

**AN ECOLOGICAL EXAMINATION OF
YOUNG CHILDREN'S MUSEUM-RELATED PERCEPTIONS**

A GREEK CASE STUDY

**Thesis submitted for the degree of
Doctor of Philosophy
at the University of Leicester**

by

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ABSTRACT

The purpose of this study is to provide an alternative ecological approach to exploring the nature of young children's perceptions about museums, and the conditions where these perceptions are developed. Drawing on Urie Bronfenbrenner's ecological theory of human development (1979) and James Gibson's theory of affordances (1986), the study conceptualises museums as ecological settings, and perceptions as ecological entities, which are formed through dynamic transactions between individuals and their environment. In the light of these conceptualizations, the study attempts to identify the contextual parameters of young children's museum perceptions, by implementing ecological research principles in terms of a qualitative research ethos. In particular, the study followed a largely ethnographic approach, combining naturalistic research methods with sets of questionnaires, in the context of multiple museum visits and feedback sessions with children, museum professionals and parents. The field research focused on an example of a Greek museum context and was conducted in collaboration with three museums, nine kindergarten schools and nineteen children of approximately five years of age and their families.

The findings of the study suggest a weak relation between museums and young children's developmental contexts. On the one hand, museums seem to demonstrate a lower commitment towards young children and their families, which is reflected in teachers' and parents' feeling that current museum education provision is not supportive enough for their own needs or those of young children. On the other hand, young children seem to be able to perceive a wider range of possibilities in the museum setting, which is also reflected in their increased levels of confidence, but such perceptions do not seem to be sustained in the long-term, as parents may not include museum visits in their leisure agenda. Apparently, a major issue raised by these findings is the question of accessibility – intellectual or physical – and relevance of any cultural setting to its local community. In this respect, the thesis proposes a long-term museum education framework for building sustainable relationships between museums and their local communities at an early stage, in order to 'socialise' museums as community resources in terms of the family's cultural context.

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INTRODUCTION

In a comprehensive review of museum learning research, Eilean Hooper-Greenhill and Theano Moussouri remarked among other things that young children had been underrepresented (Hooper-Greenhill and Moussouri, 2001: 28). Indeed, until this review was published in the early 2000s, museum research on young children's experiences had been sporadic, represented mainly by the work of Lise Filiatrault and Marie Brûlé-Currie in the early 1990s, and in the late 1990s by Anna Kindler's projects and the early work of Barbara Piscitelli, David Anderson and their Museums Collaborative colleagues at the Queensland University of Technology (QUT). In the early 2000s, a series of papers from QUT Museums Collaborative on their longitudinal research project, as well as an extensive report from the British Museums, Libraries and Archives Council (MLA) (Morris Hargreaves McIntyre, 2002) on children's needs and motivations, and certain more or less extensive individual contributions, such as those of Lyn Fasoli and Jo Graham, appeared to endorse a newly emerging research terrain, which capitalised on early cultural experiences.

What appears to be a new trend in museum research during the last decade evolves historically from a long established discourse on the role of early childhood in personality development. As early as in the 4th century B.C., Greek philosophers Plato and Aristotle claimed that the first three years in human life are fundamental for physical, social, moral, and spiritual development, and that early years education should be based on play and perception through senses (in other terms, *aesthetic* education) and should be essentially supported by the family and the state. In the 18th century, Jean-Jacques Rousseau (1712-1778) asserted that children should be educated according to their own particular needs, not those of adults, while Johann Heinrich Pestalozzi (1746-1827) emphasised specifically the role of family and the use of appropriate material in young children's education. These ideas were practically deployed in Friedrich Froebel's (1782-1852) first *kindergarten* in Germany in 1837, which followed a system based on play, and in Maria Montessori's (1870-1952) *Casa dei Bambini* in Rome in 1907, based on the performance of self-controlled activities. Such educational endeavours along with other pioneering studies, like those of Lev Vygotsky (1896-1934) on young children's learning through

personal interactions with their carers-mentors, or those of Jean Piaget (1896-1980) on children's intellectual development, helped illuminate the role and nature of early childhood experiences on human development. Besides, the latest neuroscience findings recognise early childhood as a sensitive period, during which connections between brain neurons are rapidly developed and 'can be recruited to enable future behaviours to occur, provided they are not "pruned" because of atrophy or disuse' (Ceci and Hembroke, 1995: 332).

The first museum-related example of recognising the significance of early childhood derives from the foundation of the first children museums in Brooklyn (1899) and Indianapolis (1925). By providing alternative learning settings based on discovery, play and hands-on exploration, children museums were primarily designed to respond to the particular needs of children and their carers, thus adding a social dimension to the 'museum' symbol. Ironically, the social dimension of children museums also underlies an on-going debate – even within the children museum sector – on whether children museums are eligible to be granted a 'museum' status (Pearce, 1998: 18-19). The fact that most children museums are not necessarily collection-based, is incompatible with the emphasis current museum definitions, such as those of ICOM¹ or Museums Australia², place on the collection as a springboard for any collection-based or audience-focused museum activity. Moreover, being a museum type that was launched and developed in the United States, children museums may not represent the museum traditions of geographical areas with different cultural policies and resources, like Greece, where research was undertaken for the purposes of this thesis. For these reasons, the thesis will focus hereafter on evidence related to collection-based museums without specific target audiences, which fit in the

¹ 'Museums are non-profit-making, permanent institutions in the service of society and its development, and open to the public, which acquire, conserve, research, communicate and exhibit, for purposes of study, education and enjoyment, material evidence of people and their environment'.

² In March 2002, Museums Australia adopted the following museum definition as a response to the ICOM definition: 'A museum helps people understand the world by using objects and ideas to interpret the past and present and explore the future. A museum preserves and researches collections, and makes objects and information accessible in actual and virtual environments. Museums are established in the public interest as permanent, not-for-profit organisations that contribute long-term value to communities'.

conventional museum definitions and traditions and will be briefly called here 'general public' museums.

In the domain of 'general public' museums, the focus on early childhood developed gradually from an array of research projects, conceptual studies and socio-political trends. Early museum research related to childhood (Melton *et al.*, 1936; Platten, 1976; Friedmann, 1979) was mainly interested in the effectiveness of museums as learning settings supplementary to schools, by measuring the knowledge primary school children acquired in museums through tests. Opposite to this formal education focus, certain conceptual studies (Winstanley, 1967; Spencer, 1974; Pittman-Gelles, 1981) stressed the particular characteristics of children as visitors, and regarded museums as learning settings in their own right, which can introduce people to new ideas and interests, motivate them to seek further knowledge, and, hence, act as 'catalysts' that can eliminate many of the barriers found in traditional educational institutions (Pittman-Gelles, 1981: 3). Later in the 1980s and 1990s, several reports specified further this role of museums as alternative learning settings and community resources, especially in terms of life-long learning, creative skills development, and social inclusion agendas (AAM, 1984; DfES, 1997; DfES, 1999), where it also became clear that such a role for museums could not be sustained without public support. In this case, public support did not relate to high visitor numbers, but to the extent museums met the needs of their visitors (or non-visitors), which presupposed a deeper awareness of visitors' needs and expectations through audience-centred studies and qualitative approaches (Wood, 1990: 20). Therefore, when visitor studies identified families as an important part of the visiting population in museums, studies shifted their focus towards exploring the agendas of family audiences (Leichter *et al.*, 1989; Wood, 1990; Moussouri, 1997; Harris Qualitative, 1997). This shift entailed an effort to comprehend the particular needs of children, not just in relation to their formal education or their developmental stage, but also in relation to their role as active family members, who interact with their parents/ carers (Anderson and Piscitelli, 2002).

The above trends had at least four basic implications regarding the association between museums and children. First, they stressed the significance of positive early museum experiences in creating a lifelong interest in museums, not only for the purpose of improving museum attendance, but also for sustaining the museum's social

role as a learning setting in the future (Spencer, 1974; Anderson and Piscitelli, 2002; Piscitelli, 2002; Piscitelli and Anderson 2000; 2001). Second, they dispelled certain generalisations, like certain claims that children are an 'easier' target group in museums, because they share the same baggage as participants in school visits (Dansereau-Dorais, 1991: 95), or that children's visits are necessarily directed and formal (Melton *et al.*, 1936). Third, they raised the profile of the museum as a unique setting for self-directed and free learning through first-hand experience with objects, and as a visual information resource, which makes its primary impact directly to the emotions and the intellect through the eyes, and is ideal for developing observation skills (Winstanley, 1967; Heywood, 1970; Spencer, 1974; Friedman, 1979; Binette, 1991; Lajoie, 1991; Leichter *et al.*, 1989). In some instances, such a museum profile was overstated to the point of assuming that a museum visit – especially an organised one – is 'a very different experience from any in everyday life' (Heywood, 1970: 1), which broadens one's horizons, lessens narrow-mindedness, parochialism and nationalism (Heywood, 1970: 2-3), may favour one's harmonious integration to a society (Dufresne-Tassé, 1991: 60), or even leads to 'magic' transformations (Pittman-Gelles, 1981: 3), and is always remembered as a happy part of one's childhood (Spencer, 1974: 25). Counterbalancing such generalisations, the fourth implication relates to problematic aspects of a child's museum experience, such as the museum arrangement itself, which is rarely adapted to the child's needs and abilities (Winstanley, 1967; Heywood, 1970), or the fatigue and confusion caused by single long visits (Winstanley, 1967). These aspects become even more challenging, as there is 'no pre-established harmony between the ideas which the exhibit illustrates for the scholar and the ideas it occasions in the untutored onlooker' (Melton *et al.*, 1936: 3) – especially if the 'onlooker' does not come from an affluent, middle-class or 'arty' family context, which tends to be more confident, extrovert, well-travelled, and questioning in attitude (Harris Qualitative, 1997: 11).

The aforementioned issues paved the way for exploring the museum experiences of young children, which were an uncharted terrain in museum audience research until the late 1990s, as shown at the outset of this introduction, and will be the focus of this thesis. Seminal studies on early childhood museum experiences, which will be reviewed in more detail later, such as those undertaken by Anna Kindler, David Anderson and Barbara Piscitelli, approached the museum experience

as part of broader learning, socialisation and enculturation processes, which begin at an early stage and continue through life course. In line with this perspective, this thesis will explore the quality and nature of young children's museum-related perceptions, as they are influenced by the museum context and the child's personality and everyday context, namely family and school. The thesis will particularly explore what kind of perceptions young children of approximately five years of age develop about the museum as an experiential setting, and to what extent these perceptions are influenced by the properties of the museum visit, of the child's developmental context and the child's idiosyncrasy.

To examine the nature of young children's perceptions, the relation between young children and museums, and the context where this relation is developed, the thesis will deploy the ecological theoretical paradigm, namely Urie Bronfenbrenner's Ecology of Human Development (EHD) (1979), in conjunction with James Gibson's theory of affordances (1986). Bronfenbrenner's theory primarily informed the areas of early childhood educational research (Anning and Edwards, 1999; Aubrey *et al.* 2000), research on parenting (Bronfenbrenner, 1986; Gallimore *et al.*, 1989; Bradley, 1995; Lerner *et al.*, 1995), and educational policy, such as the Head Start programme of the United States Department of Health and Human Services³, but it was also used in the Museums, Libraries and Archives report 'Start with the Child' as a contextual-constructivist basis for understanding the child's world (Morris Hargreaves McIntyre, 2002). Usually, Bronfenbrenner's theory is not combined with Gibson's theory in the disciplines of psychology and education, but this thesis will approach these theories in a complementary fashion, as each theory illuminates different facets of a single socio-personal phenomenon.

The discussion will be based upon the findings of a research project, which involved children of approximately five years of age in a series of museum visits to a history museum, a folk-life museum and an art museum in the Greek city of Thessaloniki (figure 1). Thessaloniki is the second largest Greek city in the north of the country with over a million inhabitants, that is, a tenth of the total Greek

³ Head Start is a comprehensive child development programme, which began in 1964 as a federal programme for disadvantaged families. Targeted at children from birth to age five, pregnant women and their families, the programme aims 'to increase school readiness of young children in low income families'. More information can be found on the Head Start Bureau website, <http://www.acf.hhs.gov/programs/hsb>

population, and resonates the general profile of Greece as a commercial, cultural and tourist attraction. Nevertheless, evidence from official statistics in 2002 and the local press (Kouzinopoulou, 2002; Nanou, 2002) suggested that museum visitation in Thessaloniki was limited to two or three museums, that is, only a fifth of the existing museums in the city, and was basically increased for a few months in summer and spring due to tourist and school visits. An additional instance of low public commitment towards museums in the Greek context came from Greek Statistics in 1999, which showed a relatively low public expenditure on cultural goods, despite any claims for connecting museums with society (Chryssoulaki, 1995; Tsaousis, 1997; Merriman, 1999; Moussouri, 1999; Kalessopoulou, 1999; Myroghianni-Arvanitidi, 1999; Pournara, 2002). Besides, current museum education conditions themselves appear rather problematic, due to the fragmented and occasional nature of educational projects; a lack of common action plan and learning rationale between schools and museums; little involvement of educators in the museum education process; failure to represent certain age or community groups, such as early childhood; and lack of evaluation (Vouri, 2002; Kasvikis *et al.* 2002). Therefore, Thessaloniki appears to be an intriguing setting for conducting museum audience research, especially when this research focuses on the quality of museum perceptions in the early years.



Plate 1: A map of Greece showing the location of the city of Thessaloniki in the region of Macedonia.

The thesis will develop in three major parts. The first part will review previous studies related to museums and early childhood, which will be presented in three distinct domains: the Canadian, the Australian and the British. The Canadian domain will focus on the work of Lise Filiatrault, Marie Brûlé-Currie and Anna Kindler, the Australian domain will include the studies of Lyn Fasoli and the Queensland University of Technology (QUT) Museums Collaborative, and the British domain will refer to examples of individual studies and to the 'Start with the child' report, which was commissioned by the Museums, Libraries and Archives Council in 2002. The first part will briefly present the context, aims, theoretical background, methodology and findings of each study, and will discuss the particular contribution each study has made to the area of researching early childhood in museums. The purpose of the discussion will not be to stress the differences between the various studies, but to raise a complementary relation between them. Any hypotheses emerging from these studies will be particularly noted, as they will serve as a point of reference for the concluding discussion of this thesis.

The second part will present and discuss key concepts in ecological epistemology, especially in the ecological theories of Bronfenbrenner and Gibson, which have informed the interpretative rationale of this thesis. Gibson's notion of affordances and Bronfenbrenner's notions of ecological systems, proximal processes and ecological transitions, are all central in contextualising museum-related perceptions, experiences and attitudes. This theoretical part will also present the basic premises of ecological research according to Bronfenbrenner, such as the notions of an ecological experiment and an ecologically valid setting, as their implications are crucial for researching any contextualised meanings a person attributes to a museum-related experience.

The third and most extensive part of the thesis will present the process and findings of the field study, which was undertaken in the city of Thessaloniki, in collaboration with three city museums, nine kindergartens and nineteen children of approximately five years of age with their families, who derived mainly from a middle-class and higher education background. This practical section will first present the methodological details of the research project, such as research design, sampling and data analysis processes, and will then provide a thorough account of the findings, in line with an ecological interpretative framework. Research findings will be

organized in two stages: the first one will illustrate museum-related perceptions at a broader socio-political level, drawing on findings from a preliminary small-scale survey, while the second will specifically examine the development of museum perceptions within the group of families that participated in the research programme of museum visits.

To conclude, the thesis will recapitulate the essence of the research project as a whole, by discussing, initially, the research findings in relation with hypotheses that emerged from background studies in the second part. It will next assess any lessons gained from the application of the ecological paradigm in museum research, to finally propose the basic framework of an ecological museum education plan, as a future perspective of implementing ecological theory in museum practice.

PART I

Background studies on museums and young children

This part will discuss the context, nature and findings of research projects on early museum experiences in 'general public' museums, that is, museums or exhibits not specially designed for young children, such as children's museums or hands-on exhibits. These projects, which have characterised the field of studying early museum experiences, and have also formed the background of this thesis, are mainly located in Canada, Australia and the United Kingdom. Although they may not represent museum cultures elsewhere, like in the Greek context, these projects provided an array of ingenious methodological approaches and insightful findings on early museum experiences, being informed by previous research findings and solid theoretical paradigms, such as cognitive psychology, constructivism and phenomenology. The projects will be presented in three distinct chapters, according to their geographic origin, in order to examine their individual contributions.

Chapter 1

Canadian domain: from researching learning to understanding perceptions

This chapter will discuss research projects undertaken by Lise Filiatrault, Marie Brûlé-Currie and Anna Kindler. The discussion will graphically demonstrate how research questions related to early childhood museum experiences have shifted during the 1990s from facilitating skills development through museum visits, to understanding young children's acculturated conceptions about museums.

1.1. Lise Filiatrault: an educational approach

Using museums for skills development

An early museum research example focused on young children can be found in Filiatrault's papers (Filiatrault 1991; 1996), which basically represent the work of the Canadian *Groupe de Recherche sur l'Éducation et les Musées* (GREM). The research project that Filiatrault describes more extensively in her 1996 paper, aimed to examine how five- and six-year-olds (n=93) visiting the Canadian Railway Museum, could learn concepts, facts and skills through different teaching approaches. The teaching model deployed for this project, was a model devised earlier by GREM for using museum for educational purposes. This model consisted of three phases: a) preparing the children before the visit and identifying the cognitive structure of the learner (*les préalables*); b) accompanying the children to the museum and implementing two educational programmes: a deductive, facilitator-centred one, which was common to museums, and an inductive, child-centred one, which was common to preschools; c) following-up children's learning and evaluating. To collect their data, researchers used questionnaires, along with a framework for observing interactions between the children and the facilitator, which was based on Guildford's taxonomy of mental development (cognitive, convergent, evaluative, and divergent types).

In fact, this project followed-up earlier GREM research with primary school children in history museums, which had shown that the use of personal guides and educational programmes could help children learn facts, concepts, and skills, and

develop positive attitudes towards museums and the humanities. The early childhood version of this project emerged later to address a lack of research in Quebec on what young children actually learn in museums, and what approach can maximise learning benefits in the long term. According to Filiatrault (1996), implementing the GREM project in early childhood education would have a threefold benefit. First, it would compensate for any lack of teaching material in school, by providing opportunities for using museum objects, and for active learning – a type of learning which was the focus of the preschool education curriculum. Second, by these opportunities, the project would help young children develop such skills as observing, comparing, and associating temporal, spatial and societal concepts. Third, the development of such skills could help addressing effectively the issue of future school failure (Filiatrault, 1991: 61). Clearly, these aspirations convey an educational approach to early museum experiences, which relies on the effectiveness of school-museum collaboration. Such an approach carries with it a long-standing tradition of evaluating museum education programmes, but more on this issue will follow later.

Cognitive and educational psychology

The prominence of developing concepts and skills through active learning, which characterises GREM research, derived from the area of cognitive psychology, namely from the views of Gagné and Bruner. Conspicuously, a direction towards the ideas of Gagné and Bruner demonstrates a child-centred pedagogical ethos, since both theorists acknowledged the role of the developing person in his or her cognitive development, thus opposing to behaviourist teacher-centred models.

Similarly, GREM adopted Legendre's educational theory, which also recognised the role of the developing person in the learning process. Legendre specified four factors in an educational situation: a) the subject (or the diverse target groups of learners); b) the object (or the specific learning objectives and content); c) the agent (or facilitator); and d) the milieu (or, the place where an educational situation is to occur, and the relations developed between the first three factors). Taking into account these factors, Filiatrault states (1991) that the quality of the educational situation depends on: a) the agent's knowledge of the object; b) the subject's development; and c) the agent's knowledge of the subject's learning processes. Surprisingly, these three conditions prescribe a connection only between

the first three of Legendre's factors, without making any reference to the milieu, which would involve the quality of relations between the subject, the object, the agent and the setting where an educational situation may occur.

Findings, emerging hypotheses and discussion

According to Filiatrault, GREM research project demonstrated that all the children learned concepts, regardless of the approach, and that no significant differences existed between the deductive and the inductive approach, as to their effectiveness (Filiatrault, 1991; 1996). Filiatrault also reported, however, that in two observed groups, especially through the inductive approach, young children showed learning of more complex intellectual skills, which can be classified according to Guildford's taxonomy, mentioned above (Filiatrault, 1996).

With hindsight, this latter finding suggests that the inductive approach may be more educationally effective under certain circumstances. In this case, the question would be to explore the properties of these circumstances, and their specific effectiveness. If we were to examine the effectiveness of these circumstances according to Legendre's factors, then we would have to assess not only the quality of each factor separately, but also the nature and quality of the interconnections of the factors; thus, the possibilities to explore would be numerous. In the case of the GREM project, however, if we accept as true the finding that no significant differences existed between the inductive and the deductive approach, then we may have a good reason to suggest that the educational effectiveness of the project did not simply depend on the nature or quality of any teaching approach alone. Instead, we may suggest that the fact that young children developed concepts and skills in the course of GREM's project was a function of: a) young children's maturation processes; and b) perhaps more significantly, the relations developed between all the factors of the educational situation. On the one hand, the maturation hypothesis may be a possibility, given the rapid and crucial developmental changes that occur in early childhood. On the other hand, the relation-based hypothesis entails the quality of various relations, such as child-facilitator, child-school teacher, and museum-school, which may have increased motivation for learning and participation, and enhanced the educational situation. Moreover, both hypotheses are supported by Legendre's framework: the maturation hypothesis addresses the 'subject' factor, whereas the

relation-based one addresses the 'milieu' factor. Regrettably, none of these hypotheses, which might have added a greater depth to GREM's findings, were pursued in Filiatrault's papers.

Clearly, Filiatrault's work exemplifies an early phase of research on young children's museum experiences, which was anchored to a long-standing tradition of evaluating the effectiveness of museum education programmes. The purpose of increasing the educational effectiveness of a museum visit appears as early as in 1936 in the work of Melton and his colleagues, who conducted a five-year comprehensive research with elementary school pupils, aspiring to transform a museum of science to an instrument of mass education (Melton *et al.*, 1936: 9). Four decades later, Platten (1976) sought to examine the effects of a museum aesthetic education programme on the school attendance and self-concept of economically disadvantaged elementary school children of minority ethnic origin. Similarly, Friedman (1979) examined the effects of the Brooklyn Museum Series Programme for Children on the attitudes of sixth grade pupils, especially as a function of the quality and content of the teaching and learning situation. All these projects illustrate a tendency to evaluate children's museum experiences as a product of specific educational programmes, and to legitimise the educational function of the museum through school visits (Milligan and Brayfield, 2004). This tendency also underlies GREM research, which sought to examine, as mentioned above, what young children exactly learn, but attempted to move a step forward by also asking how learning benefits can be maximised in the long-term. In this respect, Legendre's factors provided the scope and potential for establishing some insightful hypotheses about the nature and structure of young children's museum experiences, but, as shown above, this became a missed opportunity.

1.2. Marie Brûlé-Currie: a view to shared museum experiences

'Scaffolding' adult-child aesthetic experiences

Similarly to GREM research, Brûlé-Currie's research followed up an educational programme initially tailored for adults and children of eight years of age or more. The programme, called 'Family and Friends', took place in the National Gallery of Canada (NGC), endorsing a view of museum learning that was object-

focused, allowing for shared, multi-generational experiences, and, hence, distinct from school learning. A series of pilot attempts in the early 1980s to adapt this programme for four- to seven-year-olds and their parents, had given rise to three hypotheses: a) young children are more at ease with and seem to enjoy abstract art; b) when untrained in visual arts, adults may find art has no meaning or value; and c) in the family context, adults seem more open and positive towards looking at abstract art. Drawing on these hypotheses, Brûlé-Currie developed an in-depth study on the shared parent-child experiences of abstract art, which aimed to understand whether and how the presence of the child influenced the adult (Brûlé-Currie, 1996). Interestingly, the question was not only how the adult, be it the facilitator or the carer, would 'scaffold' the child's experience, to use a Vygotskian term, but more significantly how the child could 'scaffold' the adult's experience.

The project involved the researcher as a participant observer and facilitator, and four parent-child pairs, who were neither trained in the visual arts, nor regular museum or gallery visitors. In a single visit to the NGC, each pair participated in individual activities with abstract artworks, which were complemented by interviews before and after the visit. The in-gallery individual activities were designed according to Horner's 'Journey', an original approach to experiencing art, which invites the participants to 'travel' in the artwork, through a process of observing, sharing feelings and thoughts, evaluating and self-reflecting (Weltzl-Fairchild, 1991: 146; Brûlé-Currie, 1996). A shift towards phenomenology already made its presence...

Experiential learning

Brûlé-Currie based her work on the premises of experiential learning, an active type of learning drawing on creative and problem-solving abilities, which contrasts with conditional learning, a process influenced by outside agents, repetition and memorization (Brûlé-Currie, 1996). For Brûlé-Currie, any individual shapes his or her meanings through the living of an experience, and any educational experience is both intellectual and emotional, even to the limits of consciousness (Brûlé-Currie, 1991: 66-67). In terms of this experiential learning process, Brûlé-Currie also identified play as a particularly engaging learning strategy, as play is an autonomous, self-directed and self-motivated activity, which facilitates concentration, promotes interactions with people and objects, and helps learners crystallise their ideas.

It is in this context of experiential learning that Horner's 'Journey' featured as the central strategy in Brûlé-Currie's project. According to Horner, an aesthetic experience is a process that moves from a dream process of fusion with the artwork, to a process of learning objectively through concepts. This kind of experience is mediated by playful deconstructive exploration of the artwork, self-discovery, symbolic thought, awareness of others, and a metaphoric process of dialogue with the artwork in search of meaning (Brûlé-Currie, 1996). Horner's views were influenced by Husserl's phenomenology, Dewey's pragmatism, and response criticism, which in contrast with new criticism, accepts individual text interpretations from readers as an essential component in the relation between the work, the artist, the world and the audience (Weltzl-Fairchild, 1991: 146).

Along with Horner's views, Brûlé-Currie also employed Annis's symbolic interactionism, Weltzl-Fairchild's experimental aesthetics, and Dufresne-Tassé's contextual-structural approach. According to Annis, actions are influenced by surrounding symbols, and symbolic engagement is actualised in three types of space: a) the dream space, involving a subconscious interaction between the viewer, the suggestive artwork and the three-dimensional space; b) the pragmatic space, referring to social roles; and c) the cognitive space, which consists in learning about the background details of an artwork, such as its history or techniques (Brûlé-Currie, 1996). Such an exchange between the personal and the social is also conspicuous in Weltzl-Fairchild's experimental aesthetics, which examine responses to an object defined as aesthetic, in order to study normative processes of perception, discrimination and judgement or taste, to see what is common to all of the population, and, hence, to be able to predict and generalize (Weltzl-Fairchild, 1991: 142). Furthermore, the dynamic nature of this social-personal exchange is emphasised in Dufresne-Tassé's views, wherein a social phenomenon is a unique "gestalt", in Lewin's terms, which: a) integrates figure and depth in a dynamic whole; b) is influenced by experience, roles and functions adopted at each age, while influencing, in turn, the needs, expectations and benefits at each age; and c) is transformed, as the ability of perceiving and treating reality changes over time and with age (Dufresne-Tassé, 1991: 58-59). All these views provided a solid theoretical basis for Brûlé-Currie's work, which moved beyond the school-focused museum education tradition, towards a complex and dynamic approach of educational experiences, focusing on the

interactions occurring between the individual, the museum setting and the social context.

Findings, emerging hypotheses and discussion

Brûlé-Currie's work yielded supporting evidence for the initial hypotheses, which had emerged from the pilot 'Family and friends' project for young children. More specifically, Brûlé-Currie found that children were more comfortable and spontaneous in dealing with modern art, than adults. Unlike adults, who tended to look for meaning, make associations and recall, young children were not concerned with finding meaning, and were less inclined to make associations or recall memories. Instead, they employed a concrete, but highly imaginative way of looking at art, which seemed not to be influenced by formal education conventions. Young children were also happy with being able to name things, and seemed to be at ease with elements that appeared illogical to an adult (Brûlé-Currie, 1996). Nevertheless, the adults found the 'Journey' approach stimulating and enjoyable as a natural process of experiencing before learning, and admitted they had appreciated modern art and learned to look at it.

As for the parent-child relations during the project, Brûlé-Currie found that when the child was 'travelling', the parent was observing; but when the parent was 'travelling', the child showed a more egocentric behaviour, finding it hard to wait for his or her turn, wanting to go first and be the centre of attention. In the latter case, the parent often tried to include the child, either by negotiating the itinerary, or by inventing a story to sustain the child's attention. Moreover, when the parent and child were 'travelling' together, the parent had the role of the educator, letting the child decide on the details of the travel. Overall, parents were highly motivated to participate and learn for the benefit of their children, and discover something about themselves and their children through a shared experience. Interestingly, these parental behaviours and attitudes are also confirmed by Moussouri, who observed that parents intended to influence their children's educational experience, tended to provide more guidance to children of four to ten years of age (Moussouri, 1997: 40), and used museums for self-directed learning and self-awareness, and for helping their children develop an interest in the subject matter (Moussouri, 1997: 244-45).

More significantly, Brûlé-Currie, drawing on the above outcomes, was rather astute in establishing the following hypotheses: a) the quality of child-parent relation influenced the degree of the project's success; and b) the more learners participated actively through partial freedom of choice, the more their motivation increased. Brûlé-Currie also suggested that aesthetic experiences should be studied further as shared, rather than as very personal or individual, phenomena (Brûlé-Currie, 1996), which can be memorable and powerful, and that educators should be flexible and ready to teach as well as to learn (Brûlé-Currie, 1991: 70-71).

The above findings, hypotheses and suggestions demonstrate a more complex and dynamic perspective of young children's museum experiences, which surpasses the school-focused and evaluation-based tradition. This tradition, which was exemplified in Filiatrault's work above, was concerned with assessing the impact of specific museum education approaches on young children's performance, especially in the school context. Nevertheless, in Brûlé-Currie's work, young children are not just seen as members of a school class, but primarily as members of a family, who develop certain relations with their carers, as a result of child-rearing practices defined within a specific socio-cultural context. In terms of these child-rearing practices and their broader socio-cultural parameters, such as ethnicity, religion and socio-economic status, families negotiate their own communication codes and interaction patterns, and foster their own sets of values, attitudes and meanings. Hence, within given socio-cultural limitations, families develop their own idiosyncratic contexts, which are manifested in the subtleties of the relations between family members, and imbue, in turn, the family's socio-cultural activities and experiences.

By examining shared parent-child aesthetic experiences, Brûlé-Currie reinstated, first of all, the influential role of family contexts as primary developmental settings in young children's cultural experiences, namely those gained in a museum context. As Brûlé-Currie's findings demonstrate, the idea of a shared parent-child aesthetic experience functioned as a kind of 'emotional safety net' for young children and their parents, which allowed them to negotiate a new experience more naturally and confidently through their pre-established relations and codes. Moussouri (1997: 240-41) also referred to these codes as 'naturally occurring information techniques', in terms of which adults offer the necessary links to make the information meaningful for themselves and the members of the family to whom they can relate well.

What Brûlé-Currie's findings also demonstrate, however, is that these natural negotiations did not stand alone in the aesthetic experience, but were actively supported, enriched and arbitrated by the facilitator. By inducting parents and children to 'The Journey', the facilitator indicated alternative approaches to art, which empowered the participants in developing new understandings, and motivated them to develop creative perceptions of art. Nevertheless, whether or not this empowerment and motivation had also a more persisting long-term impact on families' views about art and museums, was an issue that Brûlé-Currie did not address. Hence, another hypothesis that emerges here is that, if repeated mediated museum experiences empower and motivate both young children and their parents, then family contexts will not perpetuate in an unchanged fashion, but will undergo subtle modifications, such as specific attitudinal changes towards aesthetic experiences.

A final point that may be raised is that Brûlé-Currie's approach focused not on generic learning objectives and outcomes, but, specifically, on elaborate experiential learning processes, which can enhance understanding, motivation and confidence. The purpose was not to teach, but to help young children and their parents discover new possibilities, by proposing alternative aesthetic approaches, which can maximize already established codes between parents and children, and, hence, become more relevant to the family context. Such an approach may even effectively address a problem that occurs in family visits (or lack of visits): the tendency of parents to blame either themselves for not understanding, or their children for having short concentration span, for not reading the labels and for their 'touch-and-go' behaviour (Moussouri, 1997: 244-45), and, in turn, the tendency of children to blame their parents' lack of awareness or availability (Harris Qualitative, 1997).

The shift from evaluating effectiveness to increasing the relevance of museum experiences was reinforced in Brûlé-Currie's work by the use of more complex theoretical paradigms, like symbolic interactionism, pragmatism and phenomenology. By acknowledging a dynamic interplay between the person and the broader context, these paradigms proposed a relativist and contextualist epistemological view, which was particularly pertinent for illuminating such complex phenomena as shared aesthetic experiences. Briefly, Brûlé-Currie's approach signaled a transitional phase in researching young children's experience, which viewed a mediated parent-child learning experience in the museum setting through a post-modern lens.

1.3. Anna Kindler: a cross-cultural perspective

Understanding early museum perceptions

In terms of investigating the development of attitudes and beliefs about art in a cross-cultural perspective, Kindler and her colleagues examined the conceptions that young children hold about museums (Kindler and Darras, 1997) and about art (Kindler *et al.*, 2000), and the influence of the cultural context on these conceptions. The starting point of Kindler's research was the current context of multiculturalism, globalisation, competitive leisure industry and increasingly available information through the web. In such a context, museums were regarded as only an option in a wide range of leisure activities, bearing just an auxiliary role in satisfying the general 'need to know'. In this context, Kindler and her colleagues viewed early positive museum experiences as a hope for developing lasting relationships between museums and their visitors (Kindler and Darras, 1997: 125), since it is during the early years that foundations are laid for adult attitudes, behaviours and beliefs (Kindler and Darras, 1997: 141). So, the question that needed to be addressed was how successful museums are in creating impressions that would encourage continuing participation in learning and leisure in museums.

To examine young children's museum-related conceptions, Kindler and Darras interviewed 120 four- and five-year-old children from Vancouver, Montreal and Paris, living in large urban centres and upper-middle class families. To examine young children's art-related conceptions, Kindler and her colleagues interviewed 70 four- and five-year-olds from upper-middle class families in France, Taiwan, and Canada (British Columbia and Quebec). In this latter study, the children from Canada were of Chinese, French and other European ancestry, thus exemplifying 'transplanted' cultures (in Kindler's terms), so that their views could be compared as to their cultural influences with the views of children actually living in Taiwan and France respectively. Given the geographic and socio-economic limitations of this sample, Kindler and her colleagues were proactive enough to suggest that more extensive and more diversified samples would be needed to generalise confidently the results. Rather significantly, however, they opted to interview the children in their everyday settings, such as daycares, preschools or schools with kindergarten programmes (Kindler *et al.*, 2000), thus indicating an approach 'from without', which

starts with the broad socio-cultural context. This approach is clearly in contrast with 'from within' perspectives, which start with on-site museum experiences, as exemplified in the aforementioned studies.

Social cognition

To pursue their 'from without' approach, Kindler and her colleagues were based on the socio-cognitive views of Barker and Newson, specifically on the issue of how children of different ages construct a relation between themselves and the social objects of knowledge. Drawing on this issue, Kindler and her colleagues focused on the connotative, rather than the denotative, meanings of the words, which are personally constructed, rather than conventionally attributed (Kindler *et al.*, 2000).

Subsequently, to analyse these personal meanings, the researchers employed the work of Rosch and other psychologists on alternative classification mechanisms for constructing meanings and organising concepts (Kindler and Darras, 1997). These mechanisms consist in two distinct strategies. The first one is the exemplar strategy, wherein a concept is explained through examples that are related to this concept, but can also include other instances similar to this concept. These examples indicate a general family resemblance, rather than attention to the specific features of the concept, or identification of its defining attributes. On the other hand, the attribute-based strategy entails different cognitive operations, as well as the use of descriptors, features and attributes, and characterises a shift from holistic classifications, which are typical of young children, to more differentiated classifications.

Findings, emerging hypotheses and discussion

In their study of on young children's museum-related conceptions, Kindler and Darras (1997), found that French children, unlike children from Quebec, visited museums more frequently, and that young children visited museums usually with their parents, rather than with school, although in Canada, for example, daycares are situated at a close distance from the nearest museum. They also found that young children were able to provide some ideas about what a museum is, with the lower response rate coming from Quebec, although some of these ideas did not reflect commonly accepted museum definitions. Young children's responses, except those

from Quebec, relied mainly on the exemplar-based strategy, and, in order of frequency of occurrence, the responses referred to: a) the contents of a museum, including objects and people; b) the museum's purpose and function; c) the behaviour of museum staff or visitors; and d) the museum as a place, environment, physical or aesthetic structure, and facility.

More specifically, in the contents category, young children connected museums with: a) art exemplars, such as paintings, statues, and jewellery, as well as "artistic words", such as calligraphy, especially in France and Quebec, indicating experience of different museums from British Columbia; b) artifacts, such as stuff or things, in general, or, more specifically, boats, graves, and musical instruments, suggesting narrow concepts of museums as specific places with specific collections, which are based on a direct or indirect single experience, rather than as institutions with a mission to collect or preserve a range of objects of value; c) live animals, suggesting not only a confusion between zoos and museums, and an association of museums with places for family or school visits, like the open zoo in Stanley Park and the Aquarium in Vancouver, but also an influence of secondary sources on young children's memories, as in the case where a child might have heard about the Museum of African Arts in Paris, which houses a large collection of tropical fish and aquatic wonders in its basement; d) dead animals and dinosaurs, especially in Vancouver, suggesting not an impact of direct experiences, but rather a familiarity with related children's literature, such as "My visit to the dinosaurs" by Alikei, which was commonly read in daycare and preschool settings; e) humans, mainly in France and British Columbia, such as visitors, knights, and people who dress up, suggesting that human participation is intrinsic to the notion of the museum; and f) other exemplars, such as mountains, feathers, music, and theater. Less frequently, young children referred to the contents of the museum with attributes and aesthetic descriptors, such as unusual, rare, and pretty things.

The categories of place/environment, function/purpose and behaviour featured less extensively in young children's responses. In the second frequent place/environment category, young children associated the notion of the museum mainly with specific museums, especially in France, and with other exemplars, like fairs, zoos or funeral homes. Less frequently, young children used attributes to describe characteristics of a space considered to be a museum, such as large rooms, big house, long corridors, beautiful or scary place. Also, in the function/purpose

category, young children mainly associated museums with displaying/exhibiting ('showing' things), collecting, and, especially in British Columbia, with selling, thus suggesting an influence of an increased marketing emphasis in Canadian museums. Finally, in the behaviour category, young children referred more frequently to visitor behaviour, like looking, having fun, and not touching, rather than to staff behaviour.

According to Kindler and Darras, the above findings indicated how young children's museum conceptions, especially in Canada, were influenced by a lack of a long-standing museum tradition, and by a marginal role preschools and daycares played in ensuring early exposure to museum experiences. Such negative influences may give rise to misconceptions, which children may capitalise on in developing their expectations. For example, if children associate museums with fairs, they may develop a positive and enthusiastic attitude towards museums, along with expectations of play and fun in the museum context. Drawing on this suggestion, Kindler and Darras emphasised the need to provide opportunities for more extensive museum experiences, through school-museum partnerships and family programmes, thus echoing, also, Oloffson's emphasis on the need to encourage a closer collaboration between schools and cultural bodies (Oloffson, 1979: 3). Such experiences should help young children connect the museum both with learning and leisure in a balanced and comprehensive manner, and encourage, in turn, future museum visits and lasting museum-audience relationships.

Kindler, Darras and Kuo's study on young children's art-related concepts (2000), also suggested that the development of concepts in multicultural societies was not simply a function of education, but more significantly a result of a dynamic interplay between the family's original tradition and the contemporary context of everyday life in multicultural societies. On the one hand, Kindler and her colleagues suggested that, within 'transplanted' cultures in Canada, early concepts of art, as reflected in young children's ability and willingness to offer spontaneous definitions, converged to the mainstream Canadian model (Kindler *et al.*, 2000: 48). For example, unlike Chinese children in Taiwan who found it hard to define art, Chinese-Canadian children were more ready to associate art with activities in which they participated and with products of their own effort, like drawings, thus reflecting a more extensive use of the term 'art' in education in Canada. On the other hand, the study suggested that such convergence is less likely to be found in the area of aesthetic appreciation, as both Chinese and Chinese-Canadian showed less flexible attitudes towards what

could be considered as art, thus reflecting 'a victory of heritage over new cultural influences'. Thus, Kindler and her colleagues illustrated not only the impact of the family culture on preconceptions about art in early years, but also the need to differentiate between 'transplanted' cultures and cultures of origin, and the extent of these cultures' relevance to the lives and cultural identities of young learners.

Clearly, the above findings exemplify a socio-cultural approach to young children's museum experiences, which begins with young children's original perceptions as these are fostered in their everyday settings, and not as they may be unfolded or transformed in the course of a specific educational programme within the museum setting itself. Unsurprisingly, those settings that feature prominently in Kindler's findings are the two primary developmental settings in the early years, namely family and school. Being the gatekeepers of childhood and the providers of a person's first experiences, these settings are for young children what one may call a secondary source of information about the larger societal context, given that young children are not yet equipped to participate autonomously in this larger context. Hence, it would follow that richer experiences in family and school contexts would help young children develop equally rich perceptions. For example, in Brûlé-Currie's project, participants began to construct richer perceptions of what was originally an unfamiliar subject, through a creative model of experiencing art. What this example also showed, although in a more implicit manner, was that this model of experiencing art may have been successful, because it had drawn on pre-established parent-child relations, thus legitimising itself through recognising the family context at first place.

What was implicit in Brûlé-Currie's work at a micro-level within the museum setting became more explicit in Kindler's macro-perspective. In her example, Chinese-Canadian children seemed more ready to provide an art definition than their counterparts in Taiwan, but not as ready to provide a more flexible perception of beauty in art. At least in the case of 'transplanted' cultures, this finding illustrates how educational experiences may be influential in enriching certain notions, but not necessarily in 'enriching' values as well. Apparently, elaborating on a concept may not necessarily lead to accept the values entailed in this concept, especially if those values are not directly compatible with those held in the original culture of the family. Considering the findings of Brûlé-Currie and Kindler together, it would follow as a hypothesis that families, although ready and willing to negotiate certain things, may be more reluctant to negotiate broader values, which characterise their cultural

identity and tradition. In sum, Kindler's outward-looking approach raises a challenging socio-cultural issue for museums, whose relevance and validity as learning and leisure settings is pragmatically gauged through the value systems and practices of diverse socio-cultural communities.

Chapter 2

Australian domain: reflecting on early museum perspectives

The preceding chapter on Canadian research examples demonstrated how early museum experiences can be viewed through a manifold of vantage points, which can be either museum-based, focusing on school-museum partnerships (Filiatrault) and family-museum relations (Brûlé-Currie), or more people-focused (Kindler *et al.*), examining socio-cultural influences on early museum perceptions. This variety of approaches typifies a gradually more dynamic view of young children's museum experiences as negotiated and complex processes, rather as fixed products.

This chapter will show how Australian projects perpetuate this dynamic view of young children's museum experiences, when they examine the multiple influences of early museum-related perspectives and interpretations, taking into account both the developmental particularities of early childhood and the impact of young children's everyday settings. The discussion will refer specifically to the studies of Lyn Fasoli and the Queensland University of Technology Museums Collaborative, which encapsulate an array of early childhood research trends in the 2000s.

2.1. Lyn Fasoli: a reflective approach

Exploring researcher-child interactions

In the early 2000s, Fasoli developed a doctoral research project, which examined the question how four- and five-year-olds engaged with art gallery practices. To address this question, Fasoli adopted a focus similar to Kindler's, namely on young children's perspectives and perceptions of art and museums. A most distinctive characteristic of Fasoli's work are her reflective accounts on the way these perspectives and perceptions were actually influenced in the course of her research by power relations between adults and young children. More specifically, Fasoli explored how young children interpreted specific research practices (Fasoli, 2003), and how power was negotiated and enacted continuously in these practices, rather than being inherent in the researcher-participant relationship (Fasoli, 2001).

