional methods, there are currently museums practicing supportive approaches through the placement of interpretive aids directly in the galleries for easy access and use by visitors. "One approach is through multi-sensory and multi-media techniques, which help audiences acquire information through visual, aural, and tactile means" (Falk and Dierking, 1992, p. 135). In developing this study, it was my intention to locate a museum currently making use of a variety of multi-sensory and multi-media interpretive aids within an art museum context. An analysis of these practices within the art gallery would then form the foundation from which

this investigation could evolve.

After visiting several art museums in Montreal, Quebec and Toronto, Ontario it became apparent that the Art Gallery of Ontario (AGO) in Toronto suited the needs of this inquiry. The AGO has been experimenting within their *Canadian Historical Art Galleries: Canadian Art to 1960* with a variety of interpretive techniques in an attempt to address the needs of their self-directed visitors. Since 1990, these galleries have been redesigned to incorporate interpretive aids that reach beyond traditional approaches expanding into the realm of what AGO educator Douglas Worts describes as "gallery enhancement". (Worts, 1989, 1990a, 1990b, 1991, 1995, 1997) Included in this enhancement approach is not only the re-conceptualization of the exhibition spaces, but emphasis on environmental design, interpretive strategies, communication strategies, and feedback strategies (Worts, 1996). Above all, however is their firm commitment that the art works remain the primary focus within the exhibition space.

The aim of gallery enhancement as practiced by the AGO, is to create a museum experience for casual visitors through meaningful, engaging environments in which visitors can enter into a dialogue with the art and/or themselves about the work they are viewing. (Worts, 1996) By introducing interpretive aids that support visitors, the AGO believes this can be successfully achieved. The interpretive aids currently in place in the galleries offer self-guided visitors the opportunity to access information, if desired, in order to deepen their understanding of what they are viewing. This study

hypothesizes that interpretive aids, through their presence in the galleries and content design, offer visitors a means of resolving any conflicts or cognitive dissonances evoked through their viewing of the art works.

After reviewing the Typologies of Cognitive Dissonance (Table 1) (Weltzl-Fairchild et al., 1997) and the interpretive aids available to self-guided adult visitors in the *Canadian Historical Art Galleries* at the AGO, it became apparent that in order to gain insight into the educational needs of visitors within a museum environment, further study was required to determine if the theoretical perspective could be applied to a realistic situation. Therefore, the question to be studied in this research is: Do the interpretive aids currently implemented in the *Canadian Historical Art Galleries* at the AGO assist self-guided adult visitors in resolving cognitive dissonances?

Chapter 5

The Creation of the Study Methodology

With the research question formulated, it became necessary to determine the most effective ways of answering it. The investigative method was designed so that the data collected would allow insight as to whether or not self-guided visitors were able to resolve their cognitive dissonances through the use of the interpretive aids. This determination would be possible through a comprehensive analysis of visitors' reaction to, and usage of, the multi-sensory and multi-media interpretive aids present in the *Canadian Historical Art Galleries*.

Research Instruments

After considering several data collection methods, it became apparent that simply observing and documenting the interpretive aids and visitors' interaction with them would not prove sufficient. This method would rely almost exclusively on the researcher's observations and not the direct insights of the visitors. Based on this determination, the adult visitors circulating through the galleries were identified as the most reliable source to discern whether or not the interpretive aids were able to assist them in resolving any cognitive dissonances evoked by their viewing experience. Thus, interviewing the visitors directly with the assistance of the pre-designed questionnaire would provide the insights desired.

Oral Questionnaires

A visitor questionnaire was designed consisting of nine primary questions, five secondary questions, and a section for recording the interviewer's notes and observations. (Appendix A) The nine primary questions were aimed at answering the research question. Question three on the questionnaire was designed as the key question: *Did the interpretive techniques (tools) in the galleries help answer any questions you had while you were viewing the art works? If so how? If not, why not?* By directly asking visitors if they had questions and were they able to answer those questions using the interpretative aids provided by the museum, it was anticipated the data would demonstrate whether or not the interpretive aids assisted them in resolving their cognitive dissonances. The remaining eight questions surrounding this key question were also deemed important. They were designed to move visitors through a sequential pattern of thought, provide additional information relevant to answering the research question, and permit the key question to blend in with the sequence of questions.

The five secondary questions were aimed at gathering quantifiable information on visitation preferences, frequency, usage of interpretive aids, gender, and the approximate age of the respondent. Again, this information was deemed as relevant data because it would provide respondent demographics and insights into their interpretive aid usage. Within the questionnaire, space was also allotted for interviewer's notes and observations. This area was designed to allow the researcher the opportunity

to note anything of interest or significance commented upon by the respondent beyond the limitations of the structured questions.

After reviewing the options for administering the questionnaire, it was determined that a short oral interview format using the structured questions was the most reliable route to pursue. As there were a total of fourteen questions for visitors to answer, asking them to write out their responses was seen as too great a request on the part of the researcher. It was also noted that the length of the questionnaire might deter visitors from completing all the questions asked. Another possible data collection method based on audio recording the respondents responses was also deemed as being too intrusive and possibly intimidating to visitors thus hindering their responses. Having the interviewer ask the questions orally and record the responses in a written format revealed itself as the best, most workable option for gathering data from the visitors. This approach would allow for a rapport to be established between the interviewer and the respondents, it would permit the questionnaire to be administered in a short period of time, and it would allow for additional comments (responses, comments) from the visitors to be recorded.

Respondents were selected from visitors leaving the galleries via the non-elevator entrance/exit. (Appendix D: Figure 1) After initial observations of the setting, this location was determined to be the primary route of visitors entering and exiting the *Canadian Historical Art Galleries*. A total of 32 interviews were conducted with the selection of respondents based on the

next available unaccompanied visitor seen exiting the galleries. Visitors determined to be visiting on their own at that moment were selected as they were seen as free to pursue their individual viewing/visitation style without the influence of an accompanying friend or family member.

When approached by the interviewer, visitors were asked: "We are evaluating the galleries you just visited as we are hoping to improve the exhibits. Would you be willing to answer a few questions to assist us?" This approach made it quite easy to engage visitors in a dialogue and to initiate the questionnaire. Using this approach made visitors feel the museum was interested in their feedback and placed value on their insights. This approach was requested by the AGO Gallery Enhancement Team as it would not only allow for this study to proceed, but it would also ensure that the results of this investigation would be made available to the Gallery Enhancement Team which has an ongoing interest in evaluating their initiatives. This friendly entry into the questionnaire also helped visitors feel they could respond honestly and freely to the questions and that the AGO was genuinely interested in their comments on the exhibits. Establishing trust and a dialogue between the interviewer and the respondents was deemed a key component in the questionnaire process.

Pilot Project

In order to ensure the format and feasibility of the oral questionnaire method, a pilot project was initiated prior to the scheduled primary data

collection period. During the pilot project phase six adult visitors were approached as they left the *Canadian Historical Art Galleries* and asked the series of pre-designed questions using the oral short interview format. The responses were recorded by the researcher using the method as previously discussed.

The pilot project proved useful as it indicated that the questions did not need to be changed in terms of their content, however it did reveal that the sequence in which they were being asked required adjustment. It also indicated that there needed to be the addition of questions for those visitors who chose not to use any interpretive aids while in the galleries, but were still interested in responding to the questionnaire (Questionnaire Route B). (Appendix B) Their reasons for less-usage or non-usage were deemed to be as relevant as those visitors who chose to use the support materials. This information warranted inclusion in the data gathered. Once the changes were completed the primary data collection process was initiated as scheduled, using the modified oral questionnaire. (Appendix B)

Supplemental Data Collection

In order to supplement the oral questionnaire data gathered, it was determined that there would need to be additional information acquired on the conceptual nature of the practices implemented by the AGO along with detailed descriptions of the various aids located in the galleries. This material would prove important in the contextualization and understanding of the

interpretive aids located in the galleries.

To obtain data on the conceptual nature of the practices an interview with AGO Gallery Enhancement Team member Douglas Worts was conducted. (Appendix C) Worts' responses were audio tape recorded then transcribed into a text format to allow for accurate documentation and discussion of his responses.

Information on the content and presentation of the multi-sensory and multi-media interpretive aids located in the galleries was obtained through observations made by the researcher. Photographic images were also taken to visually record the placement and presentation of the interpretive aids. This information was deemed as relevant to the study as it would provide a contextual understanding of the interpretive aids along with a visual record of the materials in the galleries.

Limitations of the Study

With an investigation of this nature, there are of course limitations to the study. In this instance, limitations are noted in the researcher's reliability on respondents' ability to recall with accuracy their actions and psychological functioning engaged during their visit in order to respond to the oral questionnaire. Respondents are open to interpret their experiences and the researcher is dependent on this information for the purposes of the study. This subjectivity can be viewed as a limitation, but not one great enough to invalidate the data gathered and the results obtained.

The study also is limited by the manner in which it is attempting to categorize the thoughts and actions of visitors within such a fluid situation. The method implemented to gather data from the visitors is aimed at breaking the process of the gallery experience into categories for analysis while visitors, as noted during the collection process, expressed ideas and thoughts that overflowed the boundaries constructed by this study. In administering the questionnaire it was necessary to pursue these unsolicited responses which at times deviated from the questionnaire. The questionnaire prompted these responses by the nature of the questions asked and it was necessary to allow visitors the opportunity to follow through with their thoughts. Although interesting, some of these responses, were not brought into the analysis of the data because they did not directly pertain to the research question.

Overall these limitations did not affect the nature of the data collected and the results of this study, they simply indicate that when conducting an investigation of this design, flexibility on the part of the researcher must be maintained. There is no way to take into account all of the unknowns, therefore remaining open to the process is necessary.

Chapter 6

Setting the Stage: A Contextualization of the Interpretive Aids in the *Canadian Historical Art Galleries*

The purpose of this study is to determine if interpretive aids placed directly in the art galleries can assist self-guided visitors resolve cognitive dissonances they may experience while viewing art works. Specifically, this study examines the role of the multi-sensory and multi-media interpretive aids within the *Canadian Historical Art Galleries* at the AGO. Prior to proceeding with a discussion of the findings resulting from the data collection process, it is necessary to discuss the conceptual framework from which these multi-sensory and multi-media aids evolved, to furnish a description of the interpretive aids profiled in this study, and to correlate them to the Typologies of Cognitive Dissonance. (Table 1)

The Art Gallery of Ontario - General Overview

One of the ten largest museums in North America, the Art Gallery of Ontario (AGO) is situated in metropolitan Toronto. Catering to a diverse audience of local, national, and international visitors, the museum exhibits a comprehensive, internationally recognized art collection. This study focuses on a group of ten galleries located on the second floor collectively titled the *Canadian Historical Art Galleries: Canadian Art to 1960*. Within these galleries are works tracing the history and development of the visual arts in

Canada from their auspicious beginnings in the 1600s through to the 1960s. A large portion of the gallery space is devoted to an internationally renowned collection of art works by a group of Canadian painters known as the Group of Seven.

The Group of Seven painted images of the land and its people that provide a special glimpse of Canadian life in Canada during the 1910s and '20s. Many Canadians have a special affection for these paintings and identify them as the first true nationalist art that captured the rugged nature of the country with vigor and strength previously unseen in Canada. (Anderson, 1996, p. 3)

Other well-known Canadian artists such as Emily Carr (1871-1945), David Milne (1882-1953), and Cornelius Krieghoff (1815-1872) are also represented, as are various art movements and groups that form the history of Canadian art including such collectives as the Canadian Art Club (1907-1915) and Painters Eleven (1953-1960). (Reid, 1988)

To fully understand the unique design of the *Canadian Historical Art Galleries*, it is necessary to discuss the evolution and philosophy behind the “enhanced” approach practiced in these galleries. An interview with AGO Gallery Enhancement Team member Douglas Worts provides insight into the interpretive practices developed.

Gallery Enhancement in the *Canadian Historical Art Galleries*: Concept, Design & Philosophical Underpinnings

Proactive support of self-guided visitors within the *Canadian Historical Art Galleries* has evolved in the past decade from traditional didactic exhibitions into non-traditional multi-media, communication oriented

environments aimed at enhancing the art viewing experience of visitors. Despite being bound by the same restrictive financial and organizational hurdles faced by other museums throughout Canada, the AGO has continued to move forward in their efforts to place greater emphasis on visitors' needs. This is seen through the initiatives of the Gallery Enhancement Team who included the placement of a variety of interpretive aids directly in the galleries to support the art works and visitors.

As an educator within the Programming and Interpretation Department, Douglas Worts has been involved for the past ten years in exhibit development and audience research. (Worts, 1988, 1990a, 1990b, 1991, 1995, 1997) After developing and implementing experimental exhibits in the mid-1980s, Worts was approached by Dennis Reid, Curator of Canadian Historical Art at the AGO, to collaborate on the reinstallation of these permanent collection galleries. Worts (1996) states:

That led to a very intensive set of discussions over a period of several years that really got into some of the assumptions, Dennis Reid's assumptions as well as our assumptions, about what visitors were and were not experiencing in the galleries. (p.3)

From there, the notion of gallery enhancement evolved in an attempt to, "navigate through the somewhat tricky waters of what role education played in the traditional territory of curatorial and exhibit development" (Worts, 1996, p. 1). In defining enhancement, Worts (1996) states:

Enhancement is the term that is used as it suggests whatever the core of the exhibit is, is still the core, but we are now doing additional things whether it be working with the environmental design, interpretive strategies, communication strategies, or feedback strategies. So the enhancement team is the team that is put together because we

usually work more or less in teams of educators, curators or designers.
(p. 1)

Gallery enhancement within this context continues to be the thrust of what drives Worts and his collaborator Dennis Reid as they seek to move forward with their interpretive initiatives.

Worts is a strong proponent of “creating a set of environments that are supportive of the art works, evocative, and encourage visitors to focus, to linger, and to interact in ways that were generally not the case in past installations” (1996, p. 2). To create their desired environment within the galleries, Worts and Reid maintain three fundamental principles:

1. The artworks must remain the focal point in the experience.
2. It is important to provide some kind of organizational structure, but not one that rigorously asserts itself.
3. The use of any interpretive devices must remain optional.

Keeping these in mind at all times, Worts contends that the development of interpretive aids to support visitors’ needs were based on “what made the most sense” (1996 p. 10). “We were looking to use different interaction strategies within each of the mediums and we wanted a variety of mediums” (Worts, 1996, p. 14). He continues:

Some people don’t like to listen to audio and there are a lot of people who do not like to read... Some people like to read, but only in a dynamic setting. They don’t want to be confronted with a big panel especially if the first two lines don’t grab their attention. (Worts, 1996, p. 14)

Meeting the variety of visitors’ needs demanded that there be a variety of accessible interpretive aids with usage remaining within the visitors’ control. Throughout the galleries visitors are free to discover interactive

computers, audio programs, historical photographic albums, books, catalogues, maps, labels, and visitor response cards all subtly placed as to not interfere with the art works. Worts (1996) states:

The notion of optional use of interpretive materials has always been important. The computers are integrated into the furniture as are the audio programs. Nothing really tells you you have to do something before you do something else... And yet it is important that if you decide that you want more information about something it is easy to figure out how to do that and to figure out where you are. (p. 5)

Each of the various interpretive aids is designed to offer visitors a variety of information though "you actually find similar content in different contexts" (Worts, 1996, p. 10). Worts (1996) goes on to state that:

If we wanted to communicate specific content and that content was very intuitively linked to a personality then we wanted to go with audio because then we could simulate or actually use our material to communicate something of that original person to reflect on or experience. With other things, the computers provided an opportunity to connect it to or maneuver through information so these things made sense as we walked along. The *Street Signs* were something different, the *Sign Posts* with the popular culture material. All of these things made sense in the medium. (p. 10)

With content and presentation methods developed simultaneously, how then does the AGO's desire to promote learning present itself? Worts contends that learning, the acquisition of new knowledge, is important should the visitor be seeking out information. However for Worts (1996),

...it's more important that somebody finds an experience that comes from themselves and is translated then into intrinsic motivation to actually pursue something such as additional information. I think that's a more fruitful learning strategy to try and encourage people to experience their own reaction to something. We put thousands of objects on display and people have a very difficult time zeroing in on things because there is so much visual competition. By having strategies that encourage people to linger, to focus, to trust their own

reactions and then go looking for something that might flush that out a little bit more is a better strategy to get information. (p. 12)

Worts believes that by making a variety of interpretive aids available to visitors, they are presented with the option of pursuing further information or engaging in other experiences in order to complement the visual component of their visit. When asked if he considers whether or not the art works and the interpretive aids are in competition for the visitors' attention, Worts (1996) responded:

I don't see them in conflict in any way. I see them only as complementary because they are always optional. You don't have to use them if you don't want. There can be no conflict there I don't think. Some people don't even see them. Some people are not aware that the audio is there and they don't find out until they sit down on the bench. So maybe sometimes they're too subtle. (p. 14)

Another objective of the Enhancement Team is based on the desire to encourage two-way communication, that is communication between the visitor and the museum. By means of response cards, visitors are given the opportunity to reflect, comment, or respond visually to their experience and to share their reactions with the AGO and the public. (Appendix D: Figure 2) Cards are gathered from drop locations situated in the galleries, read by the Enhancement Team, and then selected cards containing a wide range of remarks, are scanned into the public access computers for other visitors to view. Worts (1996) feels strongly that:

...the *Share Your Reaction* cards are important because we have come to believe that the art works really do live in the experiences of people and that the meaningfulness of those objects exist at least as much in the experiences of individuals as it does in the pronouncement of experts. The *Share Your Reaction* cards are a manifestation of that and

the insights that come from the *Share Your Reaction* cards are quite stunning. (p. 7)

With communication of information, personal experience, intrinsic motivation, and optional usage forming the basis of the enhancement approach taken in the *Canadian Historical Art Galleries* Worts (1996) contends: "It's still a bold step on the AGO's part to venture into this territory, to open itself up in this way" (p. 8).

Description of the Multi-Sensory and Multi-Media Interpretive Aids in the *Canadian Historical Art Galleries*

From computers to audio programs to *Share Your Reaction* cards, there exists a variety of interpretive aids in the *Canadian Historical Art Galleries* targeted primarily at self-guided adult visitors who possess varied levels of experience and familiarity with the museum setting. Not all of these interpretive aids are situated in all of the ten galleries that partially comprise the *Canadian Historical Art* section of the AGO, however most can be found in several locations presented in a variety of ways (Table 2). In total, nine primary tools were documented and additional information was gathered on the more tacit interpretive strategies. The latter include the circulation pattern designed to direct visitors through the gallery spaces. Photographs provide visual reference of the interpretive aids documented. (Appendix D)

Table 2
Canadian Historical Art Galleries
Interpretive Aids By Gallery

Gallery	Interpretive Aids
Emily Carr Gallery	Street Sign, Labels
Canadian Art Club Gallery	Street Sign, Labels
The Salon/Le Salon	Street Sign, Booklet, Sign Post, Share Your Reaction Cards
Canada Est/Canada Ouest Gallery (1841-1867)	Street Sign, Labels, Sign Post, Binder/Booklet, Share Your Reaction Cards
Upper Canada Gallery (1665-1845)	Street Sign, Labels, Sign Post, Share Your Reaction Cards
Turn of the Century Toronto Gallery (1895-1919)	Street Sign, Labels, Sign Post, Share Your Reaction Cards
The Group of Seven Gallery	Street Sign, Labels, Sign Post, Share Your Reaction Cards, Explore A Painting in Depth, Audio Phones, Computers
The 1930s Gallery (1930-1939)	Street Sign, Labels, Sign Post, Share Your Reaction Cards
David Milne Gallery	Street Sign, Plan of the Original Exhibit including Labels
Frances Loring/Florence Wyle Gallery	Street Sign, Labels, Catalogues

Gallery Orientation, Layout and Tacit Interpretive Aids

Located on the second floor of the museum, the *Canadian Historical Art Galleries* are accessible via two entrances. (Appendix D: Figure 1) The entrance connecting to the contemporary art galleries (Entrance A) displayed no signage indicating the overall theme or topics of the galleries while the other entrance, accessible only via the elevator (Entrance B) did display signage. At this entrance (B), large format text panels mounted on the wall revealed the title *Canadian Art to 1960* followed by a brief narrative stating that audio programs, computers, and information albums are provided to enrich the visitors viewing. (Appendix D: Figure 3) Accompanying this text is a floor map of the surrounding galleries to help orient the visitor and a brochure size map for visitors to take with them. (Appendix D: Figure 4)

In keeping with the non-traditional approach to interpretive support within the galleries, the rooms themselves are not arranged in a linear fashion. The circulation pattern sees visitors progress through a chronological sequence if they begin via the elevator entrance. Otherwise the layout of the galleries allows for alternative circulation patterns with the ability to return to a previously viewed gallery at any time. Dramatic lighting, varied room scale, and richly, sometimes vibrantly coloured walls create the ambiance of each gallery environment. By defining each gallery with varied paint schemes and seating styles, visitors immediately recognize they have moved from one historical period into another. These tacit interpretive practices are less obvious to visitors than for example, the placement of labels, however they

do play a key role in creating an enhanced gallery environment that clearly moves away from white walls and even lighting. The variety of painted wall colours, lighting, and room scales also helps visitors combat museum fatigue, a common phenomenon experienced by museum visitors who engage in extended visits.

The Primary Multi-Sensory and Multi-Media Interpretive Aids

Nine primary interpretive aids form the basis of this study (Table 2).

They include:

1. *Gallery Street Signs*
2. Labels
3. *Share Your Reaction Cards*
4. *Sign Post Photo Albums*
5. Booklets and Catalogues (Monographs)
6. *The Salon/Le Salon Guide*
7. *Explore a Painting in Depth* Audio Program
8. Computer Programs
9. Audio Phones

Upon entering any one of the galleries, visitors are immediately oriented by a large *Street Sign* located overhead on one of the walls indicating the historical theme, or the artist represented in the gallery. This use of signage to orient the visitor was not practiced at the AGO until the re-installation of *Canadian Historical Art Galleries* in the late 1980s. Beyond the *Street Signs*, no two galleries contain the exact same offering of interpretive aids.

Bilingual labels located in eight of the ten galleries offer basic information to visitors including artist, title, and date of the work. Located next to the art work to which they refer, the labels are standard throughout

the galleries in type face (font), size, and presentation. The one exception are the labels for sculptures which are located on the wall nearest to the art work. On all labels, English text appears on top with the French translation written underneath.

Situated in over two dozen locations throughout the galleries, visitors find *Share Your Reaction* cards. (Appendix D: Figures 2, 5, 6) Although presented using various display methods, the uniform format consists of cream coloured card stock with suggestions for use written across the top and bottom portions of the card with a space in between designated for visitors to complete. Visitors are encouraged to write or draw their thoughts, feelings, comments, questions, and/or concerns in the space with the pencils provided. They can then deposit the cards as they leave the gallery into designated drop-boxes. As previously discussed, the *Share Your Reaction* cards are regularly collected and read by the Gallery Enhancement Team with selected cards scanned into the public computers for visitor access.

In order to contextualize the art works within each gallery and to convey a feeling of the historical period represented, images representing the popular culture of the time period can be found in each of the galleries. *Sign Posts* are collections of historical photographs, advertisements, and other various images assembled into photo album style books for ease of viewing by visitors. (Appendix D: Figures 7, 8, 9, 10) Through these images visitors discover past products that were for sale, the fashion of the times, modes of transportation, and historical views of various Canadian cities. These images

offer insight into Canadian society creating a connection between the visitor, the art works, and the historical period during which the art work was realized.

Other interpretive aids found in several of the galleries include various books and catalogues. For example, in the *Frances Loring/Florence Wyle Gallery* there are two monographs focusing on the sculptors' legacy placed on the seating. (Appendix D: Figure 11) Visitors are welcome to sit and read at their leisure. Of all the books and catalogues distributed throughout the galleries, one in particular warrants additional discussion.

In the *Canada Est/Canada Ouest Gallery* is a narrow black padded four ring binder with AGO inscribed on the cover. Inside, visitors find a question/answer format addressing the work of artist Cornelius Krieghoff. (Appendix D: Figures 12, 13) His work is exhibited along the long wall in front of the bench on which the binder sits. (Appendix D: Figure 14) On one page appears a single question in large typeface accompanied by photographic images illustrating the artist's life. Examples of questions are:

Why is Cornelius Krieghoff considered important?
Who was Krieghoff?
Where did Krieghoff paint?
What did Krieghoff paint?

On the facing page are different opinions offered by seven noted authors. These varied opinions are designed to reveal to visitors that there can exist a variety of interpretations, insights, and opinions on an artist or art work. This format empowers visitors by encouraging them to form and value their own opinions about the works of art they are viewing. As well, this binder

presents them with additional background information on the artist.

In keeping with the exhibiting style of Eighteenth Century European Grand Salons, the Gallery Enhancement Team installed one gallery using the historically accurate floor to ceiling format. (Appendix D: Figure 15) To further the historical accuracy of the installation, no labels appear on the walls as the art works are mounted very close together. Interpretive support in this gallery comes in the form of a bilingual booklet entitled *The Salon/Le Salon*. (Appendix D: Figure 15) Contents include an explanation of why the gallery is arranged in this manner accompanied by a historical image to contextualize the installation. A numbered line diagram of the salon layout provides reference between the art works and the labels printed in the booklet. Over twenty copies of the booklet are available and are displayed in racks built into the seating easily noticed upon entering the gallery. (Appendix D: Figures 15)

The remaining three primary interpretive aids are located in the *Group of Seven Gallery* which is a large gallery divided into several sections through the placement of free-standing walls. Located in its own nook within the gallery is an audio aid entitled *Explore a Painting in Depth*. (Appendix D: Figure 16) Two wide seats nestled into a free standing wall face a single painting entitled *The Beaver Dam*, 1919 by Group of Seven member J.E.H. MacDonald. It is mounted on the wall facing the seating. (Appendix D: Figure 17) Each seat, separated from the other by a shallow dividing wall, has its own set of head phones and a small control panel through which visitors can

explore the art work using one or all of four program options. Each of the programs varies in length, from two to twelve minutes, and prompts visitors to discover the painting using their own thoughts, feelings, personal associations, impressions, and/or curatorial perspectives. Two programs are exercises designed for visually exploring the painting, with one exploration narrated by a female voice and the second directed by a male voice. The third program is a curatorial perspective of the work, while the fourth offers a dramatization of MacDonald "the man" and "the artist". Although the programs are pre-designed, there is a great degree of control given over to visitors. Not only do they control which of the self-directed programs they wish to explore, they can also select the listening volume and length of experience. If visitors choose to listen only to audio program #3 they are free to do so without restriction. The *Explore a Painting in Depth* nook also has a brief introductory panel on the wall and recessed units that hold *Share Your Reaction* cards. (Appendix D: Figure 18)

In the central area of the *Group of Seven Gallery* are two interactive computers recessed into separate stool-height tables that also display *Share Your Reaction* cards, *Sign Posts* and other miscellaneous interpretive materials such as maps, directly related to the art works and artists represented in the gallery. (Appendix D: Figure 19) Using touch response technology, visitors need only place their finger on the screen to enter into the program designed by the Gallery Enhancement Team. Both computers offer similar yet varied information.

Computer #1 options include: *Explore a Painting*, *Compare and Contrast Paintings*, *Symbolism of Trees and Mountains*, *Influences and Artistic Sources*, *Biographies*, *Geography of the Group of Seven*, *A Time Line of the Painters* and access to completed visitor *Share Your Reaction* cards. (Appendix D: Figure 20) Two of the topics, *Explore a Painting* and *Compare and Contrast Paintings* are directly related to the three Group of Seven paintings visitors face while using this computer station. (Appendix D: Figures, 21, 22, 23) The other computer faces a free standing wall on which small field paintings created by members of the Group of Seven are mounted. (Appendix D: Figure 24) Computer #2 contains the same options as Computer #1 excluding the *Explore a Painting* and *Compare and Contrast Paintings* topics. Both computers stations by nature of their placement in the gallery, are easily accessible and comfortable to work at as the museum provides two stools at each computer location for visitor use.

Running along the front side of the Computer #1 table, is a bench containing three telephone hand sets programmed with audio interpretive aids accessible through keypads recessed into the arms of the bench. (Appendix D: Figures 25, 26) While seated on the bench, visitors face the same three Group of Seven paintings highlighted through Computer #1 with those paintings also corresponding to the programs on the audio phones. (Appendix D: Figures 21, 22, 23) Making use of the same concept as the audio program *Explore a Painting in Depth*, visitors have three choices of topics to discover with each lasting approximately three minutes in length. The topics

include a curatorial perspective, a mock press debate and the Group of Seven's views on the Canadian wilderness with the latter two presented through dramatized performances aimed at heightening the auditory experience. Again, visitors are free to try any of the three programs and exit them at any time they like. As the phones are recessed into the arms of the bench, visitors are able to use the seating without feeling that they must use the audio phone. Usage remains optional.

These descriptions of the nine primary interpretive aids incorporated into the design of the *Canadian Historical Art Galleries* provide an understanding of the non-traditional, multi-sensory and multi-media approaches implemented by the AGO to enhance visitors experience of the art works and to offer interpretive support. This discussion also provides insight into how the interpretive aids are presented along with a brief overview of their content.

Correlation of the Interpretive Aids and the Typologies of Cognitive Dissonance

While the above descriptions provide an overview of the interpretive aids available to visitors, the discussion does not fully disclose the correlation between the multi-sensory and multi-media interpretive aids and the Typologies of Cognitive Dissonance (Table 1). Prior to identifying whether or not these interpretive aids can or can not assist in the resolution of dissonance, it is necessary to see how they correspond to the different types of dissonances previously identified.

The *Typologies of Dissonance and Media Options for Resolution* as presented in Table 3, demonstrate the relationship between the Typologies of Dissonances and the interpretive aids available to visitors in the *Canadian Historical Art Galleries*. By correlating the interpretive aids with the typologies of dissonance, it is determined that the interpretive aids do have the capability of assisting visitors to resolve the dissonances they encounter while in the galleries. While not all interpretive aids assist in the resolution of all dissonances, each type of dissonance has at least one option from which visitors can choose to assist them in the resolution of their dissonances based on the content they offer visitors.

With the conditions for cognitive dissonance resolution deemed present within the *Canadian Historic Art Galleries* through the presence of the multi-sensory and multi-media interpretive aids, the discussion can now focus on addressing the findings based on the data gathered through the oral questionnaires.

Table 3
Typologies of Dissonance and Interpretive Aid
Options for Resolution

Dissonance	Type	Interpretive Options
1. Dissonance between previous knowledge, label and artwork	a. Conflict between previous knowledge and perception of the artwork. b. Conflict between label and perception of the artwork. c. Conflict between previous knowledge and label.	Labels, Computer, Audio Programs, Books and Catalogues, Signposts. Labels, Computer, Audio Programs, Books and Catalogues, Signposts. Labels, Computer, Audio Programs, Books and Catalogues, Signposts.
2. Dissonance between the visitor's expectations and the aesthetic event.	a. Conflict about quality of visit. b. Conflict about the museum's role. c. Conflict about the art object & notions of Beauty and/or communication. d. Conflict about the museum's organization.	Layout of the Galleries, Maps, Seating, Labels, Computer, Audio Programs, Books and Catalogues, Signposts, Share Your Reaction cards. Share Your Reaction cards. Audio Programs Share Your Reaction cards.
3. Dissonance perceived within the art object.	a. Conflict perceived concerning the criteria of realism. b. Conflict perceived between parts within the art object. c. Conflict perceived between the symbolic message and the means of expression.	Computer, Audio Programs, Books and Catalogues. Computer, Audio Programs, Books and Catalogues. Computer, Audio Programs, Books and Catalogues.
4. Dissonance based on the visitor's personal, idiosyncratic taste.	a. Conflict between the visitor's taste and some part of the visual language of the artwork. b. Conflict between the visitor's taste and the content of the artwork. c. Conflict between the visitor's taste and the artist's style.	Share Your Reaction cards. Share Your Reaction cards. Share Your Reaction cards.