Fasoli's reflective accounts were based on a larger study with four- and five-year-old children from a university preschool, who participated in a series of excursions with their preschool teachers to the National Gallery of Australia. Children were prepared for these excursions and followed them up with play activities at the school setting. During this project, children's conversations were tape-recorded as they observed the artworks and interacted with each other, with the researcher and the teachers at the Gallery and at school. Recordings were complemented with children's drawings and photographs, and with semi-structured interviews with gallery and preschool staff.

More significantly, Fasoli aimed to establish a balanced researcher-child relationship in the course of the project. Viewing children 'not as passive participants incapable of representing their own views', but as social actors (Fasoli, 2001: 7), Fasoli explained the data collection processes to children, and attempted to involve them in making decisions about what needed to be recorded and how. Fasoli also chose to merge the researcher's role with an educator's role, by being both a participant observer and an auxiliary staff member at the preschool prior to project, hence integrating the research process with children's everyday routine. To what extent Fasoli's methods were successful in establishing an equitable researcher-child relation and in facilitating children to enact their own practices, is discussed later in this section.

Communities of practice

Aiming to conduct her research *with* children rather than *on* children (Fasoli, 2001), Fasoli relied on Wenger's framework of 'communities of practice', which regarded the research context as a set of situated social practices continually negotiated by all participants (Fasoli, 2003). According to this framework, every person belongs in multiple communities of practice, where he or she learns what counts as valuable ways of being and learning in each of these communities. To every encounter one brings a set of resources or thinking tools provided by the communities of practice where one belongs. As people participate in shared enterprises in order to achieve a joint purpose, they develop slowly over time common social practices, which are complex and mostly implicit.

Following Wenger's framework, Fasoli regarded children's engagement in the practices of the art gallery as a context specific and socially embedded enterprise. Involving young children to an art gallery research experience presupposes for a researcher to cross the boundaries between young children's everyday settings, such as home and preschool, in order to introduce children to a new community of practice, constituted by the research. As children move into the research context, they are confronted with new practices, and with implicit assumptions about the overall purposes and expectations of this context. Consequently, the role of the researcher is to provide young children with resources that are common to the research context, in order to assist them to participate more effectively as collaborators rather than as subjects (Fasoli, 2003).

Conspicuously, Fasoli's conceptual framework echoes the prominence that Brûlé-Currie and Kindler had attributed, as seen above, to the context of young children, when considering their museum-related experiences and perceptions. What distinguishes Fasoli's reflective approach, however, is that it recognises overtly the potential of the research context itself to influence one's understanding of young children's museum experiences and perceptions. Interpreting young children's museum experiences not only involves practices and values common to young children's everyday settings, but also reflects the purposes and limitations of the researcher's agenda, as it becomes more obvious in Fasoli's findings, which are discussed next.

Findings, emerging hypotheses and discussion

Fasoli's reflective approach was particularly revealing of the fact that, despite any initial theoretical intentions to establish an equitable researcher-child relation, a researcher's practices and habitual ways of interaction may still restrain the flow and interpretation of young children's museum experiences. On one hand, Fasoli (2001) showed that equity in research relationships is always evolving through 'pivot points', that is, points where power is negotiated between the researcher and the child. Thus, children may appear uninterested in the focus of the researcher and suggest other focal points of attention, or they may even resist certain research practices, which oppose to common everyday practices. For example, in Fasoli's project children seemed to be unhappy with the decision that only a few children could participate in

the research excursions, unlike the practice followed in normal excursions, where all children could attend. On the other hand, taken-for-granted adult practices, like those of a researcher or an educator, may be so unclear and confusing for young children that they can lead to misinterpretations, if not properly explained at first place. In the example of research excursions, young children apparently felt bewildered by the rules of the research excursion, since the differences of purpose and structure between a research excursion and a normal one had never been made clear to them either by the researcher or the educators (Fasoli, 2003). Similar misunderstandings occurred with the use and purpose of photos and tape-recorders as data collection tools, which young children viewed mainly as memory aids, rather than as sources of information that can be later discussed and reflected upon. What is more intriguing, however, is Fasoli's suggestion that, as adult practices are taken for granted even at a subliminal level, they may be so overwhelmingly powerful, that they can outweigh young children's agendas and, hence, undermine any opportunities for equitable adult-child negotiations. This suggestion is typically illustrated by the example of a boy captivated by the gallery computers and the efforts of both the researcher and the teachers to direct his attention to the 'real' thing in the gallery, since contemplating the actual artworks was the prevalent purpose of the research excursion (Fasoli, 2001).

The above findings reflect, first of all, a broader concern in educational and psychological research with young children. According to Cox (1986: 12), there are difficulties related to the degree of children's understanding of experimental conditions, and the degree of objectivity in the way researchers analyse children's responses. Also, Aubrey (2000: 33) asserted that the way children interpret test questions could differ from that intended by the researcher, resulting in test items failing to measure what they were designed to do. More specifically, Fasoli's findings graphically demonstrate how 'issues of power should be seen as contextual, complex and relational' (Fasoli, 2001: 11), and, ironically, how at the same time 'the access to power is already tilted in the adult's favour' (Fasoli, 2001: 9). Traditional practices and power relations in young children's everyday settings, such as school, may finally overshadow even the most honest post-modern intentions for developing collaborative projects. If to these everyday practices one adds the researcher's practices, as in the context of a school-museum research project, then young children's agendas may be found in the middle of what could be called here a 'double adult-effect', a kind of

pressure exerted more or less overtly both by the educator's pursuit of discipline and by the researcher's pursuit of his or her own questions.

Fasoli's reflective approach is a unique application of ethics in museum research specific to early childhood. As such, it may be considered as a prelude to the methodological considerations of this thesis, which will follow in Part III. As Aubrey (2000: 26) wrote:

'If we accept that babies and young children are people, social beings who are trying to participate in and make sense of the world – whatever their age – then we need to ask ourselves some important questions about the assumptions we are making when we embark on research projects, and about the way children are treated during the process of the research'.

Related to this ethical concern, Fasoli's work poses a tantalising question: given all the power influences, to what extent the nature of young children's museum experiences and perceptions, as reported by a researcher, is a concoction of the researcher's own questions and other involved adults' priorities? The question here is not whether a researcher's account of a child's museum experience or perceptions is real or not, since it refers to young children's real actions or reactions, which take place in real space and time. Instead, the issue is to what extent the reported actions or reactions are genuine expressions of young children's perspectives and interests, or forced products of the research context itself. Certainly, the limits are blurred.

2.2. QUT Museums Collaborative: a comprehensive project

Developing sustainable museum experiences

QUT Museums Collaborative was established in 1997 as a collaborative team of museum educators and administrators, and researchers from the Queensland University of Technology mainly in the area of visitor studies. In the early 2000s, the team developed a three-year study, in order to provide the first comprehensive international data on the experiences of young children in museums. Their study had five key aims: a) to use innovative procedures and technologies to examine and assess young children's understanding of museum exhibits and environments; b) to examine the impact of high quality repeated visits to museums on young children's learning; c) to identify the personal, social and contextual factors that affect young children's

informal and interactive museum-based learning; d) to develop and implement new and innovative community and museum programmes, in order to sustain high quality outcomes for children's museum-based learning; e) to explain the ways in which young children become enculturated into the world of museums, how and what they learn, and the values they (and their families and schools) ascribe to their museum-based experiences (Piscitelli and Anderson, 2000).

Through their comprehensive and longitudinal project, QUT Museums Collaborative aimed to address an array of issues related to: a) missed learning opportunities, mainly due to poor interaction, large group size, insufficient time, infrequent visits and lack of cooperation between schools and museums; b) ineffective learning outcomes of novel interactive environments of museums; c) absence of information and understanding of young children's perspectives and museum experiences, specifically on how museums affect their lives and learning, despite the fact that young children were a significant part of the museum visitor demographic, especially in terms of family visits; d) difficulties in researching experiences of young children, because of their limited ability to communicate, difficulty in self-reflecting on their past experiences, and reliability issues when adults collect data; and e) scarcity of research on the programmatic aspects of multi-visit programmes that are salient, memorable, and have a strong educational impact on young children (Anderson *et al.*, 2002; Piscitelli, 2002; Piscitelli and Anderson, 2000; 2001). While addressing these issues, the QUT team planned their study considering visitor studies findings related to: a) the multiple affective, social and cognitive facets of museum learning; b) students' enjoyment of museum visits; c) valuable learning outcomes from increased interest and enjoyment of post-visit experiences; and d) the influence of previous positive experiences on future visitation.

Given the above context, the QUT team implemented three interrelated studies over three years, which were structured to examine four components of learning: the individual (young child), the setting (museum environment), the curriculum (the exhibitor's and curator's intentions), and the instructor (the museum and its programme). The first study focused on the quality and frequency of young children's museum visits, and examined the impact of regular/frequent museum visits on young children, by exploring personal preferences, visiting habits, cultural values, and views about learning. The second study focused on museum learning, as this was manifested in children's in-gallery conversations and behaviours, adult-child interactions,

children's responses to museums and their exhibits, and children's insights. Finally, the third study focused on building museum partnerships with families and schools, and sustainable systems to support young children's learning within museums and local communities (Piscitelli and Anderson, 2000).

The project included a series of classroom sessions combined with a model of multiple visits to three museums (Queensland Museum, Queensland Science Centre and Queensland Art Gallery), which were different not only in terms of their collections, varying from natural and social history to sciences and arts, but also in terms of their display types, varying from static exhibits, like dioramas and large scale models of dinosaurs, to hands-on, interactive exhibits, with more or fewer links to everyday experience. These activities involved around one hundred four- to six-year old children mainly of Caucasian ethnic background, from four different schools in South-East Queensland, which were situated in a contemporary, predominantly middle-class socio-economic environment, and at a close distance from the participant museums. Finally, to collect their data, the QUT team employed a range of naturalistic and qualitative methods, such as observations, interviews, and target group discussions, as well as quantitative measures of learning on newly designed protocols, namely the Parent Focused Questionnaire (PFQ) (Anderson *et al.*, 2001a) and the Child Focused Survey (CFS) (Anderson *et al.*, 2001b).

Undoubtedly, the QUT Museums Collaborative project emerged as a distinct type of comprehensive and collaborative type of research on early museum experiences. Its aims, planning and structure constitute a complete research agenda, integrating all the contextual and socio-cultural aspects and issues, which were emphasised in previously reviewed studies. An issue that appears to emerge, however, would relate to the group of children who participate in the project: one may speculate that young children from a largely middle-class Caucasian background, who also happen to live and grow in close proximity to the participant museums, are likely to have already started developing some attitudes, possibly positive ones, towards those museums. To what extent a potentially biased sample the quality of the findings in the QUT study is a question to be addressed later.

Human and social constructivism

The QUT Museums Collaborative project was based on a view of learning as dynamic and idiosyncratic, considerably influenced by prior knowledge, personal active involvement, and social contexts (Anderson *et al.*, 2002). More particularly, the QUT team adopted the human and social constructivist paradigm, which holds that subsequent changes in knowledge and understanding are produced through the individual's exposure to successive experiences, which are interpreted in the light of his or her own prior knowledge and understanding. Thus an individual's knowledge and understanding is in a continual state of change, as new experiences, mediated through social contexts, are encountered and interpreted by the learner (Piscitelli and Anderson, 2000).

Along with this human and social constructivist slant to knowledge construction, the QUT team, based on such views as Hein's constructivism, Gardner's multiple intelligences, and Dewey's pragmatism, considered museum learning to be a multifaceted process and product with the following dimensions: a) the socio-cultural, referring to meaning-making events that occur as visitors interact with tools, signs, symbols, and activities (Anderson *et al.*, 2002); b) the cognitive, relating to knowledge construction through interaction with objects and people, which entails such processes as cognitive mapping, initially random and then more selective, slow and quiet exploration, orientation and active participation (Piscitelli *et al.*, 2003); c) the aesthetic, which refers not only to the affective and emotional behaviours and responses about the non-cognitive dimensions of museum visits, but also to a fused body-mind, or kinaesthetic, type of learning, involving manipulation of objects and materials, thus leading to a sense of immediacy, actuality and action (Weier and Piscitelli, 2002); d) the motivational, involving processes visitors use to give direction to their learning in a museum setting, such as making choices, willingness to accept challenges, and capacity to take control of own learning; and e) the collaborative, which is included in the previous dimensions, and refers to the co-construction of knowledge, as in a situation where a more knowledgeable person assists a novice, and the institutional collaboration for the benefit of learners, such as school-museum or family-museum links (Piscitelli and Anderson, 2000).

Findings, emerging hypotheses and discussion

The QUT study produced an array of rich findings on how young children perceive museums and their museum experience. The study showed that young children, who participated in the research, regarded museums as happy places with friendly staff, and as big, quiet spaces, where one can walk around (sometimes at a rushed pace), look at things and learn a lot (Anderson *et al.*, 2001) – although the researchers stated that it was difficult to know what young children really learned (Piscitelli *et al.*, 2003). The museum exhibits that the participant children preferred were both dynamic and static, and often provided signposts into their lives through their interests in such subjects as aviation, family life, folk culture, transportation, turtles and volcanoes. Some children, however, led the researchers to objects, exhibits and experiences that adults found unusual, such as contemporary works of art (Piscitelli, 2002).

Even more revealing are the findings of the QUT team on what children remembered from their museum experience. Unlike previous literature suggestions that visitor enjoyment and memorable museum-based experiences depend on multi-sensory, hands-on and interactive exhibits, the QUT study demonstrated through post-visit children's drawings and interviews with the participant children that those children remembered large objects and exhibits, like dioramas, full-scale transportation vehicles and dinosaurs, and non-interactive exhibits, in general, which linked, however, with children's own prior experience (Piscitelli and Anderson, 2001; Anderson *et al.*, 2002). Moreover, children recalled experiences embedded in the familiar medium of story, such as facilitator-led discussions in front of artworks, or live facilitator-led theatre-based experiences. During the interviews of the researchers with the children, however, children rarely connected their museum experiences with linked classroom-based activities, indicating, according to the researchers, that they may have compartmentalized their experiences and learning as being museum-situated (Anderson *et al.*, 2002). In general, children's recall appeared to be of a diverse and idiosyncratic nature (Anderson *et al.*, 2002).

Other findings illuminated how children experienced the museum setting. Most frequently, young children used kinaesthetic and tactile learning modalities, such as play and physical activities (Weier and Piscitelli, 2002), or what Piscitelli also defined as aesthetic learning, in the Greek sense of the word 'aesthetic', which refers

to perception through senses, not just learning related to beauty or fine art (Piscitelli, 2002; Weier and Piscitelli, 2002). Also, many children enjoyed taking the lead role in determining the content and direction of the museum visit (Piscitelli *et al.*, 2003: 15), although children's visit partners, who commonly came from children's family or extended family, played an important role in scaffolding children's learning in collaborative group situations, such as experimental play (Weier and Piscitelli, 2002).

In the above categories of findings, the QUT research also conveyed certain differences by gender, age and educational background. More specifically, male children were more likely to draw large-scale objects, dinosaurs and other exhibits from history museums and planetariums, while female were more likely to draw experiences from art galleries, and more likely to visit art galleries (Anderson *et al.* 2000; Anderson *et al.* 2001). Age-wise, older children were more likely than younger children to have visited a science museum, to remember specific exhibits, to regard museums as exciting places, and to perceive that museum staff was friendly. Finally, compared to medium or low-level educational background children, children with a high-level education background were more likely to perceive that museums were places where they can get lots of ideas, are free to look at what they want, and can discover things for themselves (Anderson *et al.*, 2000). Unfortunately, the fact that the participant children had a quite extensive visiting experience, especially from history museums, and came mainly from a high-level education background (Anderson *et al.*, 2000), could not allow for further observations related to differences in the quality of museum experiences within the sample of participants.

Apart from the aforementioned insights to young children's museum experiences and perceptions, the QUT research provided an original and interesting, yet less extensive, account of parents' museum experiences, too (Anderson *et al.*, 2001b). The QUT Parent Focused Questionnaire indicated that parents, especially mothers, visited museums at least twice a year, mostly botanic gardens, art galleries and history museums. Parents considered museums to be a family outing or an inexpensive day out, mainly associated with history, archaeology and cultural heritage, and their reasons for visiting fell within the categories of learning/education/information and pleasure/entertainment/enjoyment. What is even more interesting is the finding that parents' past museum experiences were mostly connected with rules and school life, rather than with discovery and interactivity, which appeared to be a recurring issue across generations on the nature and quality of

visitor experiences (Anderson and Piscitelli, 2002). In this respect, it would be intriguing to see in the QUT research a more direct connection between young children's museum-related perspectives and parents' museum experiences, but such connection was not explicit in the reviewed QUT Museum Collaborative papers.

As a comprehensive type of research, the QUT research would be incomplete without a set of practical suggestions for future museum practice, in order to enhance the quality of museum provision for young children. A suggestion for improving field trips for young audiences and for providing these audiences a sense of ownership of the visit, was to increase sensitivity among museum educators and school teachers on the pace at which museum experiences are delivered, and on the integration of children's agendas and interests in these experiences (Anderson and Piscitelli, 2002), using powerful mediators, such as play, stories, and objects that can be readily identified by children (Anderson *et al.*, 2002). The QUT researchers also proposed the development of strategic museum alliances with educational institutions, transport authorities and youth organizations, so that children from diverse and remote backgrounds participate in museum culture, beyond just a single brief school excursion to a museum, and enjoy their right to education, recreation and play, according to Articles 29 to 31 of the United Nations Children's Rights Convention (Piscitelli, 2001; Piscitelli, 2002). Finally, and most significantly, the QUT researchers produced a guide for best practice, entitled *Enhancing young children's museum experience: A manual for museum staff* (Piscitelli *et al.*, 2003), where researchers actually share with museum staff, school teachers and parents specific information about how to create and sustain meaningful museum learning experiences for the early years.

A first lesson that emerges from the above findings concerns the researchers' statement that it was difficult to know what young children learned in the museum, and that it was the whole experience, rather than any specific exhibit or event, that influenced young children's museum perspectives. In fact, it is not the first time that this ambiguous holistic nature of children's museum experiences became an issue of concern. Moussouri (1997: 240), for example, had observed that many kinaesthetic activities that children preferred, like role play, did not seem to have a clear purpose or measurable outcome. Also, evidence on the impact of repeat museum visits on older children had revealed that these visits did not entail significant differences on cognitive abilities, such as observation and inference, but they were considered to

have affected the level of confidence of the visitor (Forest, 1991: 78-9). On this phenomenon, Martineau (1991: 30) had stated that 'knowledge gained through the experience of visiting a museum is not one of a strictly factual and cognitive nature, but one that concerns all aspects of a visitor's personality and experience'. However, the issue of young children's perception ability that Winstanley had raised (1967: 21), seems to be more focused and enlightening:

'Adults tend to look more superficially than children, because, through previous experience, they have built up preconceptions and 'know' what is likely to be there from past experience. Children tend to fix on details and the younger the child the more irrelevant and disconcerting these details appear to adults to be'.

In other words, what seems vague or purposeless to an adult, may actually be a reason for exploration or an important discovery to a young child. Equally, what seems as a gross kinaesthetic activity, may actually disguise subtle instances of cognitively manipulating a specific stimulus through senses. Therefore, asking what a young child learned may not actually be the right question to ask about young children's museum experiences, especially if learning is meant as a merely cognitive product-process. Instead, a more specific focus on what young children perceive in their museum experience and in what conditions may prove more rewarding, but this is a hypothesis to be practically explored.

A second lesson derives from the fact that the QUT study identified differences by age and level of educational background in young children's museum perspectives, thus tending to avoid generalisations. By distinguishing between museum experiences of younger and older children, the study recognised the existence of developmental differences within early childhood, in contrast with a long-standing tendency in museum studies to approach childhood as a homogeneous audience sharing the same baggage (Dansereau-Dorais, 1991: 95). As for the differences the study noted between children of lower and higher level of education backgrounds, these confirm similar related findings in past studies. Moussouri (1997: 242-3) had found that 'adult family members from a lower educational level and their children provided a phenomenological description based on a sequence of events as they observed (what happens not why it happens)', and had considered this phenomenon to be an issue of who had access to education and cultural products. Other evidence had shown that, in the case of family museum visits, attender children

tended to come from more affluent, middle-class and/or 'arty' families, and to be more confident, extrovert, well-travelled, active, computer literate, bright and questioning in attitude, whereas non-attenders demonstrated a less rich experience background (Harris Qualitative, 1997: 11). Unfortunately, the reviewed QUT papers did not provide a more detailed account of socio-culturally diverse museum perspectives, possibly because the sample of participants, as shown above, did not allow for further comparisons on the matter. The finding, however, that young children in the QUT study developed positive museum perspectives and regarded museum as happy places, implies two possibilities: it either reflects a museum-related disposition that is specific to a higher educational background, or it suggests a capacity of the museum experience itself to counterbalance differences in educational background at an early stage.

To examine the latter possibility, it would be necessary to explore all the properties and conditions of a given museum experience. For example, the QUT study demonstrated that young children's positive museum experiences were connected to museum exhibits or events that encouraged children's active involvement, or that linked to children's own prior experience. Such exhibits, however, do not suffice to attribute an original or unique property to the impact of the museum setting alone, because they just respond to certain developmental traits, which are anyway common in early childhood psychology: young children will always use kinaesthetic modalities to explore their surroundings and discover what their body can do, and will always attach themselves to familiar situations, as these operate as a way to confirm self, and as an emotional safety net outside the family setting (Winstanley, 1967; Donaldson, 1978; Cox, 1986). Moreover, the statement of the QUT team that children's museum perspectives and recollections were diverse and idiosyncratic does not provide any specific clues, complicating even more the task of identifying a museum ability to counterbalance educational background differences. Nevertheless, in order to understand the nature of diversity and decide on whether a certain perception or behaviour is idiosyncratic or not, other factors of young children's museum experiences should also be examined, such as the role of the family context, like Brûlé-Currie and Kindler had suggested, or even the role of the researcher in the quality of the museum experience, which Fasoli had stressed. As already mentioned above, the reviewed QUT papers did not indicate any specific causal relations between parents' museum-related perspectives, as these emerged from the Parent

Focused Questionnaire, and young children's museum experiences. Besides, no explicit references were identified in these papers on whether or to what extent researchers influenced the quality and nature of young children's museum experiences. Perhaps the reason why such relations were not pursued in a comprehensive project lies in the constructivist approach that was adopted, which emphasises personal cognitive processes, rather than interpersonal exchanges and socio-cultural influences. In other words, what is interpreted as idiosyncratic under a constructivist lens, may not be so from a more relativist and contextual vantage point.

Certainly, the above issues could not annihilate in any case the quality of the QUT research project as a whole. The wealth of findings, along with a sophisticated underlying research process, places automatically the QUT Museums Collaborative study in the list of the most informed and instructive museum audience projects. On one hand, the project provided a replicable research model, which can be used to establish a larger comparative study on young children's museum experiences. On the other hand, it developed through the manual a baseline of museum practice, which is specific to very young visitors and takes into account their developmental traits and their socio-cultural background. Briefly, the QUT Museums Collaborative emphasised practically the value of collaborative museum projects, and actually exemplified a first attempt towards forging community alliances for sustainable museum experiences.

Chapter 3

British domain: improving provision for lifelong learning

The previous chapters presented a range of viewpoints on early childhood museum experiences, from evaluating museum-based educational approaches and adopting cross-cultural perspectives (Canadian domain), to developing comprehensive longitudinal projects (Australian domain). This chapter will, finally, review certain studies from the British domain, which represent a pragmatic claim to improve museum provision for the young audiences, in response to specific socio-political agendas, such as lifelong learning and equal access to cultural goods.

The first section of this chapter will jointly present the individual views of Rachel Moss and Jo Graham on the issue of museum provision for the early years. The second section will focus on the report 'Start with child: the needs and motivations of young people', which was commissioned by Resource and the Chartered Institute of Library and Information Professionals, and represents an official view on the matter.

3.1. Moss and Graham: advocates for very young visitors

Developing good museum practice for the early years

Moss's dissertation *The under-fives: Improving provision in museums and art galleries* (1999) and Graham's article 'The kids are all right' (2002) are typical, and less extensive, examples of an urging claim to improve museum provision for young children.

Moss aimed to explore the factors that affect groups visiting museums with young children, and to identify examples of good practice, which could form a set of recommendations for improving provision for the early years. For Moss, the necessity of this task derived from an array of issues, such as: a) museums' reluctance in the UK towards provision for under-fives; b) the fact that over a third of visitor population were children, especially related to formal schooling; c) developments in science-based museums, which increasingly catered for the under-fives; d) the claim for lifelong learning outside educational institutions; and e) the claim for everybody's

right to access the 'real' thing in museums. In this context, Moss examined the provision for under-fives in non-national, urban and rural museums out of London, such as the Walsall Art Gallery and the Leicester City Gallery, which could challenge perceptions about young children and art. She also performed a series of interactions and observations at various early childhood education institutions, such as nursery classes and the Early Childhood Section of the Arts and Leisure Department in Leicester City Council, thus demonstrating a need for collaborative research, which already featured in the studies examined above.

In her own article, Graham aimed to address a problem of fragmentation in museum provision for young children, through a more focused approach to the types and nature of play in the early years, which museums could deploy in their settings, in order to provide more positive museum experiences for young children. Graham's suggestion was mainly inspired by the Centres for Curiosity and Imagination project in the United Kingdom, which aimed to develop and support community-based discovery centres for children, some of which would be based in museums and others would simply draw on certain collections. Unlike Moss, who considered science-based museums to be more suitable for young children, Graham regarded the 'science centre' approach as problematic, for focusing on interactive exhibits and not on the use of collections or real objects, which is an important aim of many museums in the United Kingdom (Graham, 2002, 43). She particularly maintained that there is a significant difference between young children's learning and the conceptual approach in interactive displays: interactive displays may offer many play opportunities (such as exploring, trying out, experimenting with), but there is also an answer to arrive at, a principle to discover, or a fact to learn, while young children's play is open-ended, conceived and controlled by children themselves (Graham, 2002, 44).

Learning styles

Unlike the studies reviewed in the Canadian and Australian domain, who drew on concrete theoretical paradigms, both Moss and Graham adopted in their work generic theoretical principles regarding the developmental particularities of early childhood.

Specifically, Moss based her paper on the view that children as museum visitors adopt varied learning styles, and that they should be regarded as individuals in

their own right and in relation to those who accompany them (Moss, 1999: 2). Moss also asserted that young children are qualitatively different from older children, a statement that was confirmed, as shown above, in the study of the QUT Museums Collaborative.

Similarly to Moss, Graham also recognised that there are qualitative differences between younger and older children, but she was more precise in outlining the different needs and skills in the three age segments of early childhood, namely from birth to two years, from three to five years or preschool years, and from five to seven years or initial school years. For the purpose of her article, Graham also drew on the main categories of play, which, according to a child's developmental stage, can be exploratory (involving object manipulation), dramatic (based on role-play), rule-based (involving team games), constructive (including design and making things in three dimensions), and physical (involving various kinaesthetic activities, like jumping or running).

Findings, emerging hypotheses and discussion

In her recommendations, Moss stressed that, in order to improve their provision for young children, museums should first increase their awareness of young children's needs and abilities. According to Moss, such awareness could be developed through training, information on current curriculum and educational issues, first hand experience of pre-school education groups, consultation with early year experts, collaboration with parents, and evaluation. Drawing on a good knowledge of young children's characteristics, and taking into account learning theories and health and safety standards, museums should develop few but varied hands-on activities with clear instructions, based on simple concepts, along with quiet reflection and rest areas and workshops for parents and children. For Moss (1999: 60), any such developments should not aim to change young children's attitudes towards museums, since for many children it will be their first visit, and they often have few 'preconceived ideas'. Instead, the aim should be to enhance the quality of the child's total experience, and to create a positive image of the place, so that children feel they have been thought about and would like to return. Besides, if the museum succeeds in creating a positive image for a young child, then it may also succeed in enhancing the visiting experience

of an adult, as Moss suggested that good practice for the under-fives often benefits other visitors.

In line with Moss's recommendations, Graham also suggests that children should be allowed to experience the museum and its collections as a whole, and to do something together with their families. Drawing on the findings of the QUT Museums Collaborative, which demonstrated that, instead of hands-on exhibits, young children mostly remembered events and objects that linked to their daily life experience, Graham claimed that young children should not be confined to a separate hands-on area, but should be offered enough opportunities to learn through play. In this way, museums would be more likely to develop conditions for effective learning, based on the power of intrinsic motivation (Graham, 2002: 45). Moreover, Graham argued that museums should not be asking whether young children are learning or playing, since children learn something through everything they do. Museums need to ask instead whether the activities they are designing are rich enough learning opportunities to maximise the child's potential.

Although concise, Moss's and Graham's suggestions clearly reflect a wide range of ideas that were developed in the Canadian and Australian studies reviewed above. Brûlé-Currie's claim to support shared family experiences in the museum, Kindler's suggestion to establish school-museum partnerships, and the QUT Museum Collaborative's emphasis on connecting museum experiences with the child's life context and on developing collaborative projects, are only a few aspects of previous studies echoed here. Furthermore, the holistic view of young children's museum experience that was stressed by both Moss and Graham, was also an important feature in the QUT study, but it generally characterises Falk and Dierking's contextual model of museum learning (Falk and Dierking, 2000), a rather popular approach in museum visitor studies, which focuses on the dynamic interplay of the personal, the social and the physical in the course of time. Nevertheless, the distinctive features of Moss's and Graham's ideas may be more accurately encapsulated in Breuse, who suggested that museum education should be introduced at an early stage, namely in the preschool years, and that this should not necessarily happen in the form of educational programmes, but more widely in the manner of gaining more opportunities for better visiting experiences that can enrich the process of individual development (1991: 92).

3.2. Museums, Libraries and Archives Council: ‘start with the child’

Supporting museums as socio-cultural agents

In 2002, Morris Hargreaves McIntyre, a strategic management consultancy for the cultural sector, in collaboration with youth organisations and specialists in psychology, childcare and education, produced the report *Start with the child: The needs and motivations of young people*, which was commissioned by Resource and the Chartered Institute of Library and Information Professionals. The report was developed as a response to various socio-cultural conditions, such as: a) the emergence of central government strategies for young people on improving quality of life and social participation; b) a growing recognition of young people’s right to equal opportunities for leisure, rest, and participation in cultural and artistic life, under the impact of the United Nations Convention on Children’s Rights; and c) changing socio-demographic factors in the family structure, such as increasing numbers of one-parent or one-child families, working mothers, and young people from ethnic minorities. Museum-related factors were added to these conditions, such as less frequent museums visits of families with young children, and a reinforced role of museums as agents of social inclusion, cultural tolerance, and educational and economic well-being, according to the Department of Employment and Education and the Department for Culture, Media and Sports.

In this context, the ‘Start with the child’ report aimed to profile changing social, emotional, personal and cultural needs of young people, by investigating their needs, motivations and attitudes, and to provide museums, libraries and archives with this information, so that they can review their provision. For this purpose, the developers of the report started with young people’s perspectives in their own informal settings, like play centres and youth clubs, to encourage them to take a broad perspective of their lives, rather than being constrained by the ethos of museums, or formal education system. The researchers, apart from a thorough literature review, also conducted in-depth interviews with parents, carers, and youth workers, on child care, accessibility and relevance of museums, as well as facilitated discussions of between 3 and 7 young people using individual methodologies appropriate for each group. Discussions with young children, for example, employed children’s favourite things, drawings, and a soft rabbit toy, as a discussion character for the under-fives. In

total, 75 young people between three and sixteen years of age and of different socio-economic status participated in these discussions. For the purpose of this thesis, however, the review of this report will only focus on findings related to young children. It is also noteworthy that what formed in this report the basis for young children's response to museums was the QUT Museum Collaborative research.

Theoretical eclecticism

Unlike Moss and Graham, who relied on generic theoretical ideas, the 'start with the child' report based its epistemological view and findings on a wide range of theoretical paradigms. These paradigms, which derive mainly from the discipline of psychology, were employed in the report to illuminate diverse aspects of children's social, emotional, personal and cultural world.

In particular, the report defined children's needs, in line with Maslow's hierarchy of human needs, and Erikson's eight ages of man. Maslow's hierarchy of human needs identifies fundamental needs of all humans across all ages, which relate mainly to physiology, safety, and socialisation. Erikson's theory, on the other hand, divides the human life span in eight distinct age phases (0-1, 1-3, 3-6, 20s, 30s-50s and beyond 50s), and attributes to each one of these phases a basic socio-developmental trait. For example, at the age of three to six years old the predominant human tendency for Erikson is to make or going after and make like or playing.

The learning theory of the report was founded on Gardner's multiple intelligences theory, Haggart's view on family learning and the definition of learning that was adopted by the governmental Campaign for Learning. Gardner's theory provides useful insights to learning modalities of various types, such as linguistic, logical-mathematical, kinaesthetic and interpersonal, while Haggart's theory refers specifically to the role of family on the learning process. For Haggart, families are formative influences in people's lives, as well as places of intergenerational relationships, and deep learning at cognitive, social and emotional level. Finally, Campaign for Learning defines learning in more generic terms, as an experiential process of making sense of the world, increasing skills and knowledge, understanding values, and developing feelings, attitudes and a capacity to reflect. According to this definition, effective learning leads to change, development and the desire to learn more.

In conjunction with the above learning theories, the report also proposed a view of how children learn, drawing mainly on Piaget's stages of intellectual development, which are: the sensorimotor, related to mastering concrete objects (0-2 years); the stage of preoperational thought, characterised by the development of self-orientation, ego-centrism, symbols and representations in mental imagery and language (2-7 years); the stage of concrete operations, involving mastery of classes, relations, numbers, reasoning, understanding others' viewpoints and taking multiple perspectives simultaneously (7-11 years); and the stage of formal operations, related to abstract thinking and theoretical reasoning (from 11 years onwards). Along with Piaget's stages, the report also evoked related findings from neurophysiology, such as that babies are born with as many brain cells as adults (about 100 billion), and that brain cell connections depend highly on experience and physical activity.

Apart from the above theories on human needs and learning, the report also used, perhaps for the first time in museum audience research, Bronfenbrenner's ecological theory of human development. According to this theory, development is a context and culture-specific moving construct, where knowledge and identity are constructed and reconstructed through a lifelong process of changes. In order to map the child's world, the report implemented the notion of systems, which the theory uses to interpret a child's developmental context. The systems used in the report are: the micro-system, which refers to settings of direct participation, such as families; the exo-system, which include settings of indirect participation, such as parents' profession to a child; and the macro-system, which consists of values, beliefs and socio-cultural norms. According to the report, this systems approach combines 'inside out' and 'outside in' explanations for development, accounting for behavioural changes as development happens.

Findings, emerging hypotheses and discussion

The findings of the report related to young children were rich, and they were organised around two major categories: the ecological model of the child's world, and the child's needs and motivations.

In the first category, the report identified the main features of young children's micro-system, exo-system and macro-system. In particular, young children's micro-system is characterised by their close relationships with parents, carers, siblings,

friends and school teachers. Their exo-system involves parents' working patterns, early years care and curriculum, individual school policies, access to different media, local leisure provision, and the location of housing in relation to this provision. Finally, young children's macro-system is shaped by government policy and funding, societal concepts of gender, and the extent of community provision of safe and child friendly play spaces.

In the second category of findings, the report portrayed young children's needs and motivations, both in the context of early childhood development and in relation to museums. From a developmental point of view, the more young children explore their environment through their senses and develop their ability to communicate through language, the more they begin to understand where they belong in the world and the more they need to develop a sense of ownership. Moreover, young children increasingly understand the role of others, as they begin to follow rules and appropriate norms of behaviour, and to take others' viewpoint. Consequently, they become gradually more independent and aware of non-parent relationships, especially with peers. According to the report, this autonomy is also apparent in young children's increasing access to pocket money and use of computers.

As for the museum-related needs and motivations of young children, the report drew largely on the QUT Museum Collaborative findings. For example, the report reiterated that young children consider museums to be happy places, where they can see exceptional and old things, and that young children appear to be impressed by large scale and interactive exhibits, by the 'awe/gore' factor (as in the case of dinosaurs or mummies), and by opportunities to touch. The report also stated that young children have a broad concept of museums, including theme parks and other attractions.

The implications of the above findings were stated in the report as an array of practical recommendations for improving the quality of museum provision for young children and their carers. Similarly to Moss and Graham, the report suggested that museums should provide relevant and recognisable topics, according to the child's prior knowledge, interests and abilities, as well as various activities to allow for the child's limited attention span. Such activities could range from arts and crafts, dressing-up and pretend play, to activity sheets and use of multimedia. The physical environment, also, should be well-maintained and safe, with adequate facilities and with quiet and active spaces for both children and carers, which would offer

opportunities for multi-sensory and autonomous activities. More significantly, though, the report suggested that museums should take their services to the children, in the form of outreach activities to nurseries, for example, as well as support children's carers, by introducing them to the museum's activities, or even by directing them to other services, if necessary.

Having outlined the basic features and findings of the report, it becomes obvious that this is a type of study, which illustrates a significant effort to provide a comprehensive account of young children's needs and motivations and museum-related perspectives, for the purpose of sharing best practice with social and cultural services. In this sense, the report clearly encapsulates key findings and issues that were discussed in the reviewed studies of Part I, thus highlighting certain patterns of ideas, which can serve as points of reference for museum practice and future research.

One of these patterns relates to the need of implementing multi-method and collaborative approaches, in order to fully understand and effectively address young children's needs in museums. The 'start with the child' report is itself an example of an overt and active collaboration with early childhood specialists from psychology, education and social work, which added a richer socio-political texture to the content of the report. Reflecting a post-modern research ethos, multi-method and collaborative approaches may control any shortcomings of individual research methods, which may adversely influence the quality and depth of collected data. Instances of such method-related pitfalls, especially related to early childhood studies, are: a) the bias of pre-established hypotheses in experimental research (Bower, 1977; Donaldson, 1978; Cox, 1986); b) the adult interviewer's authority, and the abstract properties of verbal communication in interviews (Donaldson, 1978; Cox, 1986; Fairchild, 1991; Hooper-Greenhill and Moussouri, 2001); c) dubious interpretations and possibly inadequate sensorimotor skills on the part of young children, in the case of using drawings (Cox, 1986); and the difficulty to grasp the underlying 'hidden' context of young children's actions in field observations (Friedman, 1979; Aubrey et al., 2000). Ultimately, post-modern research approaches in their ideal form might be the key to address the issue of uncertainty and the claim for objectivity that prevail in socio-cultural research¹.

¹ Emphasising the principle of uncertainty, Barret (1991: 130) accepts that the most certain thing is the fact that the observer transforms the object of their observation. The claim for objectivity refers to

Furthermore, the multi-method and collaborative approach is less likely to inhibit the actual abilities of young children to be demonstrated during the research process. The reviewed studies in this Part showed that young children have a particular way of communicating and thinking², which cannot be effectively manifested, unless a research approach or a museum experience links to children's interests and life experience. As Donaldson (1978: 24) wrote, 'young children might not understand a word but can *understand situations*', as long as these are contextualised in a meaningful way that reveals some human intention or feeling and entails concrete reference points, for example, in physical space. The opposite type of thinking, according to Donaldson (1978: 76), is 'disembedded thinking', which 'does move beyond the boundaries [of human sense], so that it no longer operates within the supportive context of meaningful events'.

Another feature that the report has in common with the other reviewed studies, is the emphasis on the quality of young children's total experience. Museum exhibits and physical setting, objects and people, events and facilities, were all stressed as essential elements, on which museums should capitalise for underpinning young children's positive museum experiences. Nevertheless, the impact of the museum experience as a whole, may have functioned as a serious constraint in exploring what children can actually learn in museums: studies tended to describe what children liked and how they learned in museums, but they would not provide a clear answer on what were the specific benefits of the museum experience to young children. In relation to the latter, a hypothesis that emerged from the discussion of the QUT study was that museums may be able to counterbalance educational background differences at an early stage, and that the answer may lie in asking not how children learn, but what they perceive in a museum context and under what conditions. This is also the main hypothesis that will be explored in the course of this thesis, since *what* questions may,

selecting a research approach according to a rigorous evidence-based practice (Aubrey *et al.*, 2000), and not just because it is felt that it will be good for children (Platten 1976).

² Developmental psychology has shown that young children's thinking and communication skills may actually be more advanced than expected. See, for example, Cox's findings (1986) on: 'coordinated joint engagement', or the child's ability to engage the attention of a social partner in some activity with an object (p.8); direction of gaze in parent-infant relationships (p.9); pointing and verbalizations in interpersonal communications (p.20); alterations in speech according to changing contexts, functions and roles in communication (p.124); imitation of adults' and babies' speech (p.122); adjustments within a discourse with the same listener for establishing a topic and clarify requests (p.126); correct use of deictic terms, such as *here* and *there* at 4-5 years (p.146). Donaldson (1978: 55) also provided evidence on young children's ability of deductive reasoning and inferencing (p.55).

in fact, be more relevant to younger children, than the *how* questions, as Cox suggested (Cox, 1986: 37-42).

A final issue that relates to the aforementioned questions is what learning theory is pertinent to interpret the complex nature of young children's museum-related perspectives. The discussion of the QUT study suggested that the constructivist paradigm employed there may have not been very helpful in interpreting the socio-cultural parameters of young children's perspectives. In this respect, Kindler's socio-cognitive approach, drawing on Barker's eco-behavioural theory, seemed to have worked more effectively for exploring the dynamic nature of socio-personal exchanges. On the other hand, the eclectic approach of the British report, which meant to pursue both personal and socio-cultural interpretations, raised a serious issue: using various theories in a complementary fashion entails the risk of not critically considering each theory separately, and of reducing the theories to descriptive vocabularies, thus, not allowing a single theory to unfold its full potential as an interpretative tool. For example, Piaget's stages of intellectual development, which were evoked in the report, have long been questioned for over-relying on strictly determined biological sequences, and for disregarding the diversity of cultural influences (Bower, 1977; Donaldson, 1978; Cox, 1986; Aubrey 2000)³. Likewise, the report provided only a brief outline of Bronfenbrenner's theory, failing not only to refer to the three basic elements of the micro-system (roles, activities, and relations with persons, objects and symbols), but also to mention the meso-system, which refers to the relations between different settings of immediate participation (micro-system settings). The next Part of this thesis will attempt to reinstate the essence of Bronfenbrenner's ecological theory, and to demonstrate how the ecological paradigm can form on its own merit a framework for researching and interpreting early childhood museum experiences.

³A common example of criticism on Piaget relates to his famous experiments on young children's points of view, where the child would be asked to see a model of three mountains from different angles. Cox (1986: 37-42) considered these experiment to be inappropriate for young children, because they were based on the use of a difficult vocabulary and they did not distinguish between *what* young children see and *how* they see it. For Cox, *what* questions are more relevant to younger children than the *how* questions, whereas Piaget overemphasised the latter in the questions he addressed to the children. Also, according to Donaldson (1978: 24), 'the mountains task is abstract in a psychologically very important sense: in the sense that it is abstracted from all basic human purposes and feelings and endeavours. It is totally cold-blooded. In the veins of three-year-olds, the blood still runs warm'.

PART II

Developing ecological museum perspectives

The second part of this thesis will focus on the ecological paradigm as a distinct framework for researching and interpreting phenomena in the museum context. As shown in the previous part, ecological theory was already introduced in museum-related research by the British report *Start with the child: The needs and motivations of young people* (Morris Hargreaves McIntyre, 2002). In order to describe the child's world, the report applied basic concepts of Urie Bronfenbrenner's Ecology of Human Development, in conjunction with other theoretical frameworks, such as those of Piaget, Maslow and Erikson. However, the combination of different theoretical paradigms does not suffice to illuminate the particular value and strengths of a single theory. On the basis of Pepper's *World Hypotheses* (1942), a juxtaposition of theories reflects a type of 'multiplicative' corroboration, which only seeks to affirm a theory through other theories (Pepper, 1942: 12), but it does not help to understand the particular ability – and the main strength – of a theory to refine interpretations through 'structural corroborations' of facts with facts (Pepper, 1942: 87). Pepper (1942: 104) also maintained that a juxtaposition of theories may be confusing, as 'theories are mutually exclusive in their perspective of common sense and their course of critical refinement'. Hence, in the case of the aforementioned British report, the idea of combining an ecological theory of psychology with other theories appears to be unorthodox, as it may only superficially demonstrate the value of the ecological paradigm in museum-related studies.

This part, which consists of chapters four and five, will attempt to develop a more precise understanding of the nature and value of the ecological paradigm, drawing specifically on two ecological programmes: James Gibson's theory of affordances and Urie Bronfenbrenner's Ecology of Human Development (EHD). Although there has been a certain apprehension for synthesising Gibson's and Bronfenbrenner's programmes, because of their different emphasis on Kurt Lewin's field theory (Heft, 2001: xvii), the thesis posits that these programmes can still be used in a complementary fashion, as they help illuminate different aspects of a socio-personal phenomenon through an ecological lens. In this thesis, Gibson's views on perception will help understand the ecological nature of young children's museum-related perceptions, while Bronfenbrenner's theory of

development will help identify the ecological conditions, where these perceptions are developed.

The first section of chapter four will present basic premises of ecological psychology, which underpin the philosophy of Gibson's and Bronfenbrenner's ecological programmes. The second and third sections of the chapter will outline key notions in Gibson's and Bronfenbrenner's theories, which will inform the analysis and interpretation of research findings in the third part of the thesis. Chapter five will discuss the specific implications of ecological theory in researching young children's experiences of the museum setting.

Chapter 4

Ecological views on human perception and development

Urie Bronfenbrenner's ecological theory of human development and James Gibson's theory of affordances, which underpin the rationale of this thesis, are two separate expressions of an ecological theoretical language, which seeks to bridge positivism and phenomenology. According to Shaw and Pittenger (1977: 109), ideally, an ecological language

'would be publically confirmable and yet would retain concepts that are meaningful with reference to agents. [...] an ecologically based theoretical language would be in the first person plural mode of discourse. For example, "If *we* agents, with the same attunements, pick up information made available by such and such a physical display, then *we* will typically have the same experience *X*". Such a theoretical language is well suited to explaining social agreement in perceptual experiences [...].

In this statement, the phrase 'social agreement' does not refer to any pre-established social harmony or uniformity. On the contrary, ecological theory accepts the diversity of experiences between socio-cultural groups, but also claims that within a social group common perceptual experiences do occur, as a result of a socialisation process, in a context of shared needs, values and beliefs. The nature of perceptual experience and ecological context is further elucidated in the following section, which will attempt to provide a concise account of basic notions in ecological psychology, thus serving as a preamble to Gibson's and Bronfenbrenner's theories.

4.1. General premises of ecological psychology

Definition and roots

According to Reed (1996: 3), there are three main tendencies in psychology: biochemistry and neuroscience; historical and comparative sciences; and cognitive science, which stands as an active middle ground between the first two. A common assumption that apparently unites all these tendencies is that the brain functions to construct and utilize

representations of the world around us. From an ecological approach, however, the fundamental phenomenon to be explained in psychology is not how a world is made inside of organisms in the form of mental representations, but how organisms make their way in the world (Reed, 1996: 11), that is 'an animal's encounters with its surroundings' (Reed, 1996: 184). In Heft's terms (2001: 7), ecological psychology is a theoretical framework that allows a functional analysis of the individual's ongoing transactions with meaningful features of the environment, in terms of an individual's purposive and self-directed (molar) actions.

Ecological psychology as a term was used in the late 19th century by the radical empiricist William James (1842-1910), to emphasise the animal-environment mutuality for the study of problems of perception. From a radical empiricist view, a percept is a direct, unmediated selective discovery of structure in immediate experience, whereas a concept is abstracted from action to make it possible for the knower to isolate, classify and manipulate a 'moment' extracted from the perceptual flow. The truth value of concepts is incomplete, if concepts are not renewed through their continual contact with perceptual experience. In radical empiricist terms, also, the potentially known is latent in the world, as the world possesses an inherent structure, which may be discovered through the continuing transaction of knower and known (Heft, 2001). Structure remains the same across individual-environment encounters, and 'can be preserved over occasions, just as a melody can remain the same despite being transposed into a different key or played on different instruments' (Heft, 2001: 54). This notion of structure and the primordially of experience in perception laid the foundations for the development of ecological psychology as an epistemological paradigm.

The emphasis of ecological psychology on the role of person-context transactions also evolves from pragmatism, as represented in John Dewey's views on the nature of experience. According to Dewey, 'any normal experience is an interplay of objective and internal conditions' (Dewey, 1963: 42), that is, 'whatever conditions interact with personal needs, desires, purposes and capacities to create the experience which is had' (Dewey, 1963: 44). In terms of such transactions, or situations, Dewey also recognises the possibility of change, claiming that 'every genuine experience has an active side, which changes in some degree the objective conditions under which experiences are had' (Dewey, 1963: 39).

Apart from radical empiricism and pragmatism, the theoretical roots of ecological psychology can also be traced in the field-theoretical perspective of Gestalt psychology.

The significance that ecological psychology attributes to individual-environment transactions derives, for example, from Kurt Lewin's field analysis of individual's actions and Kurt Koffka's distinction between geographical and behavioural environments (Heft, 2001). On the one hand, Lewin asserts that a psychological event, like an action, is not caused by a stimulus, but is situated in a constellation of co-occurring environmental influences, as well as being influenced by the individual's personality dispositions and developmental constraints. On the other hand, Koffka distinguishes between the properties of the geographical environment, which exist independently of any perceiver, and the nature of the behavioural environment, which supports the actions of the individuals that are explained in terms of the perceived properties of this behavioural environment. In other words, notions such as consciousness and meaning become properties of the behavioural field, 'residing in the relation between the actor and the behavioural environment, not within the actor' (Heft, 2001: 215).

Briefly, ecological psychology may provide 'a context-specific framework, treating culture and cognition as aspects of a single interacting system of coordination between individuals and the socially conditioned context of their everyday lives' (Laboratory of Comparative Human Cognition, 1983: 299). In its essence, such a context-specific framework illustrates rather an organicist hypothesis, in terms of Pepper's four main world hypotheses (formism, mechanism, organicism, contextualism) (Pepper, 1942). An organicist hypothesis regards universe as a living organised system, whose parts gain some of their meaning from the whole in which they are embedded, and seeks to discover principles of organisation in explaining the relations of parts and wholes (Sameroff, 1983: 246). The shortcoming of organicism, according to Pepper (1942), is that analysis risks to become derivative, as this hypothesis is a synthetic ontological viewpoint, which treats basic facts as complexes or contexts. On the other hand, organicism may counterbalance the complexity of a contextualist hypothesis, where developmental events become non-predictable, as they are attributed to unique networks of many causes (Sameroff, 1983: 246).

Structure and systems

In terms of a dynamic interrelation of a living thing and its environment, ecological psychology considers environment in its full complexity, with its multiple levels of organization (Heft, 2001: xxiv). Such levels of organisation, or systems, vary from a

subatomic level of analysis to a cosmic level of analysis, and include physical systems, biological systems and socio-cultural systems. These levels, which are characterised by distinctive functional properties, are nested in a hierarchical structure, but no single level of organization is any more causally fundamental than any other. The continuing function of any system depends on an array of factors, such as: the satisfactory collective operation of this system's lower level constituent conditions; appropriate support from higher level conditions within which this system itself is a constituent; conditions residing among other within-level processes; and the absence of new higher order constraints that would threaten the integrity of this system (Heft, 2001: 242). In other words, there is a 'decentralised control process', where 'information is distributed in systems, rather than being channelled serially through a centralized hierarchical structure' (Heft, 2001: 241).

Any system has a discernible functional coherence, and tends to retain certain essential properties in the face of some degree of perturbation (Heft, 2001: 240). The ability of systems to maintain their integrity relates to their property of homeostasis, a mechanism of controlling the flow of information in experience, through a set of organic regulatory functions, which maintain the stationary states of the organisms around their intrinsic norms (Laszlo, 1969: 30). Homeostasis reflects any system's common motivation for closure, a tendency to match individual codes and environmental input, so that a situation becomes meaningful in the context of this system (Laszlo, 1969: 99). For example, Laszlo (1969: 47) posits that 'cultural' activities in diverse areas of cognition and purposive behaviour, such as science, art and religion, provide a 'metasensory feedback' to render experience more intelligible. The function of Laszlo's 'metasensory feedback' is similar to Dewey's notion of social control, where 'control of individual actions is effected by the whole situation in which individuals are involved, in which they share and of which they are co-operative or interacting parts' (Dewey, 1963: 53). In other words, there is a common underlying structure within a given context, or an array of 'within-culture universals', which, along with 'between-culture variations', are produced by 'a group's common experience with a local set of unusual constraints' (Laboratory of Comparative Human Cognition, 1983: 299).

The tendency of systems to maintain their equilibrium does not, however, exclude any possibility of change or any sense of individuality. Regarding the possibility of change, Heft (2001: 240) posits that there are limits to any system's resiliency, beyond which the defining functions of the system cease to operate. When a system's limits are perturbed, existing dynamic constraints may present problems to be solved, and their

resolution may produce novel outcomes, which may alter the previous configuration of the system. As for the issue of individuality, Reed (1996: 86) claims that the human collectivisation of effort in terms of an 'acculturated niche' has not been to the detriment of individual skills in behaviour and awareness. Instead, it seems to facilitate the growth of individual skills, as each individual may do something that is unique so that the group as a whole achieves its needs (Reed, 1996: 110). Both issues of change and individuality confirm Heft's statement that in a dynamic systems theory, such as ecological psychology, 'patterns and structures in the natural world are viewed as being multiply determined, and sustained and altered over time by the interplay of numerous factors' (Heft, 2001: 315-6).

Ecological knowledge

In ecological psychology, knowledge is founded on perceptual experience, which can be thought of as an external relation between an individual's psychological order and the domain of physical objects (Heft, 2001: 59). The point where psychological order transects the physical domain is a cross-section, where a portion of one factor is defined or articulated by principles specific to the other factor. To use a graphic cross-section example of Edwin Holt (1873-1946), a theorist of New Realism and mentor of James Gibson, when a boat with a searchlight moves along a shoreline and illuminates successive features of a landscape, the cross-section is that portion of the shoreline illuminated by the moving boat (Heft, 2001). In this case, the shoreline features are not "in" the searchlight, but exist independently in the environmental context. Likewise, from an ecological perspective, perceived objects are not "in" the mind or constructed by the mind, but are external, in the sense that they are grounded in the environment.

Meanings and values associated to the perceived objects are also regarded by ecological psychology as external, and the problem is how to detect them, and how to shape one's efforts to obtain them (Reed, 1996: 101). According to Reed (1996: 107), when a person perceives something for the first time, the meaning of the perceived object is usually grasped only vaguely or imperfectly. If this vague meaning appears interesting and non-threatening, the person may attempt to further explore it in terms of perceptual learning. Successful efforts will increase the tendency to approach other meanings in the future through similar objects, places and events, while unsuccessful efforts will foster a tendency to seek the same values, but using different actions (Reed, 1996: 103).

Efforts to obtain meanings and values are shaped both by heredity and environment, or temperament and experience (Reed, 1996: 101), and are closely related to the process of selection, a critical process in ecological knowledge. Reed (1996: 187) distinguishes between three types of selection: natural, neural and cultural. In natural selection, environmental circumstances favour or hinder the development of some characteristics, while neural selection processes sort favoured from unfavoured features of an animal's encounters with its environment. Cultural selection is a higher level of selection, which is based on dynamic interchanges between 'fields of free action' and 'fields of promoted action'. The fields of free action comprise a range of behaviours and independent actions that individuals find to be effective, whereas the fields of promoted action refer to a range of behaviours that are considered proper within a given culture. This latter range of behaviours can either constrain or facilitate individual efforts, and to a certain extent individuals must conform to these behaviours. Promoted action, which apparently relates to Laszlo's 'metasensory feedback' processes, as seen above, is illustrated in Dewey's notion of 'collateral learning' and in Reed's notion of 'prospective awareness'. According to Dewey (1963: 48), collateral learning refers to the formation of enduring attitudes, likes and dislikes. Likewise, on prospective awareness, Reed (1996: 175) describes a 'modified environment', where:

'Caregivers from a given culture will almost always introduce infants to the daily routine and everyday places of their culture through intense repetition and rhythm of experience. This, in turn, creates prospective awareness about the persisting features of the populated environment (this is where I eat or where I get to play).'

Briefly, from an ecological viewpoint, knowledge is sustained and elaborated through socio-cultural processes, and is embodied ecologically not only in social action, but also in such human constructions, as artefacts, tools and representations (Heft, 2001: xxxiv). In this case, representations are not just mental contents, but concrete features of the environment (Heft, 2001: 347), which can be shared and scrutinised by groups of individuals who participate in common tasks in a given socio-cultural context (Heft, 2001: 352). Therefore, cognition is distributed and knowing is a process of 'becoming' that occurs within experience, where latent features of the environment become appropriated in the dynamic and reciprocal relation between an active knower and environment of potential structure (Heft, 2001: 361). As Reed claims (1996: 13), in ecological psychology, 'cognition is neither copying nor constructing the world', but it is 'a process that keeps us active, changing creatures in touch with an eventful, changing world'.

4.2. James J. Gibson: an ecological approach to perception

As already stated above, perceptual experience is a fundamental feature of cognition in ecological psychology. From a Cartesian perspective, perceptual experience is commonly based on neural activity, which begins with a physical stimulus, and activates a series of brain sites through impulses from sensory receptors (Heft, 2001: 277). James Gibson's theory of affordances (Gibson, 1986), however, provides an alternative ecological approach to perception, which can further illuminate the relation of the developing person with the context which he or she experiences.

Perceiving and knowing

According to Gibson, learning is 'to improve perceiving with practice and education of attention, so that differences that were previously not noticed become noticed, and features that were formerly vague become distinctive' (Gibson, 1986: 254). In order to better comprehend the essence of Gibson's definition of learning, it is important to clarify the notion of 'perceiving' in Gibson's theory, which draws on two key concepts: that of 'ecological information' and that of 'affordance'.

Unlike other prevalent theoretical views on perception, which recognise mediating processes (such as the impact of personal cognitive schemata in constructivist theories) that enrich or transform the stimulus input, Gibson claimed that perception is direct and unmediated. More specifically, for Gibson (1986: 255):

'To perceive is to be aware of the surfaces of the environment and of oneself in it. The interchange between hidden and unhidden surfaces is essential to this awareness. These are existing surfaces; they are specified at some points of observation. Perceiving gets wider and finer and longer and richer and fuller as the observer explores the environment [...]'.

The notion of perceiving, here, is threefold. First, in perceptual experience, or in what Heft (2001: 135) characterises as 'co-perceiving', the individual perceives simultaneously the environment and the self through self-controlled actions. Second, information to be perceived – Gibson's 'hidden and unhidden surfaces' – is already available in the environment and is not constructed. Third, the process and the outcome of perceiving are gradually refined, when information is detected over time in the context of change. In this case, 'change' refers to what Gibson calls 'an awareness of transformation', that is, 'a

person's ability to perceive both the persistence of places, objects and substances, along with whatever changes they undergo' (Gibson, 1986: 246). In the context of change, perceiving can be prospective or retrospective, depending on whether an individual is aware of what would be experienced in the environment with appropriate action, or what was already experienced, respectively (Heft, 2001: 181). In general, as Gibson's experimental work has also shown, perception can improve without either reinforcement or explicit teaching, but with gradually observing more features related to a situation through individual action (Reed, 1996: 106).

As shown above, a fundamental idea that underpins Gibson's theoretical view of perception is the external relation between the perceiver and the information that is perceived or to be perceived. According to Reed (1996: 7), 'Gibson's great conceptual innovation was his conception of information as "ecological" – as special patterns in the energy fields of the environment (not in the organism)'. In order to extract the information, a person, being an active information seeker, *obtains* stimulation [Gibson's own italics], and despite any radical change in this stimulation, the information can still be the same (Gibson, 1986: 243). The ability to grasp external information is defined as 'information pickup', a kind of psychological activity, which is based on functional adjustment to the environment, rather than on a division of psychological processes into inputs and outputs (Reed, 1996: 64). Therefore, 'awareness is not an internal state of the mind or the brain, but an ecological and functional state of an animal making its way through the environment' (Reed, 1996: 67).

The ecological information that is available in the environment is defined by Gibson as 'affordances'. Affordances are a class of properties with perceiver-specific qualities and also are properties of the environment, not meanings that minds impose on the world as attributes (Reed, 1996: 19). Rather than simply being information about abstract physical properties of an object, an affordance is a perceived functional significance of an object, event or place for an individual, and is measured in relation to the individual's abilities, needs and intentions. For example, a vertical surface may afford crawling for a snail, but it cannot afford walking for a human being. Hence, affordances do not support collective actions, but are identified relative to the actions of specific perceivers (Heft, 2001: 289).

According to Gibson (1986: 141), 'the perceiving of an affordance [...] is a process of perceiving a value-rich ecological object', under the impact of multiple selection pressures, which are mutually applied by the external context and the individual. On the

one hand, affordances are aspects of the environment that regulate an individual's behaviour, in the sense that they provide opportunities for action, and are available to a population, even if they are not completely used by any one member of that population (Reed, 1996: 26). To illustrate the idea that an individual who encounters certain objects, animals, events and places cannot encounter the entirety of his or her environment, Reed (1996: 18) states that: 'an animal that encounters a piece of fruit does not thereby encounter the fructose or carbohydrates contained in the fruit, even though it *ingests* them'. Therefore, ecological resources may be altered by an individual, but are not created by them. On the other hand, individuals choose among the range of affordances, according to various criteria, such as: whether an affordance in a setting can support an activity or not; or, what psychological possibilities a setting has to offer to an individual (Heft, 2001: 290). More significantly, an affordance will be selected and elaborated by an individual, when it is within that individual's reach – physical, intellectual or social. Physical and intellectual access are related to the specific characteristics, needs and abilities of the individual, while social access is related to social roles and limits in a given socio-cultural context. For example, according to Heft (2001: 290), entrance to certain settings may be limited by age, or sitting in a chair with specific social significance or 'ownership' through prior use may be prohibited.

The role of selection processes stated above is encapsulated in Reed's assertion that 'affordances and only the relative availability (or non availability) of affordances create selection pressure on the behaviour individual organisms' (Reed, 1996: 18). In Gibson's ecological theory of perception, the environment does not cause or stimulate action in a determinist fashion; instead, it affords action for the organism, and the selection of which affordance to perceive and use reflects an individual's effort for meaning and value (Reed, 1996: 108). When an affordance persists throughout an individual's life course, there may be sufficiently persistent selection to create conditions that will favour certain actions and behavioural patterns over other patterns. Favoured actions and behaviours may be properly regarded as selection products, when selection is combined with individual developmental processes that tend to increase the reproduction of favoured patterns (Reed, 1996: 45). This dynamic transaction between context and self is fundamental in ecological psychology and in Gibson's theory, in particular, which claims that human beings begin to be socialised only when they perceive the values of things for others as well as for themselves.

Researching perceptions

Gibson's idea that perceptual experience is founded on affordances, and that perception ability can be refined through personal experience and observation, leads to certain considerations on researching perceptions. According to Reed, these considerations refer to two main questions: how a researcher can distinguish an affordance, and how this affordance can be analysed.

Regarding the first question, Reed (1996: 185) states that, in order to explain a perceptual phenomenon, it is not enough to generally state that individuals use some information to regulate their behaviour and realise an affordance. Instead, a perceptual phenomenon can be regarded as psychological, only when one can prove that some behaviour and awareness derive from a specific use of information and affordances. Once observation and experiment suggest that a particular phenomenon is psychological, then one needs to find out what kind of affordances and information can support the phenomenon. More specifically, Reed suggests that studies should offer individuals selectively degraded information with a problem to be solved, in order to see under what conditions individuals continue to explore their context for information, and under what other circumstances their ability to seek information is hindered (Reed, 1996: 106).

Reed (1996: 40) distinguishes between two levels of analysing affordances: the concrete and the abstract. A concrete analysis of an affordance shows how particular environmental properties can promote the habits of life of a particular species, whereas an abstract analysis of an affordance shows how these particular relationships between an organism and its habitat exemplify ecological regularities or laws. A question of concrete analysis, for example, according to Reed, would be 'how this kind of terrain does or does not support human locomotion'. In the same example, in terms of an abstract analysis, one would say that the ground affords walking for human beings, because of the laws of reactive forces, while the surface of a pond affords walking only for much smaller and lighter animals.

Briefly, in an ecological approach to perception it is important to observe how an individual copes with certain features of his or her context, under what conditions this way of coping is repeated, modified or frustrated, and to what extent this way of coping typifies the community of people where the individual belongs. What kind of contextual features an individual may need to cope with is an issue that this chapter will attempt to illuminate next, drawing on Urie Bronfenbrenner's ecological theory of development.

4.3. Urie Bronfenbrenner: Ecology of Human Development (EHD)

Urie Bronfenbrenner's ecological theory of human development was originally established in *The Ecology of Human Development: Experiments by nature and design* (1979), where development was perceived as a continuous and dynamic process within a larger ecological system of nested social, cultural, political and ethical settings and structures. According to Bronfenbrenner (1979: 21),

‘the ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded’.

Further elaborations on the original theory, known as Ecology of Human Development or *EHD*, have been attempted mainly in the 1990s in the concepts of the bioecological model (Bronfenbrenner and Ceci, 1994; Bronfenbrenner, 1995a; Ceci and Hembrooke, 1995) and of the person-process-context-time model or *PPCT* (Bronfenbrenner, 1995b), which emphasise the role of the organism and the impact of time, respectively, in the process of human development. Far from adopting merely psychological or sociological perspectives, Bronfenbrenner assumes a ‘development-in-context’ approach with a two-fold research focus: how perceptions, attitudes and practices change in terms of a person's exposure to and interaction with the environment; and how scientific research can challenge ideological assumptions at a political level through empirical evidence. This section will outline Bronfenbrenner's key concepts on the ecological nature and process of human development, as well as his research propositions for doing ecological research.

Development in context

The corner-stones of Bronfenbrenner's ecological theory are the notions of ‘human development’ and ‘ecological environment’. Ecological environment is typically visualised in the ecological theory as a concentric structure of four nested systems: the micro-system at the heart of the structure, the meso-system, the exo-system, and the macro-system. The micro-system consists of settings of immediate participation, which form a meso-system, as they interrelate with other micro-settings. The exo-system consists of settings where the person does not actively participate, but which can still affect or be affected by this person.

In any system, settings have their own physical and social properties, engaging the person in distinct roles, activities and relations with other persons, objects and symbols. The specific nature, consistencies and relations between these settings, is largely affected by the overarching ideological system of values, attitudes and beliefs that exist in the macro-system of a given culture or subculture.

For Lüscher (1995: 578), knowledge and beliefs express the meanings that are attributed to the relations between the biological equipment and the environment, and that are organised in relation to the perspectives of specific persons, groups, or socialities. Within a social context, such meanings contain social contracts, entailing specific rights and obligations, as well as an ethos or ideology, which justifies any pattern is followed or expected (Goodnow, 1995: 284). Bronfenbrenner (1979: 4) emphasises that '[...] within any culture or subculture, settings of a given kind – such as home, streets, or offices – tend to be very much alike, whereas between cultures they are distinctly different. It is as if within each society or subculture there existed a blueprint for the organization of every type of setting'.

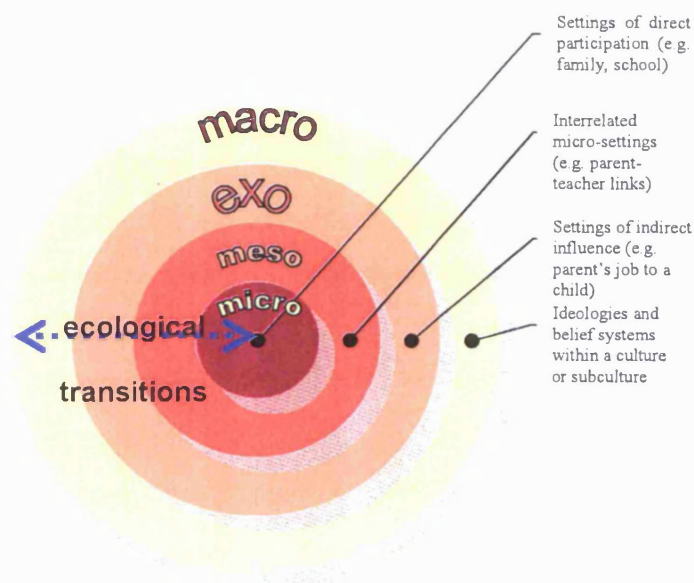


Figure 1: A schematic representation of the structure of the ecological environment.

Figure 1 provides only a basic idea of the structure of the larger ecological environment, where development occurs. However, the visualisation of the ecological environment herein might be misleading in communicating the essence of Bronfenbrenner's notion of development. For what this static representation fails to

encapsulate are the dynamic nature of human development and the nature of its ecological context 'as it is *perceived* rather than as it may exist in "objective" reality' [Bronfenbrenner's italics] (Bronfenbrenner, 1979: 4). Development is a continuing and dynamic process, wherein the person affects and is affected by the environment directly or indirectly, by experiencing and restructuring this environment through a gradually more complex repertoire of roles, activities and relations.

A role is a set of activities and relations expected of a person occupying a particular position in society and of others in relation to that person (Bronfenbrenner, 1979: 85). By the term 'relations' Bronfenbrenner (1979: 56) refers to a situation where a person in a setting pays attention to or participates in the activities of another. A reciprocal relation between two persons may constitute a two-person system or a 'dyad', that is, a critical developmental context in its own right, and a basic building block of the micro-system enabling the formation of larger interpersonal structures (Bronfenbrenner, 1979: 55). Learning and development are facilitated by the participation of the developing person in progressively more complex patterns of reciprocal activity with another person, with whom the developing person has developed a strong and enduring emotional attachment (Bronfenbrenner, 1979: 60). The more a person's relations support his or her activities, and the more these activities become self-directed, self-controlled and meaningful for the person (i.e. *molar* activities⁷), the more these activities and relations qualify as *proximal processes*.

Proximal processes involve reciprocal interactions between a developing person and other persons, objects, and symbols in the person's immediate setting (Ceci and Hembrooke, 1995: 329), which help actualise the developmental potential of a person or a setting for an 'effective⁸ psychological functioning' (Bronfenbrenner and Ceci, 1994: 568). Proximal processes occurring on a regular long-term basis are conducive to changes in the way a person perceives and deals with the environment, changes that persist in time and

⁷ Bronfenbrenner (1979: 45) defines a *molar* activity, as 'an ongoing behaviour possessing a momentum of its own and perceived as having meaning or intent by the participants in the setting'. He also distinguishes them from short-term activities with minimal impact (i.e. *molecular* activities), or from activities that are not meaningful to the person, thus having negligible impact, even if they are long-lasting.

⁸ By the word *effective*, Bronfenbrenner and Ceci (1994: 569), refer to developmental outcomes 'that represent the actualization of potentials for (a) differentiated perception and response; (b) directing and controlling one's own behavior; (c) coping successfully under stress; (d) acquiring knowledge and skill; (e) establishing and maintaining mutually rewarding relationships; and (f) modifying and constructing one's own physical, social, and symbolic environment'.

space and can be carried over to other contexts. According to Magnusson (1995: 20), 'if a person's distinctive pattern of characteristics remains unchanged across time, no development has occurred'.

Any developmental changes in roles, settings or both produce and are produced by the person's movement through ecological space, which is called *ecological transition* (marked in figure 1 simply as a dashed double arrow, to stress the reciprocity, continuity and non-linearity of the process). An ecological transition could be regarded as a 'turning point' (Clausen, 1995: 369), which may involve a person in different roles through 'transforming incidents', or may entail a feeling that new meanings have been acquired, even if life experiences are not much changed. For example, a person may discover that there are particular 'escape routes' from a disadvantaged position, such as getting education, marrying, emigrating, or finding a patron (Goodnow, 1995: 277). Such changes do not occur only as a result of existing psychological 'resources and liabilities' (i.e. abilities, achievements, temperament and personality), but more significantly as an expression of 'developmentally instigative characteristics', which are selective, dispositional orientations towards particular features of persons, objects and symbols in a person's environment (Bronfenbrenner, 1995b: 636). At an early stage, these selective orientations are manifested through selective responses to stimuli presented in different modalities, or to varied stimuli introduced within the same modality, and, later in the life course, through different interests, values, beliefs, and goals, guided by evolving conceptions of the environment and the self. Ideally, ecological transitions should ultimately lead to occupational and educational self-direction and intellectual flexibility (or creativity), and, ultimately, to self-directedness of orientation and a sense of well-being, as opposed to conformity to external authority and distress respectively (Kohn, 1995: 150).

The quality of ecological transitions is commonly related to the quality of the social context. For example, Goodnow (1995: 275) posits that access to areas of knowledge may be restricted by stereotypes regarding certain content areas as less relevant, less natural or less easy for certain ages or for a certain sex. Ceci and Hembrooke (1995: 310) state that 'one social context may elicit a higher level of processing efficiency than another, even though the same process is ostensibly operating in both'. Likewise, Kohn (1995: 153) suggests that 'a more advantageous class position, or a higher position in the stratification order, affords greater opportunity to be self-directed in one's work, that is, to work at jobs that are substantially complex, that are not subject to close supervision, and that are not routinised'. Bronfenbrenner (1995b: 640) also agrees that some environmental contexts,

such as more advantaged socio-economic levels or two-parent biological families, may instigate more effective proximal processes, but he also states that 'it is not yet clear that instability and interruptedness of the environment are the critical factors in reducing the power of the process'. Besides, according to Ceci and Hembrooke, 1995: 310), social dynamics are considerably influenced by historical changes, which are not only economic, but may also provide cultural opportunities that appear at various times in a society, such as educational television or museums, or social and political values that a culture adopts, for example, towards different kinds of schooling.

Researching ecological contexts

In *The Ecology of Human Development* (1979), Bronfenbrenner defines the contextual features that ecological research should focus on, when studying micro-, meso-, exo- and macro-systems.

In the micro-system, Bronfenbrenner (1979: 5) considers the dyad to be one of the basic units of analysis, suggesting that, 'if one member of the pair undergoes a process of development, the other does also'. Depending on the kind and degree of participation of dyad members in an activity, Bronfenbrenner (1979: 56) distinguishes five functional forms of dyads: (a) observational dyad (i.e. paying close and sustained attention to a person's activity); (b) joint activity (i.e. doing something together); (c) primary dyad (i.e. being in one's thoughts and influencing one's feelings and behaviour, even when apart); (d) developmental dyad (i.e. meeting the optimal conditions of reciprocity, increasing complexity, mutuality of positive feeling, and gradual shift in balance of power); and (e) transcontextual dyad (i.e. engaging in activity in more than one settings). For Bronfenbrenner (1979: 6), the most influential environmental events for a person's development are activities that are engaged in both by the developing person and by others.

In exploring the meso-system, Bronfenbrenner (1979: 209) focuses on four types of setting interrelations, depending on how active is a person's participation in more than one settings. The more direct type is multi-setting participation, a 'first-order social network', wherein a person participates equally actively in more than one settings (for example, at home and at school), thus constituting a 'primary link' between these settings. The second type is indirect linkage, a 'second-order' network, where the same person does not actively participate in two settings, but these settings are connected through 'third parties', who serve as 'intermediate links' between persons in these settings. A type of a more remote

interrelation are inter-setting communications, which may be one-sided or bidirectional, and consist in message transmissions from persons of one setting to persons of another setting. Inter-setting knowledge is the most remote type of interrelation, wherein any information or experience in one setting about the other is obtained either through inter-setting communications or external sources, such as books. According to Bronfenbrenner, when a person is accompanied by other persons in terms of a setting transition, the meso-system is referred to as 'multiply linked'; otherwise, in the absence of any additional links, the meso-system is described as 'weakly linked'.

Exo-system and macro-system studies constitute more complex research frameworks. On the one hand, in order to demonstrate the developmental impact of an external setting in the exo-system, a researcher should, first, connect events in the external setting to processes in the developing person's micro-system, and, second, link the micro-system processes to developmental changes in a person (Bronfenbrenner, 1979: 237). On the other hand, in macro-system studies, it is important to identify and analyse any continuities in form and content that may occur between values and beliefs in a culture or sub-culture and the other three systems of the ecological environment (Bronfenbrenner, 1979: 258).

In brief, ecological research should view the properties of the person and the environment as interdependent and analyse them in systems terms, taking into account all the interpersonal relations developed in a given setting, including the researcher, as well as the indirect influences of third parties (i.e. a 'second-order effect'). According to Bronfenbrenner (1979: 36), the most appropriate way to research human attitudes and behaviours is the 'ecological experiment' (Bronfenbrenner, 1979: 36). Unlike classical experiments which focus on hypothesis testing, ecological experiments aim at discovering the properties and processes of a system that affect and are affected by a person's behaviour and development. These experiments should combine both experimental rigour and naturalistic relevance, based on a careful selection of subjects through random assignment of matching and a selection of 'ecologically valid settings'. A research setting is ecologically valid when researchers are aware of the psychological and social meanings that research participants have attributed to it, and when these meanings are in line with the environmental experience researchers wish to generalise (Bronfenbrenner, 1979: 29).

Finally, ecological research, in the form of a 'transforming experiment', can challenge existing beliefs and ideologies in the macro-system, by eliminating, modifying, or adding elements and interconnections at any level of the ecological environment, from

the micro- to the exo-system (Bronfenbrenner, 1979: 41). For Bronfenbrenner (1995a: 606), the point is 'not to verify hypotheses, but to discover new ones, by proving yourself wrong'. By trying to change something, one may receive significant reactions from the system, which imply strongly held beliefs and established processes, as ethnic or social groups may 'not really want to change' (Bronfenbrenner, 1979: 290). Nevertheless, macro-settings may also offer, deliberately or contingently, opportunities for new thoughts and actions to arise, possibly because the evolution of human mind is open (Lüscher, 1995: 566), or because 'the macrosystem encompasses the blueprint of the ecological environment not only as it is, but also as it might become, if the present social order were altered' (Bronfenbrenner, 1979: 290). Consequently, by implementing transforming experiments, a researcher may see how flexible the system actually is.

Chapter 5

Museum-related implications of ecological theory

This chapter will attempt to identify the major implications of Gibson's perception theory and Bronfenbrenner's ecological theory of development, in the area of exploring the development of young children's museum-related perceptions. In particular, this chapter will attempt to reconceptualise the nature of museum perceptions and experiences as ecological, and to identify the main ecological parameters in researching young children's experiences in the museum context.

5.1. Museum perceptions as ecological entities

In order to conceptualise museum perceptions – especially as they are formed in early childhood – through an ecological lens, one would need to need to consider museums in terms of affordances. As shown in chapter four, according to Gibson, an affordance is a perceived functional significance of objects, events and symbols, which exists in the ecological environment and is measured in relation to specific needs, abilities and intentions. The extent to which an individual will perceive and use an affordance depends on various factors (or 'selection pressures'), such as: whether an affordance is accessible to this individual; whether the individual is aware of this affordance; or whether the individual has picked up through experience and observation enough information from his or her context to realise this affordance. Therefore, a museum setting can be regarded as an affordance (e.g. for learning or leisure), which is available in the broader socio-cultural context of the child, but whether and how the child will use this affordance, depends on the level of the child's perceptual ability and on the extent to which the child's proximal context (e.g. family, school or neighbours and friends) uses and promotes museum-related affordances.

Regarding the child's perceptual ability, Tom Bower in the *Perceptual World of the Child* (1977: 25) states that, as children grow, their perceptual abilities become more concrete and 'perceptions become more meaningful through memory and knowledge'. In line with Gibson's views, Bower (1977: 7) defines perception 'as any process by which we gain immediate awareness of what is happening outside ourselves', and posits that what

changes throughout development is not so much the information provided by our senses as the way we interpret this information (Bower, 1977: 84). Bower notes an apparent difference between children's and adults' perceptions, in the sense that young children rely more than adults on their senses to explore and understand the world, and tend to directly connect their perceptions to the contexts where they were acquired. In fact, however, as Ceci and Hembrooke (1995: 309) claim, 'the degree to which we as adults are truly context independent is less than many believe', since, according to Bower, adults tend to find recourse to the certainty of immediate perception, when abstract thinking fails them. Consequently, if young children are to perceive the functional significance of the museum setting as an affordance, they need, first, to have the opportunity in their near development context to immediately experience and observe the museum setting, and, in this respect, parents' role is crucial.

Being a field of promoted action, family constitutes a significant selection pressure in a child's perceptual experiences, since it affects the quality and the direction of the child's effort to seek for information and meaning. A child's efforts may be perspectivistic, in Lüscher's terms (1995: 565), in the sense that things are seen and understood from a certain point of view, but they also require a 'minimum of communality', which may be mediated by language and a common stock of knowledge and beliefs. In order to ascertain this minimum of communality, parents make decisions that in large part dictate when and with whom the young child interacts (Brooks-Gunn, 1995: 492). Also, in everyday life, parents consider the extent to which other settings will expose a child to a message that differs from or directly attacks a parent's message (Goodnow, 1995: 280). Therefore, if parents consider the museum setting as inappropriate for their child, they may not wish to support the child's experience in this setting. In contrast, if parents have perceived any affordances available in the museum setting and have, actually, used these affordances in their own efforts to seek for information and meaning, then, they are likely to make these affordances available to their children, as well.

However, any affordance cannot gain a developmental momentum, unless the conditions in the environment provide in the long-term enough stimuli for the child to continue seeking for information that supports the affordance, and unless these conditions instigate a change in the person and the perceived environment alike. This longitudinal aspect of affordances is, also, explicit in Dewey's criteria for assessing a positive learning experience (1963). More specifically, Dewey claims that positive learning experiences: (a) are produced by an interaction between a person and his or her environment, and also

produce some change to the environment; (b) are conducive to continuing growth and to the development of habits, attitudes and self-control in decision-making and problem-solving; and (c) consist the moving force for further positive experiences. Dewey's perception of positive experiences resembles Mihalyi Csikszentmihalyi's notion of 'flow experience' (Csikszentmihalyi and Hermanson, 1995), but where Csikszentmihalyi stresses an 'immediate aspect of agreeableness' (in Dewey's terms), Dewey stresses the element of continuity of experience in a person's life context and its influence upon later experiences. The dynamic relation that may be developed between young children and museum affordances is illustrated in the next section, according to Bronfenbrenner's views on development-in-context.

5.2. Museum experiences as ecological processes

As already shown in the previous chapter on Bronfenbrenner's ecological theory, in the course of human development the ecological environment does not only affect but is also actively affected by a person, hence socio-cultural and personal configurations are equally into effect and are interdependent. It follows, then, that to interpret the museum setting in systems terms is primarily a question of understanding these configurations. To address this question, this section provides three examples of interpreting museum-related experiences in ecological terms. The first two, which begin with the individual in the centre of Bronfenbrenner's concentric structure of systems, refer to potential child-museum and parent-museum relations respectively, while the third example attempts to interpret a potential inter-setting relation between the family context and the museum context.

Figure 2 below illustrates an ecological interpretation of a child's museum experience in terms of a school visit, drawing on the key features of the micro-system, that is, roles, activities and relations. A child visiting a museum in a school group does so in the role of a student. In this role, the child has developed particular relations with his or her teachers and classmates, in the course of his or her direct participation in the activities of the school setting. One should bear in mind, though, that the school 'baggage' of roles, activities and relations, interrelates with the child's family background and, of course, with the child's own personality (i.e. skills, interests, prior experience, and genetic potential). In other words, the child arrives at the museum already influenced by an established meso-system among family, school and him or herself.

The museum visit is itself an activity, which is legitimised both by the school curriculum and the museum's agenda, while reflecting broader values in the macro-system, such as the significance of national cultural heritage. The policies that underpin the legitimacy of the museum visit manifest certain socialisation standards that affect, and can be affected by, the child, although the child does not directly participate in them. Besides, the museum visit as a process constitutes a setting transition for the child entering a new micro-setting, which is now added to the child's meso-system. Through its educational activities, the museum setting prescribes for the child a set of roles and relations with the museum staff and the exhibits themselves. The specific nature and quality of these roles and relations will largely depend on the nature and quality of the museum provision (e.g. museum staff's attitudes, type of activities), and on the extent to which other members of the child's immediate settings (i.e. parents, teachers) will capitalise on the experience gained in the museum setting. A setting transition that is not supported in the long-term by 'significant others' in settings where the child actually lives and grows, will hardly qualify as a developmentally effective proximal process, and will eventually result in a weakly linked meso-system.

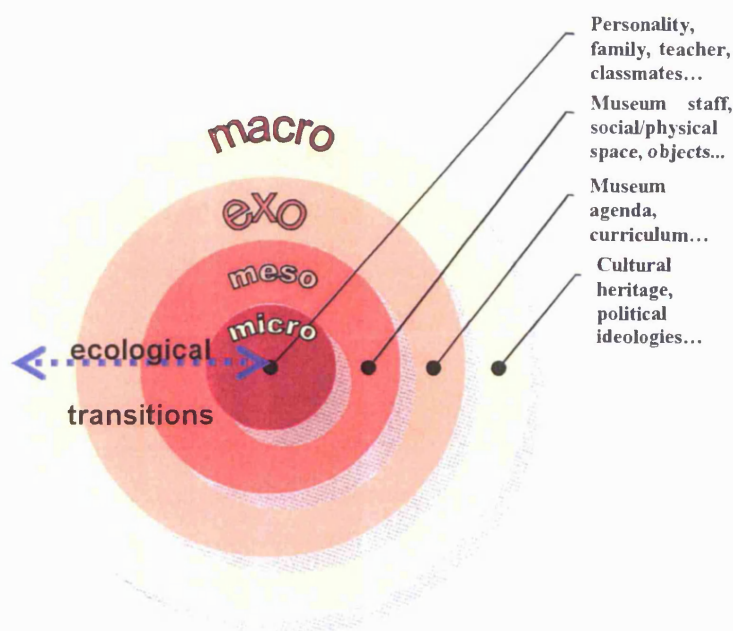


Figure 2: An example of translating a child's museum experience in ecological terms with the child in the centre of the system.

Following the same line of interpretation as in the previous example, one can also interpret a parent-museum relation, provided the parent is placed in the centre of the system. What would be, for example, an ecological interpretation of the museum setting in relation to a parent who is a museum professional? First of all, the fact that this person is a museum professional means that museums are recognised settings within the community where he or she works, and that the need for developing a museum-focused profession is also valid – the museum *is* a part of the macro-system. These conditions within the macro-system have made it possible for that person to effect an ecological transition and enter the museum world, by assuming the role of the museum professional. As a working environment, where the museum professional actively participates, the museum setting becomes part of his or her micro-system, as well as of his or her meso-system, since this person's working experience interrelates with his or her family experience as a parent. In this sense, the museum setting can become a micro- and meso-setting for this person's child also, provided this person gives the child enough opportunities to experience the museum setting. Otherwise, the museum setting will remain a part of this child's exo-system, affecting the child's life only indirectly, through his or her parent's own experience. So, this might be a rough outline for a systems analysis of the museum setting in the life of a parent, who is a museum specialist.

Finally, figure 3 below visualises museums and families as two distinct ecological settings, which exist and develop in a given local community. This means that families and museums may have their distinctive properties as micro-settings, but they also share some common ground by being parts of the same community.

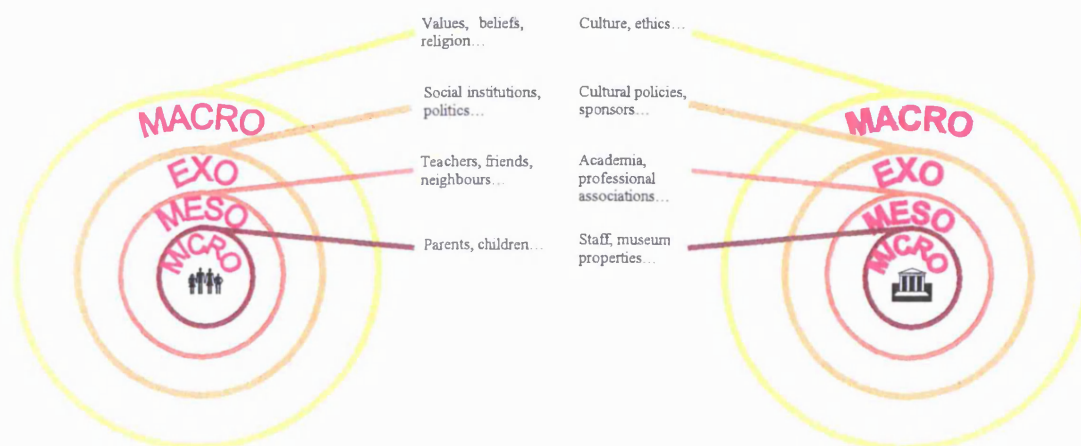


Figure 3: Families and museums as ecological settings.