Chapter 7

Self-Guided Adult Visitors and Cognitive Dissonance: A Summary of the Findings and Analysis of the Results

The findings presented in this chapter are a summary of the data collected through the interviews conducted with 32 visitors at the AGO. The primary questions from the oral questionnaire are discussed individually to allow for the respondents' thoughts and comments to be concisely reported. The findings are then analyzed to report any indications of cognitive dissonance and instances of possible resolution. This analysis then leads into a discussion and summary of the findings in the ensuing chapter. Prior to presenting the findings, a summary of the supplementary information gathered is presented including respondent demographics and an overview of the interpretive aid usage by visitors.

Respondent Demographics

Four of the five secondary or supplementary questions included in the oral questionnaire provide data on the gender, approximate age, frequency of visits, and visitation preferences of the respondents. (Table 4) A synthesis of the data gathered describes the demographics of the visitors interviewed. The following summaries were obtained:

- A relatively even distribution of gender within the study sample was obtained with 15 male and 17 female respondents interviewed.

Table 4
Summary Respondent Demographics

Based on 32 Visitors Interviewed

Gender	<i>Male</i>	15
	<i>Female</i>	17
Approximate Age (years)	<i>20-25</i>	4
	<i>25-30</i>	3
	<i>30-35</i>	5
	<i>35-40</i>	1
	<i>40-45</i>	6
	<i>45-50</i>	1
	<i>50-55</i>	2
	<i>55-60</i>	2
	<i>60+</i>	7
	<i>Unknown</i>	1
Visitation Frequency	<i>1st time</i>	16
	<i>2nd time</i>	2
	<i>3rd time</i>	2
	<i>1 x year</i>	4
	<i>2 x year</i>	2
	<i>3 x year</i>	2
	<i>4 x year</i>	1
	<i>5 x year</i>	-
	<i>6 x year</i>	2
	<i>Every 2nd year</i>	1
Visitation Preference	<i>Family</i>	11
	<i>Alone</i>	15
	<i>Friend</i>	6

- Approximate ages of the respondents interviewed include: 1 unknown, 13 between the ages of 20 and 40 years of age, 11 in the 40 to 60 years of age range and 7 visitors in the age range of 60+.
- 16 of 32 respondents were first time visitors from either metropolitan Toronto, outlying areas, other provinces, or foreign countries.
- 11 visitors frequented the museum between one and six times annually with only 2 of the 11 respondents coming at least six times per year.
- The remaining 5 visitors fall into an alternative frequency pattern based on how often they have visited the museum in their life time. 4 have visited between two and three times in their lives while the fifth visitor visited approximately once every second year.
- Although visitors were only approached for an interview if they exited the galleries alone, of the 32 visitors, 17 stated they were visiting with a friend or family member, but had circulated through the *Canadian Historical Art Galleries* alone. The remaining 15 visitors were visiting the AGO unaccompanied.

Overall the sample of visitors selected for this study were evenly distributed between gender and a broad age range was obtained. Visitation frequency indicates that there were a large number of first time visitors who were not familiar with the interpretive aids in the galleries. These visitors experienced the enhanced gallery installation for the first time removing any sense of familiarity with the format presented. While the other may have had previous interaction with the interpretive aids, their insights and usage is no less relevant to the findings of the study.

Summary of Interpretive Aid Usage By Visitors

Findings based on the usage of interpretive aids by visitors while in the galleries indicates that all aids were used at least once by one of the visitors.

Table 5
Summary of Interpretive Aid Usage

Based on 32 Visitors Interviewed

Interpretive Aid	Usage
<i>Gallery Street Signs</i>	32
Labels	31
<i>Share Your Reaction Cards</i>	1
<i>Sign Post Photo Albums</i>	18
Booklets & Catalogues	10
<i>The Salon/Le Salon Guide</i>	7
<i>Explore a Painting in Depth Program</i>	5
Computer Programs	3
Audio Phones	10

(Table 5) Besides the *Gallery Street Signs* which all visitors made use of, labels were the most highly used interpretive aid with 31 of the 32 visitors employing them to gain information about the artist, the date of the work, and/or the title of the piece. The next most frequently used interpretive aid were the *Sign Posts* photo albums. Eighteen visitors chose to make use of this material. Both the labels and the *Sign Posts* experienced high usage, however it must be noted that they are also, besides the *Share Your Reaction* cards, found in almost all of the ten galleries. (Table 2) This raises the question of whether or not the widespread availability of an interpretive aid allows for more frequent usage. There are no findings within this study to determine an answer to this question, however it is an interesting issue that warrants further inquiry.

Booklets, catalogues, *The Salon/Le Salon Guide*, and the audio visitor phones in the Group of Seven Gallery all experienced moderate usage with

between seven to ten of 32 visitors making stops to interact with the interpretive aid. The *Share Your Reaction* cards, the *Explore a Painting in Depth*, and the computers revealed the least amount of usage with between one and five of 32 visitors interacting with them.

A summary of the usage of interpretive aids (Table 5) indicates that every visitor interviewed made use of at least one interpretive aid regardless of their gender, age, or visitation frequency.

Questionnaire Route A & Route B Differentiation

During the pilot project of the study some of the visitors interviewed stated that they did not make use of any interpretive aids except for the occasional use of labels to verify information. Based on this, as previously discussed, the oral questionnaire was modified to accommodate their comments on why they had chosen to make so little use of the interpretive aids available to them in the galleries. As a result of the questionnaire requiring two routes of questions, the findings presented here are grouped according to the responses gathered from the 21 Questionnaire Route A and 11 Questionnaire Route B respondents with the last two questions discussed including the responses of all 32 respondents.

Respondent Responses - Questionnaire Route A

Why did you chose to use the interpretive tools you did?

A variety of reasons were offered by respondents as to why they chose

the interpretive aid they did, however overall visitors revealed that their choice was based on a general desire to access quick information on the art work or artist. This reasoning presents labels as the most popular choice of interpretive aid supported by the following responses:

To find out general information about the painting. (Visitor 17)

Interested to find out more through quick information. (V20)

*To get more details when interested in finding more information.
(V27)*

Wanted to know more information. (V1)

Wanted more information on the artist/sculptor. (V32)

Others simply expressed the useful nature of labels:

Labels are helpful. (V8)

Those respondents who indicated the audio programs as their choice explained that:

The information delivered made [The Beaver Dam] painting no longer static. It was also a chance to sit down and take a break. The different interpretations, various perspectives were interesting. (V12)

Audio, listening to phones is a nice alternative to reading (V3)

While some came across the audio tools by chance:

I was tired because of work so I decided to sit down. Then I saw the phone and decided to try it. (V30)

Other reasons that supported visitors' choices included a preference for reading, a desire to access biographical information on the Group of Seven, and one visitor (V2) stated that there was "no particular reason" for his choice.

Of all the tools you used, did you prefer one? Why?

Preference, much like visitors choice of interpretive aid, indicates that respondents favored labels as a way of accessing information when viewing artworks. Reasons include:

Easily available. (V25)

Are helpful. (V8)

Necessary and helpful. (V30)

While others also included labels as their aid of choice, they indicated that improvements could be made:

Hard to get information from them besides the basics. (V19)

Short biography [on the artist] would have been good. (V17)

Not enough explanation. I would like more description on the labels.

(V12)

I read all the information, but they are not detailed enough. (V7)

Visitors were clear that they preferred labels, but would have liked to see an expanded, more detailed version made available to them.

For visitors who indicated other interpretive aids as their preference, reasons varied greatly. One visitor (V10) who selected the interactive computer found "other peoples' views [from the *Share Your Reaction* cards] interesting." Two of the three visitors who listed the audio phones as their preference based their selection on the following reasons:

Good background information and easy to access. (V20)

Listening to phones is an alternative to reading. (V3)

While the third expressed that:

The three paintings (audio phone) was very good, but the 'explore' segment of it was too long and it asked you to close your eyes when you want to be looking. The two [segments] that were 2 minutes long were excellent. (V5)

There were also two visitors who selected printed materials such as the catalogues and booklets as their preferred aids because the literature provided them with more detailed information on the artist and about the art works. Three visitors expressed that they could not select a preferred aid stating that all were fine, helpful, and that the variety was good. Of all the visitors interviewed only one (V2) responded that his preference was the "to look at the art works."

Did the interpretive tools in the galleries help answer any questions you had while you were viewing the art works? If so how? If not why not?

Of the 21 visitors who responded to this question, ten stated that the tools in the galleries did help them answer questions they had while viewing the art works. A majority of respondents indicated that the aids were valuable for they provided additional information:

It gave me information and I like to know that type of background information. (V30)

It gave me the information I was looking for - artist name, period, materials. (V25)

Information was available in a variety of forms and you can use different tools each time. (V28)

They are very informative. (V27)

Useful, background information. (V7)

Answered by giving general background information. (V3)

Gave information mostly. (V1)

Used to get biographical information mostly. (V2)

One visitor (V12) stated that the aid she used enhanced her viewing of the painting and made her look at the [Beaver Dam] painting a little differently for it was no longer static. Others found the variety of interpretive aids available to visitors new and refreshing. This newness of approach led them to make use of the aids to find the information they were seeking:

I liked that a lot of the information is in a variety of forms and I can use different ones each time. (V28)

Yes they did [help me find information] and they were an alternative to reading. (V16)

Your own route can be followed and they provide background information mostly. (V29)

Six visitors indicated that their questions were not answered and that they were leaving with questions. One of the six (V20) indicated that he felt comfortable leaving with questions for if he chose to, he realized he could pursue answers elsewhere. The remaining five respondents expressed varied views in response to the question, but felt overall that the aids had not provided any benefit to their viewing experience:

Elaboration on the artist is needed. (V19)

Just interested in finding out a name or to find out dates. (V24)

Would like to know more about the artists. (V10)

I did not have any specific question. (V21)

I am still leaving even though I have questions. (V9)

Based on the findings, approximately half of the respondents found the information relevant to their questions while the other half did not. One respondent although he stated he did not find what he was looking for, felt comfortable leaving the galleries with his questions.

Do you think having so many tools in the galleries interferes with your viewing of the art works?

Of the 29 visitors who responded to this question, not one indicated that the interpretive aids interfered with their viewing of the art works. In fact, many supported their presence in the galleries and welcomed the idea of optional usage:

No, not forced upon you in any way. (V10)

To give people a choice is good, the choice is up to the visitor. (V13)

Very good to have options. (V27)

They did not interfere. Some I did not even pay attention to. (V1)

Some I did not even see such as the "Explore a Painting". (V2)

Support for the variety of interpretive aids was also reflected in the responses given by the visitors:

The combination is good, I can use a different one each time I come. (V28)

If you lived in town you could come back and try a different one each

time. (V21)

The computer does not do much for me, but the audio you can look and listen at the same time. (V5)

The remaining responses indicate the positive opinion visitors held regarding the interpretive aids and their relation to the art works:

Excellent. (V29)

I think it aids it. (V8)

They do not interfere at all with the art works rather they compliment them. (V14)

I think its appropriate to have [in the galleries]. (V23)

They improve the visit because I do not have an art background and I need to have them available. (V30)

I think they're great - for me they are not that important, but I see others being able to make use of them. For example, I saw a father and son working on the computer together. (V29)

Other answers included simple statements of support such as:

It's good. (V17)

Helps. (V16)

Enhances. (V12)

Bilingual is good. (V20)

Did you experience any difficulties with any of the interpretive tools? Please specify.

Of the 20 responses to this question, 16 expressed that they experienced no difficulties with the tools. Many visitors stated:

Everything was fine. (V25)

The four remaining respondents based their difficulties either on personal challenges such as:

I find the writing small and hard to read due to my slight vision problem. (V30)

I have trouble reading because I am dyslexic so I usually do not read. The audio is very helpful to me. (V2)

Or in another instance, the visitor (V3) found the labels placed too high on the wall and hard to read in one of the galleries due to the lighting and the colour of the wall.

If you were to add or change anything regarding the additional information provided through the various interpretive tools what would you change? Why?

This question produced a variety of responses from the visitors with not all directly answering the question asked. Overall, most visitors did correctly interpret the question with some respondents replying that they had no changes to suggest or simply stating that:

Everything was wonderful, very positive. (V29)

Others did make several suggestions on how they felt their viewing could be improved through the adjustment or the clarification of information already available in the galleries.

Better map. (V16)

Larger print. (V28)

Poor lighting in areas that could be improved. (V5)

Maps or highlights to know which artists are the most important. (V27)

Chronologically arrange the galleries to help see the development. Unsure if the works are arranged chronologically. I would like to be told they are or they should be so I can see the development. (V30)

In the remaining group of answers, respondents felt more inclined to suggest ways in which their viewing could be enhanced by suggesting interpretive aids not found in the galleries:

Music in the background would be nice. (V25)

People to ask questions to like [at the National Gallery] in Ottawa. Also movies on the periods would be helpful. (V20)

Depends on the artist. If it is not my style of art then a video or film would not improve the viewing. (V19)

Video or film on the Group of Seven or Emily Carr. (V12)

People to help. (V8)

As mentioned, it is unclear whether or not the respondents in this last grouping fully understood the question asked. None-the-less their responses are insightful and relevant to the discussion as they carry over into the final question that was asked of Questionnaire Route A respondents.

Are there any other interpretive tools that should be included that would improve your viewing of the art works?

Again, in response to this question most visitors indicated that they had no suggestions or that they did not feel qualified to answer the question even when prompted to do so. Others, in keeping with the responses from the previous question described other interpretive aids that they felt would improve their viewing and overall experience at the AGO:

I kept getting lost so a few arrows would be good. (V17)

The map for orientation is not very good. (V19)

Background music would be nice. (V25)

Map to highlight which artists are the important ones. (V27)

Two respondents felt that no additions could be made and expressed their overall satisfaction with their experience:

The choices are there. The Royal Ontario Museum (ROM) has too much print. I was impressed with the tools. (V28)

Fantastic - wonderful place to see [painting] colours. I saw them in books, but to see them in real life is great. (V30)

Respondent Responses - Questionnaire Route B

Why did you not use any of the interpretive tools available?

While almost all of the visitors indicated that they made use of the labels there were eight respondents who answered this question disregarding the use of labels as an interpretive aid and focusing on the other, newer innovations. Four of the responses indicate the variance of their reasons for not making use of interpretive aids beyond the labels:

[I came] to get an overview. But I would come back and try things next visit. (V26)

No particular reason. Maybe because I'm lazy? (V23)

Tired otherwise I may have used more, no reason. But my non use should not discourage the availability. (V14)

Taking a quick sweeping tour, I only have a limited time for a visit. (V4)

The remaining four respondents clearly indicated that their focus in the galleries was on the art works themselves:

Grazing to look at the paintings. (V22)

Prefer to look. (V18)

Prefer to look at the paintings. (V13)

More information in the paintings and I am impatient. (V11)

Do you think having all those tools available interferes with viewing the art works?

All except one of the visitors interviewed following Questionnaire Route B questioning indicated that even though they did not make use of the interpretive aids, their viewing was not interfered with by their presence in the galleries. They also stated their support for the presence of the aids and they praised the notion of the visitor maintaining the choice of whether or not they make use of them.

To give a choice to people is good. The choice is up to the visitor. (V13)

They do not interfere at all with the art works. They compliment them. (V14)

I think they are appropriate to have. (V23)

One visitor (V26) did indicate that he felt that some of the interpretive aids did interfere with his viewing, but when prompted he would not elaborate as to how or why they interfered.

**Respondent Responses:
General Questions - Questionnaire Routes A and B**

The last two questions on the questionnaire were asked of all respondents. They were designed to provide visitors with the opportunity to share or elaborate on any other thoughts or comments regarding their museum experience.

Are you leaving the galleries with any questions you would have liked answered?

Of the 21 visitors who responded to this question, 17 indicated that they were not leaving with any questions they would have liked to have had answered. Of the 17 respondents one (V3) did state that she would have used other tools in the galleries to get information if she had had the time. Three other respondents indicated that they were leaving with curiosity and that was fine:

What was not dealt with in the galleries can be pursued in the bookstore if I like. (V20)

There will always be questions and that is OK. (V9)

Other respondents clearly had questions that they would like to have been able to answer while they were in the galleries. Their questions pertained to their overall museum visit:

More details on labels. (V12)

Labels hard to read, a bit dark in the galleries and the map is not very helpful. I opened it once then put it away. The guards at the entrance were also unresponsive. They did not say anything and offered no direction. They did not even smile. They just handed me a flyer. (V4)

At the entrance, a sign to orient me towards the theme: What is the structure? How are [the artists] linked? Topics of the galleries? Did they live at the same time? (V19)

Overall, how would you describe your visit to the Canadian Historical Art Galleries?

When asked this question many respondents were able to summarize their thoughts, comments, and/or feelings on their overall experience clearly and concisely. Some visitors were very specific in expressing what areas they felt could be improved or were in need of correction:

The content is positive, the art works are great but the presentation... After they remodeled, it is too dark and gloomy. The black [text] against the gray labels is hard to read and the [labels] are placed too low down. The Turn of the Century room - the yellow walls are positive, bright. (V6)

Orientation tours would be good to focus on the different aspects of the collection and to throw things into a new light. If there had been one available I would have done it, as I prefer them. There was also too much to read, but I preferred the aural [interpretive aids]. In the Salon Gallery, I would have liked a logic explanation as I thought they were copies because so many are famous [paintings]. (V26)

It was a bit dark, I prefer daylight. (V20)

I was not able to make a thematic link. I would have liked more broad information to situate me. (V19)

Lighting made it hard to see sometimes. (V13)

Lighting made it has to look at works. Sometimes a glare or shadow interfered. (V12)

A map might be helpful for general orientation. (V20)

No directions made it hard to follow. A bit of a labyrinth. (V21)

Routing hard to follow in the museum. (V14)

Other respondents replied with favorable summaries of their experience:

Quiet and pleasant, great way to spend the morning. (V2)

Wonderful paintings. (V25)

Very nice. I love the dark walls especially the bright pink wall in the Salon. (V24)

Great idea to have lights come on in the Milne room. (V22)

Good varying galleries. History cards nice to get feelings of the time. The audio was good. (V5)

Enjoyed overall. (V3)

Very nice improvements such as the colours of the walls, the layout, benches to sit down great and so were the pillows. A good atmosphere. (V11)

Instances of Cognitive Dissonance

An analysis of the findings synthesized from the data collected through the interview process indicates that, despite the presence of the interpretive aids in the galleries, there were instances of dissonance expressed by visitors. These instances are determined by matching the categories in the Typologies of Cognitive Dissonance (Table 1) with visitors' responses. This discussion focuses on identifying these instances of dissonance and then presents an indication of whether or not these instances could have been resolved through visitors' use of the interpretive aids present in the *Canadian*

Historical Art Galleries.

An analysis of the responses indicates that there were discernible instances of cognitive dissonance experienced by visitors while in the galleries. Further examination of the instances demonstrates that all the dissonances verbalized by visitors pertain to typology 2: *Dissonance between the visitor's expectations and the aesthetic event*. Within this typology the dissonances connect to three of the four identified categories: (a) conflict about the quality of the visit; (b) conflict about the museum's role; and type (d) conflict about the museum's organization.

While question three on the oral questionnaire was designed as the key question aimed at answering the research question, there were in fact several other questions which saw the emergence of visitors' indications of dissonance. Question four saw one visitor indicating that more elaboration on the artists was needed while question six revealed that visitors experienced difficulty with the organization of the museum:

I kept getting lost so a few arrows would be good. (V17)

Labels are hard to read, a bit dark in the galleries and the map is not very helpful. (V4)

Dissonances pertaining to the organization of the museum, type (d) *conflict about the museum's organization*, were revealed through several questions. In these instances respondents clearly indicated dissonances with regards to the lighting, the label print (text size), the map, and the orientation signage.

Dissonances were also expressed with reference to the museum's role in providing for a beneficial museum experience for visitors, type (a) *conflict*

about the quality of the visit. Comments in this area focused primarily on visitors feeling unable to make the thematic and topical links between the galleries. One respondent stated that:

At the entrance a sign to orient me towards the theme [would have answered my questions:] What is the structure? How are [the artists] linked? Topics of the galleries? Did they live at the same time? I was not able to make a thematic link. I would have liked more broad information to situate me. (V19)

This visitor's dissonance while linked to typology 2(b) *conflict about the museum's role*, also moves into type 2(a) which focuses on the quality of the visit. This visitor was not alone in his expression of dissonance within this typology. Through their responses to the questions asked, other visitors indicated that they experienced conflict with the format of the galleries in terms of their chronological organization and the importance of the artists whose work was being viewed. Both of these dissonances affected the quality of their overall visit.

Of the cognitive dissonances expressed, it is the ones within typology 2(a) *conflict about the quality of the visit*, regarding the quality of the visit, that could have seen immediate resolution through the visitors' use of the interpretive aids in the galleries. Visitors could have sought answers to their questions if they had probed further into the support materials including for example, the *Sign Posts*, computers, labels, and audio phones.

Typologies of cognitive dissonance 2(b) *conflict about the museum's role* and 2(d) *conflict about the museum's organization*, could only have been seen resolution through visitors' use of *Share Your Reaction* cards which

facilitate the expression of the dissonance to the AGO. This is categorized as a resolvable dissonance even though the modification to “correct” it would not have been immediate. Here, visitors’ ability to express their dissonance to the AGO is considered as a means of resolution. The presence of an interpretive aids allows them to state their dissonance instead of leaving with it. The visitors’ dissonance could then have been addressed by AGO staff through the adjustment of the lighting or changes to the size of the label text (font size). Or for example, perhaps the AGO could address the issues by adding information in the galleries as to why the lighting is maintained at a low level.

While conditions for resolution or at least expression of the visitors’ dissonances are present in the galleries, what is perhaps of greater significance to this study is the observation that not one of the respondents interviewed expressed any other type of cognitive dissonance. Does this imply visitors experienced no other dissonances, or were all their questions resolved through the use of the multi-sensory and multi-media interpretive aids without them articulating this?

Cognitive Dissonance and Interpretive Aids: Designing for Resolution

Further analysis of the data, indicates that half of visitors interviewed were able through the use of the interpretive aids, to resolve, or find answers to their questions while in the galleries. This finding is substantiated by the responses to question three: *Did the interpretive tools in the galleries help answer any questions you had while you were viewing the art works? If so*

how? If not, why not? Visitors claimed they were able to access the information they were looking for.

When these visitor responses are combined with those of the visitors who expressed dissonances that were resolvable had they pursued their questions, the interpretive aids were able to assist self-guided adult visitors in the resolution of cognitive dissonance. Or at the very least, they provide the conditions for resolution through their availability in the galleries even though in some instances the visitor did not seek out the resolution. This ability to find answers to questions is an important aspect of the learning process for self-guided adult visitors. As stated by Dufresne-Tassé (1994) in Chapter 4, "the museum educator would be well advised to anticipate these questions regarding... exhibits and should therefore be prepared to provide material that contains an answer" (p. 477). It is this statement that allows the Typologies of Cognitive Dissonance to move from a theoretical perspective to having practical implications in the design and implementation of interpretive aids for self-guided adult visitors.

This investigation sought to determine if a theoretical perspective applied to a realistic situation could have practical implications for museum educators with regards to adult learning. If cognitive dissonance resolution leads to cognitions in consonance, and if cognitions in consonance can be realized through the placement of interpretive aids containing content derived from front-end evaluation based on determining what typologies of cognitive dissonance visitors experience, then learning is taking place. This is

further supported by Falk and Dierking (1992) who state,

Although it is not always possible to predict what will engage visitors intellectually, it is possible with front-end and formative evaluation to determine what does not engage visitors. The driving force in the design of exhibits has to be the visitor's response. (p. 149)

Interpretive aids placed in the galleries with content guided by the Typologies of Cognitive Dissonance support self-directed learning based on choices made by the learner and not the museum. This design is crucial to supporting and promoting learning in a museum as a large percentage of adults script their own visit.

While these findings are supportive of the placement of multi-sensory and multi-media interpretive aids in gallery spaces for use by self-guided adults, there are conditions and implications which must be considered by museum educators prior to proceeding with content development. These factors may not only effect the type of interpretive aid created, but also the content developed. This will be discussed further in the next chapter.

Chapter 8

The Road to Resolution: Summary & Implications of the Investigation

When considering the implementation of multi-sensory and multi-media interpretive aids in art galleries for use by self-guided adult visitors, there are several factors which must be considered prior to proceeding with their development. Not only must there be the ability of visitors to make use of these aids with uncomplicated ease and efficiency, but they must also contain content that will contribute to the experience and address some of the more common dissonances museum visitors experience. The following discussion examines issues critical to creating self-directed interpretive aids that meet the needs of both visitors and the museum without directing attention away from the primary focus of the visit: viewing the art works.

Interpreting Presence, Usability, and Content

Interpretive aids placed directly in the galleries for visitor self-directed use are beneficial and necessary for visitors as they seek information to questions or resolution of cognitive dissonances that may surface while they are viewing art works. With a large percentage of visitors engaged in museum visits independent of organized tours and programs, these aids are an important practice through which museums can offer support to self-guided visitors and promote learning opportunities. These aids, if designed with consideration for both the visitors' use and the needs of the art works,

should allow the option of usage to remain within visitors' control. Visitors are thus able to tailor their visit to their own needs making use of the materials only should they chose to. While this attention to design and approach can be beneficial to both visitors and the museum, there are certain issues warranting further consideration if their presence is to be beneficial. Art museums must be mindful of: 1) the presence of the interpretive aids in the galleries, 2) the "usability" of the interpretive, and 3) the content formulated.

1) Presence of the Interpretive Aids in the Galleries

While many museums are jumping on board the technology band wagon, there must be a cautious approach to the integration of high-tech only interpretive aids within a gallery setting. "The obsession with interactive [computer] technology, [for example], seems threatening because visitors may initially find it more exciting than looking at a painting" (Anderson, 1994, p.37). This threat depends largely on the way in which the exhibit is designed and in the manner in which the interpretive aids are integrated into the overall layout. From this study of the AGO's *Canadian Historical Art Galleries*, visitors interviewed indicated that the placement of the interpretive aids in no way distracted from their interaction with the art works. There were in fact visitors who stated that they did not even discover the interpretive aids' presence until they were sitting or standing directly next to it:

I was tired because of work so I decided to sit down. Then I saw the [audio] phone and decided to try it. (V30)

This supports one of Worts' main principles which seeks to ensure the art works remain the primary focus in the galleries. This results in the interpretive aids in the *Canadian Historical Art Galleries* being discreetly integrated into the furniture and overall design scheme. This sensitivity, achieved through the careful placement of interpretive aids, must be maintained by all art museums to ensure the primary focus of the visit remains the art works.

2) The Usability of Interpretive Aids

Another factor which plays a significant role in determining the educational benefits of the interpretive aids is their "usability". James Jensen (1997) lays the guidelines of usability as:

- Being easy to learn - users should be able to begin quickly.
- Being easy to use - the user's should be able to do what they want, and the technology should not get in their way.
- Being easy to remember - users should be able to return to the application after some time and still know how it works.
- Causing few errors - users should make few errors and be able to recover from them easily.
- Being subjectively pleasing - the application should be pleasant and satisfying to use. (p.40)

The overall ease through which visitors can access information is important as there is no greater frustration for visitors than to be interacting with an interpretive aid only to experience difficulty in using it due to the complexity of the design or program. This negates the entire purpose of the interpretive aid's presence and usefulness. It can also heighten anxiety and frustration to

the point where the visitor may abandon the visit altogether. The notion of usability not only addresses the interaction between interpretive aids and visitors, but it also places emphasis on the need for careful, appropriate content development.

3) Content Formulation

As interpretive aids are being conceptualized, emphasis must be placed on the development of the content. Some museums are swept away by the glitter of new technologies and with this comes the danger of overlooking what content is being presented to visitors. "Different points of entry into knowledge [and information] need to be established to accommodate the different lenses through which learners see" (Gardner and Davis, 1993, p.37). While no one interpretive aid can meet all the diversity of visitors' needs, museums have the ability to conduct formative evaluation through pilot projects, focus groups, and interviews to gain insight into what content visitors would like to see developed and addressed by the interpretive aids. The use of formative evaluation allows museums, in mapping the content, to address some of the re-occurring themes, topics, issues, or questions identified by visitors in direct relation to supporting the resolution of the dissonance expressed by visitors.

Further endorsement of formative evaluation in content development is supported by Jensen (1997) who states that "user-centered design" and "user analysis" must be ongoing throughout the development of content to ensure

that the correlation between visitors and content is appropriate. (p. 41) User-centered design focuses on defining users and the tasks (content) users wish to perform (access) through ongoing assessment and redesign practices implemented to maintain the integrity of the content. (Jensen, p. 41) User analysis takes the process one step further by requiring a definition of who the users are and learning as much as possible about them. (Jensen, p. 41) For this process it is imperative to know for whom the interpretive aids are being intended whether it be adults, families, special populations, or senior citizens.

While formative evaluation and user-centered design provide guidance for content development practices, interpretive aids should also be created with clear predetermined goals. They must take into consideration the needs of visitors, the learning outcomes desired, recognition of learning various styles, the expertise of the museum, the desired overall gallery design, and the art works themselves. Consideration of all these aspects may appear to complicate a simple desire to create interpretive aids supportive of visitors, however if all these factors are taken into account from the initial conceptualization, they will lead to interpretive aids that enhance visitors' experience and promote learning opportunities. In these instances, the content will have been conceived, designed, and implemented based on real assessment and not on assumptions about how and what people want to learn.

The Road to Resolution

While the preceding discussion focused on the considerations in the design and implementation of interpretive aids necessary to promote resolution of cognitive dissonance, there remains another variable that must be identified. That other variable is the visitors themselves. While museums can design and implement the most well researched and evaluated interpretive aids possible, it is still up to visitors to make use of them based on their own choice and self-direction.

The road to the resolution of cognitive dissonance that visitors must follow in order to achieve cognitions in consonance is not as direct or straight forward as simply placing well designed interpretive aids in the gallery. The age old adage "build it and they will come" does not necessarily apply in this instance. There are many variables that can interfere with visitors desire to seek cognitive dissonance resolution. In order to resolve their dissonances while in the galleries, visitors must:

- 1. Identify that they have a dissonance/question they would like to resolve/answer.*
- 2. Be motivated to seek out a resolution.*
- 3. Actually see an available interpretive aid that may assist them.*
- 4. Properly use with ease the interpretive aid they have selected.*
- 5. Access the information they are seeking*
 - a. The aid must have the desired information (content).*
 - b. The visitor must be committed to seeking it out.*
- 6. Return to the point of dissonance and apply the information found to resolve the conflict.*

7. *If the information is not found then visitors must be motivated to:*
 - a. *Seek out another interpretive aid in hopes that it contains the information they are seeking or*
 - b. *Express their dissonance to the museum, if possible.*
8. *Museum must respond to visitors' requests with a modification.*

Other factors that could affect visitors' road to resolution include:

1. *Visitors may not be motivated to resolve their dissonance.*
2. *Visitors may not know that interpretive aids are available to assist them in the resolution their dissonance (Visitors do not see the interpretive aid).*
3. *Visitors may select the inappropriate interpretive aid and not find the content they are looking for.*
4. *Interpretive aid may not offer the information the visitors seek.*

When the intricacy of interpretive aid design and the responsibility of visitors to pursue cognitive dissonance resolution are brought to bear on this discussion, it becomes readily apparent that there exists an inherent complexity in designing and implementing interpretive strategies to assist self-guided adult visitors. However, these factors should not deter museums from choosing to place interpretive aids in the galleries, conducting front-end and formative evaluation to determine the appropriate content, and making modifications based on on-going evaluation of the content.