More specifically, the systems of each of the two settings may include different sets of relations. For example, the micro-setting of the family consists of relations with parents and siblings, which are qualitatively different from the relations occurring in the museum micro-setting between colleagues. However, the macro-system of both contexts may be shaped by a set of given cultural values, beliefs and attitudes, which are shared in the local community. In the exo-system, both contexts may be affected by the same educational, cultural and social policies, which are specified by their central and/or local government. In the meso-system, both ecological contexts may have built relationships with the same micro-settings, such as formal education institutions.

Nevertheless, one could not assume on the basis of these common grounds that museums and families are parts of the same meso-system. If two micro-settings are to form a meso-system, they have to directly partake in the life of each other, so that the two micro-settings directly influence each other on a regular basis. In fact, building an effective meso-system between families and museums appears to be a challenging task for two reasons: first, because families may regard museums simply as leisure settings of optional participation and may not consider them as relevant to their needs and priorities; second, because museums may have ranked families lower in their priority target groups in relation, for example, to tourists or schools, and they may not be practically available to families as community resources. If at least one of these two reasons is the case, then the meso-system between families and museums will either not exist at all, or, at best, become *weakly-linked*. Certainly, in Gibson's terms, the possibility for museums and families to consciously develop an effective partnership in the course of a lifelong learning process may still be an affordance, which exists in the macro- and exo-system (for example, in social inclusion and accessibility policies), but which museums and families have not yet perceived.

All the above examples are different instances of applying ecological terms, in order to interpret museum-related phenomena in socio-cultural contexts that foster the development of museums. For socio-cultural contexts, though, where the museum culture is not supported and the museum setting is regarded as personally, socially and politically irrelevant, it would be, of course, unrealistic to attempt a museum-related interpretation. This issue of relevance is prominent in the ethos of ecological research, which is the focus of the next section.

5.3. Ecological perspectives of museum research

Both Gibson's and Bronfenbrenner's views on research reflect the need, which Heft identifies (2001: 7), to provide an account of the functional relation between the properties of environment and an individual's actions. A functional analysis should focus on the individual's ongoing transactions with meaningful features of the environment, and on the environmental conditions that support these transactions and the individual's purposive and self-directed (i.e. molar) activity. By exploring the transactions between the individual and his or her environment, ecological research purports to address common issues that occur in research methods and designs used, such as lack of relevance to the child's abilities and interests, or an exaggeration of average trends. In particular, ecological research intends to: (a) provide more information about molar activities, interpersonal structures and roles in the settings where events occur; (b) provide more information about the child's behaviour in everyday life, rather than on the child's specific reaction to a specific research situation; and (c) to identify any changes that occur not only in the child, but also in the persons around the child (Bronfenbrenner, 1979: 164). Besides, according to Bronfenbrenner (1995b: 632), it is important in ecological research to demonstrate the various ways children respond to external conditions, rather than to reduce them to average trends.

As shown in chapter four, Gibson specifies the concrete and the abstract level of analysing affordances. Concrete analysis focuses on how the perception and use of contextual features can promote habits of life, whereas abstract analysis seeks for regularities and laws underlying individual-environment transactions. Hence, in terms of researching young children's museum-related perceptions, a concrete analysis should explore the types of affordances young children perceive in the museum setting, and the way they use these affordances – if they use them – in aspects of everyday life. On the other hand, an abstract analysis should seek for commonalities in the background of young children, who perceive and use specific museum affordances in the same way. An outcome of an abstract analysis would be, for example, that a museum affords learning only for those children who come from a higher education family background. It is obvious that both types of analysis are complementary and equally important in understanding the impact of the museum setting as an affordance.

Similarly to Gibson, Bronfenbrenner is also interested in identifying how individuals cope with the environment, where they live and grow, and what commonalities underlie this way of coping in the broader context. The research standards he proposes,

though, are more detailed than Gibson's propositions, and have three major implications for researching museum perceptions in early childhood. First of all, in terms of ecological validity, the museum researcher should become aware of the prior experience and preconceptions that young children and the persons related to them (e.g. parents, teachers) have around museums, and of the preconceptions that museums hold about young children as museum audience. For example, a museum researcher should not generalise in viewing the museum as a social inclusion setting, if research participants already view it as an elitist setting. Any background information on the existing macro-systems will enhance the ecological validity of the museum as a research setting and will also serve as a point of reference against which the researcher will assess change.

Second, the researcher should involve young children in different types of visits to different museum types, so that young children and their accompanying people challenge or enrich their perspectives of the museum setting, while getting involved in a variety of roles, activities and relations in different situations (e.g. family visit and educational programme). In Gibson's terms, such a variety of museum experiences would introduce children to a richer repertoire of affordances and possibilities provided in a museum setting. Thus, the museum becomes a micro-setting, which, in relation with other young children's immediate environments, enters also young children's mesosystem.

Finally, a series of post-visit meetings among research participants, museum staff and museum researchers, would give participants a chance to reflect on their museum experience, while enabling the researcher to track changes, to assess their developmental validity and to estimate the transforming effect of the research project. This way of elaborating on the museum experience may be a challenging task, both for the researcher and the participants, but it would hopefully indicate possibilities of change, by revealing certain 'surfaces' or affordances of the museum setting, which may be hidden to an individual.

The aforementioned implications of ecological research propositions in museum research become more explicit in Part III, which provides a detailed account of an attempt to apply ecological theory, in order to examine young children's museum-related perceptions.

PART III

Exploring the ecology of early museum perceptions

This part, which consists of chapters six and seven, will provide a detailed account of an attempt to apply principles of ecological theory and research, for the purpose of exploring the nature and influences of young children's museum-related perceptions. The study presented here involved museums, families and teachers in a Greek museum context, namely in the city of Thessaloniki, which is located in the north part of Greece and is considered to be the second capital of the country. The field research took place in 2004, and was followed up a year later, in 2005, with a final questionnaire, which was sent to the participant families, in order to identify any long-term changes in their museum perceptions and experiences.

Chapter six will focus on the methodology of the study, while chapter seven will present its findings regarding young children's museum perceptions, and the conditions in which they developed. Rather than claiming a full application of ecological research principles by using analytical processes used in sociology or psychology (Alwin, 1995; Magnusson, 1995), the study approaches ecological research through the lens of a qualitative research ethos, which is prevalent in museum research with children, as shown in Part I.

Chapter 6

Research Methodology

Chapter five demonstrated that the principles of ecological theory and research, as exemplified in Gibson's and Bronfenbrenner's views, have at least five generic implications in researching young children's museum experiences. First, researchers should understand the meanings and values that children and the persons in their developmental context attribute to the museum setting. Second, they should observe how the child copes with the museum setting, and what kind of selection pressures (e.g. personal idiosyncrasy, family rules, cultural habits) affect child's efforts to cope with the setting. Third, researchers should attempt to understand whether a child's specific way of coping with the museum experience complies with any generalised patterns of behaviour, or whether it appears to be an exception to the norm. Fourth, researchers should follow-up children's experiences, if they are to detect any changes occurring in the child and his or her context as a result of a museum experience. Finally, in all the above conditions, researchers should reflect on their own role and impact, since they enter the child's world as third parties, or intermediary links.

In other words, ecological research stipulates a pragmatic, in-depth and reflective approach to experience, which is rather similar to the ethos of phenomenology and ethnomethodology (Holstein and Gubrium, 1998). In the manner of an ethnomethodologist, an ecological researcher has to set aside his or her taken-for-granted orientation to the life world ('bracketing'), in order to focus on the 'ethnomethods', that is, the practical everyday procedures of any community members for creating, sustaining, and managing a sense of objective reality. Furthermore, in line with the ethnomethodological viewpoint, an ecological researcher treats meanings as depending on and being situated in a visible context, which can be observed, such as talk and interaction ('indexical' nature of meanings), and as shaping and being shaped by the settings they constitute ('reflexive' nature of meanings). More significantly, both ecological researchers and ethnomethodologists share the belief that a culture supplies resources for interpretation, not absolute directives, and that alternative interpretations are possible through personal and interpersonal histories.

Having drawn this parallels between ecological research and ethnomethodology, the field research, which is presented in this chapter, follows basically an ethnographic line, using naturalistic methods, such as video-taping and tape-recording, alongside a series of questionnaires for data collection. The research methods, instruments and design are described in section 6.1. Section 6.2 focuses on the characteristics of the research context and participants, that is, three museums, nineteen families and nine kindergartens schools, and on the related sampling processes. Finally, section 6.3 refers to the data analysis processes employed in the study, which are largely qualitative in nature, drawing on grounded theory techniques.

6.1. Research methods, instruments and design

An effective way to meet the requirements of ecological research, as summarised above, is to follow a multi-method approach. As shown in Part I, various studies on young children's museum experiences used collaborative research agendas, which involved a combination of methods, in order to study a situation from multiple perspectives (e.g. Moussouri, 1997; Moss, 1999; Piscitelli and Anderson, 2000; 2001; Anderson et al., 2001; 2002). Moreover, a multi-method approach may control any shortcomings inherent to individual research methods, which may adversely influence the quality and depth of collected data. Instances of such method-related pitfalls might be the bias of pre-established hypotheses in experimental research (Bower, 1977; Donaldson, 1978; Cox, 1986), as, according to Aubrey (2000, 33), 'the way children interpret test questions could differ from those intended by the researcher, resulting in test items failing to measure what they were designed to do'. Other issues refer to the adult interviewer's authority and the abstract properties of verbal communication in interviews (Donaldson, 1978; Cox, 1986; Fairchild, 1991; Hooper-Greenhill and Moussouri, 2001), as well as to the difficulty to grasp the underlying 'hidden' context of young children's actions in field observations (Friedman, 1979; Aubrey et al., 2000). Also, an overreliance on the drawing method in early childhood entails, in particular, the risk of dubious interpretations and inadequate sensorimotor skills on the part of young children (Cox, 1986). These problems become even more apparent in early childhood research, because of additional developmental constraints that are into effect, like short attention span and concrete, as opposed to abstract, thinking.

Therefore, this study used an array of methods and instruments to explore young children's museum perspectives. Table 1 below provides a summary of these methods and instruments as evolving from ecological research premises (see section 4.3) and related research purposes and questions. All methods and instruments are included in Appendix 1, alongside the protocols of family meetings, museum visits and feedback sessions, which contain operational notes on procedural directions (Strauss and Corbin, 1998: 217).

Principle of ecological research	Related research purpose	Related research questions	Related methods/instruments
<i>Ecologically valid settings</i>	Understand a. families' preconceptions about museum affordances b. to what extent children and their context are affected by museums (micro-, meso-, macro-level)	a. What do young children, their parents and teachers think about museums? b. What do museums think about young children as visitors?	Questionnaires for teachers, parents and museums, and semi-structured interviews with children and parents at the outset of the project (preliminary phase)
<i>Ecological Experiment</i>	Understand a. young children's background (micro-, macro-level) b. museum's relation with this audience group (meso-, macro-level)	a. Which elements of the child affect the level and quality of museum experience? b. Which elements of the museum affect children and their life context?	Naturalistic methods (field observation, tape-recording, video-taping)
<i>Transforming experiment</i>	Understand any changes to initial perceptions about museum affordances, as a result of children's participation in the research project	Are there any signs of change in museum-related perceptions of young children and their context?	Four different types of visits (initial free family visit, guided visit, educational programme, final family visit to the museum the child liked most) to different types of museums (Museum of Byzantine Culture/MBC, Folk-life Museum/FEMMT, Museum of Contemporary Art/MMCA), to provide the opportunity to children and their parents to perceive a range of possibilities and museum affordances, entailing different roles, relations and activities. Feedback sessions after every visit for discussion (through questionnaires, semi-structured interviews and in-depth discussions on video-taped material, and child drawings)

Table 1: Research Methods and Instruments

The above methods and instruments were administered as shown in table 4 below, which presents the timescale of the project from December 2003 to June 2004. A year later, in February 2005, a final feedback questionnaire, which is not included in the table, was sent to the participant families to examine any post-visit effects in children's perceptions about museum-related affordances.

	DEC. '03	JAN. '04	FEB. '04	MAR. '04	APR. '04	MAY '04	JUN. '04
Preliminary phase: Sampling museums, schools and families (museum, teacher and initial parent questionnaires)							
Meeting participant families (semi- structured interview, tape-recording)							
1 st visit (video-taped family visit at the MBC)							
1 st visit feedback (discussion on video- taped-visit)							
2 nd visit (guided visit at the FEMMT)							
2 nd visit feedback (discussion with museum staff on related drawings)							
3 rd visit (ed. progr. at the MMCA)							
3 rd visit feedback (discussion with museum staff on related drawings)							
4 th visit (family visit at the museum the child liked most)							
4 th visit feedback (questionnaire)							
Teacher Questionnaire							
Museum Questionnaire							

Table 2: Research Timescale

The preliminary phase of the project and the field research are presented next in more detail.

Preliminary phase

Before exploring young children's museum-related perceptions, the study attempted to identify the nature of museum affordances perceived in the children's macro- and exo-systems, and in their close developmental settings. In particular, the purpose of the preliminary study was to assess the consistencies between parents' and teachers' museum attitudes, museums' audience policies and broad political views on museums' educational role. For this purpose, the study integrated (a) museum education ideals contained in Greek government texts, and (b) the responses of parents, early childhood educators and museum professionals to a small-scale survey, based on questionnaires, which combined mainly open questions and Likert-type scales for assessing attitudes.

On the one hand, the survey examined the philosophy of two cultural and educational entities, which are closely linked to the Greek museum's education policies and broad socialisation process: the Department of Educational Programmes of the Hellenic Ministry of Culture, and the MELINA programme: Education and Culture, named after Melina Merkouri, a former socialist Minister of Culture (Hellenic Ministry of Education and Religious Affairs, Hellenic Ministry of Culture, 1997). On the other hand, the survey included a set of three questionnaires, which addressed the three participant museums (MBC, FEMMT and MMCA), the teachers of the nine nursery schools, and the parents of the pupils in those schools.

The questionnaire for the museums included nine items, where museums had to state their visitor numbers in the year preceding February-March 2004, and indicate their priorities on: (a) their purposes; (b) display criteria; (c) interpretation means; (d) museum provision; (e) target groups; (f) means of marketing their activities; (g) event planners; (h) event evaluators. Of these items, the 'purpose' one indicates the museums' perceived roles and mission statements, while the 'display', 'interpretation', and 'provision' ones indicate the extent to which these roles are manifested through their activities. The items on target groups, promotion, organisers and evaluators, combined with the museums' visitor numbers suggest the level of relating to their public (see Appendix I, 'Exhibition practice and audience policy in museums' questionnaire).

The questionnaire for teachers also included nine items on: (a) the nature of their previous museum experience; (b) museum visits in the past year; (c) reasons for

visitation/ non-visitation; (d) attitudes on the nature of museums; (e) types of school visits to museums; (f) purpose of school visits to museums; (g) sources of information about museum events; (h) appropriateness of museum provision for early childhood; (i) degree of museums-teachers collaboration; (j) degree of teachers-parents collaboration (see Appendix I, 'Museums in early childhood' questionnaire). The questionnaire aimed at exploring both teachers' own museum-related experience, and the use of museum settings and experiences in school practice.

The questionnaire for parents, which was distributed through the school teachers, included nine items on: (a) place of parents' origin; (b) duration of residence in Thessaloniki; (c) number and age of children; (d) interests/ hobbies of family members; (e) museum visits with the family in the past year; (f) reasons for visitation/ non-visitation; (g) attitudes on the nature of museums (see Appendix I, 'Family and Museums' questionnaire, and Appendix III, sample initial parent questionnaire). The questionnaire also included a call for participation in the field research, and parents would write their personal details, only if they were interested in participating in the programme.

In terms of this preliminary phase, the museums agreed with the researcher on which type of visit they were able to host, as a main purpose of the project was to provide a variety of museum experiences to young children. Museums could opt for a free family visit, or a guided visit, or an educational programme. Thus, the MBC chose the free family visit, the FEMMT the guided visit, and the MMCA the educational programme.

Field research

As already mentioned above, parents were introduced to the research project in the questionnaire they filled in for the preliminary phase. In particular, the field research included:

(a) An induction meeting (see Appendix I, 'Induction meeting protocol'), which took place in a setting, where the family would feel comfortable. All meetings were held at the child's home, apart from a couple of cases, where the meeting took place at the child's school for convenience reasons. The researcher involved children in a semi-structured interview about their interests and previous museum experiences, which was tape-recorded, and discussed with parents any other issues of concern. All

families received their own research folder, which included the outline of the project, a form of informed consent to be signed by parents, a calendar to facilitate the planning of the visits, and a notepad, where parents could write their own comments or those of their children, regarding their museum experiences (see Appendix I, 'Family's research folder').

(b) An open-ended family visit to MBC and a feedback session at the child's home (see Appendix I, '1st museum visit and feedback protocols'). This visit meant to follow the family's and the child's agendas, but families were free to involve the researcher in the visit process, if they wished (for example, if they wanted to talk about an exhibit with the researcher). Thus, the researcher would assume a role of participant observer. The researcher also had a digital video-camera, which she showed children how to use, so that they, as 'film directors', videotape what they liked best, in order to remember it. In some cases, children wished to share the task of videotaping with the researcher. The videotaped visit was later discussed with children and their parents, at the family's home. Before the discussion, the researcher would conduct a brief semi-structured interview with the child, which was tape-recorded, in order to explore any child's comments and recollections from the first visit.

(c) A guided visit to FEMMT, organised by the museum's curator, and a feedback session at the museum with the curator (see Appendix I, '2nd and 3rd visit and feedback protocols'). For this visit, the children were divided into two groups. As this was the first group visit, the researcher would gather each group in the museums playground in the garden beforehand, so that children could introduce themselves to each other and receive their name tags. The visit was entirely organised and guided by the museum's curator, while the researcher had an assisting role. The curator would engage in a dialogue with children in front of specific exhibits, and let them try out the handmill, or push the buttons to activate the working models of water-powered mills. After the visit, the researcher would hand out a work sheet for the children to draw what impressed them the most from the FEMMT. Children brought their drawings in for the feedback session, which was held on a different day at the museum, in order to talk about them with the curator (plates 2-6). After the discussion, the curator realised a refresher visit around the exhibition, where children had the opportunity to explain the exhibits themselves.



grinding with a hand mill



hand operated pit saw

Plates 2 and 3: A picture of a handmill (left) and a pitsaw (right) at the FEMMT.



Plate 4: Feedback drawing from the FEMMT of a 4 ½ year-old boy (the round picture to the left depicts a handmill, and the two spiky figures to the right depict saws).

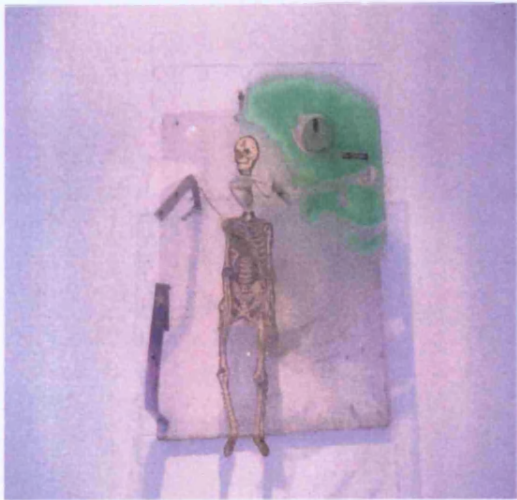


Watermill (c.1800), working model



Plates 5 and 6: A working model of a watermill at the FEMMT (left) and a feedback drawing of a watermill from a 5-year-old boy (right).

(d) An educational programme to MMCA, organised by the museum's educator, and a feedback session at the museum with the same educator (see Appendix I, '2nd and 3rd visit and feedback protocols'). As in the previous case, the educational programme was entirely planned by the museum's educator. The programme included: (a) guiding the children around specific artworks, through the medium of a story; (b) manipulating materials, such as feathers and paper straps, which were also used in the artworks; and (c) making a mixed-technique artwork in groups, using pictures of the museum artworks and colour pens. In this last activity, some parents were also invited to participate (see Appendix III, sample group visit and child's drawing from MMCA). The feedback session followed the same routine as above (plates 7-10, and Appendix III, Group drawing and child's drawing).



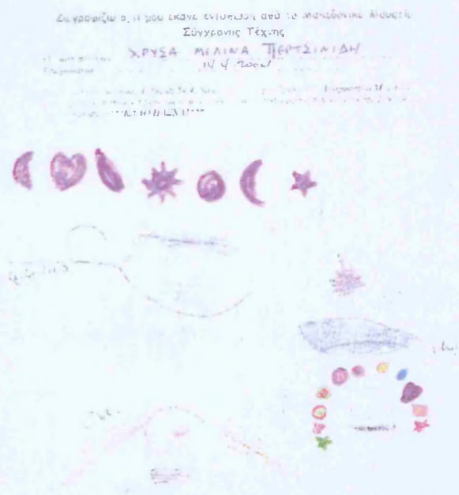
Jean Tinguely, *Dance Macabre*, 69
(plexiglass, electrical mechanism)



Plates 7 and 8: An artwork from the MMCA and its representation in a feedback drawing (bottom right) of a 5-year-old girl.



Niki de Saint Phalle, *Adam and Eve*
(papier-mâché)



Plates 9 and 10: An artwork from the MMCA and its representation in a feedback drawing of a 5-year-old girl.

(e) A repeat family visit to any of the above three museums the child chose to revisit, and a feedback questionnaire for children and parents to express their comments (see Appendix I, '4th museum visit and feedback protocols, and Appendix III, sample 4th feedback questionnaire). In this case, the visit was entirely up to the child's agenda. In this visit, the researcher would give each child the role of a 'tour guide', and ask them to show us around their favourite exhibits. After the visit, the researcher would give each family a questionnaire, where children and parents could express their own comments about what they experienced through their participation in the project. At the end of the project, only one parent handed in his 'diary' on his daughter's museum experience (see Appendix III, 'Parents' diary').

A year later, this field research was followed up by a final questionnaire, which aimed at identifying any lasting effects of the museum experience gained in the research project, and any other museum-related experiences after the end of the project (see Appendix I, 'Final family questionnaire', and Appendix III, 'Final feedback questionnaire' sample).

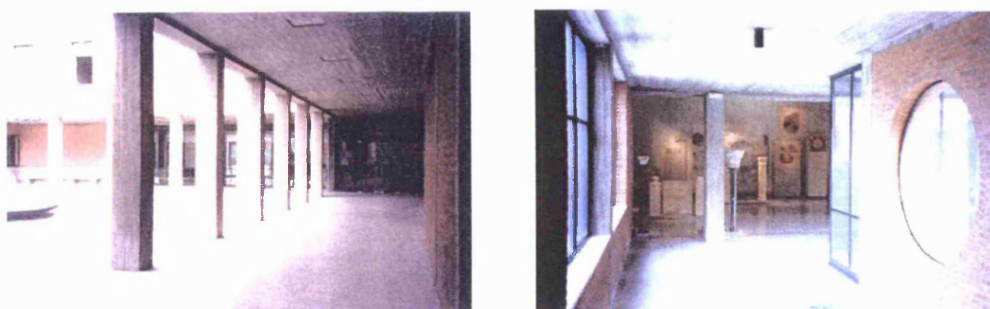
6.2. Research participants

Museums

Chapter five already suggested that a museum study with young children should involve young children in different types of visits to different museum types, so that young children and their accompanying people are involved in a variety of roles, activities and relations in different situations (e.g. family visit and educational programme), entailing a richer repertoire of affordances and possibilities provided in a museum setting.

Therefore, the research project involved three different museums of Thessaloniki: the Museum of Byzantine Culture (MBC), the Macedonian Museum of Contemporary Art (MMCA), and the Folk-life and Ethnological Museum of Macedonia-Thrace (FEMMT). The criteria upon which these museums were originally selected were: (a) the fact they are state museums, under the auspices of the Greek Ministry of Culture; (b) their educational provision for children; (c) their different exhibition practice (aesthetic-thematic for MBC, aesthetic for MMCA, and

educational-thematic for FEMMT); (d) their central location, which rendered them easily accessible even by public transport; (e) their availability at the time of the research (the Archaeological Museum, for example, could not be included in the project at the time, as it underwent major refurbishment project); and (f) their themes, as history/ archaeology, arts and folk-life are typical examples of the museum provision in Greece at present. The Museum of Byzantine Culture did not open its doors to the public until the 1990s, while the other two museums had already opened in the 1980s, but they both underwent refurbishment and expansion works in the 1990s. As a result, all three museums meet contemporary exhibitions standards to a satisfactory degree.



Plates 11 and 12: A view of the entrance (left) and the first room (right) of the Museum of Byzantine Culture.

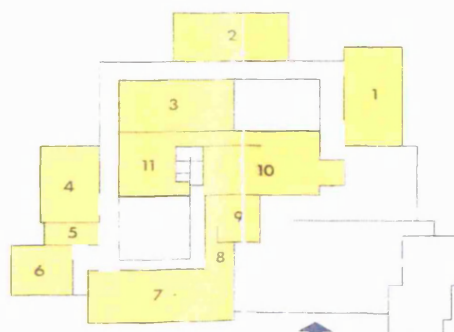
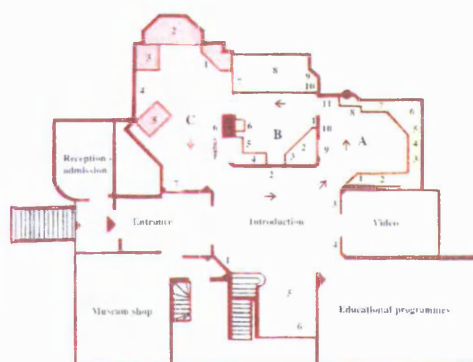


Plate 13: A map of the Museum of Byzantine Culture.

In particular, the Museum of Byzantine Culture began to function in 1994. Its building was designed by the Greek architect Kyriakos Krokos and is regarded as the finest example of public architecture seen in Greece in recent decade (plates 11 and 12). The permanent exhibition, which occupies eleven rooms (plate 13), is organised by subject and by period. The exhibits come mainly from Thessaloniki and other areas of Northern Greece, and illustrate aspects of the art and culture of Byzantium, such as

religion, arts, housing, burial customs and castles, from the Early Byzantine (A.D. 4th-7th c.) to the late Post-Byzantine period (A.D. 19th c.). The final room aims to illuminate the process behind the creation and functioning of the display areas, through the use of visual media and information and communication technology (ICT). The museum also organises educational programmes for schools, mainly on the theme of everyday life, and, in 2005, it won the award of the European Museum for its commitment to its audience and its educational purposes.



Plates 14 and 15: A view of the Folk-life and Ethnological museum of Macedonia-Thrace and a map of its current exhibition space.



Sawmill: working model

Plate 16: A working model of a sawmill.

The Folk-life and Ethnological Museum of Macedonia-Thrace was founded in 1970 as Folk-life and Ethnological Museum of Macedonia, but in 1993 was renamed as Folk-life and Ethnological Museum of Macedonia-Thrace and its scope was extended to include Thrace as well. Its building, which was originally designed and built by the architect Eli Modiano as a family home for the banker Yako Modiano, is a fine example of the eclectic style of the early 20th century, and was declared a listed monument in 1980 (plates 14 and 15). The museum researches and studies the traditional culture of the Northern Greek world in the modern historical period, and claims a primarily social role, by organising guided tours, educational programmes

and events. The permanent collection of the museum explains the role of watermills and traditional technology in agriculture, housing and clothing, by juxtaposing the original artefacts with working models (plate 16), audio-visual media, and push-button maps, while a hand-mill lets the visitor try grinding grain into flour. Moreover, the museum provides an interactive multimedia programme for visitors aged ten or over, as well as an educational package for younger children, which can be realised within the exhibition or in the museum playground, using replicas of watermills and windmills.



Plates 17 and 18: The entrance of the Macedonian Museum of Contemporary Art to the right, and a view of its interior.

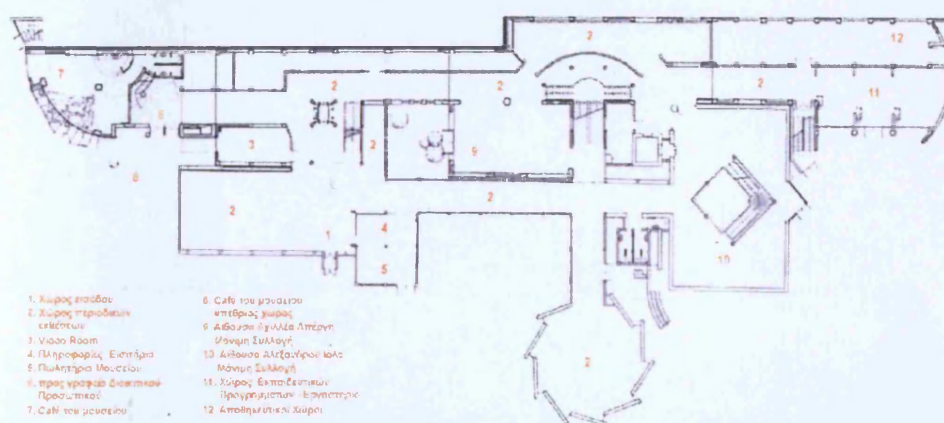


Plate 19: A map of the ground floor of the Macedonian Museum of Contemporary Art.

Finally, the Macedonian Museum of Contemporary Art was founded in 1979 and has been housed in the premises of the Thessaloniki International Trade Fair since 1991 (plates 17 and 18). The museum follows a non-linear pattern (plate 19) and its exhibition space is organised in three levels. The first two levels (i.e. basement and

ground floor) display the permanent collection of the Museum, which includes artworks from Greek artists, mainly deriving from the collection of Alexandros Iolas. Part of the ground floor and the third level of the museum are allocated to any temporary exhibitions the museum may organise, such as the exhibition ‘Art-Immigration-Utopia: Any place any’, which included artworks and installations from an array of international artists, and was hosted at the time of the research project in 2004. The museum also organises educational programmes for school groups and art workshops for children and families.

Schools and families

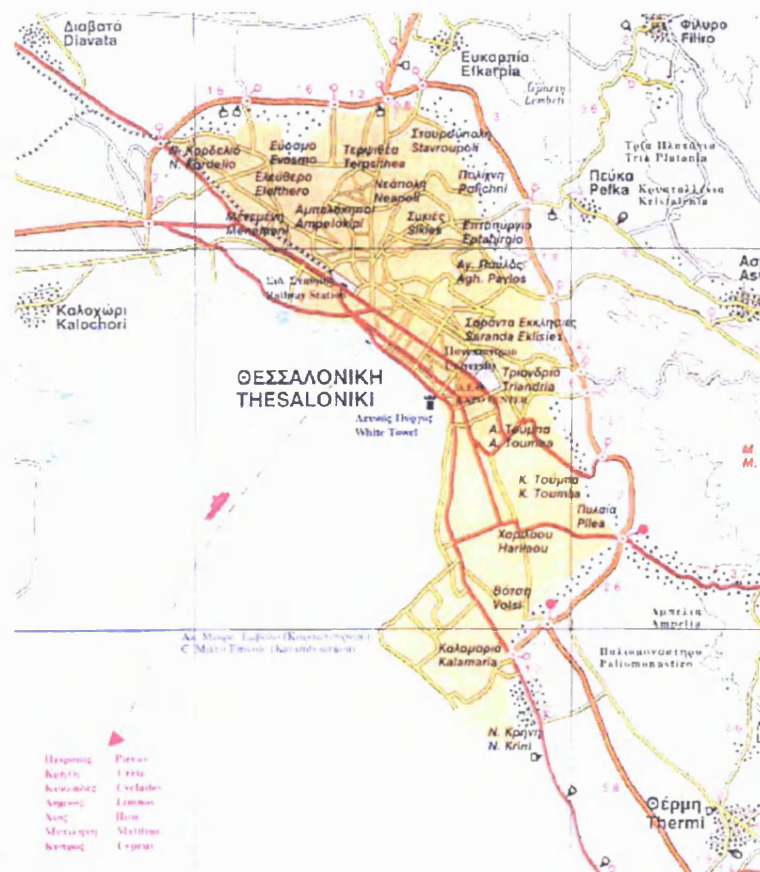


Plate 20: A map of the city of Thessaloniki; the areas spreading from the White Tower downwards on the map are the eastern areas, whereas the areas spreading upwards are the western areas. The area around the White Tower is the city centre, which includes the International Trade Fair premise and the Museum of Byzantine Culture.

Teachers and parents that participated in the study came from nine kindergarten schools, the majority of which were state schools (78%), while the rest were one private and one municipal. The school sample was evenly spread in east and west areas of Thessaloniki (plate 20), with west areas being widely known as industrial, with lower cost of living, thus attracting more diverse socio-cultural groups. Apart from providing equal opportunities for participation in the research, the inclusion of the west area in the project was meant to address the question whether there would be significant differences between east and west areas, regarding museum attitudes and relevance.

The total response rate of teachers in the initial survey of the project was 67% (n=18), with the higher rate deriving from the west areas (44%) and the municipal school in the east area (22%). As for the families that responded to the initial survey, the image was inversed: their return rate was 39% (n=120), with the higher rate deriving mainly from state schools in the east area (43%). A higher return rate for teachers is perhaps an effect of the personal contact between them and the researcher, which may have created a feeling of stronger commitment on behalf of the teachers. This higher rate also suggests, however, that the group of teachers in the sample is less diverse than the group of families, which is explained not only by the common role teachers share as educators, but also by the fact that teachers are fewer than families, given that an average rate of teacher to child in a kindergarten class is 1/20. Any suggested difference between the return rates of east and west areas here is an issue to be discussed in the findings of the thesis.

Children

Children who participated in the research project (n=19) derived from the respondent families in the initial survey. From the sample of 120 families, 27% (n=32) indicated in the survey that they were willing to participate in the programme of museum visits, as outlined in the relevant questionnaire (see section 6.1). For practical reasons, the researcher had to initially sample twenty families for the programme of museum visits, although one family had to withdraw from the project later for serious family reasons, which were not related to the nature of the project itself.

The participant families were sampled according to five criteria: (a) degree of museum interest and visitation; (b) nature of parents' occupation (e.g. degree-based or labour); (c) family size; (d) the child's age (e.g. 4 ½ or 5 ½ years old); and (e) the return rate from each school. The first criterion is an indicator of previous museum experience of the family. The second, third and fourth criteria were selected as pragmatic factors that may affect the first criterion. The fifth criterion of return rate is related to the number of parents per school, who expressed their interest in participating in the programme of visits, and, for reasons of fairness, schools with a lower level of interest in participating should not be overrepresented in the sample of participants.

An effort was made to match the distribution of these criteria in the sample of participants with the respective distributions in the survey sample of 120 respondent families, so that the sample of participants is more representative of the total sample of families and not just of the 27% of this total sample (n=32) who expressed an interest in participating. Nevertheless, this was not always feasible, as there could not be a perfect correspondence at first place between the total of 120 families and the 32, who were willing to participate. For example, parents who indicated they were interested in museums, may have been willing to participate, but they may have had limited time, because of the nature of their work. The five tables below compare per each criterion the distribution of families in the initial survey (n=120) with the distribution of families in the final sample of participants (n=20), and provide a first idea about the background of the children who participated in the research.

(a) Degree of museum interest and visitation

Museum interest/visitation	n=120	n=20
+/+	27%	30%
+/-	22%	10%
-/+	5%	30%
-/-	47%	30%

Table 3: Distribution of respondent families (n=120) and participant families (n=20) in the criterion of museum interest/visitation.

The initial survey distinguished four categories in this criterion, depending on whether parents crossed in their initial questionnaire the box ‘visiting museums/galleries/heritage sites’, and whether they indicated that they visited museums with their children or not. In the four categories, parents:

1. are interested in museums and visit them with their children (+/+)
2. are interested in museums, but do not visit them with their children (+/-)
3. are not interested in museums, but have visited them with their children (-/+)
4. are neither interested nor visiting museums (-/-)

Table 3 above shows the distribution of parents of the initial sample and the final sample of participants per each category.

(b) Nature of parents’ occupation

Three categories were distinguished in this criterion, depending on whether parents exercise a profession that is directly related to a higher degree or not. The categories are:

1. Degree-based (such as teachers, doctors, accountants, engineers...)
2. Other (such as non degree-based private employees, or freelance)
3. Labour (such as builders, cleaners...)

These categories were distributed as shown in table 4.

Parents’ Occupation	n=120	n=20
Degree-based	44%	65%
Other	47%	25%
Labour	9%	10%

Table 4: Distribution of respondent families (n=120) and participant families (n=20) in the criterion of parents’ occupation.

(c) Family size

No of children	n=120	n=20
1	18%	20%
2	63%	70%
3+	17%	10%

Table 5: Distribution of respondent families (n=120) and participant families (n=20) in the criterion of family size.

The family size was mainly related to the number of children in the family, that is, one, two, and three or more. Regarding the number of parents, all respondents in the initial survey were two-parent families, apart from two cases who also participated in the programme of visits. The first was a single-parent family (mother), and in the second one the father lived and worked in another city, so the mother was the main carer of the child. Table 5 shows the distribution of families, according to the number of children.

(d) Child's age

The vast majority of the parents who responded in the initial survey had children of 5-5 ½ years of age, who were pupils of the schools where the survey questionnaire was distributed. Younger children of 4-4 ½ years old reached a rate of 20% in the total sample, and, similarly, in the sample of participants younger children reached the rate of 15%.

(e) Return rate from schools

School area code	n=120	n=20
NE	10%	15%
SE	32%	45%
S	23%	20%
W	34%	20%

Table 6: Distribution of respondent families (n=120) and participant families (n=20) in the criterion of return rate from each school.

The last criterion, which affected the sampling process of the participants in the programme of visits, was the rate of parents in each school who expressed their interest to participate in the project. The distributions in table 6 show to what extent respondent parents from each school were represented in the final sample of participants. Schools are indicated in the table above, according to the area they are located. The meaning of the area codes is as follows:

1. NE=North East (private school)
2. SE=South East (state and municipal schools)
3. S=South (all state schools)
4. W=West (all state schools)

6.3. Analysis of findings

Any data and notes gathered from the above processes were summarised in tables (see Appendix II, 'Tabulated data'). Drawing on Gibson's notions on concrete and abstract analyses (see section 4.2), the process of data analysis and interpretation aimed at identifying, on one hand, any types of museum-related affordances young children perceived, and, on the other hand, any commonalities in the background of those children who perceived similar affordances. This process was largely qualitative in nature, based on such qualitative techniques as coding and patterning, which are common in grounded theory (Mason, 1996; Strauss and Corbin, 1998), but was partly supported by a few basic quantitative measures, especially for the data of the preliminary phase, as these measures facilitated the identification of frequencies in emerging patterns and commonalities. Hence, to a certain extent qualitative and quantitative methods were used in a complementary fashion, as '[...] reflecting different stages of the same scientific process' (Aubrey, 2000: 34). Besides, according to Aubrey (2000: 34), 'to reject totally the quantitative perspective is to lose all right to claim factuality for one's results; to reject totally the qualitative may lose one the right to claim meaning'. The analysis process, which affects the structure of findings in chapter seven, is explained separately for the preliminary phase and the field research.

Preliminary phase

The responses of museums, teachers and parents in the respective questionnaires were all tabulated in Excel format, so that can be easily filtered according to various criteria (see Appendix II). The use of average and standard deviation functions, which features in all the questionnaire-related tables, helped to identify prevailing trends in museum related attitudes and their degree of consistency. In particular, the more the standard deviation price for a range of responses is above zero, the less consistent are the responses with each other. For example, an average of 1 in the positive scale with a standard deviation close to zero is an indicator of a consistent range of responses. In contrast, the same average 1 with a standard deviation around 2, renders the responses that consist the average less consistent, hence, less reliable with a higher degree of uncertainty. In this way, it became easier to sort reliable from unreliable trends, and to specify the focus of interpretation.

Once summarised, data was interpreted in a qualitative way, by identifying and coding recurrent patterns in the sets of data. The main purpose of this analysis was to understand the selection pressures imposed by the child's socio-cultural context on perceiving museum-related affordances. To address this purpose, the coding and interpretation of data, including the information from official texts, focused on the key elements of the micro-system, that is, roles, activities and relations with persons, objects and symbols. Hence, the main question was what the data implied about the roles, activities and relations that official policies in macro- and exo-system, and other entities in the micro-system (i.e. museums, teachers and parents) perceived in relation to the museum setting. The interpretation also attempted to draw parallels and identify incongruities between these perceived sets of roles, activities and relations, in order to specify the quality of the meso-system developed between museums, parents and teachers.

Field research

As the field research yielded data from various sorts of sources, such as video and tape transcripts, drawings and field notes, the process in this phase followed a merely qualitative approach. Data about children's background and their participation in the project were summarised in family protocols, which meant to help identify

selection pressures that a child's micro-contexts imposed on his or her museum perceptions and experiences. Similarly to the preliminary phase, the interpretation followed the axes of roles, activities and relations engaged in by the child, in relation to the family setting and to the research setting with its different research stages. Teachers' questionnaires were also used in this phase, as they indicated selection pressures from the school setting.

Protocols were compared to identify any patterns in the types of young children's museum-perceptions, and the conditions where these were developed. Types were discerned according to pre- and post-visit children's views about: what we can see and do in the museum; which museums they liked best/least at why; and how the museum they liked least could be improved. Any common patterns found in the personal and family backgrounds of children sharing similar affordances, and in terms of roles, activities and relations developed in the family and the research settings, were considered as commonalities within the museum-affordance types, thus indicating a more generalised trend. Any apparent exceptions to these commonalities were not considered simply as idiosyncratic traits, but also as latent aspects of museum affordances, or 'hidden' possibilities for change (see Chapter 4).

Chapter 7: Research Findings

7.1. Museum-related affordances I: selection pressures within the socio-cultural context

Exo-system and macro-system: museum education policies

It has been mentioned earlier in Part II that the exo-system comprises settings, where an entity does not immediately participate, but which still affect, and can be affected by, this entity. In this sense, broader cultural policies and institutions largely belong to the museum's exo-system. Although the museum's functions are influenced by a wide range of policies, the findings here will focus on the philosophy of two cultural and educational entities, which are more closely linked to the Greek museum's socialisation process: the Department of Educational Programmes of the Hellenic Ministry of Culture, and the MELINA programme: Education and Culture of the Hellenic Ministries of Education and Culture, named after Melina Merkouri, a former socialist Minister of Culture (Hellenic Ministry of Education and Religious Affairs, Hellenic Ministry of Culture, 1997)⁹.

The Department of Educational Programmes and the MELINA programme reflect a fairly recent effort of the Greek state to develop an official framework for museum education, since the former was only established in 1985 and it was not until 1995 the latter was launched. As their names imply, the Department of Educational Programmes focuses more on museum-specific educational initiatives, whereas the MELINA programme: Education and Culture reflects a more open-ended claim to link educational settings. Apparently, each one of these entities have their own agendas, but they both prescribe specific roles, activities and relations for museums and community members, which are summarised in table 5 below.

Presumably, these roles, activities and relations lay the foundations of a social ideology imbued by at least three discernible sets of values at the macro-level: enculturation and humanism; education and creativity; and socialisation and citizenship. In the realm of such values, museums are called upon to convey content lessons, alongside cultural lessons (Milligan and Brayfield, 2004: 281), that is,

⁹ For details on the Department of Educational Programmes and the MELINA programme see the Hellenic Ministry of Culture website, <http://www.culture.gr/2/20/201/2011/201101/>

specific knowledge information, alongside cultural attitudes (e.g. preservationism), which, ideally, underpin the formation of an enriched, sophisticated, and socially sensitive individual. Museum education, as the perceived vehicle of these content and cultural lessons, acquires herein a supplementary role to the formal school curriculum, which is to enrich the educational system through creative and cross-cultural learning approaches, and provide equal access to cultural resources for all. Thus, museums are legitimised as a cultural currency to be invested for the purposes of personal development, social integration, and democratisation of resources. Nevertheless, despite this spirit of democratisation, a quick browse in the ‘relations’ column of table 5 suggests that how this cultural currency is to be invested and valued is mainly an affair of the members of a knowledgeable community and the ‘insiders’ of the exo-system, rather than a matter of broader social participation and consent. The influence of these ideological and political stands is examined next at the micro- and meso-levels.