Implications of This Study

Because of the complexity of the issues involved, should museums shy away from initiating these supportive approaches for visitors that promote learning opportunities? On the contrary, museums should strive to make

further use of interpretive strategies. Self-guided visitors comprise an increasing portion of visitors to museums and they deserve as much attention and educational service by museum educators as do the visitors who participate in pre-designed tours and programs. Self-guided visitors' needs can not be overlooked and as discussed, the Typologies of Cognitive Dissonance (Table 1) offer one means through which museums can gain an understanding of the areas of dissonance or questioning that visitors experience while viewing art works and visiting the museum. Once these areas are determined through the application of the Typologies of Cognitive Dissonance categories to visitors' thoughts, opinions, and comments, then these insights can help fine tune the content, presentation, and future possibilities in order to promote learning in museums.

In Conclusion

The *Canadian Historical Art Galleries* at the Art Gallery of Ontario offer one example of how art museums can re-conceptualize gallery environments to enhance the visitor's experience of the art works and promote learning opportunities. However, in the *Canadian Historical Art Galleries* the interpretive aids are not the driving force of the experience. They take a back seat to the art works. Visitors ultimately remain in control of their own experience and as such, multi-sensory and multi-media interpretive aids should be created to expand visitors' options, not limit them and always return the viewer to the art work.

In a world saturated with technology, information, and mass media, the art museum remains a unique environment where visitors experience the “real thing”. As museums begin to make use of new interpretive strategies within gallery spaces that have previously been devoted exclusively to the art works, there must be a clear understanding of the impact the interpretive aids will have on both the art works and visitors prior to their implementation. An implementation process based on clearly expressed goals, desired outcomes and visitors’ input, in conjunction with the expertise of museum professionals, can lead to the creation of interpretive aids that heighten visitors experience and interaction with the art works and promote learning. The Typologies of Cognitive Dissonance is one tool that can assist museum educators to better determine what content should be developed based on real visitor needs. This will enable us to ensure that our self-guided adult visitors leave the museum having engaged in meaningful, beneficial experiences. Only then, will we be able to state that in keeping with our educational mandate, we are beginning to meet the needs of all our patrons including self-guided adult visitors.

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Appendix A

Visitor Questionnaire - Test Pilot Format

- Male
- Female

Age (approx.) _____

Are you visiting the Art Gallery of Ontario

Alone With a Friend With Family Other _____

How often do you visit the Art Gallery of Ontario (per year)?

Approx. _____ times per year First time _____

Which of the following did you use while visiting the galleries

	Used	Partially Used	Did Not Use
Labels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text Panels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share your Reaction Cards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sign Posts Photo Albums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Booklets (Salon Gallery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Books/Catalogues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Explore a Painting" in depth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive Computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visitor Phones Group of Seven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Why did you chose to use the interpretive techniques (tools) you did?

Of all the tools you used did you prefer one? Why?

Did the interpretive techniques (tools) in the galleries help answer any questions you had while you were viewing the art works? If so how? If not why not?

Do you think the variety of interpretive techniques (tools) available improves or hinders your experience of the art works? Please explain.

Did you experience any difficulties with any of the interpretive techniques (tools)? Please specify. For example: hard to read, inaccessible language, faulty computer program?

If you were to add or change anything regarding the additional information provided through the various interpretive technique (tools) what would you change? Why?

Are there any other interpretive techniques (tools) that should be included that would improve your viewing of the art works?

Overall, how would you describe your visit in the Canadian Historic art galleries? Any other thoughts or comments?

Appendix B

Visitor Questionnaire - Revised

Are you visiting the Art Gallery of Ontario

Alone With a Friend With Family Other _____

How often do you visit the Art Gallery of Ontario (per year)?

Approx. _____ times per year First time _____ Member _____

	Used	Did Not Use
Labels	<input type="radio"/>	<input type="radio"/>
Share your reaction Cards	<input type="radio"/>	<input type="radio"/>
Sign Posts Photo Albums	<input type="radio"/>	<input type="radio"/>
Booklet (Salon Gallery)	<input type="radio"/>	<input type="radio"/>
Books/Catalogues	<input type="radio"/>	<input type="radio"/>
"Explore a Painting" in depth	<input type="radio"/>	<input type="radio"/>
Interactive Computer	<input type="radio"/>	<input type="radio"/>
Visitor Phones Group of Seven	<input type="radio"/>	<input type="radio"/>

Interviewer Notes:

Route A

Why did you chose to use the interpretive techniques (tools) you did?

Of all the tools you used did you prefer one? Why?

Did the interpretive techniques (tools) in the galleries help answer any questions you had while you were viewing the art works? If so how? If not why not?

Do you think having so many tools in the galleries interferes with your viewing of the artworks?

Did you experience any difficulties with any of the interpretive techniques (tools)? Please specify. For example: hard to read, inaccessible language, faulty computer program?

If you were to add or change anything regarding the additional information provided through the various interpretive technique (tools) what would you change? Why?

Are there any other interpretive techniques (tools) that should be included that would improve your viewing of the art works?

Route B

Why did you not use any other tools ? **OR**
Why did you not use any of the tools available?

Do you think having all those tools available interferes with viewing the artworks?

Are you leaving the galleries with any questions you would have liked answered?

Overall, how would you describe your visit in the Canadian Historic art galleries? Any other thoughts or comments?

Male Female Age (approx.) _____

Appendix C

Interview Questions Art Gallery of Ontario Douglas Worts

These questions are designed to lead a general interview with two members of the Gallery Enhancement and Audience Development team. They are only an outline as I would like the interview to be a discussion allowing other questions and thoughts to surface as the interview progresses.

General Questions -

- What is your position here at the Gallery?
- What is your role on the Gallery Enhancement and Audience Development team?
- On what basis were the team members selected?
- How does the team function within the Gallery? within itself?
- Can you describe for me the history of how and why this team was realized?
- What is the mandate/mission of the team?
- Has it changed since it was formed? Why?
- Why were the Canadian Historic Art Galleries chosen as the site within the museum as the focus of the team?
- What are the responsibilities of the team?
- Is the approach a test pilot for other galleries in the AGO or will it be applies only to the Canadian Historic Galleries?

Questions Re: Content & Presentation -

- Can you tell me about the various interpretive techniques used in the galleries?
- Why did you chose to employ these approaches?
- Does each interpretive tool have a specific function in terms of its

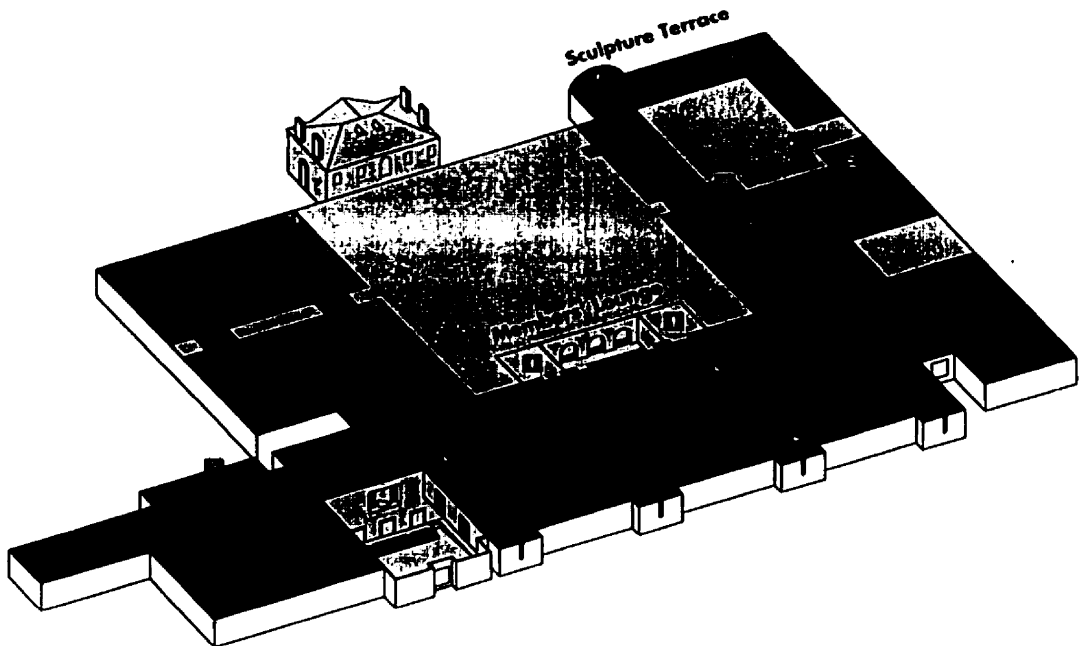
content/presentation?

- **How is the content/presentation decided upon?**
- **Is the content/presentation ever evaluated? If so how? If not why not?**
- **Is the content/presentation ever modified or changed?**
- **Do you have any sense of how visitors feel about having various options and information to chose from?**
- **Do you ever think that the interpretive tools overshadow the art?**
- **Are these tools provided to help visitors "learn" more while they are at the Gallery? If so do you think you are successful? Please explain.**
- **Where do you want to see the interpretive tools go next?**
- **Where do you think they will go next?**
- **Any other questions or comments regarding the interpretive materials?**

Appendix D

Figures 1 - 26

.



UPPER LEVEL

- Twentieth Century Art ■
- Contemporary Art ■
- Canadian Art to 1960 ■
- Inuit Art ■
- Special Exhibitions ■
- Services ■

Figure 1 - Canadian Historical Art Galleries, Location in the Art Gallery of Ontario

SHARE YOUR REACTIONS...

YOUR RESPONSE IS VALUABLE. SELECTED COMMENTS AND DRAWINGS WILL BE ADDED TO THE DISPLAY.



ARTWORK, ARTIST OR GALLERY EXPERIENCE REFERRED TO:

PLEASE DESCRIBE YOURSELF (eg. where you are from, background, age, etc.):

NAME (optional):

DATE:

Figure 2 - Share Your Reaction Card

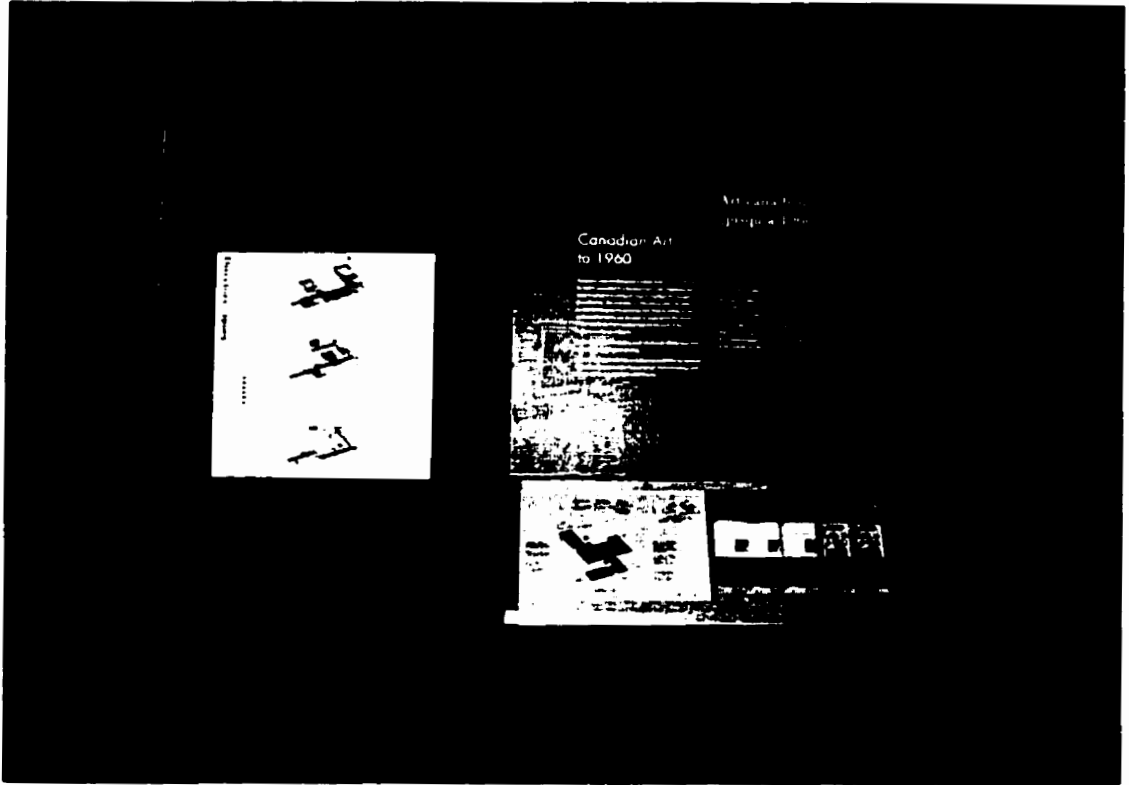
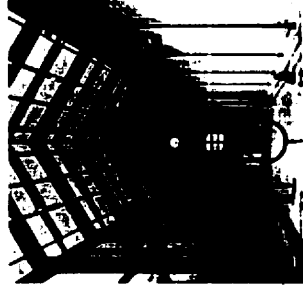