MACRO-SYSTEM VALUES		
Enculturation-humanism/ Education-creativity/ Socialisation-citizenship		
EXO-SYSTEM POLICIES		
ROLES	ACTIVITIES	RELATIONS
education; protection of cultural heritage; social cohesion; knowledge; life improvement; communication; personal involvement; aesthetic appreciation	educational programmes/exhibitions; participation in European programmes (Department of Educational programmes); teachers and art specialists training (MELINA); happenings (MELINA); evaluation (MELINA)	<p><i>For planning:</i> Ministry of Education; Ministry of Culture; education institutions in Greece and abroad (e.g. ICOM, UNESCO) (Department of Educational Programmes)</p> <p><i>For planning/ implementation:</i> primary, secondary, higher education teachers and students; specialists (e.g. artists, archaeologists); minority schools in Greece; Greek schools abroad (Department of Educational Programmes)</p> <p><i>For evaluation:</i> Pedagogical Institute (MELINA); Universities (MELINA); Scholars (MELINA); Professional organisations (MELINA)</p>

Table 7: Macro-system values as reflected by roles, activities and relations, identified in the museum education rationale of the Department of Educational Programmes and the MELINA programme (most features are common in both rationales, unless otherwise stated in parentheses).

Micro-system: the museum setting

The following findings on museum roles, activities and relations derive from the responses of the MBC, the MMCA and the FEMMT in the questionnaire about these museums' practice (see also Appendix II, 'Museum questionnaire: exhibition practice and audience policy in museums').

Roles: The museums' responses suggest that their primary concern is to safeguard and promote Greek material culture, history and tradition, as well as to educate the public on Greek cultural heritage, whereas research is ranked second in their priorities. These priorities reflect most of the macro-values and the roles prescribed at the exo-system (table 5), indicating an enculturation and education focus, which, nevertheless, does not seem to be including – at least explicitly – the factor of social integration and cohesion.

Activities: The responses listed in table 6 below suggest a curatorial and collection-based ethos in museum activities, focusing on exhibitions supported by traditional interpretation means. Of course, the priority of the thematic display indicates an educational shift in the nature of exhibitions, which is further stressed by the development of educational programmes, in line with the exo-system activities (table 5). As in the case of museum roles, other events that may indicate a broader social orientation feature lower in the museums' priorities lists.

	PROVISION	DISPLAY CRITERIA	INTERPRETATION MEANS
1.	Permanent Exhibitions	Thematic	Text
2.	Temporary Exhibitions	Time	Illustrations/ photos
3.	Educational Programmes	Aesthetic	Audiovisual
4.	Guided tours		
5.	Other events (seminars/ workshops, conferences)		

Table 8: Responses on main museum activities in order of priority

Relations: The low social focus identified above in the roles and activities of the museums, is graphically reflected in table 7, which shows the museums' strong ties with formal education and adults, but not with other social groups. Museums' target

groups also feature in the evaluation process of the museums' activities, alongside those who organise them, but they are not also involved in the planning process, which appears to be internal, rather than collaborative. Besides, the limited and traditional methods the museums use to market their events, suggest not only a lack of familiarity with more sophisticated methods (e.g. internet), but also an over-reliance on the 'loyal' formal museum audiences (e.g. schools), which may undermine the need for reaching out to other social groups (e.g. special needs and minorities, as mentioned in table 5). In fact, families, which are primary developmental settings, are granted an apparently low priority, unlike schools, which may not be surprising, given that families are also disregarded in the exo-system (table 5). Finally, visitor numbers may suggest a higher public familiarity with historical themes, as well as an impact of the museums' location on visitation (for example, the MMCA, although centrally located, is less visible than the other two museums, as it is situated in the premises of the Thessaloniki Trade Fair).

	VISITOR NUMBERS	TARGET GROUPS	MARKETING	ORGANISERS	EVALUATORS
1.	MBC (17,000)	Primary education	Media	Staff/ Scholars	Staff/ Scholars/ Target groups
2.	FEMMT (12,087)	Secondary education	Private contacts	Museum Friends	
3.	MMCA (11,000)	Adults	Contacts with other institutions (e.g. local educational authorities)		
4.		Higher Education			
5.		Early childhood			
6.		Specialists			
7.		Families			

Table 9: Indicators of museums' relations with the public

Micro-system: the school setting

As above, teachers' perceptions of museum-related roles, activities and relations stem from their responses to the respective questionnaire (see Appendix II, 'Teachers' questionnaire: Kindergarten teachers and museum going). Additional information on the teachers' background is included in the findings below.

Teachers' personal background: The vast majority of the teachers had acquired some formal experience on museums, either as part of their studies or as part of their teaching tasks. Regardless of the range of their personal interests and hobbies, most of them, with very few exceptions, were museum-goers, and had also visited museums of Thessaloniki, mainly for purposes of education, entertainment and historical awareness. Besides, while they tend to believe that museums are interesting settings, which constitute cultural heritage for all with the potential of improving their life, teachers also suggest that museums are expensive learning settings, and sometimes hard to understand.

Roles: In school practice, teachers view the museum primarily as a means of familiarising oneself with cultural heritage and history, and then as an educational supplement to the school curriculum, providing educational programmes and promoting aesthetic education. However, they tend to believe that they are more appropriate for older, rather than young, children. These attitudes match, on the one hand, the values and prescribed roles in the macro- and exo-system (table 5), while, on the other hand, seem to reflect a practical concern about the pertinence of museums to early childhood. This concern, apparently, echoes not only the teachers' personal views that museums may be hard to understand, but also the low priority granted by the museum to very young audiences (table 7).

Activities: Teachers tend to visit a museum at least once a year with their classes. School visits usually take the form of educational programmes, which teachers feel do not always provide a good range of activities for young children. As above, this concern illustrates museums' relatively low priority to young audiences, and a subsequent inadequacy of museums' educational provision, which might be more geared towards meeting the needs of primary or secondary education pupils.

Relations: Linked to the above concerns is the teachers' feeling that museums do not collaborate effectively with them in the development of appropriate activities for young children. This finding supports the suggestion made above in discussing museums' relations, that museums treat the planning and evaluation of their educational process basically as an internal process, rather than a collaborative venture. In contrast, teachers feel that parents generally support them in programming

museum visits for their children. How parents, in turn, value museums is explored next.

Micro-system: the family setting

The findings on the museum-orientated roles, activities and relations of young children's parents, draws on evidence gathered from the initial questionnaire on their museum experience and attitudes (see Appendix II, 'Initial parents' questionnaire: family demographics, interests and museum going' and 'Initial parents' questionnaire: Parents' museum attitudes').

Parents' personal background: Nearly half of the respondents were practicing a degree-related profession (47%) and 63% had two children. Another half of them (51%) had not visited a museum with their children, while more than half of them (around 63%) had not visited any museums in Thessaloniki recently. The latter rate probably indicates a closer connection of museum visitation to travelling, rather than to the place of residence.

Roles: In their majority, parents tend to regard museums as interesting settings of concern to their families, and as cultural heritage for everyone. However, non-museum-goers tend to believe that these settings might not be appropriate for young children, and that they require some knowledge background to be understood. In fact, certain respondents based upon these limitations, their non-museum attendance and their own perceived inadequacy to guide and support their children in the museum setting. Likewise, certain parents seem to be relying on school visits, feeling that it is in the school's remit to accompany children in museums. This attitude might broadly underlie parents' willingness to support teachers in organising museum visits for their children, as shown above, while it resonates again, but not surprisingly, the low priority that museums seem to be giving to family audiences.

Activities: Parents suggest that museum visits with their children often occur in the occasion of a daytrip or vacations, in order to gain an original, enriching and entertaining experience for themselves and their children, which will raise their

awareness of cultural heritage, history and tradition. Such a nature of family museum visits reflects more than an education-focused school-visit, as shown above, a willingness to combine a cultural experience with a broader socialisation purpose, such as prescribed at the level of macro- and exo- systems.

Relations: An examination of families' museum experience in relation with their demographics shows a graphic connection of family museum visits with the area of the family's residence and the nature of the parent's profession. Apparently, parents with a degree-based profession seem to capitalise more on informal cultural experiences for their children, by making more time allowances towards this purpose. On the contrary, time and distance concern more the parents living in the west areas of Thessaloniki or working, for example, in the freelance or labour sector, which involve limited time resources or extensive physical fatigue. Therefore, an apparent low commitment to museum visitation might not necessarily be attributed to a general lack of museum interest (although this featured as a possibility in the actual range of responses), but might be genuinely impeded by pragmatic and social factors, also including concerns for the cost of the museum visit.

Meso-system: inter-setting relations

A recapitulation on the quality and nature of perceived museum-orientated roles, activities, and relations at a micro-system level, as examined above, leads to three major assertions about museum-school-family relations in this case and the role of current museum education practice in them:

(a) The museum respondents seem to over-represent through their education practice the needs of primary and secondary education, hence demonstrating a lower commitment towards other social groups, such as early childhood education and families. Besides, they tend to follow strictly internal procedures in their educational planning and evaluation, which suggest a low level of accountability in the broad societal domain, and to a certain extent echo the top-down evaluation approach indicated at the exo-system. Certainly, an absence of an explicit social orientation in

the museums' mission and general practice at present cannot reflect the full potential of the ideals in the macro-system.

(b) The teacher respondents, apparently, endorse the broad cultural and education rationale at the macro-system, thus demonstrating 'value-driven visitor perspectives' (Milligan and Brayfield, 2004: 282). They suggest, however, that current museum education provision is less appropriate for young children or early childhood education needs, and that it does not prescribe a closer collaboration with early childhood educators. This concern raises the issues of generalising educational provision to different groups with diverse needs, and of the limited teacher's participation in museum education initiatives (Nikonanou *et al.*, 2004: 52). Moreover, this problem might be also reflecting a broader inadequacy of more elusive cultural lessons (i.e. values and attitudes) emphasised by the museums over more concrete content lessons (Milligan and Brayfield, 2004: 297), that may be more pertinent to young children's needs and skills.

(c) Similarly to teachers, the parent respondents endorse the museums' broad cultural lessons, but their family visit agenda also entails a more enriched social scope (Merriman, 1999), which is in line with the socio-cultural repertoire of values in the macro-system. Nevertheless, their perceived inadequacy of knowledge, the problem of distance, and the lack of time due to socio-pragmatic factors may result in a low commitment towards museum visitation, especially when they feel that museums provision is not supportive enough to cover these needs.

The above suggestions apparently challenge in this case the level of support the museums currently provide for the 'significant others' in the child's primary developmental settings, thus revealing a *weakly linked* meso-system, in Bronfenbrenner's terms, among museums, schools and families.

7.2. Museum-related affordances II: selection pressures within the child's context

This section focuses on the nature and context of young children's museum-related perceptions, as these were demonstrated in the induction meeting, the fourth feedback questionnaire and the final family questionnaire. Before exploring the context of these perceptions, it is first necessary to present the main types of perceived museum affordances that emerged in the study and are summarised in table 10.

Table 10 consists of five major columns. The first indicates the different types of affordances with different letters from A to E. The second column mentions the typical feature of each group of affordances. The third one indicates examples of children's initial museum perceptions, as demonstrated in the induction meeting, as well as examples of their final perceptions, as they were indicated in the fourth family feedback questionnaire. The fourth column includes the cases of children, divided in male and female, who perceived the affordances of each type. Each child features next to the initials of their favourite museum, as stated in the fourth feedback questionnaire, and is indicated with a number from 101 to 119, according to their family's serial number in the 'Initial parent questionnaire' tables (Appendix II). The final column states the total number of children per museum, who endorsed a specific type of perception.

Some first commonalities that emerge from young children's perceptions are the nature and role of the museum as a big building that basically keeps many old things for us to remember, and the acts of seeing, talking about and not touching the objects as a visitor's main activities. However, each group of perceptions contains a typical feature that seems to convey a sort of priority in the way each child relates with the museum setting. Thus, group A reflects a more passive and traditional way of engagement with the museum object (e.g. looking at past discoveries), while group B focuses on the active nature of the museum experience (e.g. playing, drawing, taking photos). Group C stresses the social aspect of the museum experience, which may even spoil the intimacy of the museum experience (e.g. in a crowded space, or when talking a lot). Group D focuses on the spatial features and arrangements of the museum, and group E indicates a preference to new things and aesthetic pleasure. One

may notice that the distinctive features of all these groups emerge mainly from the final children's perceptions, that is, after children's participation in the field research.

GROUP	TYPICAL AFFORDANCE	CHILDREN'S PERCEPTIONS		CHILDREN CASES		TOTAL
		INITIAL	FINAL	M	F	
A	A museum keeps objects safe for us to remember. Learning and looking at things (mainly old).	> big building	> past discoveries	MBC: 115, 117, 119	MBC: -	3
		> lots of objects	> old things found	MMCA: 101	MMCA: 116	2
		> old, rare, valuable things	> underground or in the sea	FEMMT: 110, 114	FEMMT: -	2
B	A museum keeps various things. Learning and doing.	> ancient Greeks	> talk about things			
		> dinosaur bones				
C	A museum keeps old and pretty things. Being with people.	> seeing things	> large building	MBC: -	MBC: 113	1
		> many, old objects	> various things (old, pretty, small, big, mechanical)	MMCA: -	MMCA: 112	1
		> object kept in cases	> 'don't touch'	FEMMT: 102, 103	FEMMT: -	2
D	A museum shows things. Museum as a space.	> playing photos	> taking photos			
		> drawing				
E	A museum keeps old and new things. Museums for pleasure.	> big house	> seeing things	MBC: 104	MBC: 109	2
		> many old things	> no need for much talking	MMCA: 108	MMCA: -	1
		> activities	> museum staff/educators	FEMMT: -	FEMMT: -	-
F	A museum shows things. Museum as a space.	> seeing other kids	> being with mum			
		> not fun when crowded				
G	A museum shows things. Museum as a space.	> big place with tall columns, and nice roof	> big house	MBC: -	MBC: 106	1
		> looking at old, pretty things	> many rooms	MMCA: -	MMCA: 105	1
			> museum café	FEMMT: -	FEMMT: 118	1
H	A museum keeps old and new things. Museums for pleasure.	> big museums are tiring	> no touching			
		> no touching				
I	A museum keeps old and new things. Museums for pleasure.	> big building	> looking at things from past and present	MBC: -	MBC: -	-
		> ancient things	> playing new things	MMCA: -	MMCA: 107, 111	2
			> pretty things	FEMMT: -	FEMMT: -	-
J	A museum keeps old and new things. Museums for pleasure.	> colours				

Table 10: Types of museum affordances perceived by the participant children

The total number of children for each affordance type indicates that the traditional type A is more common among the participant children. The rest of the children appear to be more evenly spread in categories B, C and D, while type E seems to be the least frequent. Moreover, the more traditional and ‘academic’ type A seems to be more popular with boys, whereas the alternative types D and E, which are related to a feeling of well-being, feature exclusively among girls. Besides, these occurrences may also be related to children’s museum preferences, as the table suggests, but this is an issue to be further discussed in the following three sections on background commonalities and exceptions per museum preference and type of affordance.

MBC ‘friends’ and affordances: background commonalities and exceptions

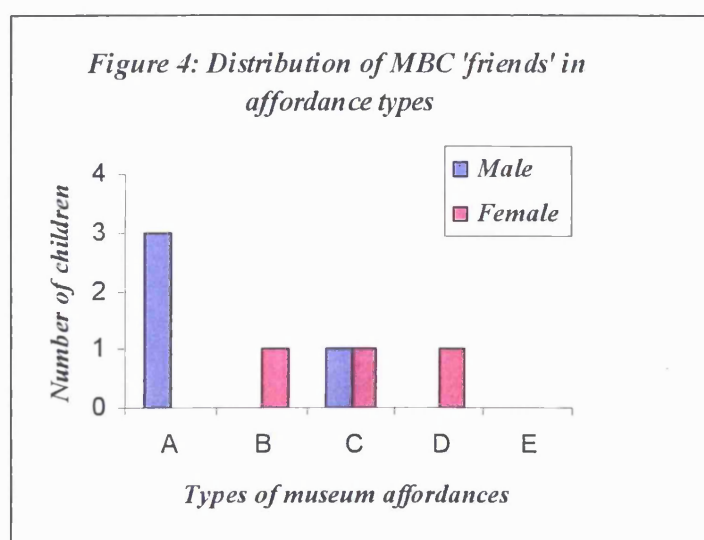


Figure 4 above shows how children who preferred the MBC are distributed according to their sex and the affordance group, which they apparently represent. The quantitative difference between boys ($n=4$) and girls ($n=3$) is not significant, but it appears that boys tend to concentrate more around type A, with the exception of a boy in type C. In contrast, girls are evenly distributed in alternative types B (action), C (people) and D (space), but not in type A. It is also noteworthy that there are no children representing type E (modernity, aesthetic pleasure). This is not surprising, however, given that what one may expect from a history museum, like the MBC, is to learn about the past, which fits in type A, and not to seek for modernity or aesthetic

pleasure. The significance of these remarks is further illuminated by the findings that follow, regarding the background of children that feature in the MBC case.

a. Affordance type A: cases 115, 117 and 119

In this category the prevalent image of a museum is that of a big building, which affords looking at old, rare, interesting and worth-seeing objects. This is an image that connects the museum setting with a role of safeguarding the past, although a museum may also have new things (119). Most MBC 'friends' in type A disliked the MMCA, because children considered its exhibits either 'too small' (115), or 'more common' (119), with the exception of a child (117), who liked the MMCA, because of the 'skeleton' (see chapter 6, plate 17). This child was also more specific in his reasons for liking the MBC, as he stated that what he liked most in that museum were the castles (MBC's Room 6), whereas the other two children made more abstract comments, as seen above.

Personal background:

All children had previous museum visiting experiences, with one child (117) having already visited the MBC with his school. However, in case 115, the child refused to consider the site he had visited with his mother as a museum (i.e. a small local folk-life museum in a listed building), because it was not big enough (see also his comments on the size of MMCA objects above). Other recollections children had from their past visits were the 'do not touch' rule from the school visit at the MBC (117), and an orange drink can in a canon at the War Museum of Thessaloniki (119)!

None of the children had siblings and their parents had a wide range of interests and were all practicing degree-based professions, relating to positive sciences (i.e. maths, medicine, architecture, ICT and finance). Also, the kindergarten teachers of all three children were active, informed and experienced in the area of aesthetic education and museum visiting, while the children of cases 115 and 117 happened to be classmates at the municipal school in the east area of Thessaloniki.

Although children's parents were somewhat skeptical about how appropriate a museum setting may be for a young child, all children participated in the research project on a regular basis. In fact, in case 119, the child's mother was particularly skeptical about the choice of the MBC in the research project, but this museum turned

out to be the child's favourite, which he opted to revisit. It is also worth mentioning that the child in case 117, who was characterised by his mother as a hyperactive kid, who could not stand theatre or cinema, coped very well with the conditions of every stage of the project. In particular, in MBC, not only did he manage to watch a video on Byzantine castles in room 6 (plate 21), but he also remained there longer, in order to take a closer look at the exhibits and the pictures of the panels.

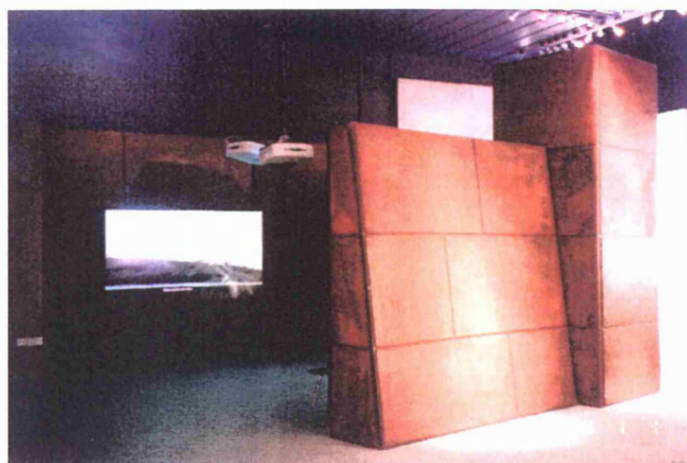


Plate 21: A view of the video projection on Byzantine castles.

Roles:

All parents appeared to be delegating and flexible with their children, seeking to provide them with various stimuli and opportunities to take their own initiative. As a result, children seemed to be rather confident in every phase of the project. It was only in case 119, where parents initially appeared to have more firm expectations on what their child should know, like reading and writing well before going to primary education. At the first visit to the MBC, for example, the father would expect his child to recognise and spell out the letters and syllables of certain inscriptions or text panels correctly, and to provide the right answers to his questions, regarding the museum's exhibits. This seemed to affect the child's level of confidence, who tended to follow his father's pace, talking softly and quietly contemplating the exhibits, during the first visit at the MBC, and who got quite upset in his parents' absence at the first group visit to the FEMMT.

Activities:

Interestingly, apart from playing and making things with building blocks, children in this type seemed to be particularly fond of collecting. In case 115, the child collected toys, and in case 119, the child collected cards from a Japanese cartoon. Both children were eager to show their collections to the researcher at the induction meeting. The same children had well-developed writing and reading skills, which they used in any given opportunity. For example, as already shown above, the child of case 119 was able to spell letters, syllables and whole words in any text, whereas the child of case 115, took notes of the names of objects he wanted to remember from the MBC, and showed them to the researcher at the first feedback session, after the MBC family visit. In contrast, the child of case 117, who also came from a different school, had a speech problem and it was often difficult for him to articulate his thoughts or concentrate on a conversation, especially in the beginning. However, in the course of his participation in the project, he gradually became more eloquent in expressing his ideas.

Also, during the research project, all children were able to spontaneously make associations of what they saw with their own previous experience, and to make speculations about objects they did not know. Moreover, during the museum visits, children actively interacted with their parents, drawing their attention on objects that they liked and proposing their own itineraries. As shown above, this was less obvious in case 119, especially in the beginning of the project, but by the end of the project this situation seemed to be reversed. The child gradually became more communicative and sharing with the researcher in the feedback sessions with the researcher and the museum staff, while in his repeat visit at the MBC, he seemed extremely confident in showing his parents around the exhibits he preferred or remembered from the museum.

Relations:

All children seemed to have a closer relation with their mothers, rather than with their fathers, as their fathers had long working hours (117, 119), or worked and lived in another city (115). All children attended the project mainly with their mothers, apart from case 119, where the father, either alone or with the mother, accompanied the child to the museum visits.

Also, all children and their parents had developed a friendly relationship and rapport with the researcher. In particular, in couple of cases (117 and 119), parents attributed to the researcher's presence any benefits their children gained from their participation. In this respect, parents felt that museums cannot really be accessible, unless there is some guidance, motivation and support for parents and children, while the child's parents in case 119 mentioned, specifically, that any positive change that occurred in her child resulted from the fact the child accepted the researcher.

A year later:

In the final family questionnaire, all children recalled at least one exhibit from each museum, but they seemed to have a particular recollection of the tombs (117, 119), which were the subject of one of the MBC rooms. It seems that the imposing lighting of the tombs, and the theme of burial customs itself that entailed a sense of mystery and awe, made a lasting impression on children.

Also, after the visit two children (115, 119) had the opportunity to travel and visit more museums after the end of the research project. However, the child's mother in case 117 did not pursue further museum visiting experiences, although she stated that she was very satisfied with her child's participation in the project. She felt, in particular, that museums were still quite remote from children's and parents' needs and that she preferred to do something else with her child in their leisure time, rather than visiting museums.

Children's perceived image of the museum setting did not significantly change from their initial perceptions. In the final family questionnaires, the museum setting was still perceived as a setting with many old and interesting things to see, where one can learn about other cultures (119) and various subjects, such as science and history (115). Only one child (115) added here the dimension of play as a possibility provided in the museum setting, which becomes more explicit in other categories.

b. Affordance type B: case 113

The initial perception of museums in this case was quite similar to that stated in type A, as museums were perceived as places with many old small and big things, like vases, paintings and jewellery, which are displayed in cases, so that people cannot

touch them and break them. However, the child of this case also stated a more active side of the museum, which affords drawing and participating in various activities.

The child's reason for choosing the MBC as her favourite museum were its 'pretty things' and particularly the blue and white gems it had in one of its rooms (parts of a garment). Like the children in type A, the child here also disliked the MMCA, because of its 'skeleton' and 'Eve' (see chapter 6, plates 17 and 19 respectively).

Personal background:

The child had an idea about museums from she had heard about her older brother's museum experiences and from television programmes. Her participation in the project was not very regular, as she missed a couple of feedback sessions and the repeat visit.

Her parents had degree-based professions (teaching and medicine), like above. Her mother, who was a Greek literature teacher, related museums mainly with history, and believed that museums respond better to older children's needs and skills, and that parents need to be motivated in order to take their children to museums. The mother liked the MBC for having well organised and grouped its exhibits, for its good lighting and its open space, and she also liked the subject of the FEMMT exhibition. She felt, however, that more information was necessary on the exhibits, for example, through leaflets or guides.

Roles:

As in the cases of type A, parents were rather flexible with the child, allowing her enough space to express her own ideas and take initiatives, within certain basic limits of social behaviour, like politeness. Thus, in the museum context, the child seemed happy to listen to what her mother had to say or show, but she was also free to make her own choices.

Activities:

Unlike the boys in type A, the girl of this case preferred drawing and more social activities, like role-playing with her brother and listening to fairy tales and stories. This social aspect was also obvious in her museum visits, where she was quite active in asking questions, making remarks and speculations about the exhibits. She

also tended to observe the details of the exhibits, like their forms, colours and material they were made of. After her first visit at the MBC, she bought a jigsaw from the museum shop, which she enjoyed doing in her spare time at home.

Relations:

As her father was a doctor with a more demanding schedule, the child tended to spend more time with her mother, as it also happened with the children in type A, but she also had a very good relationship with her brother, with whom she liked playing. The relations of the family with the researcher were friendly, and the child liked to share toys and drawing with her.

A year later:

The child remembered the 'pretty things', the gems and the jewellery from the MBC, and she related museums not only with learning and history, but also with fun and 'remaking what is pretty' (i.e. restoring). Her mother stated she was quite affected by her participation in the project, as she used to talk about her experience, spend time with the jigsaw from the MBC and watch TV programmes on museums, travelling and history. The mother also felt that the experience may have also helped her child focus on related subjects at the primary school.

c. Affordance type C: cases 104 and 109

Apart from connecting museums with learning and seeing many old and pretty things, this type included a more people-focused definition, which came from the girl in case 109: 'people in the old days were very good at making things, which, when they died, they left for us to see'. Children in this category liked the MBC for its pretty things, such as mosaics, statues and graves. It is interesting that the child of case 109, despite choosing to visit the MMCA in her repeat visit, still seemed to prefer the MBC, 'even if it was tiring'. Both children stated in their feedback questionnaires that they disliked the FEMMT, because there was too much talking (104, 109), there were too many kids in a small space, so they couldn't see well (109), and 'mum was not there' (104) (i.e. the situation at the guided tour in groups). Apparently, all these reasons suggest a priority on the social context of the visit. After

this experience, the child of case 109 said that she would not like to visit more museums, as she found them a bit boring.

Personal background:

Both children's parents came from the area of positive sciences (medicine and engineering), as in the cases in type A. Also, both children had siblings (a younger brother in case 104, and older brother and sister in case 109), and they both went to kindergarten schools in the eastern area (municipal in case 104), where, as already mentioned above, teachers were particularly active in the area of aesthetic education and creativity.

Only the child of case 109 had some previous museum visiting experience, as she had already visited the MBC with school (as in case 117, above), and her parents were museum-goers themselves and particularly interested in the arts. Her older sister also attended art classes. In both cases, however, parents considered their child's participation in the project as a socialisation opportunity, since both children happened to be quite shy (especially, in case 104). Interestingly, in case 109, parents wished to involve their child in the project, despite the fact they already had some unfortunate museum experiences with their other children (e.g. a visit to an archaeological museum which upset their older daughter, when she was at a younger age). Also, in both cases, children were regular participants in the project.

Roles:

In case 104, the child's mother seemed to have a leading role in child-rearing role. At the induction meeting, for example, apparently it was the mother's initiative to involve her child in the project, as the child's father seemed to be totally unaware of the project. Instead, in case 109, it was the father who seemed to be more involved in the museum visit arrangement and in supporting her daughter in participating, although both parents made an effort to accompany the child to the museums. In this latter case, also, parents tended to analyse their children's behaviour, keep a balanced and fair approach to all their children and provide them with rich stimuli, in order to help them develop skills and become more mature. As seen above, for example, parents saw their daughter's participation in the project as an enculturation experience that would challenge her shyness.

Activities:

In everyday life, the child of case 109, like her parents, seemed to have a wider range of interests than the child in case 104. In case 109, liked drawing landscapes, travelling in nature, doing ballet, listening to music and watching films, thus reflecting a particular relation with physical space and the people involved in this. Besides, this may explain the fact that what the child remembered from her school visit to the MBC were the colours of the museum building, its patio and its museum educators. In case 104, the child liked playing with his younger brother, which also entails a social aspect, but in a closer family sense, and, similarly to other pupils of the municipal school in type A, he had a particular interest in writing, which was obvious in his own diary. Moreover, this child liked drawing machine-like figures, which meant to show different parts of a machine, possibly under the impact of his parents' background in engineering, and which his mother called 'little monsters', as they were quite complicated.

In the context of museum visits, the child of case 109 seemed to be more active, making her own choices about what she wanted to see, especially in the first visit to the MBC and the repeat visit to the MMCA, and participating with enthusiasm in the activities of the educational programme at the MMCA (see Appendix III, parents' diary, and sample drawing from the MMCA). She also tended to become the centre of attention, especially in family visits, which is apparently related to her wish to become a model, despite her shyness. At the first visit to the MBC, for example, she would ask the researcher to include her in the video recordings of the exhibits she wanted to remember, in order to see herself 'on TV'. In contrast, the child of case 104 seemed happy to follow the suggestions and pace of his mother, in family visits, or of the museum staff and the whole group, in group visits. Similarly to the case 119, however, the child gradually seemed to gain more self-confidence and become more communicative, both in museum visits and in feedback sessions. It is interesting, for example, that in the second meeting with the researcher (first feedback session on the MBC) the child shared his diary with her, an event which his mother received as a pleasant surprise.

Relations:

It is obvious from the above, that the child in case 104 was particularly attached to his mother, like the other boys in type A, and, like the child in type B, he

also seemed to have a very good relationship with his younger brother. In case 109, although the child seemed to have a good and open relationship with all the members of the family, she did not appear to be particularly attached to any one member during the project, but she tended to relate more with the researcher, sharing with her any personal ideas or comments. In both cases, however, parents attributed, to a certain extent, the benefits gained from the project to the researcher's open and friendly approach towards families and children, in particular.

A year later:

In the final family questionnaires, children's recollections were related to all three museums, and referred to 'valuable ancient Greek things' (104), such as jewellery (109), at the MBC, to the machines of the FEMMT (104), such as the wool processing machine (109), and to educational activities and specific artworks (skeleton, wings made of paper straps) at the MMCA. Both children's museum perceptions appeared to be quite similar to their initial ones, but were more enriched. Thus, the museum image was still object-based, related to keeping things safe (104), or seeing how things used to be in the old days (109). However, the people focus was particularly stressed: in case 104, the child stated that he would like his brother to go to same school as him, so he can also visit various museums, while the child of case 109 stated that in a museum we can do various activities related to the exhibits, and we can tell our friends about these.

Only in case 109 did the family realised follow-up visits to other Greek and British museums, in order to obtain stimuli for learning and entertainment for the whole family. In both cases, though, parents felt their children were quite affected by the whole experience of participating in the project: in case 104, the child would talk about his experience and draw machines from the FEMMT, while in case 109, the child seemed familiar with the visiting process and would also refer to her experience, whenever she visited a museum. Also, in case 104, the child's mother considered the project as a very good parent-child experience, where she was happy to realise how a six-year-old child understands past lifestyles and machinery and how pleased the child was with that experience. She stated, however, that she was reluctant to revisit the MBC, because of the staff's attitude, which should be more friendly and professional, in order to meet parents' and children's needs.

d. Affordance type D: case 106

This child had no prior experience of museums, and only after her participation in the project, she defined museums as places where we can see dishes, glasses, combs and a machine working with water. However, her reason for preferring the MBC was not its objects, but its 'many rooms'. This child missed the MMCA feedback session, as well as the repeat visit, and since the family never returned the final questionnaire to the researcher, no remarks can be made about the child's follow-up museum experience and perceptions.

Personal background:

The child went to the same nursery school as the children in cases 117 (type A) and 109 (type C) above, but had a different teacher, who was not as experienced in the domain of museum education as the other teachers. She had a couple of years older brother and her parents were private employees, but not in a degree-based profession, as in the previous cases. A particularity in this case was that the child had a speech difficulty, consisting in unclear articulation and a problem in structuring words and phrases. Parents dealt with this issue by providing to their child a series of home sessions with a speech therapist, but, in general, they were concerned about increasing the degree of their child's initiative and self-confidence.

As for parents' views on museums, these appeared rather positive, although they still conveyed some skepticism about the extent to which museums are suitable for young children. Specifically, parents liked the MBC, which is also reflected in the child's preference, because it showed 'how we used to be', but they felt that some of the MMCA exhibits, which showed male and female genitalia, were not appropriate for children. Besides, parents regarded the project as a chance to see something with their children.

Roles:

In contrast with other cases above, no parent seemed to have a particularly leading role in the family, but they appeared to equally negotiate and decide on issues related with their children. Moreover, parents and brother seemed to be particularly supportive regarding the child's speech difficulty. In the feedback sessions, for example, that were held at home, all the family was present, encouraging the child in

her dialogue with the researcher, and properly repeating any unclear points in the child's responses.

Activities:

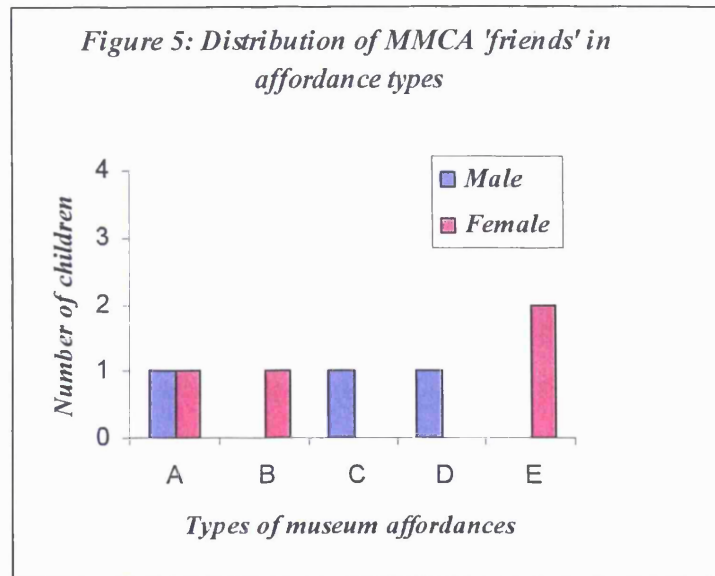
In her everyday life, the child loved drawing and dancing, which also suggests her particular relationship with space. In terms of the research project, the child was rather active, sharing her thoughts, ideas and speculations with her family and the researcher, and pointing out anything she found interesting or familiar. Also, the child coped rather effectively with group activities, following the directions of the museum staff and the pace of the group.

Relations:

Similarly with the child of case 109 above in type C, the child of this case did not seem particularly attached to any of the family members. Instead, she related well with everybody, but some competition appeared to exist at times between her brother and her, although this was not excessive or particularly lasting. Besides, the family's relation with the researcher was open from the beginning of the project, and the child also appeared to have accepted the researcher very easily. This facilitated considerably the communication between the child and the researcher, despite any speech difficulties.

MMCA 'friends' and affordances: background commonalities and exceptions

In this case, the picture appears as the exact opposite of that presented in the MBC figure above. As shown in figure 5 below, the quantitative difference between boys and girls is not significant, but the proportion of girls to boys is inversed, as girls (n=4) are more than boys (n=3). Unlike the MBC case, type E seems to be a prevalent type here, as the MMCA is a museum where one may seek for modernity and aesthetic pleasure. The fact, however, that children here are more evenly distributed in all types of affordances, suggests that MMCA may provide a wider range of possibilities, which children had the opportunity to explore in terms of an educational programme.



a. Affordance type A: cases 101 and 116

Similarly to perceptions in type A above, museum perceptions here were also linked with objects, past times and memory. In particular, museum affordances in this case entailed keeping old things safe (101), seeing old interesting things and learning about past life (116). It was interesting that the child in case 101 claimed that museums keep old things for us to remember, as old things cannot come back again, in the same way that people cannot become babies again. Moreover, children's reasons for preferring the MMCA relied again on the nature of objects, focusing on specific artworks, such as the skeleton, the sculpture of Eve, or a tree made out of paper straps, as opposed to the wood and water exhibits of the FEMMT (101), or the few things of the MBC (116). In case 116, the child still preferred the MMCA, despite the fact that she chose in the end to revisit the FEMMT. Both children were regular participants in the project, but as families did not return the final questionnaires a year later, it is not possible to draw any comments on the children's follow-up museum experiences or perceptions.

Personal background:

In both cases, parents had degree-based professions, in the area of banking (116) and of physical education and psychology (101). Both families regarded the project as an interesting activity for their children, although in case 116 parents felt

that museums were irrelevant to everyday life, being mainly linked with history and school. Although only one of the children had a brother (101), their age difference was so big, that they did not have a close relationship – in fact, the researcher never happened to meet the child's brother. The child in case 116 was a pupil of the private school in the north east area of Thessaloniki, where teachers were not as informed or experienced in museum or aesthetic education, as those of the municipal school, where the child of case 101 was a pupil. Also, during the project, the child in case 116 happened to visit with her school the local Archaeological Museum and its exhibition on the gold of ancient Macedonia.

Roles:

In both cases, parents had a delegating and flexible approach towards their children, providing them enough space to take their own initiative and express their own ideas. Children's mothers appeared here to have a leading role again in selecting their children's opportunities for education and entertainment, and it was them who mainly accompanied their children to the museums. In one occasion where the child (116) was accompanied by his father to the repeat visit to the FEMMT, the father did not seem to be eager to participate, so he relied almost entirely on the researcher to support the child during the visit.

Activities:

A feature that both children had in common here was imagination, which was expressed, though, in different ways. In case 116, for example, the child liked drawing and making things out of paper, which she shared with the researcher. In case 101, the child provided some interesting responses in his conversations with the researcher: he said, for example, that he dreamt of a museum once, but he did not remember how it looked like (induction meeting), or that he liked the video on Byzantine castles at the MBC, because it showed things that one could not see in the museum, like trees and the sky (first feedback session on the MBC experience). Both children were particularly active, being also interested in such activities as role play and outdoor play (101), or dancing and swimming (116).

In the museum context, children would readily associate the exhibits with previous experiences (e.g. linking MBC jewellery with jewellery seen at the Archaeological Museum in case 116, or Byzantine castles with personal toy castles in

case 101). Also, they both tended to leave their personal mark behind, either by writing with the researcher's help a positive comment on the MMCA visitors book (i.e. 101, repeat visit at the MMCA: 'I liked the museum very much, and I would love to visit again'), or by including a picture of oneself in the feedback drawings (116, feedback session at the FEMMT). This latter case may also suggest a strong self-image of an only-child, who tends to be the centre of attention in the family.



Plates 22 and 23: Picturing self on the FEMMT feedback drawings (116) (the drawing on the left depicts the girl surrounded from left to right by a handmill, a big saw, the museum building and its garden; the drawing on the right depicts the girl in front of the display case with traditional outfits).

Relations:

Children seemed to have a closer relation with their mothers, but they also related very well to the researcher during the project. It was typical of both children to ask the researcher to play with them, or to share with her their favourite toys or drawings. In case 116, the child would even pout at the researcher, if the latter could not stay as long as the child wished her to, which also suggests a deeper need for company and friendship.

b. Affordance type B: case 112

In this case, the museum image is related with seeing things, but the child's reason for preferring the MMCA was connected to a more active aspect, namely to 'sitting on cushions and drawing on the floor', during the educational activity there. Like above, the child disliked the FEMMT, because it had many tools, and she stated that she would have liked it, if it had happier pictures. The child participated regularly

in the whole project, but, like above, there are no comments for her follow up museum experiences, as the child returned with her family to Russia and the researcher lost contact with them.

Personal background:

The child belonged to a family of Russian immigrants, and lived in the west part of Thessaloniki with her mother, her older brother, her younger sister, and some relatives of theirs. She was a pupil of a state school in her neighbourhood, where the teacher was particularly active and informed in the area of contemporary teaching methods, namely in terms of cross-thematic and interdisciplinary approaches. The child had no previous experience of museums.

Her mother, who worked as a housekeeper, said that, although she loved museums, she was not able to visit them, both because she had to look after her younger child and because she felt that there was a language barrier, since she did not know very good Greek. Only the child's brother, however, who was about five years older, had some previous visiting experience with school at the local Museum of Technology.

As for their participation in this project, the child's mother liked the fact that in all museums there was someone to explain, and that they had a unique opportunity as a family to visit museums all together, combining entertainment and learning. She felt, however, that it would be better if there was a bus that could get them to the museums easily, since they had to change two or three lines, in order to attend a visit.

Roles:

As the child's father lived and worked in Russia, her mother was the leader in the family, who safeguarded the limits in her children's socialisation process. In this role, however, her mother was considerably assisted by her sister-in-law and her family, and, in certain cases, by the child's brother as well, who also had a very good knowledge of the Greek language. Apparently, in this family context every member of the family supported each other, and the older one tended to look after the younger one. Thus, even the child of this case herself would look after her younger sister, as far as she could. It is, also, very characteristic, that, in every stage of the project, the mother was present with all her three children, so that everyone benefits from the experience.

Activities:

Unlike all the aforementioned cases, the family did not pursue a wide range of leisure activities, since there was also a financial barrier. However, the child enjoyed playing with dolls and drawing in her spare time or at school, so it is not surprising that she enjoyed drawing on the floor at the MMCA. The child seemed happy to walk around the exhibitions and take a careful look at most of the exhibits in all museums, making her own comments and talking to her family about them. Besides, the child's feedback drawings demonstrated a very good memory (e.g.

Relations:

It is obvious from the above, that all the members of the family had close relationships with each other, as they were mutually supported. It is noteworthy that rapport was developed easily between the family and the researcher, as the family regarded the researcher as a link to an enculturation experience they usually could not afford or access.

c. Affordance type C: case 108

As in previous cases above, the museum setting was also perceived here as a big building with old things. In line, though, with the more people-focused nature of type C, the child defined museum also as a place to meet other children, and explained that he liked the MMCA, because there were more children and he could play (i.e. in terms of the educational programme). Moreover, the child regarded museums as an opportunity to go out, although he was not a regular participant in the project. The final questionnaire, in this case, was never returned to the researcher, so no comments can be made about the child's follow-up museum experience.

Personal background:

This child was one of the youngest in the whole group of participant children, since he was 4 ½ years old. He had an older brother in primary school, and his parents worked in the freelance sector, leading their own industry in the west area of Thessaloniki, where they also lived. The child's school was also in this area, and his teacher was not only particularly informed and experienced in creative education and

drama, but also, according to the child's parents, she helped the child overcome a certain difficulty in speech and gain self-confidence.

Although parents would not visit museums with their children, their attitudes towards museums were particularly positive, viewing museums as places that represent the rich historical and cultural context of Greece. Parents, also, regarded museums as an effective way to approach history, and they reckoned that school visits did not include museums as much as they included other events, such as theatre performances. Having participated in the project, parents stated that they were impressed by the MBC display approach and its video projection on Byzantine castles, but they disliked the fact that its guards were unfriendly, that there were fewer visitors than they expected, and that museums were not promoted enough in the media and press.

Roles:

Both parents seemed to have an equal onus in selecting the range of education and leisure opportunities for their children. However, in the case of this project, it was the father who took the initiative for his child's participation, as he was particularly interested in history, mythology and astronomy, and curious to see what his child would get out of museums. Parents strongly held that children should learn through practice, when the time is appropriate and when children are mature enough to understand. For example, they were reluctant towards providing a personal computer facility to their older son, as they were afraid that this would take up time from his studies.

Activities:

The child liked drawing, making things with paper and building blocks, watching TV, and playing. Parents themselves were not involved in a wide range of activities, as their working hours would leave them very little spare time. However, the child's father pursued as much as he could his own interest in history and astronomy, as seen above.

In the museum visit context, the child seemed particularly active in exploring the exhibitions, observing the details of objects at his own pace and often asking questions about them. In the group sessions, follow the pace of the group very effectively and was eager to try out any idea the museum staff proposed to the group.

In the feedback sessions with the researcher, he showed an incredible ability to recall details of the exhibits, of what he was told or of the museum setting, in general, and would constantly ask the researcher 'why' questions about them (e.g. 'why were these pots broken', or 'why did the museum put this terrace over there?'). At those moments, he wanted to be carefully listened to, and he even told his parents off for chatting and giggling, during the tape-recording of our conversation.

Relations:

Parents would admit that they were too emotionally attached to their younger child, to the point of becoming over-protective. The fact that they had long working hours, and could not see their children as much as they would like to, stressed even more this over-protective attitude. When parents were not at home, the child would spend more time with his grandparents than with his brother. It was interesting to see, however, that despite any emotional attachments, the child seemed to be rather self-confident and independent during the project, and was eager to tell the researcher his own stories, often to their parents' surprise, who did not expect such positive response from their child.

d. Affordance type D: case 105

Being influenced by a video she had watched on a Greek archaeological museum, the child related the museum setting to a big place with columns and a nice roof made of cement, where we can look carefully at things in cases, like pretty, old and valuable things, which we should not touch, so they will not break.

Personal background:

By combining spatial features with object properties and behavioural norms, the above definition clearly reflects the nature of her parents' professional background in architecture (father) and teaching (mother, Greek literature teacher). The child had a younger sister and an older brother in primary school. She was a pupil of the municipal school, like the child in case 101, and lived near the city centre.

After the end of the project, the child's mother stated that the FEMMT had a nice approach to the water theme, which was well adapted to children's abilities and made a good use of the museum's available means. She found, however, that the

choice of exhibits at the MMCA was at times unfortunate, obviously agreeing with another parent's view in case 106 above.

Roles:

The child's mother was the main person of reference during the project, as it was her who had a leading role in the child-rearing and who decided to participate with her child in the project. Similarly to case 112, children seemed to have a relation of mutual support, with the older looking after the younger.

Activities:

In the everyday context, the child liked comics, drawing and attending her music classes. She also liked playing with her brother and sister , as well as with a plastic swing at home. The child was an energetic and self-directed participant during the project: she would observe museum objects in detail, following her own pace, but also listening to what others had to tell her. Her drawings (plate 18, chapter 6) were colourful and the arrangement of figures in her drawings conveyed a good relation with space.

Relations:

No particular attachments were noticed between the members of the family. The child's relations with her parents and siblings were balanced, in general, although she seemed to relate somewhat better with her brother. She was, also, very open and communicative with the researcher.

A year later:

The family realised follow-up visits to other museums, and her mother felt that the child was quite affected by her participation in the project, as she would often talk about her experience to others or draw themes related to her experience. Most significantly, though, and despite her mother's skepticism towards the MMCA, the child attended art workshops that were organised at the MMCA.

e. Affordance type E: cases 107 and 111

The museum setting was perceived here as a place, which can 'take you to an old world' (111), and as a 'big house' with old and new things (107). The MMCA was commonly preferred here for its new and pretty things, in contrast with the MBC and the FEMMT. On one hand, the MBC had not such pretty things and would be better with newer things (107), whereas the FEMMT had too many mechanical things, and would be better if it was bigger with more things (111).

Personal background:

Children in this category had previous visiting experiences in different museums, mainly archaeological, as their parents had a specific interest in history and culture.

The child of case 107 lived in the west area of Thessaloniki and had a younger sister. Her parents were both accountants, and they wished to involve their child in the project, both because they felt that leisure opportunities were limited in their area, and because they were curious to see whether and how her daughter would associate her visits with her previous experience.

In case 111, the motivation for participation was similar to case 107, but the family situation was totally different, as it was a single-parent family. The child lived in the east area of the city only with her mother, who worked as a cleaner and dining room assistant in schools. The child was a pupil of the municipal school, but she was exempted from tuition fees, due to low income.

In both cases, however, parents regarded the project as a chance to enrich their child's interests and cultural experiences. In case 107, parents liked the clean and well-ordered spaces of the museums, but, in relation to the MBC, they found the staff's behaviour inappropriate, and the information provided on certain exhibits, such as icons, insufficient. In case 111, the child's mother also felt that the communication with the museum staff should be improved, but, in general, she found that the range of exhibits was good in all museums and that the MMCA was a masterpiece itself.

Roles:

In case 107, parents tried to keep a balanced and fair attitude towards their two daughters, providing enough opportunities for their children to take their own initiatives, but always within given limits. In case 111, the child's mother followed a similar child-rearing path, but her role was reinforced as a single parent. In both cases, children appeared to be rather self-directed and responsible for their personal things.

Activities:

Children were particularly interested in drawing and books. Particularly, in case 107, the child would spend enough time with her father, drawing and reading history and mythology books. In case 111, the child liked story books, as well as role playing, theatre and the movies, and would like to become a painter. This child also seemed particularly interested in writing, although her mother discouraged her, thinking it was too soon for that.

What was impressive in both cases, though, was the children's divergent thinking and ability to express their ideas freely and spontaneously. In case 107, for example, before the first visit to the MBC, the child drew the museum, as she imagined it with columns, five roofs and various objects (including an 'ancient telephone'!), under the influence of her previous experiences, whereas after the MBC visit, she made a picture of heaven, being influenced by the paintings in the tombs. Also, in case 111, the child stated in one of the feedback questionnaires that she would like to visit the MMCA and the MBC again, because 'her brain works', thus also showing a high level of self-confidence.

Relations:

Children had rather open and sincere relations with their families, and this feature was also extended to their relation with the researcher. Besides, in case 107, the child had close relationships with her grandparents, with whom she spent most of her time, when her parents were at work, while in case 111, the child had a very good relation with her mother's brother, who had a broader supportive role.

A year later:

As contact was lost with the family of case 107, information on follow-up experiences and perceptions derived only from case 111. Specifically, after the end of the project, the child had the opportunity to visit more museums in Athens with her mother. She remember a wide range of exhibits from all three museums she had visited in the project, like the 'dancing skeleton' at the MMCA, the priest's crown at the MBC, and the mills at the FEMMT. Her perception of the museum setting was quite similar to her initial one, considering the museum as a place where we can 'remember what we used to have in the old days', but where we can also see 'modern things'.

FEMMT 'friends' and affordances: background commonalities and exceptions

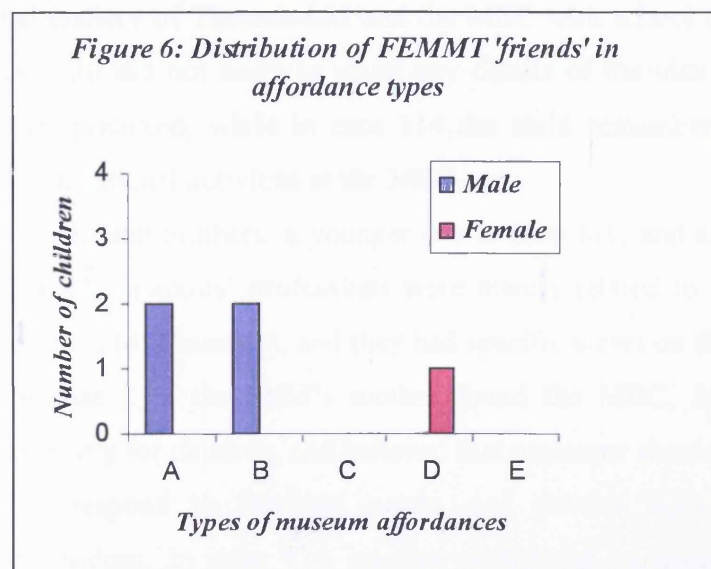


Figure 6 above, clearly suggests that the FEMMT is almost exclusively related with types A and B. Being a museum which combines modern Greek history and traditional technology, the FEMMT is a place to learn about the recent past through active modes of engagement with objects, such as trying out the handmill, and to closely observe the operation and technical details of traditional machinery. As the figure shows, such a museum experience apparently appeals more to boys ($n=4$), with the exception of one girl in type D (space).

a. Affordance type A: cases 110 and 114

In these cases, children initially linked the museum setting with seeing valuable things and dinosaur bones (110), with things found underground or in the sea (114), and also with playing and drawing (114). Children liked the FEMMT for its tools and for showing how they function, and commonly disliked the MMCA, either because it did not show how things operate (110), or because there was too much searching (i.e. in the educational activity) (114). The child in case 114 preferred the FEMMT, despite the fact that his repeat visit occurred at the MBC, but, in general, he stated that he would not like to visit any other museums.

Personal background:

Children had previous museum visiting experiences at the MMCA (110), and at the Municipal Gallery of Thessaloniki and the MBC with school (114). However, the child in case 110 did not seem to recall any details of the visit to the MMCA, which his mother preferred, while in case 114 the child remembered some of the exhibits and the educational activities at the MBC.

Both children had brothers: a younger one in case 110, and a couple of years older one in case 114. Parents' professions were mainly related to health (i.e. 110: hotel owner, doctor; 114: chemists), and they had specific views on the museums and expectations. In case 110, the child's mother found the MBC, for example, too abstract and unfriendly for children, and believed that museums should connect theory with practice to respond to families' needs, and provide activities or spaces appropriate for children. In case 114, parents considered museums as a cultural experience, and the project as an opportunity for their children to be involved in something that themselves never had the chance to experience.

Children had different educational experiences, as in case 110 the child went to the private school, while in case 114 the child went to a local state school, where, as seen above, teachers happened to be more informed about and sensitive to issues of aesthetic education.

Roles:

In case 110, the child's mother was again the main person of reference for the child, as his father's work schedule as a hotel owner was more demanding. A second

person of reference for this child was his grandmother, who looked after him and his brother in his parents' absence. In contrast, in case 114, the child's father seemed to be the leading figure, and he was rather anxious about safeguarding certain limits and rules between his two sons, unlike the child's mother in case 110, who seemed to have a more relaxed parenting style.

Activities:

Both children liked drawing and outdoor activities. In case 110, these activities were mostly shared with the mother, as the child liked watering plants with her, or colouring pictures that she would draw. He also liked superheroes, outdoor play, and the sea, which was the reason for choosing to draw the aeroplane on his feedback drawing for the MMCA (plate 24; note the brown waves at the bottom of the original artwork). Interestingly, he loved watching trains and he said that he would like to become a train driver. In case 114, the child attended drawing classes with his brother and also went to boy scouts with him. This child also seemed to participate more eagerly in the museum project, as he engaged more actively with his ideas, questions and speculations in any conversations between him and the museum staff or the researcher. He tended, however, to be considerably distracted by the presence of his brother, with whom he even started racing in the corridors of the MBC, to his father's frustration.



Plate 24: The aeroplane of case 110 (Alexis Akrithakis, Aeroplane, 1982; wood, neon 150x185cm) and to its left the 'mechanism' of case 102 (Takis, Télélumière, '61; mercury lamp, electromagnet).

Relations:

In case 110, the seemed to be particularly attached to his mother, and would share everything with her. In case 114, the child would spend more time with his brother, but there was enough competition between them. In this latter case, it is characteristic that the child's father was anxious from the beginning of the project about including the older brother in the whole process, so that he does not feel excluded or jealous. In both cases, however, parents' and children's relations with the researcher were friendly.

A year later:

Children's museum perceptions were limited to seeing and talking about things and learning about past discoveries (110), or seeing lots of objects (114). Being concise and abstract, these perceptions appeared rather detached from the experience children actually gained during the project, and they perhaps imply a low level of interest in museums.

b. Affordance type B: cases 102 and 103

As in previous categories, the museum image was still related here with old and pretty things and learning, but it also included a more practical aspect, such as playing (102) and taking photos (103). The reason for preferring the FEMMT links to the mechanical nature of objects themselves (sawmills, watermills, laundry and drying machines for woven cloths). Children in this category disliked other museums, either for being tiring and for not understanding much there (102 on MMCA), or for having only statues (i.e. static exhibits) (103 on FEMMT).

Personal background:

Children had a quite different background. In case 102, the child was 4 ½ years old with a younger brother, living in the west area of the city. His parents were private employees, who had previous visiting experiences, but were generally concerned about the lack of leisure opportunities in the west areas. In case 103, the child had a much older sister, living in the east area of the city, and had previous visiting experiences from school visits. His father was an engineer and his mother a teacher, with a wide range of interests.

Although they went to different schools, both children had active, informed and experienced teachers, and, interestingly enough, both children would like to work in the technical sector. In case 102, the child would like to become a 'driller', because he saw somebody drilling in the street and he liked the idea. Similarly, in case 103 the child would like to become a hot works operator for cutting and welding iron, because he saw someone doing this in one of his trips with his parents.

In both cases, also, parents were concerned about the quality of museum provision for children. In case 102, although they found impressive the museum buildings and display approaches, they felt that the staff's behaviour was problematic and the entrance fees were quite expensive for a family. Besides, in case 103, parents felt that museums should have interactive programmes for children and more information should be provided to motivate parents.

Roles:

In both cases, parents were rather delegating and supportive with their children. Parents were open to discuss with their children and seemed to keep an effective balance between providing their children with opportunities for self-directed action, and maintaining the limits, whenever these should be respected for the benefit of the whole family and other persons.

Activities:

Both children were keen on drawing and playing. In case 102, the child also liked music and other social activities, like playing basketball, going for a walk with family and friends, and fishing with his grandfather. In case 103, the child would spend a lot of time constructing things with building blocks, mainly things relating to the 'space' theme, like satellites and rockets. This great interest of the child in constructions and technical details was also obvious in the MMCA feedback session: what really impressed the child was not any of the artworks included in the educational programme, but a mechanical artwork he, himself, noticed just next to one of the discussed exhibits, the 'Aeroplane' (plate 24). Both children tended to describe and explain to others in detail anything they saw or experienced in the museum.

Children's parents were also very active participants during the project. In case 103, for example, the child's father would always discuss with his son about the

exhibits both during and after a museum visit. In case 102, parents would also talk with their child about his museum experience, and the child's mother participated actively in the group activity at the MMCA, in order to help the museum staff and the children.

Relations:

It is already clear from the above, that parents and children had solid and open relations. The only striking thing in case 103 was that the child's relations with his older sister were quite remote, because, according to the child, his sister would always study, read books and watch films, and she would not play with him. In contrast, the child would play and draw quite often with his father, and he had become almost attached to the researcher during the project. As for case 102, the child had also close relations with his grandparents, who would not simply look after him, but would also include them in certain activities, like fishing, as seen above.

A year later:

Children recalled various exhibits from all three museums. In case 102, the child remember characteristic exhibits of each museum, such as the watermill from the FEMMT, pots with handles from the MBC, and decorative objects from the MMCA. Instead, in case 103 seemed to remember what appealed to his own interests, rather than what was typical of each museum. Thus, from the MMCA the child recalled 'a system with many pipes, wires and a light bulb' (i.e. the mechanical artwork seen above), the four screens in the last room of the MBC, which showed how a pot was restored, and the watermill, the sawmill, and drying and laundry machines at the FEMMT.

In case 103, the child's perception of museums appeared to be slightly extended towards entertainment purposes ('in a museum we can see many things in various rooms and enjoy ourselves'). In case 102, museums were still defined as places where we can see things, but also where we can find computers with information to read, using a 'small arrow' (i.e. the cursor of the touch screen terminal in the last room of the MBC).

In both cases, children seemed to be quite affected by their experience. In case 102, parents stated that the child could recognise the area where the FEMMT was located, and that he often mentioned the researcher as well. In case 103, the child's

father also stated that his son recognised the locations of the MBC and the FEMMT, and remembered the researcher 'with fondness'. In this latter case, the child used to talk about his experience to relatives and friends, and draw museum objects, mainly watermills. Besides, when his father indicated in the final questionnaire that the child was little affected by his participation in the project, the child disagreed, saying he was actually very impressed by what he saw.

c. Affordance type D: case 118

This is the only case of a girl who preferred the FEMMT, because she could see 'how wheat is made' (i.e. ground or processed). The child connected museums with things that people used in the old days, and, similarly to other cases in the category of the FEMMT 'friends', she disliked the MBC for being too big and tiring.

Personal background:

The child was a pupil of a private school, like case 110 and 116, and had an older brother. Her father was a trader, and her mother had quit her job as a private employee to raise her children. During the project, the child happened to visit the Archaeological Museum of Thessaloniki (see case 116 above).

Her parents held positive attitudes towards museums and were particularly impressed by the kindness of the museum staff, especially at the FEMMT. However, they were concerned about the high entrance fees, and the lack of car parks, facilities (e.g. cafés), and other events for children and families.

Roles:

The child's mother seemed to have a leading role in deciding which education and leisure experiences would be appropriate for her child. As in other cases above, she also seemed to keep an effective balance between supporting the child's interests and needs, and maintaining the necessary social limits. This kind of approach was particularly evident in the child's increased self-confidence and sense of responsibility during the project.

Activities:

The child had a wide range of interests, such as ballet, drawing, singing and playing with puppets, but she also enjoyed her afternoon walks with family and friends. The fact that she liked watching television programmes on arts and crafts, conveys a more practical aspect of her interests, which was common among the FEMMT 'friends'.

Relations:

As the child spent practically more time with her mother and brother, her relations with them seemed to be somewhat closer, than with her father, for example. In general, though, the child was rather sociable and friendly with all the people involved in the project, including other children and museum staff.

A year later:

This is the only case where the child's recollections are totally focused on the museum of preference. The child recalled the mills and the machines which made (i.e. processed) wool from the FEMMT. Her parents felt she was quite affected by her participation in the project, as she talked to friends about how people used to grind the wheat and how they used to process the wool. The family did not happen to visit any other museums after the project, as, according to the child's parents, time was limited and they did not have a chance to plan a museum visit.

The above findings provide an insight to the complexity of young children's micro-context, which affects the way young children perceive the affordances of a museum setting. These findings are summarised and further discussed in the concluding part of this thesis, which follows next.

CONCLUSION

Towards an ecological museum education framework

The first part of this thesis, which reviewed existing studies on young children's museum experiences in 'general public' museums, illuminated an array of suggestions on the potential factors that may affect the nature and quality of these experiences. These factors ranged from the quality of the museum's educational provision (Filiatrault, Graham, Moss), or the quality of parent-child interactions in the museum visit (Brûlé-Currie), to the impact of the research setting itself (Fasoli), the persistence of socio-cultural values (Kindler *et al.*), or a combination of all these features (QUT Museums Collaborative, Morris Hargreaves McIntyre report). However, the dynamic interrelation of the child's background with the museum context and the conditions which favoured or impeded this interrelation, remained largely unspecified, as, in many cases, findings tended to reflect children's responses to a given museum visit context, without adequately exploring the place and value of these responses within the child's socio-personal context.

The purpose of this thesis was to explore the nature of young children's museum related perceptions, and, specifically, to understand the conditions where these perceptions are developed. Expanding on the comprehensive research ethos of the QUT Museums Collaborative, and on the initiative of Morris Hargreaves McIntyre and of Kindler and her colleagues to apply an ecological interpretative perspective (through Bronfenbrenner's and Barker's theory respectively), this thesis attempted to establish an ecological framework for researching and interpreting young children's museum perceptions, based on Gibson's theory of affordances and Bronfenbrenner's Ecology of Human Development. In terms of this framework, the museum setting was conceptualised as a micro-setting in a larger ecological context, with a number of possibilities – or affordances – for a young child to explore. To what extent the child would perceive these possibilities was regarded as a function of what information the child would pick up in terms of mutual person-context transactions, and what kind of selection pressures would be identified in these transactions at a socio-personal level.

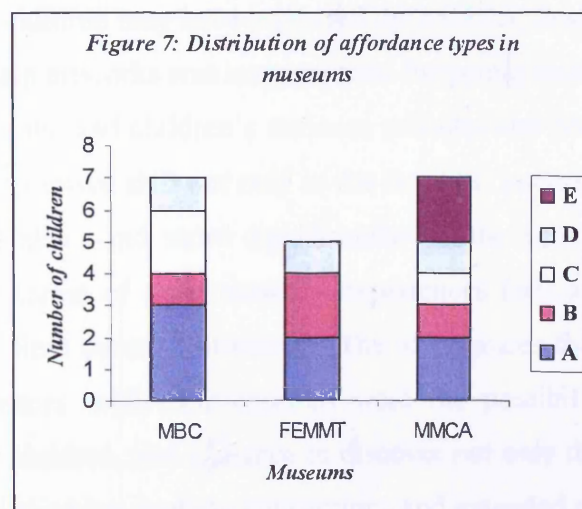
To address these issues, the thesis presented a case study in a Greek museum context, which attempted to understand how a specific affordance was used by each child (Gibson's concrete level of analysis), and whether any commonalities existed in the use of this affordance within the sample of participant children (Gibson's abstract level of

analysis). Specifically, the research process attempted to examine the mutual transactions between the child and the museum setting (Bronfenbrenner's ecological experiment), to understand the values and meanings children and their context attributed to the museum setting (ecological validity), and to explore the impact of different museum experiences on children's perceptions (transforming experiment). The findings were interpreted qualitatively on the basis of Bronfenbrenner's micro-system analysis, focusing on the kind of roles, activities and relations engaged in by children and other persons in their family and research context. The process of interpretation followed two phases: drawing on the initial questionnaire survey for museums, families and teachers, the first phase aimed at identifying selection pressures in children's broad socio-cultural context; and the second phase aimed at identifying selection pressures in the specific micro-context of each child.

The first part of analysis suggests that the current function of museum education does not explore the full essence and potential of the exo- and macro-system claims for the development of a 'new type of citizen', through enculturation, education and social integration. The museum context examined herein seems to be in a transitional phase of 'socialisation', as its educational provision may be actually legitimising the museum's presence, through its mission to enrich the formal education system, but, presumably, it still lacks the necessary flexibility and experience to open up to its broad community. As a result, the impact of a single school museum visit might gradually wane, if museums and other micro-settings are not encouraged or supported to further elaborate on the benefits of that visit. Such deficiency of opportunities for active reflecting is particularly illustrated in teacher and parent respondents' feeling of almost being disqualified from fully partaking in the benefits of the museum experience. These findings apparently challenge the level of support the museums currently provide for the 'significant others' in the child's primary developmental settings, revealing, initially, a *weakly linked* meso-system, in Bronfenbrenner's terms, among museums, schools and families.

The second part of analysis revealed that all children associated the museum setting with a big building that basically keeps many old things for us to remember, and with the acts of seeing, talking about and not touching the objects. However, the specific approaches of children to the museum setting suggested five different types of museum-related affordances perceived by young children in the study: the traditional object-focused and learning based type (A); the activity-based type (B); the people-focused type (C); the space-focused type (D); and a modern-aesthetic type (E). Each of these types is characterised by a typical feature that seems to convey a sort of priority in the way each

child relates with the museum setting. These types were distributed to all three museums of the research (MBC, FEMMT, and MMCA) (figure 7), with types A and C appearing mostly among the MBC ‘friends’, and types A and B featuring mainly among the FEMMT ‘friends’, while the MMCA seemed to convey all types of affordances. It seemed, however, that type A was more typical of a history museum, such as the MBC, type B was more typical of the FEMMT museum with its working models of traditional machines, and type E expressed more the spirit of a contemporary art museum, such as the MMCA. This distribution of museums to affordance types apparently reflects the subject of the museum and the type of visit (family visit, guided visit, or educational programme). For example, the MMCA seemed more likely to afford perceiving aesthetic qualities, because of the nature of its exhibits, and to be linked with learning and playing, because of the educational programme, that took place there. However, the fact that the MMCA may have conveyed a wider range of affordances, has not necessarily rendered it more popular, as it appealed to as many children as the MBC, and almost as many as the FEMMT.



Children’s preference towards a museum and perception of specific museum affordances also seemed to be a function of gender, as also implied in the QUT Museum Collaborative project. The MBC and the MMCA appealed almost equally to boys and girls, with the MBC appealing slightly more to boys, and the MMCA slightly more to girls. The FEMMT seemed to attract mostly boys, with one girl only showing preference to this museum. This finding may suggest a different type of thinking or learning between girls and boys, which was also evident in the fact that the types A, B and C were comprised both girls and boys, whereas types D and E were common only among female participants.

Therefore, girls may be actually more inclined to perceive aesthetic qualities and spatial arrangements in the museum context.

Apart from any gender issues, the way young children perceived museum affordances seemed to be closely related to parents' background and style of parenting. The findings suggested, for example, that in cases where parents tended to have more concrete expectations from their children, children tended to perceive more object-focused and learning-based affordances (type A), also related to rules. Moreover, children tended to relate more to types A or B, if their parents' professions were related to positive sciences. Certainly, there was a close relation between types of affordances and children's interests, but findings also suggested that children's interests were quite close to the interests of the parent to whom they were more attached or with whom they spent more leisure time. These suggestions, however, do not necessarily apply to the children's museum preferences, which, in some cases, contradicted their parents' preferences. For example, a child may have preferred the MBC, despite parents' views that the MBC would be tiring for young children, or children may have preferred the MMCA, despite the parents' feeling that the subject of certain artworks was inappropriate for young children.

Regarding parents' and children's museum attitudes and perceptions, the post-visit survey demonstrated a positive shift not only in the families' understanding of the museum role and content, but also –and more significantly– in the way they perceived young children's abilities in terms of their museum experiences (see also Appendix II, table comparing initial and final parents' attitudes). The affordances that parents perceived in their museum experiences with their children were the possibility for shared cultural experiences with their children, and a chance to discover not only their children's potential (e.g. ability for critical thinking, making connections and extended attention span), but also themselves. Moreover, the participant children were able to recall various elements of their museum experience, such as spatial elements and objects, and were more self-confident in expressing themselves about their experience.

It was rather interesting that parents often attributed to the researcher any benefits their children gained from their participation, as their children would not only show some signs of positive change (e.g. emotionally), but they would also explicitly include the researcher in their recollections. The issue of researcher's influence seemed to be a recurring pattern for only-children or children with much older siblings, and children with low self-confidence. This finding indicates, on one hand, the significant role of third parties, who serve as intermediary links in inter-setting transitions, according to

Bronfenbrenner, and, on the other hand, a parents' tendency (which was also obvious with participant teachers and museum staff) to adopt a more sensitive approach towards a novel experience, when they are approached and talked to personally. It seems that the feedback sessions that were included in the project were particularly effective in this respect.

The post-visit survey, however, also suggested that the issue of a relatively low commitment of families to museum visitation, which was evident in the first part of analysis, persisted. Most parents did not report follow-up museum experiences after the end of the project, or, when they stated their reasons for not visiting more museums, they would often refer to lack of time and appropriate planning, or even lack of interest (in one case). This finding illustrates a certain type of 'cultural homeostasis', in terms of which any changes or novel experiences can be integrated to the family's routine up to a certain limit. As also implied in Kindler's work, families may be ready to accept the benefits of a positive museum experience, but they may not be as flexible to make these benefits work in their everyday life patterns. In relation to this effect, Bronfenbrenner that, in a transforming experiment, a researcher may try to challenge long-established perceptions in people's lives, and people may respond positively to these efforts, but they may not want to change.

The above issue of homeostasis demonstrates that ecological theory is rather effective in understanding the limits to which people can accept change. Such limits became obvious in the first part of analysis, where ecological theory was used as interpretative tool to describe current trends in perceiving the nature and role of museum experiences within a specific socio-cultural context. The second part of analysis, where ecological premises were used as a dynamic research framework, conveyed not only the value and meaning of museum experiences in the child's micro-system, but also new possibilities of the museum experience, or subtle instances of change. To quote Bronfenbrenner (1979: 289), 'the macro-system encompasses the blueprint of the ecological environment not only as it is, but also as it might become, if the present social order were altered'. However, these possibilities were particularly obvious in young children's perceptions, rather than in their parents' perceptions, perhaps because in early childhood children are more open to discover new experiences and are more spontaneous in exploring them. Consequently, the question is how families as socio-cultural and primary developmental settings can become more flexible towards museum experiences.

A first step towards addressing this question would be to increase museums' relevance within its community. According to Anderson, museums hold a potential to act

as ‘agents of social and political change’, where ‘political’ is not linked to any political party affiliation, but to a museum’s responsibility, ‘first, to ensure that important contemporary issues relevant to the institution are raised and discussed within an ethical framework and, second, to identify social and cultural needs in society and positive steps to address them’ (Anderson, 1994: 3). In order to realise this potential, however, Weil (2002: 14), in *Making Museums Matter*, identified two prerequisites: ‘that of accomplishing the museum’s mission-derived purposes and that of converting the public’s goodwill into actual support’. An issue here is that museums cannot expect to effectively convert the public’s goodwill into actual support, unless they explicitly include the public in their mission-derived purposes. Depending on the nature of a museum’s mission statement and purposes, the terms ‘public’ and ‘support’ may acquire different meanings. If a museum seeks to increase its visitor numbers or promote its educational programmes, then it would probably define ‘support’ as ‘more ticket sales’ or ‘more school visits’ respectively, and ‘public’ as ‘tourists’, ‘school groups’ and possibly ‘sponsors’. Beyond this narrow example of purposes and definitions, Weil suggests in his work that public support should essentially refer to the conscious use of museums by the local community, where ‘conscious use’ relates to a self-motivated use – not just visit – of the museum, and ‘local community’ encompasses a wide range of community groups, from children and special needs to the elderly. It follows that a museum, which is unknown to its local community or irrelevant to the community’s needs and expectations, could not be consciously used or even visited.

This thesis posits that the conditions for learning to consciously use museums should begin to be created in early childhood, in line with a widely recognised role of early experiences in developing future attitudes, values and beliefs. The museum field has been increasingly focusing on very young audiences and their families for various reasons, such as changes in the family structure, significance of early learning experiences in the process of lifelong learning, and a developmental need for creative learning and entertainment (Wood, 1990; Harris Qualitative, 1997; Moussouri, 1997; Milligan and Brayfield, 2004; Piscitelli and Anderson, 2001; Anderson and Piscitelli, 2002; Morris Hargreaves McIntyre, 2002). The urging title “Start with the child” of a British report commissioned by Resource: The Council for Museums, Archives and Libraries and The Chartered Institute of Library and Information Professionals (CILIP) (Morris Hargreaves McIntyre, 2002) is particularly indicative of the need to capitalise on the provision of quality early museum experiences, which would draw on the needs and expectations of young audiences. This

need underpins an aspiration for the museums to sustain their role as a socially inclusive learning setting in the long term, by developing a proactive education plan, which would begin at the base of a local community.

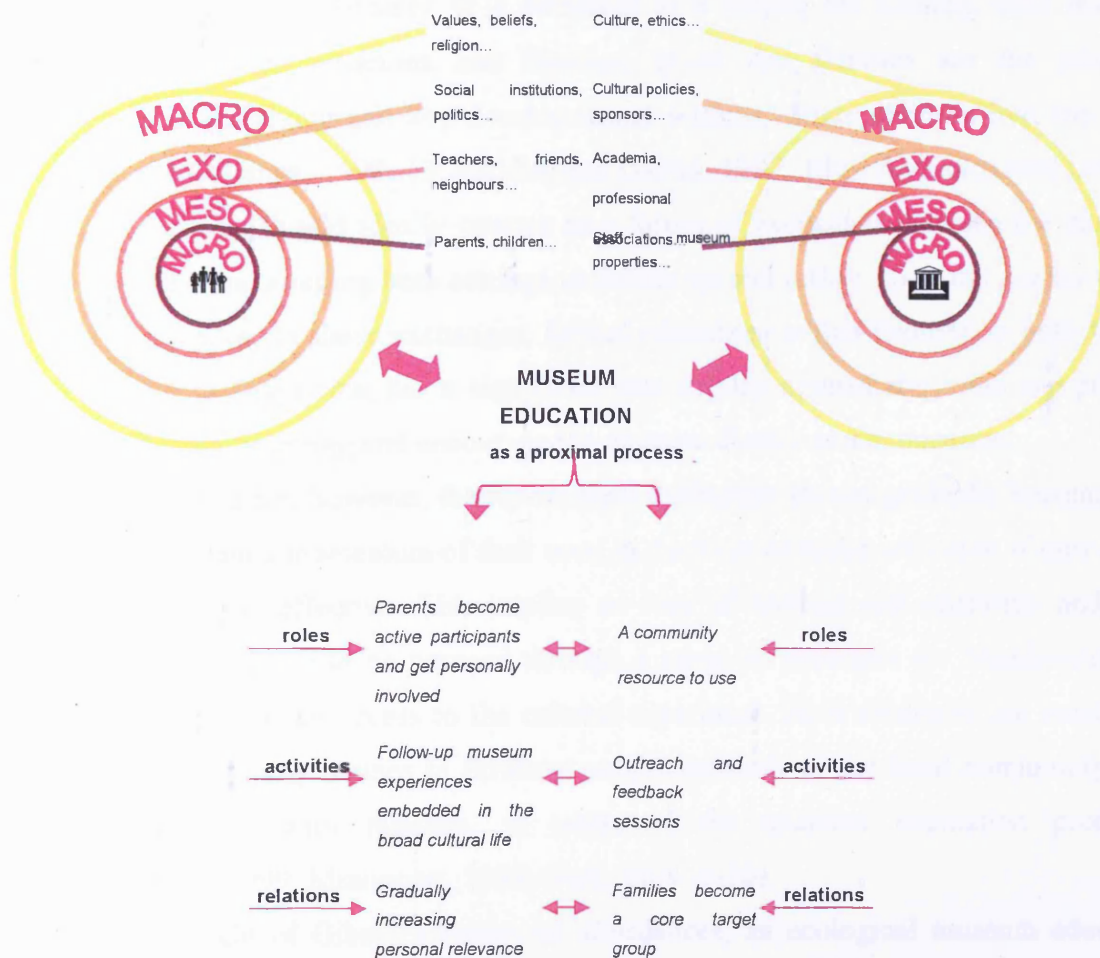


Figure 8: A schematic representation of museum education as a proximal process linking families and museums.

From an ecological perspective, the foundations of such proactive plan may be founded in Bronfenbrenner's notion of a proximal process, for, in ecological terms, this is what a museum would need, in order to actualise its potential as a social agent, and what parents would also need, in order to actualise their own potential as active supporters of their child's cultural experience. Figure 8 above shows schematically the potential function of museum education, not just as a set of activities, but as the needed proximal process, mediating a sustainable family-museum relation at a meso-level. More specifically, the

figure illustrates what kinds of roles, relations and activities would need to be established, in order to create the conditions for an effective museum-family learning partnership.

A distinctive feature of museum education as a proximal process is that museum education is not simply perceived as a supplement to formal education curricula in terms of school visits. More significantly, it is perceived as a vehicle for building solid learning partnerships between museums and families, given that families are the principal gatekeepers of childhood and key developmental settings, where children live and grow (Crowley and Callanan, 1998: 13; Kindler and Darras, 1997: 140). As a proximal process, museum education should ideally operate as a forum of exchanges between the museum and the family, encouraging both settings to follow-up and reflect upon the quality of the cultural experience. In these exchanges, formal education, which features in both family and museum meso-systems, has a significant role to play as mediator, who can provide access to the family setting and encourage the museum-family communication.

In the long run, however, family-museum exchanges should gradually become self-controlled and gain a momentum of their own, in the form of molar activities, if they are to be developmentally effective. This implies an idea of lifelong self-education and self-actualisation, which could be pursued through a range of strategies for broadening both physical and intellectual access to the cultural experience. Such strategies are essentially museum outreach programmes in different neighbourhoods of the local community, and feedback sessions with families, in terms of the museum evaluation processes (Kalessopoulou, 1999; Moussouri, 1999; Gazi, 2004: 9-10).

In the light of Gibson's theory of affordances, an ecological museum education process capitalises on richer and more refined perceptual experiences, in order to become more sensitive to the information of the socio-cultural context. In an ecological education process, a museum does not simply afford attracting visitors by displaying collections; it affords supporting learning by providing chances to practice attention and perception, which are the foundations for critical thinking. Likewise, in an ecological education process, a local community does not simply afford increasing visitor numbers; more significantly, a community affords providing a social value to the museum setting, by actively and consciously using it in the everyday context, for any resource cannot be sustained, unless it is enriched through community participation. Hence, an ecological museum education process would not simply seek to initiate families to the 'museum culture', but, more significantly, to 'socialise' museums as community resources in terms of the family's broad cultural context.

APPENDIX I

RESEARCH TOOLS AND PROTOCOLS

This appendix presents questionnaires, family meeting and museum visit protocols, as well as feedback forms, in the order they were used in the different phases of the research. It also contains the first guidelines-page of the notepad that was meant to be used as a diary by parents.

For practical reasons, all the research tools were translated into English. Samples of the original Greek material can be found in Appendix III. The tools are presented in the following order:

1. Museum Questionnaire (Preliminary research phase)
2. Teacher Questionnaire (Preliminary research phase)
3. Initial Parent Questionnaire (Preliminary research phase and sampling)
4. Family's research folder (Induction meeting)
5. Induction meeting protocol (Before the first visit)
6. 1st museum visit and feedback protocols (Family visit and feedback)
7. 2nd and 3rd museum visit and feedback protocols (Guided visit and educational programme respectively)
8. 4th museum visit protocol and feedback questionnaire (Family visit and feedback)
9. Final family questionnaire (Final feedback after one year)



Exhibition Practice and Audience Policy in Museums



This questionnaire forms part of a doctoral research in Museum Studies (*Museum Studies Department, Leicester University*) funded by the *Greek State Scholarships Foundation (IKY)* and the *Arts and Humanities Research Board (AHRB)*. The following questions aim at gathering basic statistical data about the current exhibition practice and the audience policy in museums of Thessaloniki. Your answers to these questions will add to the objectivity of the research. I would be grateful if you took a few minutes to answer and return this questionnaire by 5/3/2004. Thank you.

1. What is the basic purpose of the museum you represent? (please mark only any boxes applying to your museum, using number 1 for the most basic purpose, number 2 for the second basic purpose and so on – a same number can be used for more than one boxes)

<input type="checkbox"/>	<i>Safeguard and promote material culture/ history/ tradition</i>
<input type="checkbox"/>	<i>Educate visitors on Greek cultural heritage</i>
<input type="checkbox"/>	<i>Promote research</i>
<input type="checkbox"/>	<i>Entertain visitors</i>
<input type="checkbox"/>	<i>Other (please specify).....</i>

2. How many visitors did your museum admit last year? (please cross (x) one of the following boxes)

<input type="checkbox"/>	<i>Less than 1000</i>
<input type="checkbox"/>	<i>1000 – 1500</i>
<input type="checkbox"/>	<i>1500 – 2000</i>
<input type="checkbox"/>	<i>2000 – 2500</i>
<input type="checkbox"/>	<i>2500 – 3000</i>
<input type="checkbox"/>	<i>More than 3000 (please give approximate number.....)</i>
<input type="checkbox"/>	<i>I don't know</i>

3. How are exhibits organised in the museum? (please mark only any boxes applying to your museum in order of priority, as in question 1)

<input type="checkbox"/>	<i>In chronological order</i>
<input type="checkbox"/>	<i>By themes</i>
<input type="checkbox"/>	<i>By aesthetic criteria</i>
<input type="checkbox"/>	<i>By exhibit significance</i>
<input type="checkbox"/>	<i>Other (please specify).....</i>

4. What means does the museum use to support the meaning of its main exhibits? (please mark only any boxes applying to your museum in order of priority, as above)

<input type="checkbox"/>	<i>Written information / texts</i>
<input type="checkbox"/>	<i>Dioramas</i>
<input type="checkbox"/>	<i>Audio information</i>
<input type="checkbox"/>	<i>Models of original objects</i>
<input type="checkbox"/>	<i>Audiovisual means (e.g. video, films)</i>
<input type="checkbox"/>	<i>Juxtaposition of later objects to compare old and new</i>
<input type="checkbox"/>	<i>Photos/ Pictures related to exhibits</i>
<input type="checkbox"/>	<i>Other (please specify).....</i>

(P.T.O) ⇨

5. What kind of events does the museum offer for visitors? (please mark only any boxes applying to your museum in order of priority, as above)

<input type="checkbox"/>	Dispose loan boxes to different institutions (e.g. schools)
<input type="checkbox"/>	Educational programmes in the museum
<input type="checkbox"/>	Outreach educational activities (e.g. in schools, open spaces)
<input type="checkbox"/>	Workshops
<input type="checkbox"/>	Conferences/ Lectures
<input type="checkbox"/>	Permanent exhibitions
<input type="checkbox"/>	Guided tours
<input type="checkbox"/>	Temporary exhibitions
<input type="checkbox"/>	Seminars
<input type="checkbox"/>	Resource services (e.g. library, websites)
<input type="checkbox"/>	Entertainment events in or out of the museums (e.g. concerts, plays, art exhibitions)
<input type="checkbox"/>	Other (please specify).....

6. Who are usually the target audience of the above events? (please mark only any boxes applying to your museum in order of priority, as above)

<input type="checkbox"/>	Preschool children/ Kindergartens	<input type="checkbox"/>	Particular population minorities (e.g. gypsies, immigrants)
<input type="checkbox"/>	Primary school students	<input type="checkbox"/>	Families
<input type="checkbox"/>	Secondary school students	<input type="checkbox"/>	Special needs
<input type="checkbox"/>	Higher education students	<input type="checkbox"/>	Adults
<input type="checkbox"/>	Specialists	<input type="checkbox"/>	Other (please specify).....

7. How does the museum usually inform the above target groups about its events? (please mark only any boxes applying to your museum in order of priority, as above)

<input type="checkbox"/>	Press releases	<input type="checkbox"/>	Personal communication/ correspondence
<input type="checkbox"/>	Mail to different institutions (e.g. schools, universities, associations)	<input type="checkbox"/>	Internet
<input type="checkbox"/>	Other (please specify).....		

8. Who does mainly contribute in organising the events of the museums? (please mark only any boxes applying to your museum in order of priority, as above)

<input type="checkbox"/>	Ministry of Culture representatives	<input type="checkbox"/>	Students in disciplines related to the subject of the museum
<input type="checkbox"/>	The Museum Board	<input type="checkbox"/>	Volunteers
<input type="checkbox"/>	Friends of the museum	<input type="checkbox"/>	People from target groups (e.g. parents, children)
<input type="checkbox"/>	Specialists/ academics (e.g. archaeologists, art historians, ethnologists)	<input type="checkbox"/>	Specialists in social sciences (e.g. educators, social workers, psychologists)
<input type="checkbox"/>	Other (please specify).....		

9. How are the museum's events usually evaluated? (please mark only any boxes applying to your museum in order of priority, as above)

<input type="checkbox"/>	Through the Ministry of Culture	<input type="checkbox"/>	Through visitors/ target groups (comment books, evaluation forms)
<input type="checkbox"/>	Through the Board of the Museum	<input type="checkbox"/>	Through the organisers of the events
<input type="checkbox"/>	Other (please specify).....		

Thank you for your time and co-operation.



Museums in Early Childhood Education



The following questions are part of a broader study on early childhood and museums. The purpose of these questions is not to evaluate your answers, but to gather data about the position of the museum in preschool education for merely statistical purposes – so, there are no right or wrong answers. I would be grateful if you took a few minutes to answer these questions. Your answers will remain strictly confidential, and they may be anonymous. Once you complete this questionnaire, you may return it in a sealed envelope. Thank you.

Some questions about you...

(please write your answer next to each question)

1. Which school do you work for?
2. What position do you have in this school?
3. What is your prior experience in museum education? (please cross (x) any of the boxes applying to you)

Postgraduate studies in museum education	Participation in education programmes of museums
Completion of related modules for the first degree	Organising guided tours in museums
Further education seminars (e.g. at Thessaloniki Uni)	Participation in guided tours in museums
Participation in museum education seminars	No experience
Planning educational activities in museums	Other (please specify)

4. What are your main interests and leisure activities? (please cross (x) any of the boxes applying to you)

Sports/Physical activities	Movies
Shopping	Music
Reading (e.g. books, newspapers, magazines)	Languages
Travelling	Poetry/ literature (writing)
Visit museums/galleries/archaeological sites	Social meetings with friends
ICT/Internet	TV/video/DVD
Theatre/ Drama	Video games
Arts (e.g. painting, sculpture)	Dance
Other (please specify)	

5. Have you visited any museums/ galleries/ heritage sites in the last couple of years? ☐ Yes ☐ No

6. If not, why not? (please write your answer and go to question 9)

.....