Figure 3 - Canadian Historical Art Galleries, Signage, Elevator Entrance

ART GALLERY OF ONTARIO

Gallery Guide



MUSÉE DES BEAUX-ARTS DE L'ONTARIO

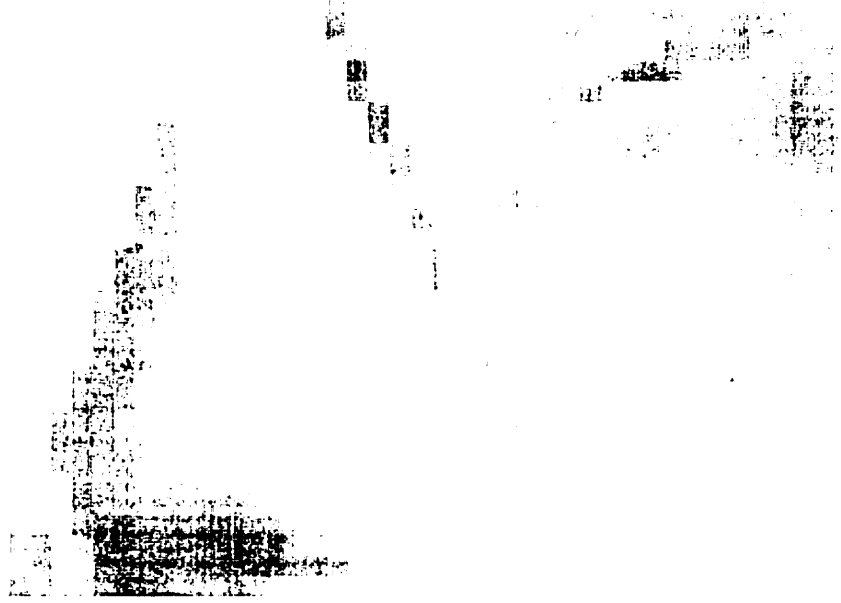


Figure 4 - Art Gallery of Ontario, Gallery Guide

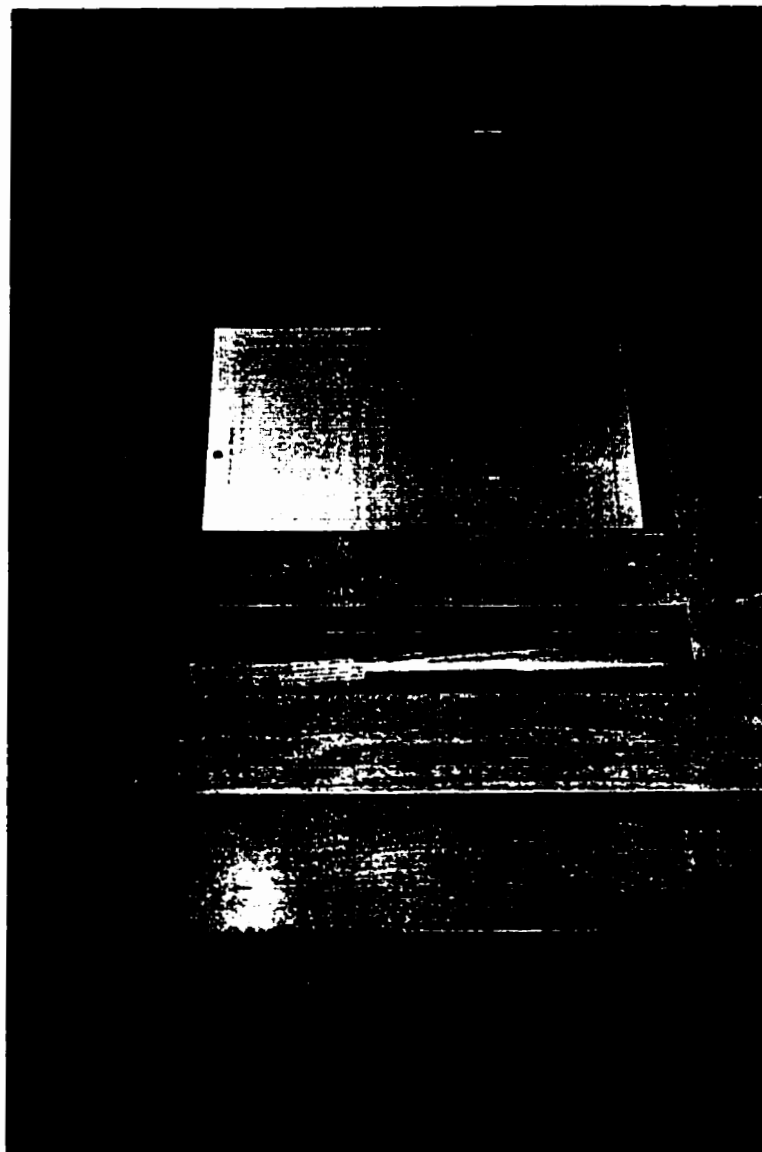


Figure 5 - *Share Your Reaction Cards, Presentation*



Figure 6 - *Share Your Reaction Cards, Presentation, The 1930s Gallery*



Figure 7 - *Sign Post* Photo Album, Presentation

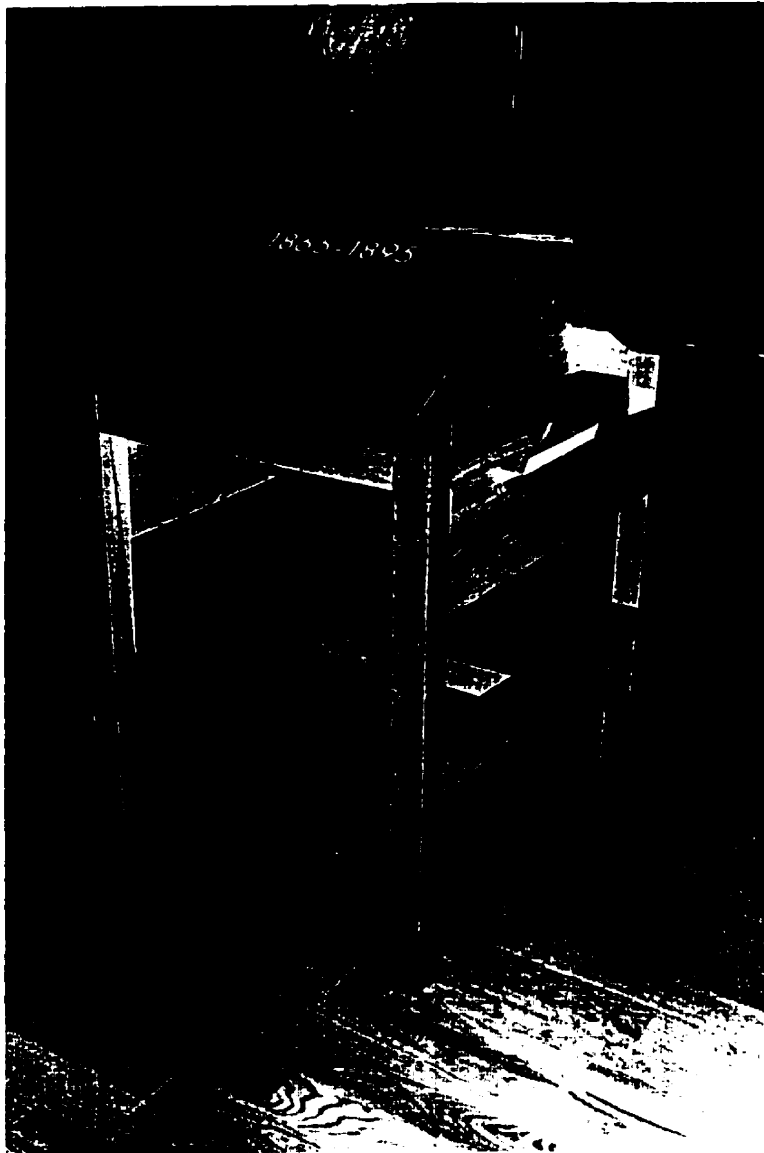


Figure 8 - *Sign Post Photo Album, Presentation, The Salon/Le Salon Gallery*

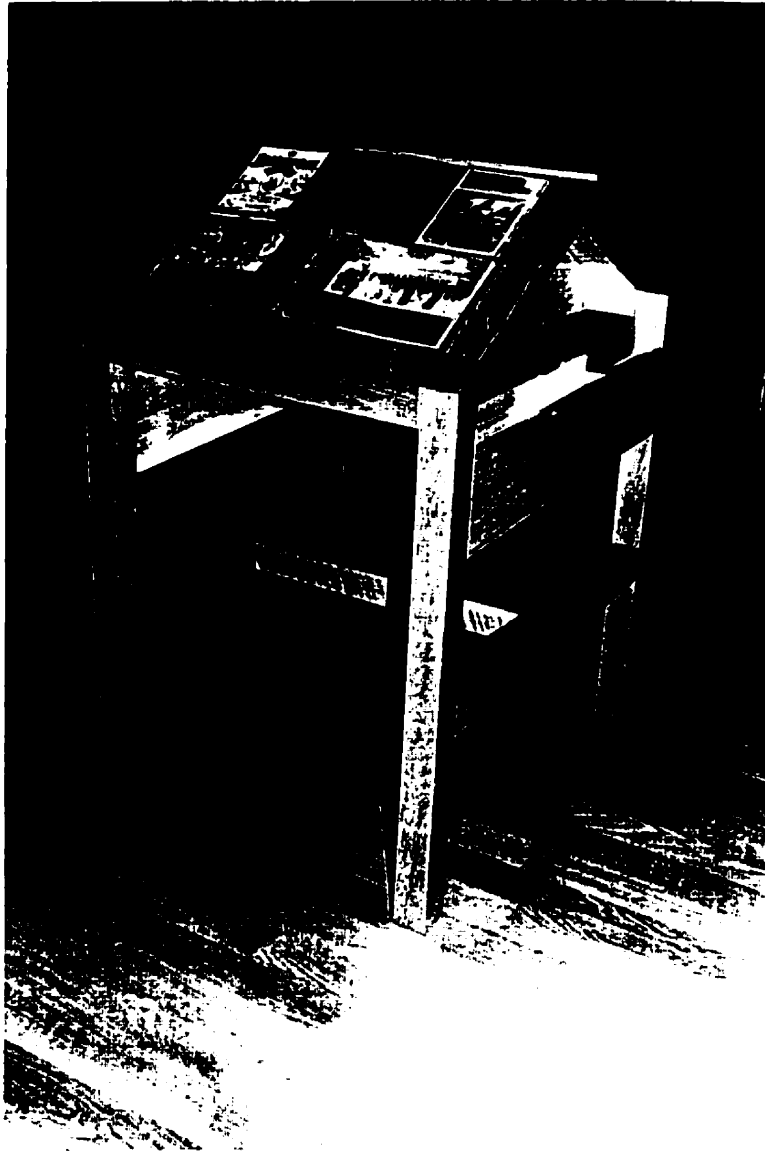


Figure 9 - *Sign Post Photo Album, Presentation, The Salon/Le Salon Gallery*



Figure 10 - *Sign Post Photo Album, Presentation, Turn of the Century
Toronto Gallery*

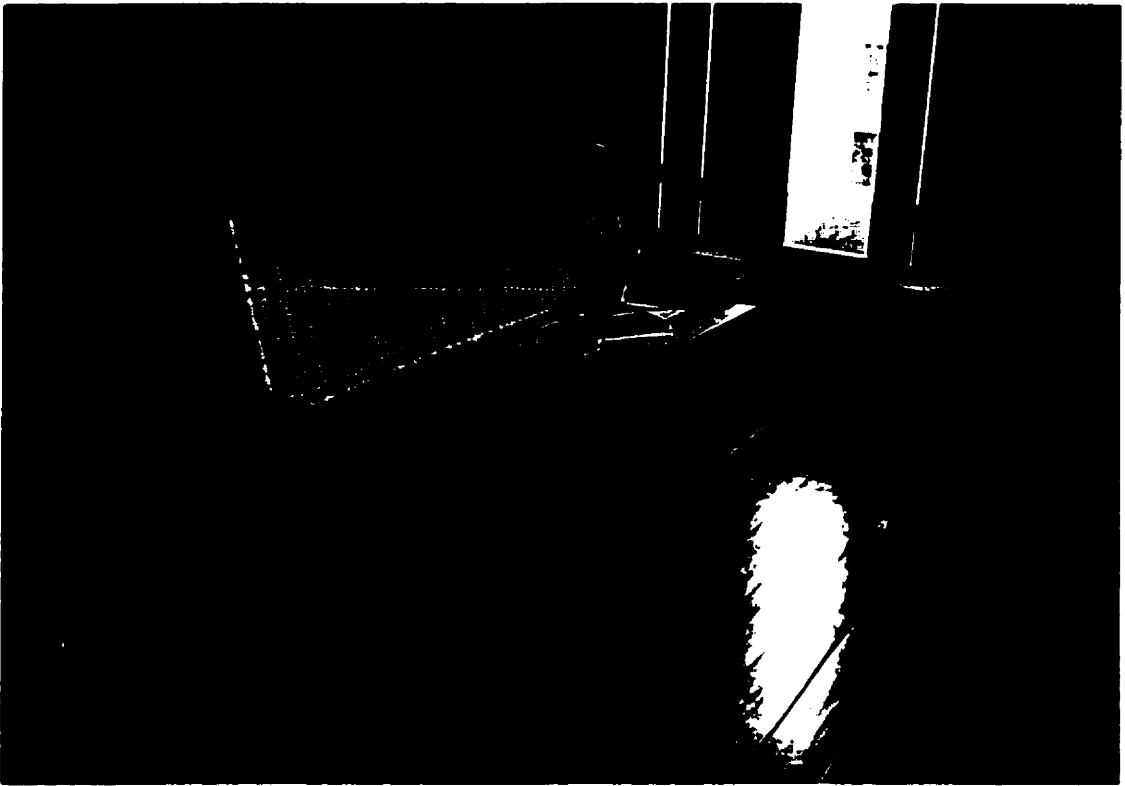


Figure 11 - *Monograph (Catalogue)*, Presentation, Frances Loring/Florence Wyle Gallery