.....

7. If so, which places did you visit? (please write the names of the places in the list below)

- | | |
|---------|---------|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

8. What was the purpose of your visit? (please write your answer below)

.....

.....

.....

(continues) ⇨

9. The following table presents nine (9) pairs of opposite statements about museums. Please cross (x) the box that is closer to your personal view in each pair. (Example: if you cross the dark box next to the statement 'Museums are boring', it means that you absolutely agree with this statement. If you cross the grey box to the right, it means that you quite agree, but if you cross the white 'zero' box (0), it means that your view is neutral and that you believe that museums can be both boring and interesting.)

	Absolutely	Quite	Neutral	Quite	Absolutely
Museums are boring			0		Museums are interesting
Museums are not relevant to me			0		Museums are relevant to my family
Museums are expensive			0		Museums are affordable
Museums cannot improve our life			0		Museums can improve our life
Museums are places of learning and knowledge			0		Museums are places for entertainment
Museums are hard to understand			0		Museums are easy to understand
Museums are for specialists			0		Museums are for all
Museums are not appropriate for young children			0		Museums are appropriate for young children
Museums are the cultural heritage of the few			0		Museums are everybody's cultural heritage

...and about school practice

10. How often do you visit cultural venues (museums, galleries, archaeological sites) with your preschool students? (please cross (x) one of the following boxes)

At least twice a year

Twice a year maximum.....

Once a year maximum.....

11. What is usually the type of your visits to these venues? (please mark the boxes applying to you, using number 1 for the highest frequency, number 2 for second higher frequency and so on – you can use a number for more than one boxes)

<input type="checkbox"/>	Educational programmes	<input type="checkbox"/>	Guided tours
<input type="checkbox"/>	Guided tours enhanced with educational activities	<input type="checkbox"/>	Other (please specify)

12. What is usually the purpose of your visits to these venues? (please mark the boxes applying to you in order of priority, as above)

<input type="checkbox"/>	Connection with specific teaching unit
<input type="checkbox"/>	Connection with national anniversaries
<input type="checkbox"/>	Get familiar with cultural heritage and history
<input type="checkbox"/>	Participation in specific events these venues offer (e.g. educational programmes, guided tours, exhibitions)
<input type="checkbox"/>	Aesthetic education in general
<input type="checkbox"/>	Other (please specify)

(continues) ➡

13. How do you usually find out about events taking place in cultural venues? (please mark any boxes applying to you in order of priority, as above)

<input type="checkbox"/>	From museum mail sent to schools
<input type="checkbox"/>	From media
<input type="checkbox"/>	From colleagues
<input type="checkbox"/>	From friends
<input type="checkbox"/>	From parents
<input type="checkbox"/>	I don't know
<input type="checkbox"/>	Other (please specify).....

14. To what extent do you agree with the statements below? (please cross (x) one of the four squares next to each statement)

	Agree	Do not always agree	Disagree	Don't know
Museums offer a great variety of activities for early childhood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The educational activities of museums respond to the needs and developmental traits of early childhood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Museums collaborate effectively with educators to plan events for early childhood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Museums mainly address older children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Educators are generally willing to participate with their students in museum events.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parents generally support educators in programming out-of-school activities in museums.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your time and co-operation.



Museums in Early Childhood



RESEARCH PROJECT

Dear parents,

My name is Dimitra Zapri and I am a graduate of the Early Childhood Education Department, Aristotle University of Thessaloniki. I have also completed my master degree in Museum Studies at the University of Leicester, United Kingdom.

Being currently a PhD candidate in Museum Studies in Leicester, I will be organising an original research project from January 2004, which aims at studying the relation of young children with the museums as cultural settings.

This leaflet is part of this research project and includes two parts under the headings 'Family and Museums' and 'Programme of Visits to Museums of Thessaloniki – Call for participation' respectively.

The 'Family and Museums' part is a set of questions for parents, aiming at gathering data about the relation of the family with the museum as a cultural institution.

The second part with the title 'Programme of Visits to Museums of Thessaloniki – Call for Participation' provides information about the research project that will take place in 2004, as well as details about the terms and conditions of participation.

I would be grateful if you would take a few minutes to answer the questions in the first part and read the information about the rest of the research in the second part. Any personal details you state on this leaflet, will remain strictly confidential. For further details, you may contact me on 2310. 327 298 (daily 3-6pm).

Once you fill in your answers, you may return this leaflet in a sealed envelope to your school secretary by .../1/2004.

In a research project about the child, parents' participation is essential, both for the accuracy of the information gathered, and for reasons of transparency, consistency and objectivity in the research process in general.

I thank you in advance for your time.

Kind Regards,

***Dimitra Zapri
PhD Candidate in Museum Studies
Department of Museum Studies
University of Leicester, UK***



Family and museums



The following questions are part of a broader study on early childhood and museums. The purpose of these questions is not to evaluate your answers, but to gather data on the relation of families to the museum for merely statistical purposes – so, there are no right or wrong answers. I would be grateful if you took a few minutes to answer these questions. (Please note that your answers may remain anonymous.)

Some questions about you...

(please write your answer next to each question)

1. What is your place of origin?
2. What is your nationality?
3. What is your main occupation?.....

...your partner...

(please write your answer next to each question)

4. What is his/ her place of origin?
5. What is his/ her nationality?
6. What is his/ her main occupation?.....

...and your family

(please write your answer next to each question)

7. How many children do you have in your family?.....
8. What age do they have?.....
9. How long have you been living in Thessaloniki with your family? (please cross (x) one of the three following boxes)

Less than five (5) years

About five (5) years

More than five (5) years..

10. What are the interests and leisure activities of your family? (please cross (x) any boxes applying to you, your partner and your children)

<i>Sports/ physical activity</i>	<i>Cinema</i>
<i>Shopping</i>	<i>Music</i>
<i>Reading (e.g. books, newspapers, magazines)</i>	<i>Languages</i>
<i>Travelling</i>	<i>Poetry/ literature (writing)</i>
<i>Visiting museums/ galleries/ heritage sites</i>	<i>Social meetings with friends</i>
<i>ICT/ Internet</i>	<i>TV/ video/ DVD</i>
<i>Theatre/ Drama</i>	<i>Video games/ play station</i>
<i>Arts (e.g. painting, sculpture)</i>	<i>Dancing</i>
<i>Other (please specify).....</i>	

11. Have you visited a museum or gallery in the last two years with your children?; ☐Yes ☐No

12. If not, why? (please write your answer below and go to question 15)

.....

.....

.....

13. If yes, which museum(s) did you visit? (please write the museums in the list below)

- | | |
|---------|---------|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

14. What was the purpose of your visit? (please write your answer below)

.....

.....

.....

15. The following table presents nine (9) pairs of opposite statements about museums. Please cross (x) the box that is closer to your point of view in each pair. (Example: if you cross the dark box next to the statement 'Museums are boring', it means that you absolutely agree with this view. If you cross the grey box to the right, it means that you quite agree, but if you cross the white box 'zero' (0), it means that your view is neutral and that you think that museum can be both boring and interesting.)

	Absolutely	Quite	Neutral	Quite	Absolutely	
<i>Museums are boring</i>			0			<i>Museums are interesting</i>
<i>Museums are not relevant to my family</i>			0			<i>Museums are relevant to my family</i>
<i>Museums are expensive</i>			0			<i>Museums are affordable</i>
<i>Museums cannot improve our life</i>			0			<i>Museums can improve our life</i>
<i>Museums are places of learning and knowledge</i>			0			<i>Museums are places for entertainment</i>
<i>Museums are hard to understand</i>			0			<i>Museums are easy to understand</i>
<i>Museums are for specialists</i>			0			<i>Museums are for all</i>
<i>Museums are not appropriate for young children</i>			0			<i>Museums are appropriate for young children</i>
<i>Museums are the cultural heritage of the few</i>			0			<i>Museums are everybody's cultural heritage</i>

Thank you for your time and participation.

Overleaf you will find information about the programme of visits to museums of Thessaloniki, which is the main part of the research. If you are interested in taking part in this project, please fill in your details at the bottom of the next page.



Programme of visits to museums of Thessaloniki



Call for participation

What is the programme of visits to museums of Thessaloniki?

The programme of visits is an original project in terms of a doctoral study on the relationship between early childhood and museums. It includes a series of scheduled visits to three different museums of Thessaloniki, in which children of about five (5) years old will take part with their parents free of cost. Every visit will be followed by a discussion, where children and their parents will have the opportunity to comment on their experience. This programme will take place from mid-January 2004 to mid-June 2004.

Who can participate in this programme?

This programme addresses families with children of about five (5) years old. Your answers in the previous questionnaire or the level of previous museum experience will not affect your chances to participate – on the contrary, diverse views and experiences are welcome and desired. All it takes to participate is persistence, promptness and openness, so that the programme is successfully completed and participants benefit from their experience.

What does the programme include?

The programme includes four (4) visits to three museums of Thessaloniki, as well as a number of meetings before and after every visit for discussion. The exact times and dates of visits and respective meetings will be often decided along with the parents. The basic programme is as follows:

Months	Museum Visits	Additional meetings with the researcher
Jan – Mar	One (1) visit with the child with one of the parents to the first museum (the visit may be recorded by the researcher) (1h 30' maximum)	- <u>Before the visit</u> : meeting of the researcher with the family, at a place that is familiar to the child (possibly at the child's home) (45' maximum) - <u>After the visit</u> : discussion on the visit with the child and parent at home (possibly with a view or the recorded visit) (1h maximum)
March	One (1) group guided visit to the second museum, addressed to children only without their parents (a meeting game will precede) (45' maximum)	- <u>After the visit</u> : discussion on the visit at the museum with the children and the tour guide (possibly with the museum director as well) (45' maximum)
April	One (1) group educational programme at the third museum with the groups of children that were formed in the previous group visit, without parent participation (1h 30' maximum)	- <u>After the visit</u> : discussion of the visit at the museum, with the children and the museum educator (possibly with the museum director as well) (45' maximum)
Apr – Jun	One (1) repeat visit of the child to any one of the above three museums they wish with the parent who had not participated in the other visit (possible video-recording) (1h 30' maximum)	- <u>After the visit</u> : α. Discussion on the visit with children and their parents (preferably at home) possibly with view of recorded visit (1h maximum) β. Group discussion at a museum on the experience of participation in the project, with the parents and the museums' staff (1h 30' maximum)
Total :	Four (4) visits (5 hrs 15' maximum)	Six (6) meetings (5 hrs 45' maximum)

What will the role of parents be in this programme?

The main purpose of the programme is to study to what extent a child's contact with the museum setting affects their everyday life. As parents are the most basic persons in a child's everyday life of a child, their role will not simply be that of a visitor, but mainly that of a co-researcher. More specifically, participant parents will occasionally take notes of any comments or actions of the child, that may be related to the child's museum visiting experience. More details about this process, which will be brief and simple, will be given to the parents, once they decide to participate in the research project.

Are you interested in taking part in this original research project?

If you wish to participate, please fill in your details, so that you can be contacted by the researcher. Thank you.

Full Name.....

Address.....

Tel (daytime)..... Tel (afternoon).....

Fax:..... E-mail:.....

Family's Research Folder

This folder is given to parents at the induction meeting. It includes:

- a. A copy of the last page of the Initial Parent Questionnaire, which informs parents about the programme of museum visits.
- b. A Statement of Parental Consent (see below).
- c. A museum visit calendar, where parents choose the date and time of their first family visit, and are informed on the dates and times of the other two visits, as they were agreed between the researcher and the museums (see below).
- d. A notepad meant to be used by parents as a diary (see below).

(b) STATEMENT OF PARENTAL CONSENT

The undersigned, address
....., ID
number, I confirm that I agree to participate with
my child in the museological research project of Dimitra Zapri, as it is outlined in the
terms and conditions of the project, with my child's consent.

Location - Date.....Signature.....

SPECIAL NOTE

**This item is tightly bound
and while every effort has
been made to reproduce the
centres force would result
in damage.**

(c) MUSEUM VISITS CALENDAR 2004

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
						1 FEBRUARY
2	3	4	5	6	7 <u>MBC</u> 9am: 11am: 1pm:	8 <u>MBC</u> 9am: 11am: 1pm:
9	10	11	12	13	14 <u>MBC</u> 9am: 11am: 1pm:	15 <u>MBC</u> 9am: 11am: 1pm:
16	17	18	19	20	21 <u>MBC</u> 9am: 11am: 1pm:	22 <u>MBC</u> 9am: 11am: 1pm:
23 Bank Holiday	24	25	26	27	28 <u>MBC</u> 9am: 11am: 1pm:	29 <u>MBC</u> 9am: 11am: 1pm:

1 MARCH	2	3	4	5	6 <u>MBC</u> 9am: 11am: 1pm:	7 Electio
8	9 X	10 X	11 X	12 X	13 X	14 X
15 X	16	17 <u>FLEMMT GUIDE</u> 5pm: GROUP A 6pm: GROUP B	18	19	20	21
22	23	24	25 Bank Holiday	26	27 <u>MMCA EDUC. PROGRAMME</u> 10am-11am: GROUP A	28

(c) MUSEUM VISITS CALENDAR 2004

<i>MONDAY</i>	<i>TUESDAY</i>	<i>WEDNESDAY</i>	<i>THURSDAY</i>	<i>FRIDAY</i>	<i>SATURDAY</i>	<i>SUNDAY</i>
						1 FEBRUARY
2	3	4	5	6	7 <u>MBC</u> 9am: 11am: 1pm:	8 <u>MBC</u> 9am: 11am: 1pm:
9	10	11	12	13	14 <u>MBC</u> 9am: 11am: 1pm:	15 <u>MBC</u> 9am: 11am: 1pm:
16	17	18	19	20	21 <u>MBC</u> 9am: 11am: 1pm:	22 <u>MBC</u> 9am: 11am: 1pm:
23 Bank Holiday	24	25	26	27	28 <u>MBC</u> 9am: 11am: 1pm:	29 <u>MBC</u> 9am: 11am: 1pm:
1 MARCH	2	3	4	5	6 <u>MBC</u> 9am: 11am: 1pm:	7 Elections
8	9 X	10 X	11 X	12 X	13 X	14 X
15 X	16	17 <u>FLEMMT GUIDE</u> 5pm: GROUP A 6pm: GROUP B	18	19	20	21
22	23	24	25 Bank Holiday	26	27 <u>MMCA EDUC. PROGRAMME</u> 10am-11am: GROUP A	28

<i>MONDAY</i>	<i>TUESDAY</i>	<i>WEDNESDAY</i>	<i>THURSDAY</i>	<i>FRIDAY</i>	<i>SATURDAY</i>	<i>SUNDAY</i>
29	30	31				
			1 APRIL	2	3 MMCA <u>EDUC. PROGRAMME</u> 10am-11am: GROUP B	4
5	6	7	8	9	10	11 Easter
12	13	14 FLEMMT <u>FEEDBACK SESSION</u> 5pm: GROUP A 6pm: GROUP B	15	16	17 MMCA <u>FEEDBACK SESSION</u> 11am-11.30 am: GROUP A 11.30am-12 am: GROUP B	18
19	20	21	22	23	24	25
26	27	28	29	30		

Opening hours of museums for individual visits

Museum of Byzantine Culture (2 Stratou Ave.) (MBC)

Until 31/3:

Monday 10.30am – 5.00pm

Tuesday – Sunday 8.30am – 3.00pm

From 1/4:

Monday 12.30am – 7.00pm

Tuesday – Sunday 8.00am – 7.00pm

Folklife and Ethnological Museum of Macedonia-Thrace (68 Vasilissis Olgas Ave.) (FLEMMT)

Monday, Tuesday, Friday, Saturday and Sunday 9.00am – 3.00pm

Wednesday: 10.00am – 10.00pm

Thursday: Closed

Macedonian Museum of Contemporary Art (International Trade Fair, Angelaki Entrance) (MMCA)

Monday: Closed

Tuesday – Saturday 10.00am – 2.00pm και 6.00pm – 9.00pm

Sunday 11.00am – 3.00pm

(d) Parental Diary

Αγαπητοί Γονείς,

Στο μπλόκ αυτό μπορείτε να κρατήσετε
ενημερώσεις σχετικά με:

α) προσωπικές εντυπώσεις, παρατηρήσεις
και σχόλια από τις επισκέψεις στα μουσεία

β) αυθόρμητες εντυπώσεις, παρατηρήσεις
και σχόλια των παιδιών σας, που μπορεί
να συνδεθούν άμεσα ή έμμεσα με
τις επισκέψεις τους στα μουσεία.

Οι πληροφορίες αυτές θα σας βοηθήσουν
να αξιολογήσετε και να αξιολογήσετε την
ποιότητα της επίσκεψής σας από τις επισκέ-
ψεις στα μουσεία. Μην ξεχάσετε να
αναφέρετε την ημερομηνία των παρα-
τηρήσεών σας

Καλές Μουσείο-
Εξερευνήσεις
- Δ.Ζ. -

'Dear Parents,

*In this notepad you take any notes
about:*

a) *personal impressions,
remarks and comments on
your museum visits,*

b) *spontaneous impressions,
remarks and comments of
your children, which may
relate directly or indirectly
with your museum visits.*

*These notes will help you discuss
and evaluate the quality of your
visiting experience. Don't forget
to mention the date of your
comments.*

*Enjoy
your museum exploration.
-D.Z.-'*

Induction Meeting Protocol

a. Purpose of the induction meeting

The induction meeting is the first meeting of the researcher with participant children and parents, before the first museum visit. The purpose of this meeting is to:

- a. Help the family familiarise with the researcher.
- b. Help the researcher understand parent-child relations.
- c. Help the researcher understand previous museum experience of children and their parents.
- d. Help parents and children understand the research process they are engaging in.
- e. Obtain the participant's informed consent to the project.

b. Time, place and duration of the meeting

The meeting takes place when and where is more convenient for parents and where children feel more comfortable and safe. The researcher may suggest children's home or school, but they may opt for other places, according to a family's suggestions.

The researcher should be there on time for the meeting, as parents' spare time may be limited. Being on time is also a sign of professionalism and a starting point for building a relationship of trust with the family.

The meeting may take approximately an hour. The researcher should be as concise as possible, leaving enough time for parents and children to share with the researcher any queries, thoughts and previous experiences.

c. Baseline for the meeting routine

1. The researcher, parents and children introduce themselves.
2. The researcher explains to the family the agenda of the meeting and makes sure parents consent to any researcher's note-taking (or tape-recording) during the meeting.
3. The researcher may start a discussion with the child around the following questions:

Museum-related questions:

- a. Have you ever been to a museum?
- b. What is a museum?
- c. How do you imagine a museum to be?
- d. What do you think we can find in a museum?
- e. What would you like to see in a museum?

- f. What things would you put in a museum?

Everyday life questions:

- a. What do you like doing at home?
- b. What do you like doing at school?
- c. What is your favourite toy and why?
- d. What you like to be when you grow up?

4. The researcher discusses briefly with the parents around the following museum-related questions:

- a. Do you like visiting museums? Why/ why not?
- b. Which museums have you been to?
- c. Which museums do you prefer?
- d. Have you been to any museums with your children? If so, how did you find the experience? If not, why?
- e. Why did you decide to participate in this project?
- f. What do you expect from your participation in this project?

5. The researcher presents to the family their personal research folder. The researcher first explains the programme of visits, as it appears in the last page of the initial parent questionnaire, and answers any questions parents may have about the project. The researcher also explains their own role and parents' role in the research. After this briefing, if parents and children still wish to participate, the researcher asks parents to fill in and sign the 'Statement of Parental Consent'. If, however, parents or children do not wish to participate for any reason, the researcher should respect their decision and not try to persuade them otherwise.

6. Once parents have signed, the researcher may discuss with them any arrangements concerning the museum visits with the help of the museum visits calendar. The researcher also explains to parents how to use the parental diary, so that they can note down their remarks.

7. The researcher may allocate a few minutes to discuss any other issues parents wish to share about their children or their museum experiences.

8. After the meeting, the researcher writes a meeting diary, and updates the related family protocol accordingly.

Museum Visit and Feedback Protocols and Feedback Questionnaires

1st museum visit protocol at the Museum of Byzantine Culture (MBC) – Family visit

The first visit of the research project is a family visit at the MBC, where each participant family visits the museum separately with the researcher. The purpose is to observe the spontaneous reactions of parents and children to the exhibits, without any particular guidance from the researcher or any other museum professional.

Before the visit the researcher makes sure that:

- a. The museum knows that a research visit will take place with the use of a video camera and has already approved of that.
- b. Parents know that the visit will be videotaped.
- c. Ticket arrangements have been made for the families, where necessary.

The routine of this visit is basically as follows:

1. The researcher meets children and parents at the MBC, and hands out the museum information leaflet with the floor plan. The researcher reminds the family that there is no set agenda for this visit, and that they can see any exhibits they like at their own pace.
2. The researcher tells children they are going to be ‘film-makers’, and explains to them how to use the digital video camera, so they can videotape anything in the museum impresses them.
3. The researcher may also videotape significant events during the visit, like parent-child conversations in front of an exhibit.
4. If the child asks the researcher a question about an exhibit, the researcher may start a brief dialogue before providing any answers, asking the child to make some speculations first (e.g. “What do you think this is?”, “Does this remind you of something we use today?”, “Why do you think this is broken?”). The researcher can also ask children questions to find out what they are thinking, if children seem to be paying particular attention at something.
5. After the visit, the researcher writes a visit diary with the help of the video transcript, and updates the related family protocol accordingly.

1st Feedback session protocol

This session is held at the family's home, where the videotaped visit can be played and discussed. The researcher may use a tape recorder during the discussion with the child, after explaining to the child that a tape recorder can make it easier to remember what people have talked about.

1. Before playing the video, the researcher asks the child the following questions (including others that may occur in the discussion):

- a. What did you like most at the Museum of Byzantine Culture? Why?
- b. Is there anything you didn't like? Why?
- c. What would you do to make this Museum better?
- d. Did you have the chance to talk about your visit at school or elsewhere?
- e. If a friend asks you what we can do in the Museum of Byzantine Culture, what will you say to help him understand?
- f. Would you tell your best friend to go to this Museum too, like you did? Why/why not?

2. When the video is ready to play, the researcher explains to children that if there is anything in the video they would like to see better or talk about, they may ask to pause/rewind the tape.

3. After watching the video, the researcher may allocate a few minutes to talk with children and parents any other issues related to their visiting experience.

4. After the visit, the researcher writes down the tape transcript, and updates the family protocol accordingly.

2nd and 3rd Museum Visit Protocol

The second visit takes place at the Folklife and Ethnological Museum of Macedonia-Thrace, and is a guided visit organised by the curator of the Museum. The third visit takes place at the Macedonian Museum of Contemporary Art and is an educational programme conducted by the museum educator.

For both visits the main tasks of the researcher are:

1. To gather the groups of children and check if anybody is missing before, during and after the visit.
2. To appoint one or two parents as group assistants, if necessary.
3. To make sure all children in the groups feel safe and comfortable during the activities, and nothing hinders their participation.
4. To assist the museum staff in the activities, when necessary.
5. To observe how children participate in the activities, and take notes, if possible.
6. To hand out the drawing forms to children after the visit, so they can draw what impressed them the most (see forms below).
7. To write a visit diary immediately after the visit, and update the family protocol accordingly.

2nd and 3rd Visit Feedback Protocol

Second and third feedback sessions have two phases:

- a. A group discussion, where children can talk to the museum staff about their drawings.
- b. A brief refresher tour around the most outstanding exhibits, which may feature in children's drawings.

For both sessions, the main tasks of the researcher are:

1. To find a space, beforehand, where children can gather for the discussion, according to the suggestions of the museum staff.
2. To gather the groups of children and check if anybody is missing before, during and after the visit.
3. To take notes of what is discussed, and make sure every child who has brought a drawing has the chance to talk about it.
4. To collect the drawings after the discussion, and assist the museum staff in the refresher tour.
5. To write a diary on the feedback session and update the family protocol accordingly.

Draw what impressed you the most at the Folklife Museum.

Full name.....

Date.....

***Draw what impressed you the most
at Macedonian Museum of Contemporary Art.***

Full name.....

Date.....

4th Museum Visit Protocol

The fourth museum visit is a repeat family visit to one of the three museums above, which the child picks. Before the visit, the researcher asks the child why he/she picked the particular museum, and explains to the child that this time he/she is going to be the 'tour guide', who will show the others around the exhibits.

During the visit, the researcher observes and takes notes about:

- a. Which exhibits attract child's attention?
- b. What does the child say about these exhibits?
- c. How confident is the child in moving around the exhibition?
- d. What does the parent do?

After the visit, the researcher hands out the questionnaire 'Families and Museum: Evaluation of the Experience' (see below), and updates the family protocol accordingly.

Final family feedback

After a year, the researcher sends to the families the questionnaire 'Family and Museums: Impressions and Comments' (see below), in order to examine the long-term impact of the family's visiting experience.



Family and Museums: Evaluation of the Experience



The purpose of the following questions is to evaluate the quality of the experience gained from museum visiting during the research project. This evaluation has two parts. In the first part, which is 'Child's comments, impressions and remarks', you fill in your child's answers (trying not to influence their views!). In the second part, which is 'Parent's comments, impressions and remarks', you fill in your own views. Please note that there are no right or wrong answers. Once you answer these questions, you may return the questionnaire to me either personally following a phone arrangement (tel.: 2310 327 298, 697 897 7019), or by fax on 2310 822 364, or by e-mail to dzapri@yahoo.co.uk. Thank you for your time and co-operation.

Full parent's name

Date

A. Child's comments, impressions and remarks

1. What is a museum?

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2. What can we do in a museum?

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3. Which museum from the ones we visited did you like best? Why?

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4. Which museum of the ones we visited did you like the least? Why?

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5. How do you think the museum you liked the least could get better and more fun?

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6. Would you like to visit more museums in your free time? Why?

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B. Parent's comments, impressions and remarks

7. What made a positive impression on you about the museums we visited? Why?

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8. What made a negative impression? Why?

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9. Do you think museums could become more accessible to young children? If so, how?

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10. Would you opt to visit more museums with your family in your spare time? Why?

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11. On the whole, how pleased are you with participating in the research programme of visits to museums of Thessaloniki? Why?

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12. The following table presents nine (9) pairs of opposite statements about museums. Please cross (x) the box that is closer to your point of view in each pair. (Example: if you cross the dark box next to the statement 'Museums are boring', it means that you absolutely agree with this view. If you cross the grey box to the right, it means that you quite agree, but if you cross the white box 'zero' (0), it means that your view is neutral and that you think that museum can be both boring and interesting.)

Absolutely
Quite
Neutral
Quite
Absolutely

<i>Museums are boring</i>			0			<i>Museums are interesting</i>
<i>Museums are not relevant to my family</i>			0			<i>Museums are relevant to my family</i>
<i>Museums are expensive</i>			0			<i>Museums are affordable</i>
<i>Museums cannot improve our life</i>			0			<i>Museums can improve our life</i>
<i>Museums are places of learning and knowledge</i>			0			<i>Museums are places for entertainment</i>
<i>Museums are hard to understand</i>			0			<i>Museums are easy to understand</i>
<i>Museums are for specialists</i>			0			<i>Museums are for all</i>
<i>Museums are not appropriate for young children</i>			0			<i>Museums are appropriate for young children</i>
<i>Museums are the cultural heritage of the few</i>			0			<i>Museums are everybody's cultural heritage</i>

Thank you.



Families and Museums: Impressions and Comments



The purpose of the questions below is to see whether and in what way the experience of participating in the research project has influenced the child. I would be grateful if you would take a few minutes to answer these questions. Please note that this questionnaire does not test the memory or knowledge of the child or the adult, so there are no right or wrong answers. Thank you for time and your kind cooperation.

Parent's name.....

Date.....

A. Questions for the child

(The following three questions are for the child to answer. Please write your child's answers, without trying to influence their memory or judgement. If the child cannot answer a question, you may simply leave the answer blank.)

13. What can you remember from our visits to the museums last year?

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14. What is a museum in your opinion?

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15. What can we do in a museum?

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B. Questions for parents

16. Did you have the chance to visit a cultural site (museum, gallery, archaeological site) with your child, after the research project had ended? *(please circle your answer)* **YES** **NO**

17. If not, why;

.....

.....

18. If yes, which sites did you visit and what was the purpose of your visit?

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.....

P.T.O.

19. In your opinion, to what extent the experience of participating in the research project has influenced your child? *(please circle one of the following answers)*

- a. A lot
- b. Quite a lot
- c. A little
- d. Not at all
- e. I don't know

20. If you answered a, b or c above, how can you tell your child has been influenced? *(please circle one or more of the answers below, and write some examples for your answers)*

a. The child took the initiative to talk to you or others (e.g. at school, to relatives or friends) about his/her experiences.

b. The child has talked about his/her experience to you or others, after being prompted (for example, he/she recalled details from his/her experience, when asked, or in terms of a trip or a museum visit)

c. The child has enrolled in a new activity (e.g. collects, draws, visits museums), having been motivated by the research project.

d. The child has drawn specific details from his/her experience of participating in the research project.

e. Other (please specify).....
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Examples *(please state briefly any specific incidents illustrating your answer, and – if you remember – when these incidents took place)*

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Thank you

APPENDIX II

TABULATED DATA

This appendix contains tabulated data derived from museum questionnaires, school questionnaires and family questionnaires. It also includes a sample family protocol, which groups more qualitative data derived from family meetings, museum visits and feedback sessions.

The data is presented in the following order:

1. Museum Questionnaire: Exhibition Practice and Audience Policy (7 tables)
2. Teachers Questionnaire: Kindergarten Teachers and Museum Going (4 tables)
3. Initial Parents Questionnaire: Family demographics, interests and museum going
4. Initial Parent Questionnaire: Parents Museum Attitudes
5. Initial Parents Questionnaire and 4th Feedback Questionnaire: Comparison between initial and final attitudes of participant parents towards museums
6. Sample Family Protocol

Exhibition Practice and Audience Policy (Museum Q/aire)

NOTE: Figures indicate order of priority. The mean features at the end of each column, along with the standard deviation price, which shows the level of consistency among the answers of a category.

QUESTIONS 1, 2, 3

	VISITS		PURPOSE					DISPLAY CRITERIA				
	>3000		Heritage	Education	Research	Entertainment	Other	Time	Theme	Aesthetic	Significance	Other
1 MBC	17.000		1	2	3	-	-	1	1	2	-	-
2 FLEM	12.087		1	1	1	1	-	2	1	3	3	-
3 MMCA	11.000		2	1	3	2	-	2	1	2	2	-
MEAN	13362,33		1,33	1,33	2,33	1,50		1,67	1,00	2,33	2,50	
ST.DEV.			0,58	0,58	1,15	0,71		0,58	0,00	0,58	0,71	

QUESTION 4

	INTERPRETATION MEANS							
	Text	Dioramas	Audio	Models	AV	Comparison	Pictures	Other
1 MBC	1	-	-	4	3	-	2	-
2 FLEM	1	-	3	1	2	2	1	-
3 MMCA	1	-	4	-	2	-	3	+
MEAN	1,00		3,00	2,50	2,33	2,00	2,00	
ST.DEV.	0,00		0,71	2,12	0,58	-	1,00	

+Happenings/ Films

QUESTION 5

PROVISION												
	Loan boxes	Education Programmes	Outreach	Workshops	Conferences	Permanent Exhibits	Guided tours	Temporary Exhibits	Seminars	Resources	Entertainment	Other
1 MBC	-	2	-	-	3	1	3	1	3	-	4	-
2 FLEM	-	1	2	-	2	1	2	2	3	1	2	-
3 MMCA	-	3	-	-	4	1	3	2	3	5	6	*6
MEAN		2,00	2,00		3,00	1,00	2,67	1,67	3,00	3,00	4,00	6,00
ST.DEV.		1,00	-		1,00	0,00	0,58	0,58	0,00	2,83	2,00	-

* ArtBazaar, Anniversary Events

QUESTION 6

	TARGET GROUPS									
	Early	Primary	Secondary	Higher	Specialist	Special groups	Families	Special needs	Adults	Other
1 MBC	5	2	3	4	6	6	7	3	1	*6
2 FLEM	1	1	1	2	2	2	2	-	2	-
3 MMCA	1	1	1	1	1	-	2	2	2	-
MEAN	2,33	1,33	1,67	2,33	3,00	4,00	3,67	2,50	1,67	6,00
ST.DEV.	2,31	0,58	1,15	1,53	2,65	2,83	2,89	0,71	0,58	-

*Educators

QUESTION 7

	PROMOTION				
	Media	Institutions	Private	Internet	Other
1 MBC	1	-	2	4	*3
2 FLEM	1	2	2	-	-
3 MMCA	1	1	2	-	-
AVRGE	1,00	1,50	2,00	4,00	3,00
STDEV	0,00	0,71	0,00	-	-

*Education Directorates/Concerned Institutions

QUESTION 8

ORGANISERS									
	Ministry	Board	Friends	Scholars	Students	Volunteers	Target groups	Specialist	Other
1 MBC	4	-	2	3	-	-	-	-	*1
2 FLEM	2	1	3	3	5	4	5	3	-
3 MMCA	-	1	1	2	2	1	2	2	*1
MEAN	3,00	1,00	2,00	2,67	3,50	2,50	3,50	2,50	1,00
ST.DEV.	1,41	0,00	1,00	0,58	2,12	2,12	2,12	0,71	0,00

*Staff

QUESTION 9

EVALUATION					
	Ministry	Board	Target groups	Organisers	Other
1 MBC	2	-	1	1	-
2 FLEM	-	2	2	1	-
3 MMCA	3	2	1	2	-
MEAN	2,50	2,00	1,33	1,33	
ST.DEV.	0,71	0,00	0,58	0,58	

Kindergarten teachers and museum going (Teacher's Q/aire)

Questions 1-8: Teachers' profile

	SCHOOL	POSITION	MUSEUM EXPERIENCE	INTERESTS	MUSEUM INTEREST	MUSEUM GOING	TH.MUS.	REASONS
1	SE	Director	-	I/A/S	NO	YES	YES	Entertainment
2	SE	Teacher	Postgraduate/participation in educ.programmes/Participation in guided tours	A/S	YES	YES	YES	Tourism/Enculturation
3	W (ST)	Director	organise activities/participate in guided tours	I/A	NO	NO	NO	No time/Visit with school anyway
4	W (ST)	Teacher	participation in guided tours	P/Sh/I/T/S	YES	YES	YES	School Visit
5	E (MUN)	Director	participation in guided tours/educ.programmes	I/A/T/S	YES	YES	YES	Event
6	E (MUN)	Teacher	Organise and participate in guided tours/edupro	I/A/T/S	YES	YES	YES	Education, info
7	E (MUN)	Teacher	Univ.Lectures/Organise and participate in educ.programmes and guided tours	P/Sh/I/T/A/S/M	YES	YES	YES	Edutainment
8	E (MUN)	Teacher	Organise and participate in edupro/Participate in guided tours	P/Sh/I/T/A/S/M	YES	YES	YES	Edutainment
9	E	Teacher	none	P/Sh	NO	NO	NO	No interest
10	E	Teacher	none	Sh/I/A/S	YES	YES	YES	Education,history
11	E	Teacher	univ. Lectures/participate in ed.programmes and guided tours	T/M/A/S	YES	YES	YES	Education,history
12	NE	Teacher	Participate in guided tours	P/I/S	NO	YES	YES	n/a
13	W	Director	Univ.Lectures/MusEduCourses/Organise activities/participate in ed.progr. and guided tours	P/I/T/A/S	YES	YES	NO	Edutainment,Tourism, History through objects
14	W	Teacher	Organise and participate in edupro	P/I/A/M	YES	YES	YES	Open my mind and eyes,aesthetic education,entertainment
15	W	Director	Participate in guided tours	I/S	NO	NO	NO	n/a
16	W	Director	Postgraduate	Sh/I/T/S/M	YES	YES	YES	Prepare for class
17	W	Teacher	Postgraduate/participation in guided tours	I/T/M/A	NO	YES	YES	Info guide
18	W	Teacher	Univ.Lectures/Museum Ed. Courses/participate in guided tours	T/A	YES	YES	YES	Enculturation with family

NOTES

School Area: W=West; SE=South-East; S=South; E=East; NE=North-East; CNTR=Centre

Interests: PH (physical, e.g. sports, dance), SH (shopping), T (travelling), S (social, e.g. meeting with friends), I (intellectual, e.g. reading, writing, A (arts, e.g. painting, theatre, films), M (media/ICT, e.g. watching TV, internet)

Museum interest: YES=museum-going is ticked in the hobbies list of the initial parent questionnaire

Museum going: YES=parents visited museums with their children

Th.Mus.: YES=parents included museums of Thessaloniki in their list of museums they visited

Reason: Reason for visiting/not visiting

Kindergarten teachers and museum going (Teacher's Q/aire)

Question 9: Museum-related attitudes

	Interest	Concern	Cost	Improvement	Nature	Understanding ease	Inclusiveness	Suitability for children	Cultural Heritage	MEAN	ST.DEV.
1	-	-	-	-	0	-	2	-	-	1,0	1,4
2	1	1	-1	0	-1	1	2	1	2	0,7	1,1
3	1	1	-1	0	-1	1	2	2	2	0,8	1,2
4	1	1	1	1	0	0	0	0	0	0,7	0,7
5	2	-	-1	1	-2	1	2	2	2	0,9	1,6
6	1	2	1	1	0	-1	0	0	2	0,7	1,0
7	2	2	-1	1	0	-1	0	1	2	0,7	1,2
8	2	2	-2	1	1	-1	2	0	2	0,8	1,5
9	1	-1	-	-	-1	1	1	2	2	0,7	1,3
10	2	2	-1	-	-2	2	2	2	2	1,1	1,6
11	1	1	1	0	1	0	2	-1	2	0,8	1,0
12	1	1	-1	-	-2	-	1	2	2	0,6	1,5
13	1	1	-1	1	0	-1	1	2	2	0,7	1,1
14	1	2	2	-1	2	2	2	2	2	1,6	1,0
15	-	-	-2	-	-2	-2	-1	-1	-1	-1,5	0,5
16	1	1	-1	1	-1	0	1	1	1	0,4	0,9
17	1	1	-1	1	-2	1	2	2	2	0,8	1,4
18	2	1	-	1	-2	0	1	1	2	0,8	1,3
MEAN	1,3	1,2	-0,5	0,6	-0,7	0,2	1,2	1,1	1,8	0,7	0,9
ST.DEV	0,5	0,8	1,2	0,7	1,2	1,2	0,9	1,1	0,8	0,6	0,3

NOTE: The title of each column is an abbreviation of the nine statements, in the order they appear in the attitudes table of the q/aire. Figures in each cell indicate which boxes parents crossed in the table (-2 for the second box to the left of 0 point, -1 for the first box to the left of 0 point, 0 for 0 point, 1 for the first box to the right of 0 point, 2 for the second box to the right of 0 point). The mean of these figures features at the end of each row and each column, along with the standard deviation price, which shows the consistency of the mean (the closer the standard deviation is to 0, the more consistent the mean).

Kindergarten teachers and museum going (Teacher's Q/aire)
Questions 11-13

	Visit Nature					Visit Purpose						Info Means						
	School Visit	Educational programme	Guided tour with activities	Guided tour	Other	Curriculum needs	National Anniversary	Heritage	Event	Aesthetic Education	Other	Press	Media	Colleague	Friends	Parents	Unknown	Other
1	2	1	-	2	-	2	-	-	1	3	-	1	-	2	-	3	-	-
2	2	2	2	1	-	2	2	1	2	1	-	1	-	2	3	4	-	-
3	1	1	2	1	-	1	2	3	4	-	-	2	-	2	3	-	-	*1
4	3	3	2	1	-	4	5	2	3	1	-	1	-	2	-	-	-	-
5	2	1	2	3	-	2	-	-	1	3	-	1	3	2	-	-	-	-
6	1	2	1	3	-	4	5	2	3	1	-	5	1	2	3	4	-	-
7	1	2	1	3	-	5	4	3	1	2	-	1	5	2	4	3	-	-
8	1	2	1	3	-	3	5	2	4	1	-	-	3	2	1	4	-	-
9	3	1	2	3	-	3	4	1	2	5	-	1	-	2	3	4	-	-
10	3	1	2	3	-	4	3	1	2	5	-	1	-	2	3	4	-	-
11	2	2	1	3	-	1	-	3	2	-	-	2	-	1	-	3	-	-
12	2	-	-	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-
13	1	-	1	-	-	1	-	1	1	1	-	-	1	-	-	-	-	-
14	3	-	-	1	-	-	-	-	-	1	-	2	1	4	3	-	-	-
15	3	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-
16	3	-	-	1	-	1	3	2	4	-	-	1	1	-	-	-	-	-
17	1	2	1	-	-	-	-	1	3	2	-	2	1	3	4	5	-	-
18	1	2	1	3	-	1	2	5	3	4	-	2	1	3	4	-	-	-
MEAN	1,9	1,6	1,5	2,1		2,3	3,3	2,1	2,3	2,3		1,6	1,8	2,2	3,1	3,8		1,0
ST.DEV.	0,9	0,6	0,5	1,0		1,4	1,4	1,2	1,1	1,5		1,1	1,4	0,7	0,9	0,7		

NOTE: Figures indicate order of priority or frequency. The mean features at the end of each column, along with the standard deviation price, which shows the level of consistency among the answers of a category.

* Primary Education Directorate

Kindergarten teachers and museum going (Teacher's Q/aire)

Question 14: Museum Education Activities

	Variety	Suitability	Museum-teacher partnership	Focus on older children	Parent-Teacher Partnership	Parents will to collaborate
1	1	1	3	3	1	1
2	2	2	3	3	1	1
3	1	-	-	-	-	-
4	2	2	2	2	2	2
5	3	2	3	1	1	1
6	3	3	3	2	2	1
7	2	3	3	1	1	1
8	3	3	2	1	2	2
9	1	1	1	2	-	1
10	1	1	1	2	1	1
11	3	2	4	1	2	1
12	-	-	-	1	-	-
13	3	3	2	1	1	1
14	4	4	4	3	2	2
15	3	2	4	2	4	1
16	2	2	3	1	1	1
17	1	1	1	1	2	2
18	1	3	2	3	2	1
MEAN	2,1	2,2	2,6	1,8	1,7	1,3
ST.DEV.	1,0	0,9	1,0	0,8	0,8	0,4

Codes: 1=agree, 2=not always agree, 3=disagree, 4=don't know

The mean features at the end of each column, along with the standard deviation price, which shows the level of consistency among the answers of a category.