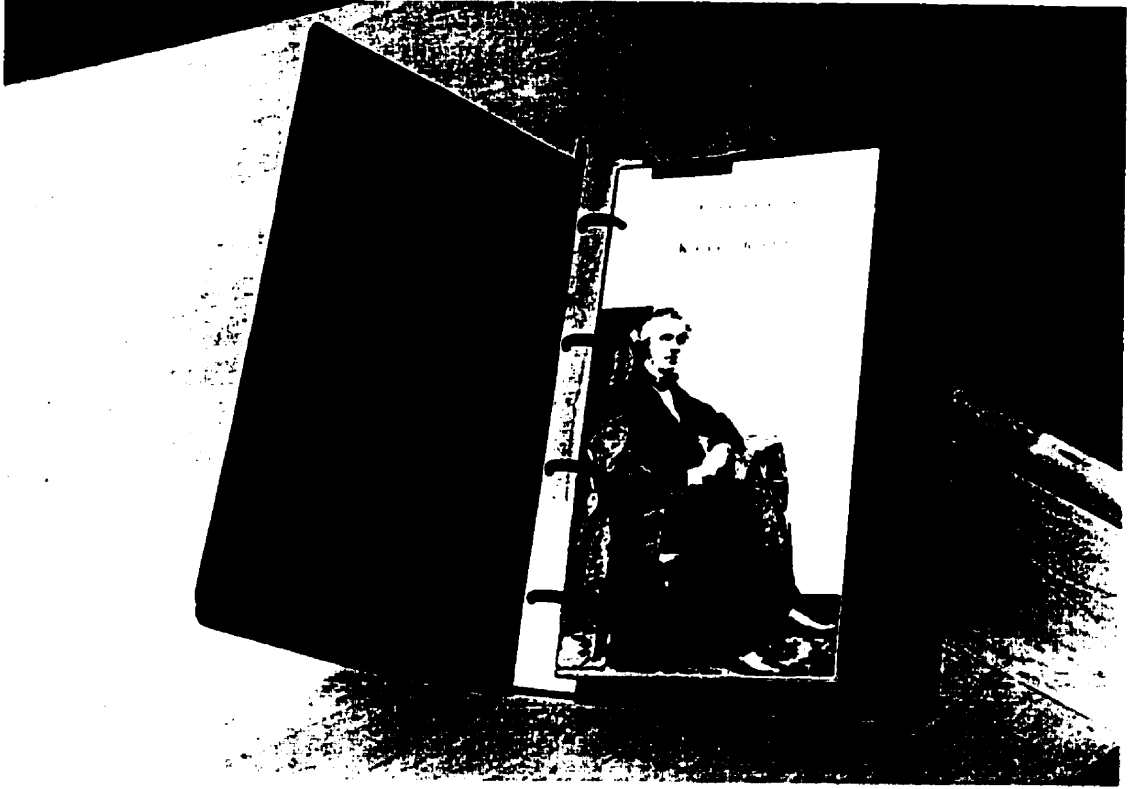


Figure 12 - Cornelius Krieghoff Binder, *Canada Est/Canada Ouest Gallery*

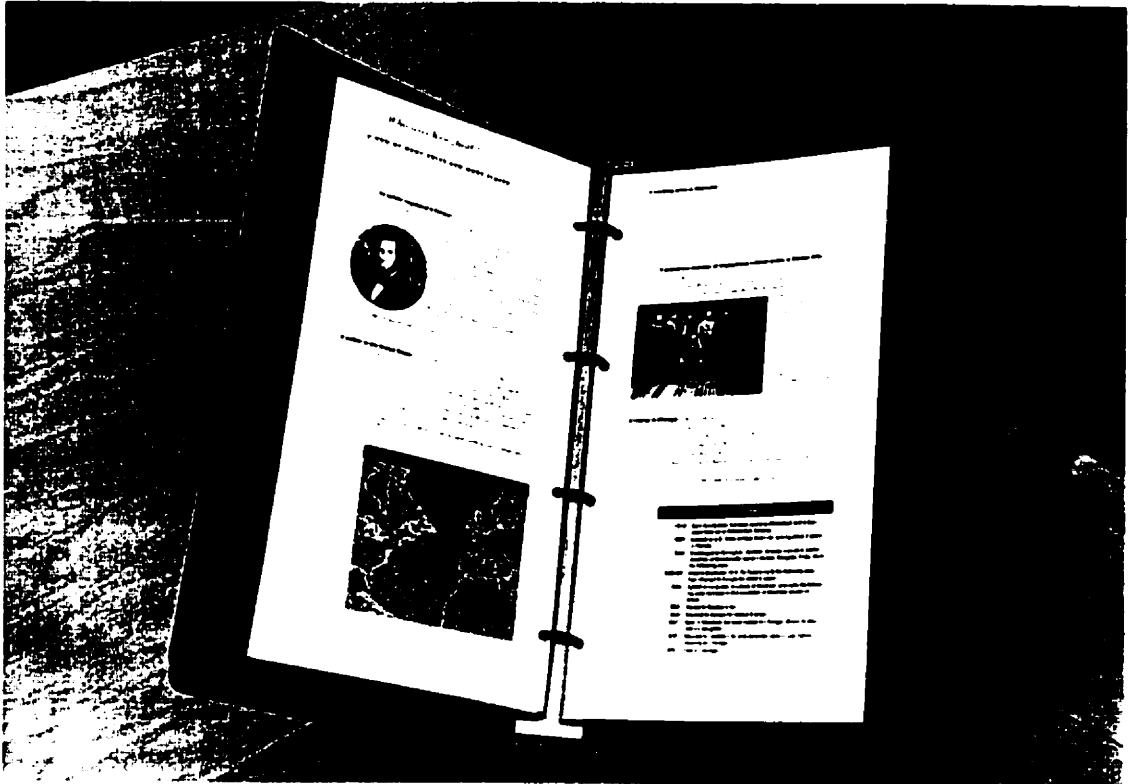


Figure 13 - Cornelius Krieghoff Binder, *Canada Est/Canada Ouest Gallery*

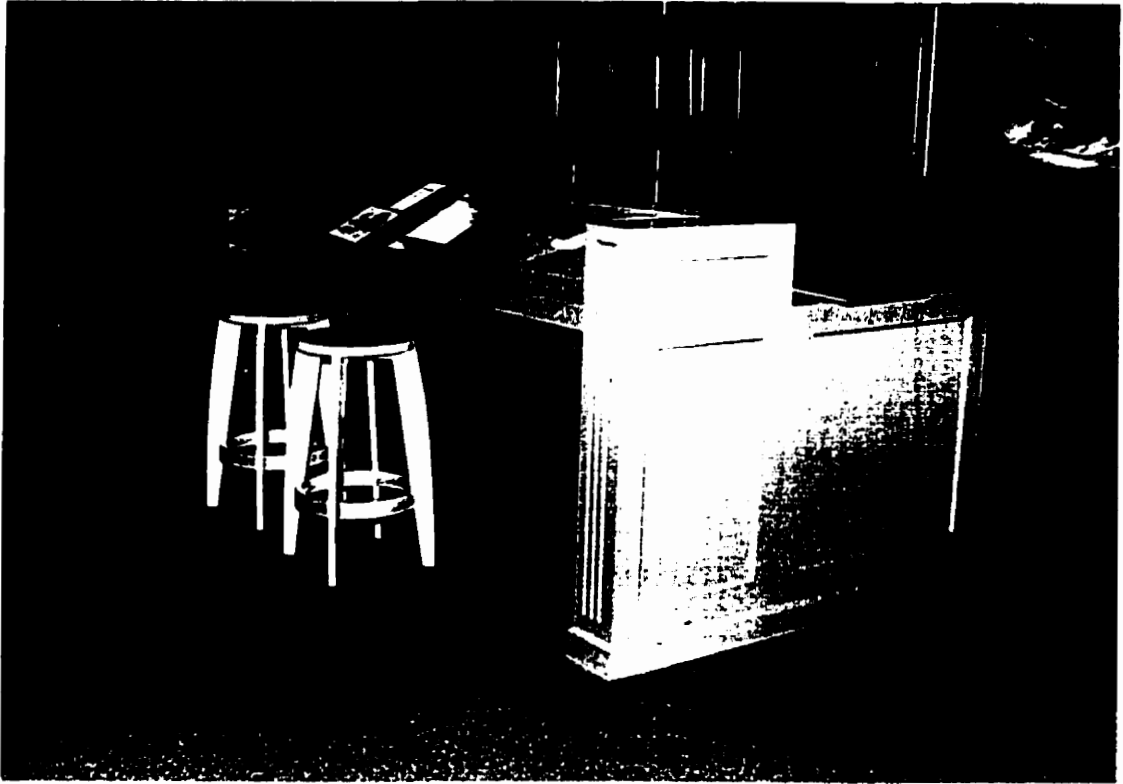
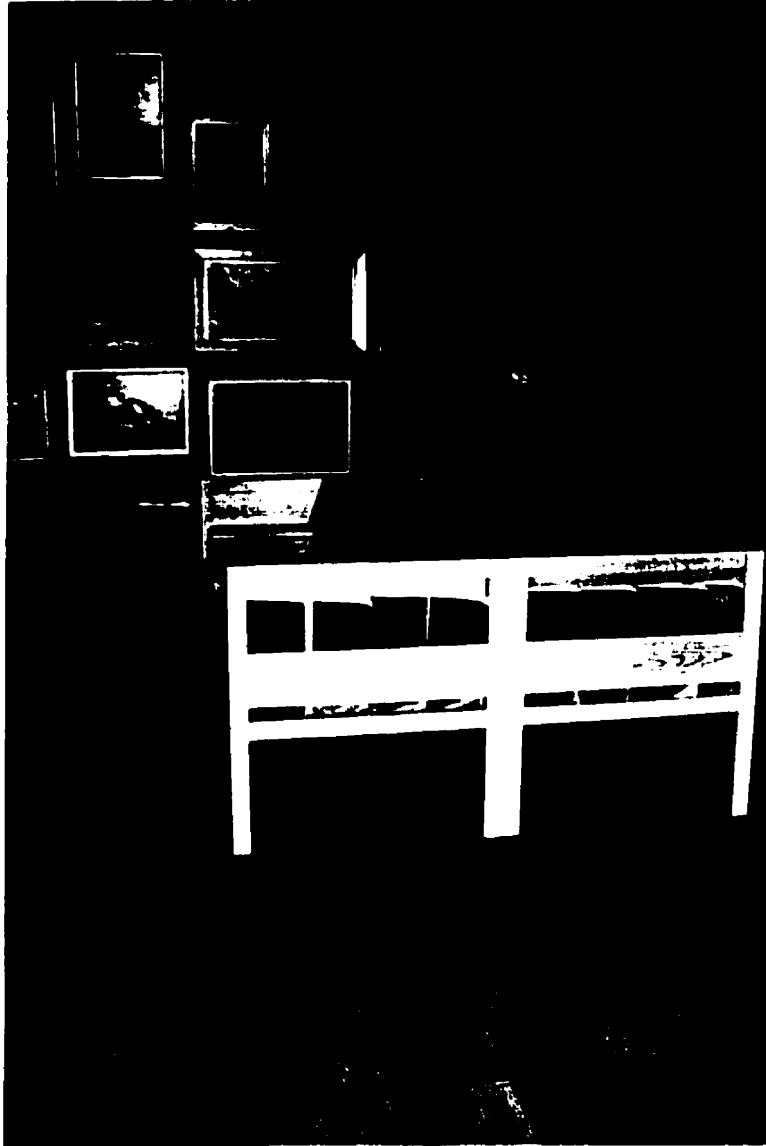


Figure 14 - Cornelius Krieghoff Binder, Presentation, *Canada Est/Canada Ouest Gallery*



**Figure 15 - Eighteenth Century European Grand Salon Display
& Guide Presentation, *The Salon/Le Salon Gallery***

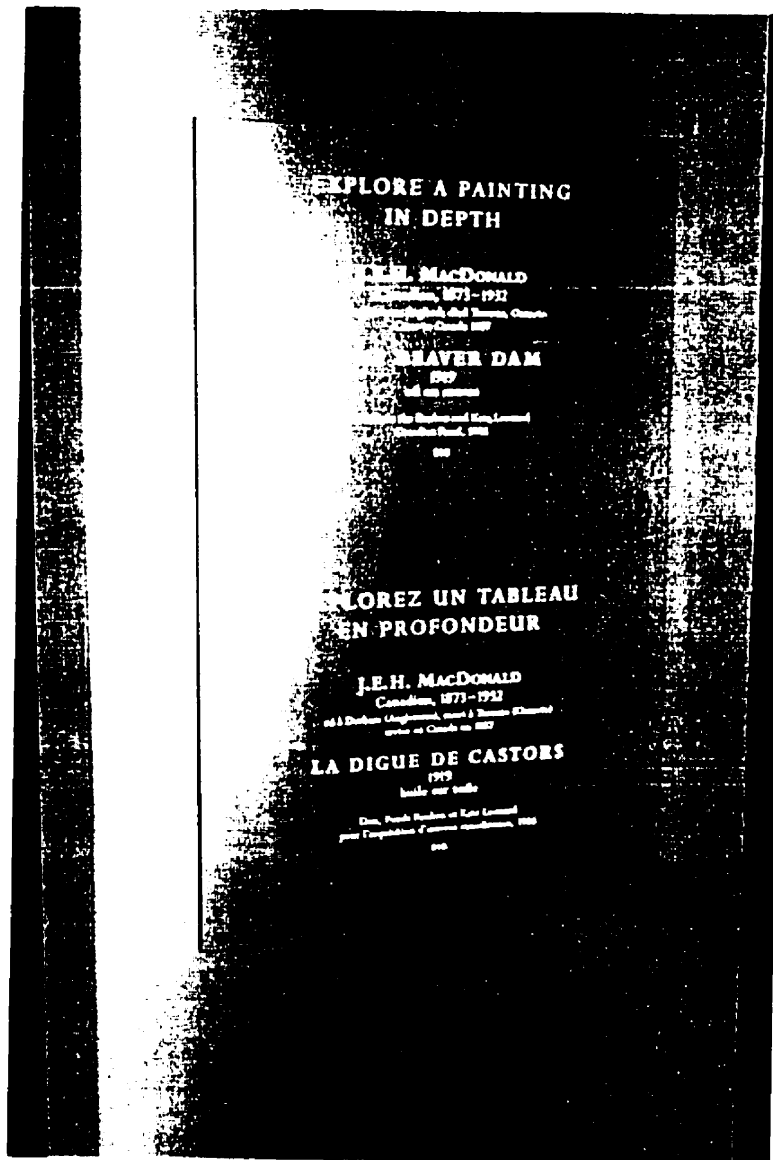


Figure 16 - Explore a Painting in Depth Signage, Group of Seven Gallery



Figure 17 - *Explore a Painting in Depth Seating and Audio Program,*
Group of Seven Gallery

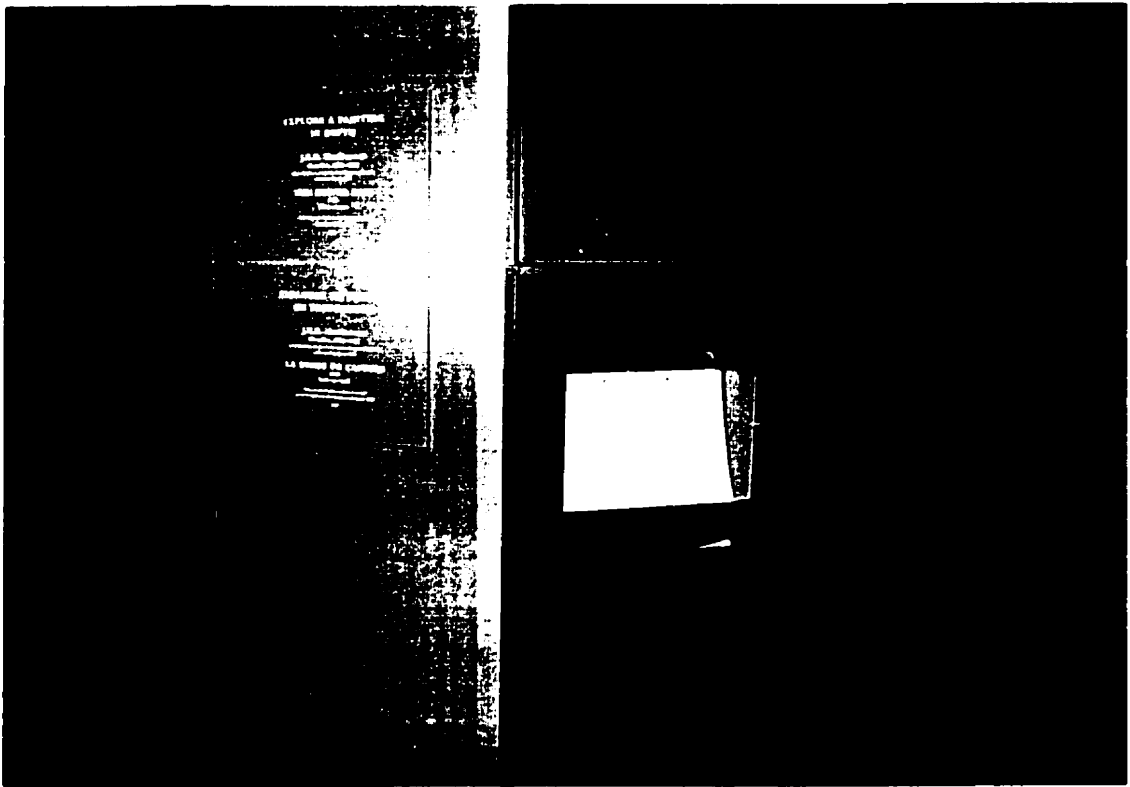


Figure 18 - *Share Your Reaction Cards, Explore a Painting in Depth Nook, Group of Seven Gallery*

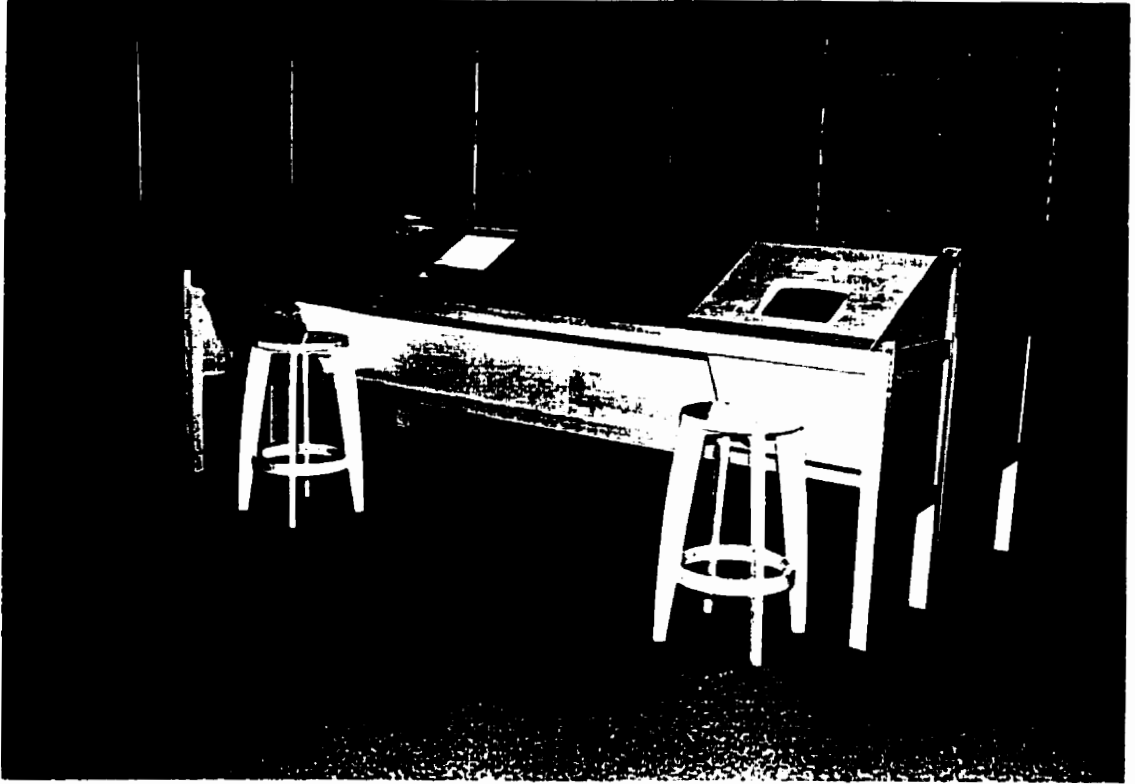


Figure 19 - Computer #1, Presentation, *Group of Seven Gallery*

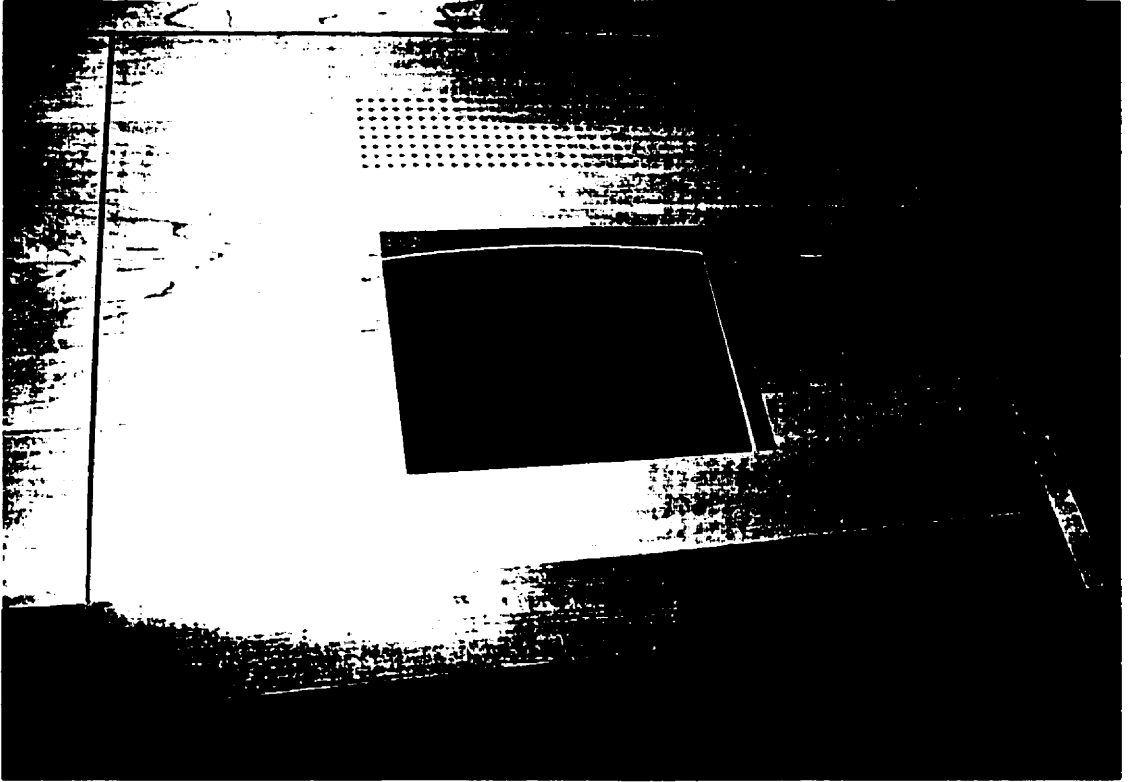


Figure 20 - Computer #1, Close-up View, *Group of Seven Gallery*



Figure 21 - *Above Lake Superior*, 1922, Lawren Harris

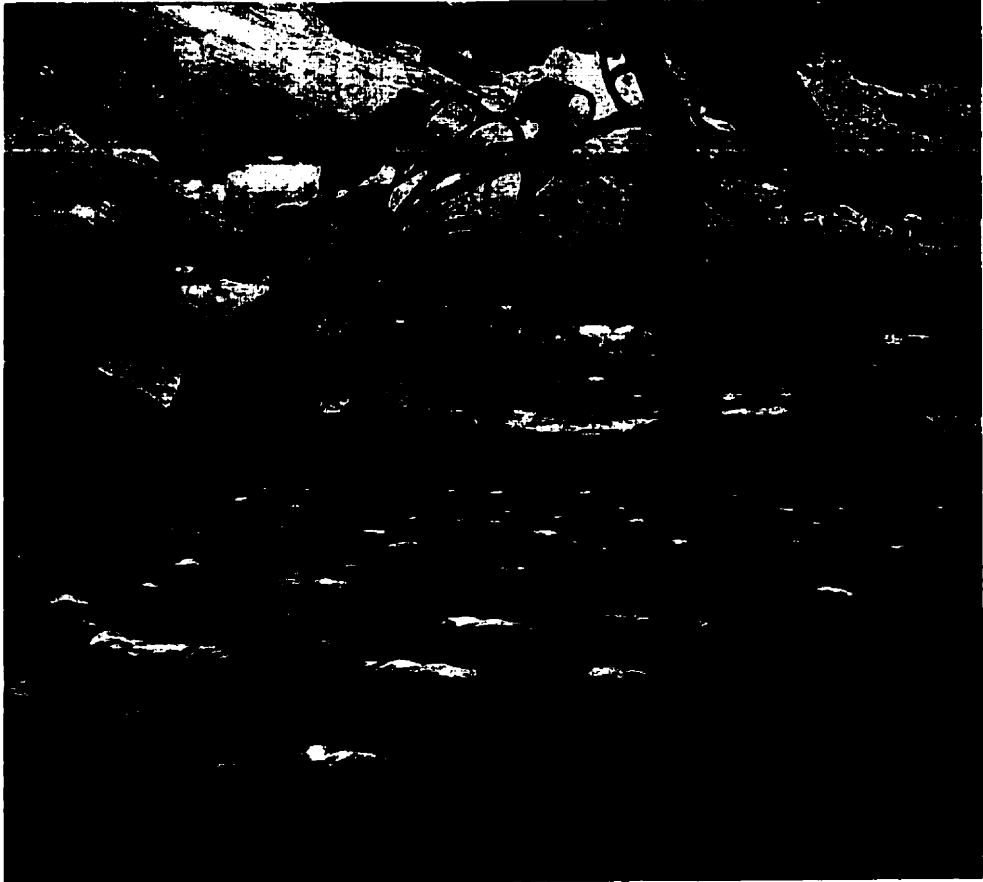


Figure 22 - *The West Wind*, 1917, Tom Thomson

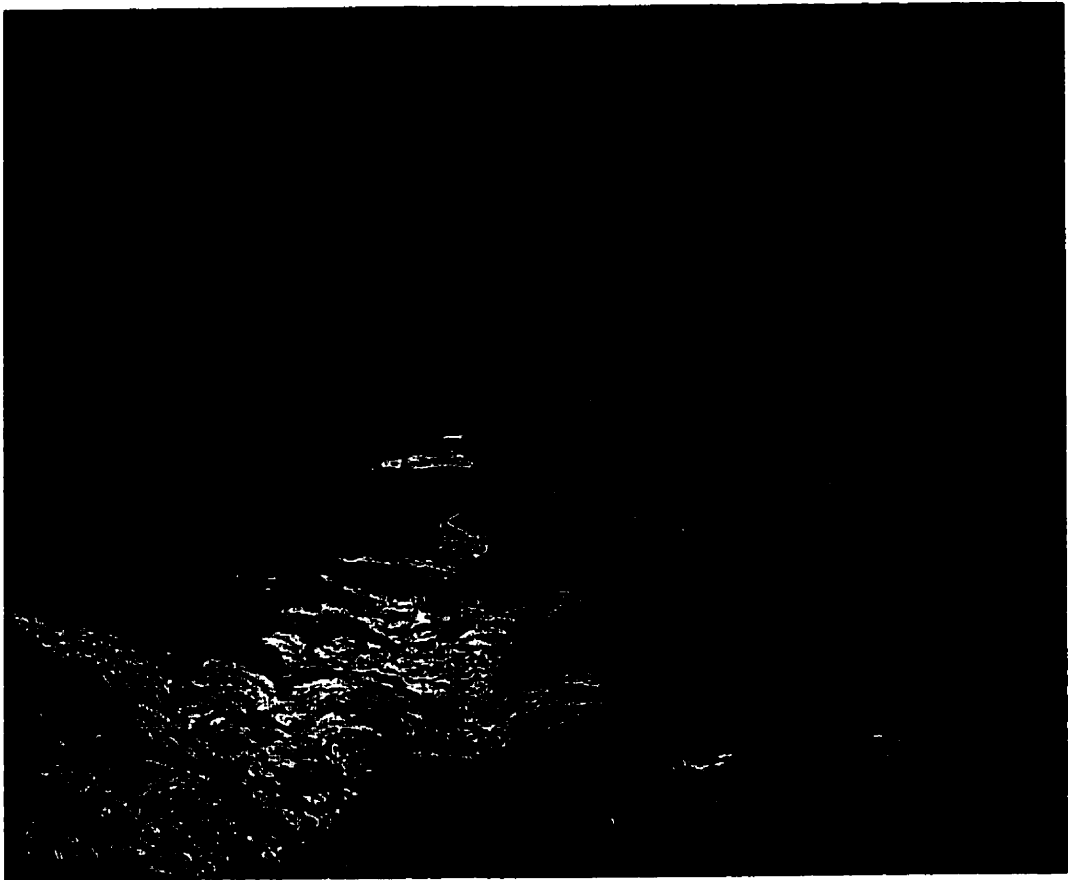


Figure 23 - *Falls, Montreal River*, 1920, J.E.H. MacDonald



Figure 24 - Computer #2, Presentation, *Group of Seven Gallery*

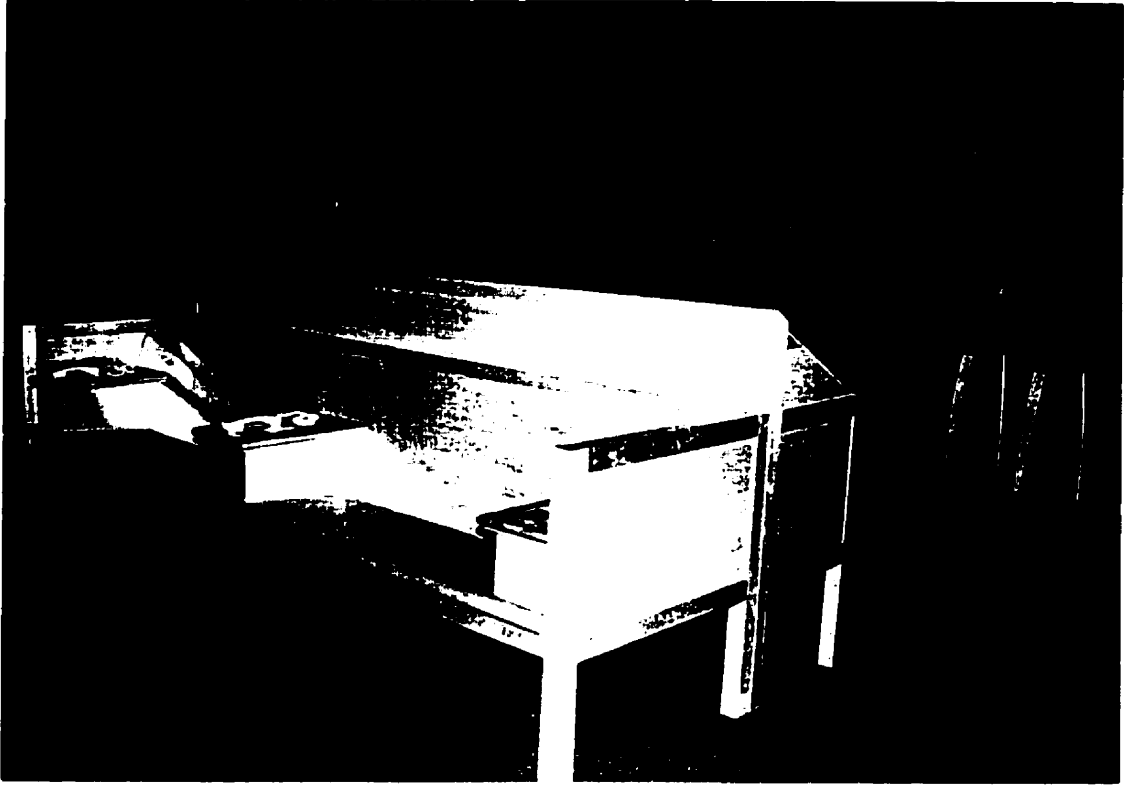


Figure 25 - Audio Phones, Location, *Group of Seven Gallery*

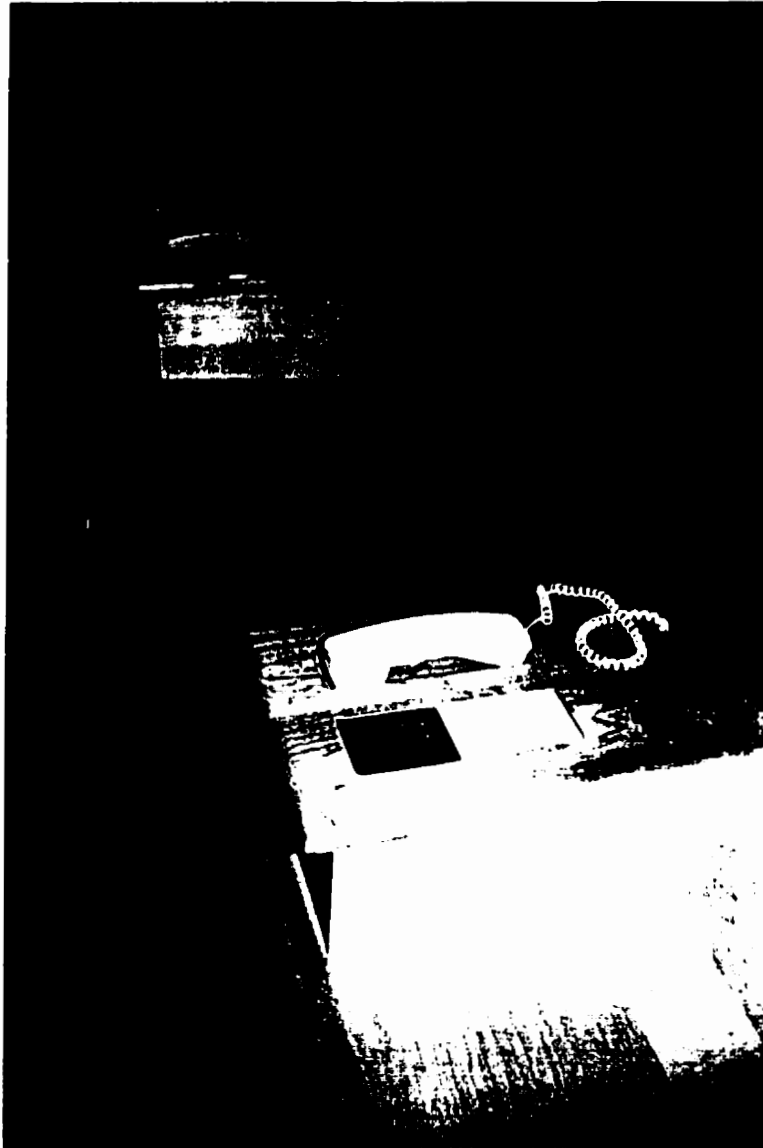


Figure 26 - Audio Phones, Presentation, *Group of Seven Gallery*

Appendix E

Visitor Profiles From Oral Questionnaires Art Gallery of Ontario

Visitor	Gender	Approximate Age (years)	Visitation Preference	Visitation Frequency
1	Female	60+	Family	1st time
2	Male	60+	Alone	1-2 x year
3	Female	40-45	Alone	1st time
4	Male	55-60	Alone	1st time
5	Female	50-55	Family	1-2 x year
6	Female	60+	Alone	1 x year
7	Male	40-45	Family	1st time
8	Male	25-30	Friend	2-3 x year
9	Male	40-45	Family	1 x year
10	Female	20-25	Alone	2nd time
11	Female	20-25	Friend	Every 2 years
12	Female	25-30	Friend	4 x year
13	Male	30-35	Alone	3rd time
14	Female	40-45	Family	1st time
15	Female	45-50	Alone	1st time
16	Male	30-35	Family	1st time
17	Female	20-25	Alone	1st time
18	Female	-	Friend	1 x year
19	Male	25-30	Alone	1st time
20	Male	30-35	Alone	1st time
21	Female	35-40	Friend	2nd time
22	Male	40-45	Family	1st time
23	Male	60+	Alone	1st time
24	Female	70+	Friend	6 x year
25	Female	30-35	Alone	1st time
26	Male	65+	Family	1st time
27	Female	60+	Alone	1st time
28	Female	40-45	Alone	3-4 x year
29	Male	55-60	Family	6-8 x year
30	Male	50-55	Alone	3rd time
31	Male	30-35	Family	1 x year
32	Female	20-25	Family	1st time