FAMILY DEMOGRAPHICS, INTERESTS and MUSEUM GOING (INITIAL PARENT Q/AIRE)

SR: School Region (W=West; SE=South-East; S=South; E=East; NE=North-East; CNTR=Centre)
 ORG: Place of Origin (TH=Thessaloniki; GR=Other part of Greece; TH/GR=one parent from Thessaloniki, one from other part of Greece; OTHER=other country; GR/OTHER=one parent from Greece, one from other country)
 RNCE: Length of residence in Thessaloniki (1=less than 5 years; 2=about 5 years; 3=more than 5 years)
 JT/ED.: Job type related to educational background (DEGREE=degree-based, e.g. doctor, engineer, accountant; OTHER=not necessarily degree-based, e.g. private employee, freelance; LABOUR=workers, e.g. builders, cleaners)
 CHL: Number of children in the family
 PRN: Number of parents (e.g. single-parent, two-parent)
 Interests: PH (physical, e.g. sports, dance), SH (shopping), T (travelling), S (social, e.g. meeting with friends), I (intellectual, e.g. reading, writing, A (arts, e.g. painting, theatre, films), M (media/ICT, e.g. watching TV, internet)
 Museum interest: YES=museum-going is ticked in the hobbies list of the initial parent questionnaire
 Museum going: YES=parents visited museums with their children
 Th.Mus.: YES=parents included museums of Thessaloniki in their list of museums they visited
 Reason: Reason for visiting/not visiting

	SR	ORN	RNCE	JT/ED.	CHL	PRN	Interests	Museum Interest	Museum Going	Th.Mus.	Reason
1	W	TH/GR	3	OTHER	3	2	P/I/T/A/M/S	NO	YES	NO	Local history/ test knowledge
2	SE	TH/GR	3	DEGREE	3	2	Sh/P/I/T/A/M/S	NO	YES	YES	Event
3	SE	TH	3	DEGREE	2	2	P/I/T/A/S	NO	YES	NO	Past life
4	S	TH/GR	3	DEGREE	2	2	Sh/I/T/A/M/S	NO	YES	YES	Tourism/history
5	W	TH/GR	3	LABOUR	4	2	Sh/T/M	NO	NO	n/a	n/a
6	W	OTHER	1	DEGREE	2	2	A	NO	NO	n/a	n/a
7	W	GR/OTHER	3	OTHER	2	2	Sh/P/I/T/A/M/S	NO	NO	n/a	n/a
8	SE	TH	3	LABOUR	2	2	Sh/A/M/S	NO	NO	n/a	Age
9	NE	TH	3	OTHER	1	2	ALL	NO	NO	NO	Lack of knowledge
10	SE	TH/GR	3	OTHER	2	2	ALL	YES	YES	YES	History/Duty/Tradition
11	W	GR	3	DEGREE	2	2	Sh/P/I/T/A/M	YES	YES	YES	Education
12	SE	TH/GR	3	DEGREE	2	2	ALL	YES	YES	NO	Info/Entnm
13	SE	GR	3	DEGREE	2	2	I/A/S/T	YES	YES	YES	Museum awareness
14	S	TH/GR	3	DEGREE	4	2	P/I/A/M/S/T	YES	YES	YES	Leisure/Entnm/BroadenInterests
15	SE	GR	3	DEGREE	1	2	Sh/I/T/A/M/S	YES	YES	YES	Museum awareness/Leisure
16	W	GR	3	DEGREE	2	2	Sh/I/T/A/M/S	YES	YES	NO	Heritage
17	W	OTHER	1	DEGREE	1	2	ALL	YES	YES	NO	History
18	W	TH	3	OTHER	3	2	ALL	YES	YES	YES	First hand experience
19	W	TH	3	OTHER	2	2	Sh/I/T/A/M/S	YES	YES	NO	n/a
20	W	TH/GR	3	OTHER	2	2	ALL	YES	YES	YES	Knowledge/Aesthetic/museum awareness
21	W	TH	3	DEGREE	2	2	ALL	YES	YES	YES	Heritage
22	S	GR	3	DEGREE	4	2	ALL	YES	YES	YES	History/School
23	S	GR	3	DEGREE	1	2	ALL	YES	YES	YES	Edutainment
24	S	TH	3	DEGREE	2	2	ALL	YES	YES	NO	Edutainment
25	S	GR	3	DEGREE	2	2	ALL	YES	YES	YES	Edutainment/Broaden Interests
26	S	TH/GR	3	DEGREE	2	2	P/I/A/M/S/T	YES	YES	YES	Edutainment
27	S	GR	3	OTHER	2	2	ALL	YES	YES	YES	Leisure
28	SE	TH	3	OTHER	2	2	P/I/M/S/T	YES	YES	NO	Education
29	SE	TH	3	DEGREE	2	2	ALL	YES	YES	YES	Edutainment
30	SE	GR	3	DEGREE	1	2	Sh/I/T/A/M/S	YES	YES	YES	Art/Share interests
31	SE	TH/GR	3	DEGREE	3	2	ALL	YES	YES	NO	Leisure/Tourism
32	SE	TH	3	OTHER	1	2	ALL	YES	YES	NO	History
33	W	GR	2	LABOUR	2	2	Sh/P/I/A/S/T	YES	YES	YES	Enculturation
34	NE	TH	1	DEGREE	2	2	Sh/I/T/A/M/S	YES	YES	YES	Event
35	NE	TH	1	DEGREE	1	1	ALL	YES	YES	YES	Museum awareness
36	W	OTHER	1	LABOUR	2	2	Sh/I/M	NO	YES	YES	Local history
37	W	TH	3	OTHER	2	2	ALL	NO	YES	NO	Exhibits
38	W	TH/GR	3	OTHER	4	2	Sh/A/M	NO	YES	YES	n/a
39	W	GR	3	OTHER	3	2	P/I/A	NO	YES	YES	SchoolVisit/Tourism
40	W	GR	3	DEGREE	2	2	Sh/A/M/S/T	NO	YES	YES	Info
41	W	GR	3	DEGREE	2	2	I/A/S/T	NO	YES	YES	History/Enculturation/Tourism
42	NE	GR	3	OTHER	2	2	Sh/I/A/M/S/T	NO	YES	YES	Education/info/cultural heritage
43	NE	TH/GR	3	OTHER	2	2	Sh/I/A/M/S/T	NO	YES	NO	Edutainment
44	NE	TH	3	OTHER	2	2	P/I/A/M/S/T	NO	YES	NO	Tourism
45	NE	GR	3	DEGREE	3	2	P/I/A/M/S/T	NO	YES	NO	Schoolvisit
46	S	TH/GR	3	DEGREE	2	2	ALL	NO	YES	YES	Education/enculturation
47	SE	TH/OTHER	2	DEGREE	2	2	P/I/S/M	NO	YES	YES	Different experience
48	SE	TH	3	DEGREE	1	2	Sh/P/I/A	NO	YES	YES	Daytrip
49	SE	TH	3	DEGREE	2	2	ALL	NO	YES	YES	Edutainment
50	SE	TH	3	DEGREE	1	2	ALL	NO	YES	NO	Education
51	W	TH/GR	3	DEGREE	2	2	Sh/P/I/A/M/S	NO	YES	YES	n/a
52	W	TH/GR	3	DEGREE	2	2	Sh/I/A/M/S/T	NO	YES	NO	Tourism
53	SE	TH	3	OTHER	2	2	ALL	YES	NO	NO	n/a
54	W	OTHER	3	DEGREE	2	2	P/Sh/I/M/S/T	NO	NO	NO	n/a
55	W	TH	3	LABOUR	4	2	P/Sh/M/S/T	NO	NO	NO	n/a
56	SE	TH/GR	3	DEGREE	2	2	ALL	NO	NO	NO	n/a
57	W	TH	3	DEGREE	2	2	I/A/M/S/T	NO	NO	NO	Too young
58	W	TH	3	DEGREE	2	2	P/I/A/M/S/T	NO	NO	NO	No chance
59	W	GR	3	OTHER	1	2	A/S/M	NO	NO	NO	No time
60	W	TH/GR	3	OTHER	3	2	S	NO	NO	NO	n/a
61	W	TH	3	OTHER	2	2	P/A/S/M	NO	NO	NO	No time
62	W	TH	3	OTHER	2	2	Sh/A/S/M/T	NO	NO	NO	n/a
63	W	GR	3	OTHER	2	2	Sh/I/M	NO	NO	NO	No chance
64	W	TH/OTHER	3	OTHER	2	2	P/I/S	NO	NO	NO	Lack of concern
65	W	TH/GR	3	OTHER	3	2	P/I/A/M/T	NO	NO	NO	No time
66	W	TH	3	OTHER	1	2	Sh/I/M/T	NO	NO	NO	No chance, too young
67	W	TH/OTHER	3	LABOUR	2	2	P/A/S/M	NO	NO	NO	n/a
68	W	OTHER	3	DEGREE	2	2	P/A	NO	NO	NO	n/a
69	S	GR	3	OTHER	2	2	P/Sh/I/M/S	NO	NO	NO	n/a
70	S	GR	3	OTHER	3	2	P/I/A/M/S	NO	NO	NO	Prefer theatre
71	S	TH/GR	3	OTHER	2	2	P/I/A/S/M/T	NO	NO	NO	School caters for that
72	S	TH/GR	3	OTHER	1	2	Sh/I/A/M/S/T	NO	NO	NO	No time
73	S	TH/GR	3	OTHER	1	2	P/Sh/I/A/T	NO	NO	NO	Too young
74	S	TH/GR	3	OTHER	2	2	P/Sh/I/A/S/T	NO	NO	NO	No chance
75	S	TH/GR	3	OTHER	2	2	A/I	NO	NO	NO	No chance
76	S	TH	3	OTHER	2	2	P/I/A/S/M/T	NO	NO	NO	Lack of knowledge, education and concern
77	S	GR	3	OTHER	1	2	Sh/I/A/M/S/T	NO	NO	NO	Not suitable for young children
78	S	GR	2	OTHER	2	2	P/Sh/I/A/M/S	NO	NO	NO	No time
79	S	TH	3	OTHER	2	2	Sh/A/M/S/T	NO	NO	NO	No chance
80	S	n/a	3	n/a	2	n/a	P/I/M	NO	NO	NO	No time
81	S	TH/GR	3	OTHER	2	2	P/I/A/M/S/T	NO	NO	NO	n/a
82	S	GR	3	DEGREE	3	2	I/M/Holy Testament	NO	NO	NO	No time, expensive
83	SE	GR	3	OTHER	1	2	ALL	NO	NO	NO	No time, too young, no transport means
84	SE	TH/GR	3	OTHER	1	2	I/A/M/S/T	NO	NO	NO	No chance
85	SE	TH/GR	3	OTHER	2	2	Sh/I/A/M/S/T	NO	NO	NO	No chance
86	SE	TH/GR	3	OTHER	1	2	Sh/I/A/M/S	NO	NO	NO	Too young

87	SE	GR	3	OTHER	2	2	Sh/I/S/M	NO	NO	NO	Too young
88	SE	TH	3	OTHER	2	2	Sh/I/A/S/M/T	NO	NO	NO	School caters for that, husband finds them boring
89	SE	TH/GR	3	OTHER	3	2	P/Sh/I/S/M/T	NO	NO	NO	n/a
90	SE	TH	3	OTHER	1	2	Sh/I/A/M/S	NO	NO	NO	n/a
91	SE	TH/GR	3	OTHER	3	2	P/Sh/I/S/M/T/physiotherapy for kids	NO	NO	NO	n/a
92	SE	TH	3	OTHER	2	2	ALL	NO	NO	NO	n/a
93	SE	TH/GR	3	DEGREE	3	2	I/A/S/T/M	NO	NO	NO	n/a
94	W	TH	3	LABOUR	2	2	Sh/I/A	YES	NO	NO	n/a
95	W	TH/GR	3	LABOUR	3	2	M/T	NO	NO	NO	Cost, no time
96	W	GR	3	DEGREE	2	2	A/S	NO	NO	NO	n/a
97	W	TH	3	DEGREE	2	2	Sh/I/S/M	NO	NO	NO	No chance
98	W	TH/GR	3	OTHER	2	2	P/Sh/I/A/S/M	NO	NO	NO	n/a
99	NE	TH	2	DEGREE	2	2	I/A/S/M/T	NO	NO	NO	Too young
100	NE	GR	3	DEGREE	2	2	P/Sh/I/A/T	NO	NO	NO	Too young
101	E	GR	3	DEGREE	2	2	P/I/T/M/A/S	NO	NO	NO	n/a
102	W	TH	3	OTHER	2	2	P/I/M/A/S	NO	NO	NO	Travel without children, so no chance
103	SE	TH/GR	3	DEGREE	2	2	P/I/T/M/A/S/Modelling	NO	YES	YES	see exhibition, day trip
104	SE	TH	3	DEGREE	2	2	ALL	YES	NO	NO	n/a
105	SE	TH/GR	3	DEGREE	3	2	P/Sh/I/T/A/S	NO	YES	YES	see exhibition
106	S	TH/GR	3	OTHER	2	2	I/A/M/S	NO	YES	YES	enculturation, entertainment, new experience
107	W	TH/GR	3	DEGREE	2	2	P/Sh/I/T/A/S	YES	YES	YES	enculturation
108	W	TH	3	OTHER	2	2	P/I/T/A/S/M	YES	YES	NO	enculturation
109	S	GR	1	DEGREE	3	2	P/I/A/M/S/games	NO	YES	YES	enculturation, interest in arts
110	NE	GR	3	DEGREE	2	2	ALL	YES	YES	YES	see exhibition
111	SE	TH	3	LABOUR	1	1	ALL	YES	YES	YES	enculturation
112	W	OTHER	3	LABOUR	2	2	Sh/T/A/S/M	NO	NO	NO	baby
113	SE	GR	3	DEGREE	2	2	Sh/I/T/A/M/S	NO	YES	NO	see exhibition
114	S	TH/GR	3	DEGREE	2	2	P/I/A/S/M/T	NO	YES	YES	see exhibition
115	CNTR	TH/GR	3	DEGREE	2	2	P/Sh/I/T/A/S/M	NO	NO	NO	n/a
116	NE	TH/GR	3	DEGREE	1	2	ALL	YES	NO	NO	Too young
117	S	TH	3	OTHER	1	2	P/Sh/I/T/A/S/M	NO	NO	NO	No time, too tired, no info from school or work place
118	NE	TH	3	OTHER	2	2	I/T/M/A/S	YES	YES	YES	see exhibition, info about earlier societies
119	SE	GR	3	DEGREE	1	2	I/T/M/A	YES	YES	YES	n/a
120	SE	GR	3	DEGREE	2	2	P/Sh/T/A/M	NO	NO	NO	No time

Parents Museum Attitudes (INITIAL PARENT Q/AIRE)

NOTE: The title of each column is an abbreviation of the nine statements, in the order they appear in the attitudes table of the q/aire.

Figures in each cell indicate which boxes parents crossed in the table (-2 for the second box to the left of 0 point, -1 for the first box to the left of 0 point, 0 for 0 point, 1 for the first box to the right of 0 point, 2 for the second box to the right of 0 point). The mean of these figures features at the end of each row and each column, along with the standard deviation price, which shows the consistency of the mean (the closer the standard deviation is to 0, the more consistent the mean).

	Interest	Concern	Cost	Improvement	Nature	Understanding ease	Inclusiveness	Suitability for children	Cultural Heritage	MEAN	ST.DEV.
1	1	0	-2	0	-2	2	2	2	2	0,6	1,7
2	2	1	2	1	1	1	1	2	2	1,4	0,5
3	1	1	2	2	-2	0	2	0	2	0,9	-1,3
4	0	2	1	1	2	1	2	0	2	1,2	0,8
5	1	0	0	0	-1	0	1	0	1	0,2	0,7
6	0	0	0	0	-2	0	0	0	0	-0,2	-3,0
7	1	1	1	1	-1	1	1	1	1	0,8	0,7
8	1	0	0	0	-2	2	2	1	2	0,7	1,3
9	0	2	0	2	-1	0	2	2	2	1,0	1,2
10	0	1	0	0	0	-1	1	1	1	0,3	0,7
11	2	2	1	1	2	1	2	-	2	1,6	0,5
12	1	1	0	1	1	1	1	0	1	0,8	0,4
13	0	2	2	2	1	0	2	2	2	1,4	0,9
14	2	2	1	2	0	2	2	2	2	1,7	0,7
15	-	-	-	-	-	-	-	-	-	-	-
16	2	1	-2	1	-1	-1	1	1	2	0,4	1,4
17	2	1	1	-1	0	2	2	1	2	0,9	1,5
18	1	1	-1	1	0	0	-1	0	1	0,2	0,8
19	2	2	2	2	2	2	2	2	2	2,0	1,3
20	0	0	-1	0	-1	0	1	0	2	0,1	0,9
21	1	1	-2	2	2	1	1	1	2	1,0	1,2
22	2	2	1	1	1	2	2	2	2	1,7	0,5
23	1	0	1	0	-1	0	1	1	2	0,6	0,9
24	2	2	0	2	-2	0	2	-1	2	0,8	1,6
25	1	2	0	1	-2	1	2	1	2	0,9	1,3
26	2	2	2	2	2	1	2	2	2	1,9	0,3
27	1	2	-2	1	-2	-	-	1	2	0,4	1,7
28	2	2	-2	2	-2	2	2	2	2	1,1	1,8
29	1	1	1	1	-2	1	2	2	2	1,0	1,2
30	2	2	1	2	2	1	2	2	2	1,8	0,4
31	2	1	0	1	-1	0	2	1	2	0,9	1,1
32	2	-	-	-	-2	-	2	2	2	1,2	1,8
33	1	1	1	0	-	1	0	0	2	0,8	0,7
34	1	1	-1	0	1	0	1	1	0	0,4	0,7
35	1	0	1	0	0	1	1	1	1	0,7	0,5
36	1	-1	-	1	2	2	1	0	1	0,9	1,0
37	2	-	2	-	-	1	1	-	2	1,6	0,5
38	-	-	-	-	-	-	-	-	-	-	-
39	1	0	-2	0	-2	0	2	1	2	0,2	1,5
40	2	1	0	1	-2	-1	1	1	2	0,6	1,3
41	2	-	-	-	0	-	2	2	2	1,6	0,9
42	1	-	-1	0	0	-	1	-	1	0,3	0,8
43	1	1	2	0	-1	2	2	2	2	1,2	1,1
44	0	0	0	1	0	1	2	1	2	0,8	0,8
45	2	1	-1	1	0	1	2	2	2	1,1	1,1
46	2	1	-1	1	-2	0	1	0	2	0,4	1,3
47	1	1	-1	0	1	0	2	1	2	0,8	1,0
48	1	-	1	-	1	-1	2	1	2	1,0	1,0
49	-	-	-	-	-	-	-	-	-	-	-
50	2	1	-1	1	-2	1	2	1	2	0,8	1,4
51	1	1	-1	2	-1	1	2	1	2	0,9	1,2
52	0	0	0	1	-1	1	2	2	2	0,8	1,1
53	1	1	-2	1	-2	0	1	0	2	0,2	1,4
54	2	2	1	2	0	0	1	0	2	1,1	0,9
55	0	1	1	2	2	0	1	1	2	1,1	0,8
56	2	2	-1	2	1	1	2	0	2	1,2	1,1
57	1	-	-1	1	0	-	1	-2	1	0,1	1,2
58	-	-	-	-	1	-	1	1	1	1,0	0,0
59	0	-1	-2	0	0	0	1	0	0	-0,2	0,8
60	-	-	-	-	-	-	-	-	-	-	-
61	-	-2	-	-	-	-	-	-	-	-2,0	-
62	-	-	-	-	-	-	-	-	-	-	-
63	2	1	-1	1	-1	0	1	1	2	0,7	1,1
64	1	0	0	0	-1	0	1	0	1	0,2	0,7
65	2	1	-2	1	-1	2	2	1	2	0,9	1,5
66	2	1	0	2	0	0	2	0	2	1,0	1,0
67	1	-1	0	1	-2	-1	1	1	2	0,2	1,3
68	1	0	0	0	1	1	2	1	2	0,9	0,8
69	0	0	1	-1	-2	0	2	0	2	0,2	1,3
70	1	1	1	-	-	-1	0	1	1	0,6	0,8
71	1	1	0	2	2	2	2	2	2	1,6	0,7
72	0	1	0	1	-2	0	2	2	2	0,7	1,3
73	1	0	-1	1	-1	1	1	1	1	0,4	0,9
74	2	2	0	2	-2	0	2	2	0	0,9	1,5
75	1	1	1	2	1	1	2	2	2	1,4	0,5
76	0	0	-1	2	-2	-2	2	1	2	0,2	1,6
77	0	-	-	-	-	-	-	-	-	0,0	-
78	0	0	1	1	-1	0	1	0	2	0,4	0,9
79	-	1	-1	2	-2	-	1	1	2	0,6	1,5
80	0	0	2	-1	-2	1	2	0	2	0,4	1,4
81	1	0	-2	1	-2	0	2	0	2	0,2	1,5
82	0	0	-1	0	-2	0	0	2	2	0,1	1,3

83	2	0	0	0	0	2	1	2	1	2	1.1	0.9
84	1	0	0	0	0	0	0	0	0	0	1.2	0.8
85	0	0	0	0	0	0	0	0	0	0	-0.1	0.3
86	2	2	2	2	2	2	2	2	2	2	0.5	1.3
87	1	2	2	2	2	2	2	2	2	2	1.6	0.7
88	0	0	0	0	0	0	0	0	0	0	0.8	1.5
89	0	0	0	0	0	0	0	0	0	0	-0.2	0.7
90	0	0	0	0	0	0	0	0	0	0	0.3	0.7
91	2	2	2	0	2	-2	-2	-2	2	2	1.0	1.6
92	1	0	-1	-1	-2	-2	-2	-2	1	2	0.7	1.4
93	2	0	-1	-1	-2	-2	-2	-2	0	2	0.0	1.5
94	2	-1	-1	-1	-2	-2	-2	-2	2	2	1.0	1.7
95	1	0	-2	-1	-1	-1	-1	-1	2	2	0.7	1.4
96	2	0	0	0	-1	-1	-1	-1	0	2	0.7	1.1
97	1	-1	1	-1	-1	-1	-1	-1	1	2	0.2	1.2
98	-	-	-	-	-	-	-	-	-	-	-2.0	1.2
99	1	1	-1	-1	-1	-1	-1	-1	1	2	0.6	1.0
100	1	1	1	1	1	-2	-2	-2	1	1	1.0	0.0
101	2	1	2	2	0	-2	-2	-2	-2	2	0.4	1.6
102	2	2	0	0	2	-1	0	0	1	2	1.3	1.1
103	1	1	0	0	0	-1	0	0	1	2	0.9	0.8
104	2	2	-1	0	1	-1	-1	-1	2	2	1.1	1.3
105	2	2	2	2	2	2	2	2	2	2	1.2	1.3
106	2	1	2	2	1	-2	-2	-2	1	2	0.7	1.3
107	2	2	-2	2	2	-2	-2	-2	2	2	1.1	1.8
108	2	2	-2	2	1	-2	-2	-2	1	2	1.0	1.7
109	0	1	2	2	0	1	1	1	0	2	1.1	0.8
110	2	0	2	2	0	-1	-1	-1	-1	2	0.3	1.0
111	2	2	2	2	2	-2	-2	-2	1	2	0.9	1.7
112	0	1	0	0	-1	-2	-2	-2	2	2	-0.1	1.2
113	2	2	1	1	2	2	2	2	2	2	1.7	0.5
114	1	2	1	1	0	2	2	2	2	2	1.3	0.7
115	2	2	1	0	2	-2	-2	-2	2	2	0.9	1.5
116	2	1	-1	-1	0	2	2	2	2	2	1.3	1.4
117	1	1	-1	-1	0	2	2	2	2	2	0.6	1.1
118	2	2	-1	-2	2	-2	-2	-2	2	2	1.7	1.0
119	2	2	-2	-2	2	-2	-2	-2	2	2	1.1	1.8
120	2	2	-1	1	1	0	0	0	2	2	1.3	1.1
MEAN	1.2	0.9	0.0	0.9	-0.6	0.5	1.5	0.9	1.7	0.8	1.0	
STDEV.	0.8	0.9	1.2	1.0	1.4	1.0	0.7	1.0	0.6	0.3		

Comparison between initial (A) and final (B) participant parent attitudes towards museums (A: Initial Parents Q/aire; B: 4th Feedback Q/aire)

	Interest		Concern		Cost		Improvement		Nature		Understanding ease		Inclusiveness		Suitability for children		Cultural Heritage		MEAN		ST.DEV.	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
101	2	1	1	1	2	2	0	2	-2	-2	1	1	0	2	-2	0	2	2	0,4	1,0	1,6	1,3
102	2	2	2	1	0	1	2	1	-1	2	0	1	1	2	0	2	2	2	0,9	1,6	1,2	0,5
103	1	1	1	1	0	0	0	0	0	0	1	1	2	2	1	1	2	1	0,9	0,8	0,8	0,7
104	2	2	2	1	-1	1	1	-	-1	-1	1	1	2	2	2	2	2	2	1,1	1,3	1,3	1,0
105	2	1	2	1	2	0	2	1	1	-1	-1	1	2	1	-1	1	2	-	1,2	0,6	1,3	0,7
106	-	1	1	1	1	0	1	1	-2	-1	-	0	1	0	1	-1	2	2	0,7	0,3	1,3	1,0
107	2	-1	2	2	-2	1	2	1	-2	-2	2	1	2	2	2	2	2	2	1,1	0,9	1,8	1,5
108	2	2	2	2	-2	-2	2	2	-2	-2	2	1	2	2	1	1	2	2	1,0	0,9	1,7	1,7
109	0	1	1	1	2	2	1	1	1	0	1	1	2	2	0	2	2	2	1,1	1,3	0,8	0,7
110	1	1	0	1	2	0	0	0	-1	-2	0	-1	1	2	-1	-1	1	2	0,3	0,2	1,0	1,4
111	2	1	2	-	2	1	2	2	-2	-2	-1	1	2	2	-1	1	2	2	0,9	1,0	1,7	1,3
112	0	1	1	1	0	0	-1	1	-2	-1	0	0	-	2	-1	1	2	2	-0,1	0,8	1,2	1,0
113	2	2	2	2	1	-1	2	2	2	0	1	1	2	2	1	1	2	2	1,7	1,2	0,5	1,1
114	1	1	1	2	1	2	1	2	0	-1	2	2	2	2	2	2	2	2	1,3	1,6	0,7	1,0
115	2	2	2	2	0	-	0	1	-2	0	0	1	2	2	2	-1	2	2	0,9	1,1	1,5	1,1
116	2	2	1	2	-	1	2	1	2	-2	1	1	2	2	-2	1	2	2	1,3	1,1	1,4	1,3
117	1	2	1	2	-1	0	0	2	0	2	0	1	2	2	-	1	2	1	0,6	1,4	1,1	0,7
118	2	2	2	2	-1	-1	2	2	2	1	2	2	2	2	2	2	2	2	1,7	1,6	1,0	1,0
119	2	2	2	2	-2	-2	2	2	-2	-2	2	2	2	2	2	2	2	2	1,1	1,1	1,8	1,8
MEAN	1,6	1,4	1,5	1,5	0,2	0,3	1,1	1,3	-0,6	-0,7	0,8	0,9	1,7	1,8	0,4	1,0	1,9	1,9	1,0	1,0	1,2	1,1
ST.DEV.	0,7	0,8	0,6	0,5	1,5	1,2	1,0	0,7	1,5	1,3	1,0	0,7	0,6	0,5	1,5	1,1	0,2	0,3	0,4	0,4		

ANALYSIS PROTOCOL

No.¹:	101	
1. Age (in years)²:	5 (male)	
2. School³:	E2	
3. Home area⁴:	SE	
4. Place of origin⁵:	GR	
5. Residence time in Thessaloniki⁶:	3	Remarks
6. Family type⁷:	2	
7. Sibling(s) number and age(s)⁸:	1	15
8. Parental work⁹:	D	PE, psychology
9. Family interests¹⁰:	PH/ I/ T/ M/ A/ S	
10. Child's interests¹¹:	Play (outdoor play, role play), cars, building blocks	
11. Other remarks about the child:	Imagination	
12. Museum interest¹²:		
13. Museum going¹³:		Reasons:
14. Thessaloniki museums¹⁴:		
15. Time intervals between sessions (in days)¹⁵:	I-M1: 18 M1-M1f: 21 (sickness delay) M1f-M2: M1-M2: 11 M2-M2f: 28 M2-M3: 10 M3-M3f: 24 M3f-M4: 41 M4-M4f: 27 M4f-F: -	

¹ Use serial number corresponding to the child from the Excel summary table 'Family demographics, interests and museum going'

² See initial questionnaire

³ Select among school codes: NE (north east-private), E (east), E1 (east-public), E2 (east-municipal), W1 (Stavroupoli area), W2 (Ionia area)

⁴ Select among area codes: N (north), S (south), NE (north east), E (east), SE (south-east), W (west), C (centre)

⁵ Use origin code for each parent: TH (Thessaloniki native), GR (other Greek area native), OTHER (non-Greek; specify place in Remarks box)

⁶ Use code for time spent in Thessaloniki: 1 (less than 5 years), 2 (about 5 years), 3 (more than 5 years)

⁷ Select among codes: 1 (single-parent), 2 (two-parent), OTHER (specify situation in Remarks box)

⁸ Write number of siblings in first box and ages in Remarks box

⁹ Select among job codes for each parent: D (degree-based), O (other, e.g. private employee, freelance), L (labour)

¹⁰ Use codes according to Excel summary table 'Family interests and museum going': PH (physical, e.g. sports, dance), SH (shopping), T (travelling), S (social, e.g. meeting friends), I (intellectual, e.g. reading, writing), A (arts, e.g. painting, theatre, films), M (media/ICT, e.g. watching TV, internet).

¹¹ Briefly state any related information gathered from the induction meeting.

¹² Put a cross x in the first box, if museum-going is ticked in the hobbies list of the initial questionnaire.

¹³ Put a cross x in the first box, if parents indicated in the initial questionnaire that they visited museums with their children. Write any reasons parents gave for visiting or not visiting in Remarks box.

¹⁴ Put a cross x in the first box, if parents included Thessaloniki museums in the list of visited museums in the initial questionnaire. Write which ones in Remarks box.

¹⁵ I (induction meeting), M1 (1st visit, MBC), M1f (1st feedback), M2 (2nd visit, FLEMMT), M2F (2nd feedback), M3 (3rd visit, MMCA), M3f (3rd feedback), M4 (4th visit), M4f (4th feedback), F (final feedback).

A. MUSEUM PERCEPTIONS

I. Parents

i. Museum-related attitudes

Scale Mark ¹	Initial attitudes (Mean: 0.4 St. Dev.: 1.6)	Final attitudes	Researcher's remarks
2	Interesting Not expensive Everyone's cultural heritage	Not expensive Everyone's cultural heritage *Can improve life *Are for all	Mostly positive changes, indicating increased feeling that museums may be suitable for and relevant to everyone as a shared experience.
1	Concern my family Easy to understand	Concern my family Easy to understand !Interesting	
0	Can improve life Are for all	*Suitable for young children	
-1	-	-	
-2	Learning Not suitable for young children	Learning	

1. The negative sign indicates answers on the left of the zero point in the attitudes table (see initial and 4th feedback questionnaires). 0 indicates a neutral stance, 1 stands for 'quite agree' and 2 for 'absolutely agree'.

* Asterisk indicates positive change

! Exclamation mark indicates negative change

ii. Other parents' comments²

	Initial	Final	Researcher's remarks
Everyday life			<p>Induction meeting took place at school for convenience. Not extensive talk with the parent.</p> <p>Positive changes in attitudes, indicating a satisfying shared experience.</p> <p>Focus on opportunities for comfortable move around the museum space, more active involvement through play and guidance, and shared experiences.</p>
Child		Didn't get bored, esp. at the MMCA	
Museums		<p>+ big space, and modern, functional, large buildings (esp. MBC, MMCA), unlike small FLEMMT.</p> <p>- unwelcoming attitude of MBC guards</p> <p>Suggestions: large spaces; opportunities to touch; outdoor play space; exhibition guides</p> <p>"Would like to visit again more museums"</p>	
Research project	<p>Mother found it interesting</p> <p>Liked the planning</p>	<p>A rather satisfying first-time experience</p> <p>Learned a lot together</p>	

2. Both parents' and children's comments stem from the induction meeting, the 4th feedback questionnaire and the final feedback questionnaire.

II. Child

i. Museum-related comments

Initial	Final	Researcher's remarks
<p>Don't know what museums look like</p> <p>Dreamt of a museum but doesn't remember how it looked like</p> <p>Museums keep the past, that cannot come again (for example, he was born but cannot become a baby again)</p> <p>Museums keep things safe to remember them</p>	<p>Museums show things that we can look at.</p> <p>+ the skeleton at MMCA</p> <p>- wood and water exhibits at FLEMMT</p> <p>Suggestions: FLEMMT could become better with such things as those of the MMCA</p> <p>"Would like to visit more museums, because I don't know them and I want to find out</p>	<p>Use of imagination (the dream)</p> <p>Playful, creative and more bizarre features in a museum appeal more to his imagination and his interests.</p> <p>His will to revisit also appears in the visitors book incident (see Child's relations, M4, below)</p>

(he would keep his castle safe, for example)	about them”	
--	-------------	--

B. RESEARCH CONTEXT

I. Parents

Research Phase ¹	Roles	Activities	Relations	Researcher's remarks
I				Positive attitude towards the project, but not much discussion
M1	Lead discretely; decide visit plan with child and researcher	Dad mainly explains Looks at and explores things with son (e.g. touch screens)	Friendly with researcher	
M1f	Unobtrusive during the interview with the child		Objects/space: + comfy space, easy to move around; nice façade - the building seemed unfinished; 'cold' ambience; not very interesting collection Persons: - unfriendly/unhelpful staff; discouraging 'don't touch' policy;	Focus on ambience, as created by spatial features and staff friendliness.
M2	No involvement			
M2f	No involvement			
M3	No involvement			
M3f	No involvement			
M4	Parents are happy to let their child lead the visit	Engage in conversation with their child about the artworks	Persons: Balanced interactions with child and researcher; wish to talk with the researcher about their visit and their participation in the project in general at the museum café after the visit	Focus on communication
M4f		Write down their own impressions and thoughts, as well as those	Objects: + large space; open play ground at MMCA	Focus on free and comfortable movement, and opportunities for the child to express his own

		of their child		interests
F	-	-	-	-

I. Phase codes are explained in the 'Time intervals' above.

II. Child

Research phase	Roles	Activities	Relations	Researcher's remarks
I		Answers researcher's questions; quite brief conversation	Quite comfortable with researcher	Imagination
M1	Leads the visit jointly with parents and researcher	Looks; comments; compares; asks	Objects/space: observes details (e.g. dots on map that indicate the location of cemeteries, or little lights in the interior of the grave); attracted by spatial characteristics (e.g. the view of the graves from the platform, the long corridors and the view from the windows) Persons: Shares his questions and thoughts with parents and researcher	Focus on spatial characteristics. Open in communicating with everyone.
M1f		At the MBC people would see "things people used. They'd see ancient things, but not too ancient, the middle ones" (echoes what I'd told him about Byzantine things, that are more recent than the very ancient ones).	Objects: Video of castles ("liked those TV's that showed the old days, because they had things the museum didn't have, like trees, whole castles, earth") Persons: comfortable with the researcher; asks her to play in his "spaceship" with him after the interview.	Doesn't recall many details (possibly because of long time interval between the visit and the feedback session) Happy to discuss his thoughts and share his interests with the researcher.
M2	Follows curator's instructions	Listens to the curator; tries out the models of traditional machinery and observes	No particular interactions with other children and curator.	Follow the group of children quietly during the guided tour

M2f		<p>Feedback with curator (discussion of drawings and brief refresher tour of the exhibition)</p> <p>Looks at the drawings of other kids and listens to the discussion.</p> <p>Participates quietly.</p>		
M3	Follows educator and participates in short art activities	<p>Participates in the discussion, trying to answer educator's questions that involve imagination (e.g. what do you think this sculpture shows? Where does this plane show?)</p> <p>Participates actively in all activities</p>	Collaborates quietly with other children	Seems quite happy to participate in this visit.
M3f		<p>Draws a colourful picture of the aeroplane (adding mountain and sea)</p> <p>Feedback with educator (discussion of drawings and brief refresher tour of the exhibition)</p> <p>Happy to participate in the discussion animated by the educator during the session</p>	<p>Objects: liked the skeleton because it moved and made sound.</p> <p>Persons: relates with educator and other children well</p>	
M4	Assumes a more leading role in the visit, involving all the other participants.	<p>Observes colours and sounds; touches objects, when he has the opportunity;</p> <p>makes comments and asks questions;</p> <p>invites parents to guess the story behind some artworks;</p> <p>shows adults around his favourite artworks;</p> <p>makes personal associations (e.g. when I tell him about the person whose collection formed the basis for the MMCA exhibition, he says that</p>	<p>Objects: chose to revisit because it had more pictures;</p> <p>impressed by skeleton and aeroplane, which he talks about at the museum café after the visit;</p> <p>Persons: shares questions and thoughts with researcher, parents and guard;</p> <p>at times he just observes alone with the researcher, and then invites his parents to show them;</p> <p>asks the researcher to write down for him in the visitors book "I liked it very much. I want</p>	<p>High level of initiative</p> <p>Open to communicate with all the participants in the visit</p>

		he also collects toys)	to come again".	
M4f			Objects: recalls the skeleton; liked generally 'the things' at MMCA	
F	-	-	-	-

APPENDIX III

SAMPLES OF PRIMARY DATA

This appendix presents primary data from the file of a five-year-old girl who participated in the research. Family questionnaires and child's drawings are presented in the order they were gathered in the different research phases.

As the child did not attend the feedback session at the Folklife and Ethnological Museum, the file does not include a drawing from that museum. Fortunately, the parent's personal notes compensate for this absence, which is an originality, as this is the only example of parental diary in the whole data set.

Data from questionnaires and parent's notes is presented in their original Greek form and translation into English is provided (for an English version of the questions included in the questionnaires, see Appendix I).

The data is organised in the following order:

1. Initial Parent Questionnaire
2. 3rd museum visit: Group drawing from the educational programme at the Macedonian Museum of Contemporary Art (MMCA)
3. 3rd visit feedback: Child's drawing from the MMCA
4. 4th feedback questionnaire
5. Parents' diary
6. Final feedback questionnaire (after a year)

1. Initial Parent Questionnaire

Λήμνητρα Ζύληρη

Το μουσείο στην προσχολική ηλικία: Έρευνα



Οικογένεια και Μουσείο



Οι ερωτήσεις που ακολουθούν αποτελούν ένα μικρό μέρος μιας ευρύτερης μελέτης για την επαφή του παιδιού προσχολικής ηλικίας με το μουσείο. Σκοπός των ερωτήσεων δεν είναι να αξιολογηθούν οι αντίστοιχες απαντήσεις, αλλά να συγκεντρωθούν κάποια στοιχεία για την σχέση οικογένειας και μουσείου για λόγους καθαρά στατιστικούς επιμέρους, δεν υπάρχουν σωστές ή λάθος απαντήσεις. Θα σας ήμουν ευγνώμων αν αφιερώνετε λίγα λεπτά από τον χρόνο σας για να απαντήσετε στις ερωτήσεις αυτές. (Σημειώνεται ότι οι απαντήσεις σας μπορούν να είναι ανώνυμες.)

Μερικά στοιχεία για εσάς...

(παρακαλώ συμπληρώστε την απάντησή σας δίπλα σε κάθε ερώτηση)

- Ποιός είναι ο τόπος καταγωγής σας; Θεσσαλία Thessaly
- Ποια είναι η εθνικότητά σας; Ελληνική Greek
- Ποιό είναι το επάγγελμά σας; Ιατρός Doctor

...για τον/την σύζυγό σας...

(παρακαλώ συμπληρώστε την απάντησή σας δίπλα σε κάθε ερώτηση)

- Ποιός είναι ο τόπος καταγωγής του/της; Θράκη Thrace
- Ποια είναι η εθνικότητά του/της; Ελληνική Greek
- Ποιό είναι το επάγγελμά του/της; Ιατρός Doctor

...και για την οικογένειά σας

(παρακαλώ συμπληρώστε την απάντησή σας δίπλα σε κάθε ερώτηση)

- Πόσα παιδιά έχετε; τρία three
- Τι ηλικία έχουν; ~13, 9 1/2, 5 1/2
- Πόσο καιρό ζείτε με την οικογένειά σας στην Θεσσαλονίκη; (παρακαλώ σημειώστε X σε ένα από τα τρία τετράγωνα)
 Λιγότερο από πέντε (5) χρόνια ☒
 Περίπου πέντε (5) χρόνια ☐
 Περισσότερο από πέντε (5) χρόνια ☐

- Τι είδους ενδιαφέροντα και δραστηριότητες ελεύθερου χρόνου υπάρχουν στην οικογένειά σας; (παρακαλώ σημειώστε X σε όσα τετράγωνα αντιστοιχούν στα προσωπικά σας ενδιαφέροντα, καθώς και σε όσα αντιστοιχούν στα ενδιαφέροντα του/της συζύγου σας και των παιδιών σας)

<input checked="" type="checkbox"/> Αθλητισμός/Γυμναστική	<input checked="" type="checkbox"/> Κινηματογράφος
<input type="checkbox"/> Βόλτα στην αγορά/ψώνια	<input checked="" type="checkbox"/> Μουσική
<input checked="" type="checkbox"/> Διάβασμα (π.χ. βιβλία, εφημερίδες, περιοδικά)	<input checked="" type="checkbox"/> Ξένες Γλώσσες
<input type="checkbox"/> Εκδρομές/ταξίδια	<input checked="" type="checkbox"/> Ποίηση/Λογοτεχνία (συγγραφή)
<input type="checkbox"/> Επισκέψεις σε μνημεία/μουσεία/πινακοθήκες	<input checked="" type="checkbox"/> Συνάντηση με φίλους
<input type="checkbox"/> Ηλεκτρονικοί Υπολογιστές/Internet	<input checked="" type="checkbox"/> Τηλεόραση/Βίντεο
<input checked="" type="checkbox"/> Θέατρο	<input checked="" type="checkbox"/> Video games/ play station
<input checked="" type="checkbox"/> Καλές Τέχνες (π.χ. ζωγραφική, γλυπτική)	<input checked="" type="checkbox"/> Χορός
<input checked="" type="checkbox"/> Άλλο (παρακαλώ προσδιορίστε) <u>Επιτραπέζια παιχνίδια</u>	<input checked="" type="checkbox"/> Table games

- Εχετε επισκεφθεί κάποιο μουσείο ή πινακοθήκη τα τελευταία δύο χρόνια μαζί με τα παιδιά σας; ☒ Ναι ☐ Όχι



Αθήνητρα Ζάπρη

Το μουσείο στην προσχολική ηλικία: Έρευνα

12. Αν όχι, γιατί. (Παρακαλώ συμπληρώστε την απάντησή σας και πηγαίνατε στην ερώτηση 15)

1. Photo Exhibition - Tellogleion Foundation (Thessaloniki)
2. Photo Exhibition - Thessaloniki Port
3. State Museum of Contemporary Art (Thessaloniki)

4. Art Exhibition - Kordas Military Camp (Thessaloniki)
5. Natural History Museum (Heraklion, Crete)

13. Αν ναι, ποιά ή ποιά μουσεία επισκεφθήκατε; (Παρακαλώ συμπληρώστε τα ονόματα των μουσείων στην παρακάτω λίστα)

1. Τετ. Μουσείο - Ε. Ε. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο
2. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο
3. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο
4. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο
5. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο
6. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο - Τετ. Μουσείο

14. Ποιός ήταν ο σκοπός της επίσκεψής σας; (Παρακαλώ συμπληρώστε την απάντησή σας)

Ποιός ήταν ο σκοπός της επίσκεψής σας; (Παρακαλώ συμπληρώστε την απάντησή σας)

General interest in art, children's contact and familiarization with art

15. Ο πίνακας που ακολουθεί παρουσιάζει εννέα (9) ζευγάρια αντίθετων απόψεων σχετικά με το μουσείο

Παρακαλώ σημειώστε Χ στο τετράγωνο που βρίσκεται πιο κοντά στην δική σας άποψη σε κάθε ζευγάρι.

(Παράδειγμα: αν σημειώσετε το σκούρο τετράγωνο που βρίσκεται δίπλα στην πρόταση "Τα μουσεία είναι αναπόρ" σημαίνει ότι συμφωνείτε απόλυτα με την άποψη αυτή. Αν πάλι σημειώσετε το αμέσως επόμενο ανοιχτόχρωμο τετράγωνο προς τα δεξιά, σημαίνει ότι συμφωνείτε αρκετά, αλλά αν σημειώσετε το λευκό τετράγωνο μηδέν 0, σημαίνει ότι η άποψή σας είναι αδιάφορη και ότι πιστεύετε ότι τα μουσεία μπορεί να είναι άλλοτε αναπόρ και άλλοτε ενδιαφέροντα.)

	Απόλυτα	Αρκετά	Ουδέν	Αρκετά	Απόλυτα	
Τα μουσεία είναι αναπόρ			X			Τα μουσεία είναι ενδιαφέροντα
Τα μουσεία δεν αφορούν την οικογένειά μου			0	X		Τα μουσεία αφορούν την οικογένειά μου
Τα μουσεία είναι ακριβά			0		X	Τα μουσεία δεν είναι ακριβά
Τα μουσεία δεν μπορούν να βελτιώσουν τη ζωή μας			0	X		Τα μουσεία μπορούν να βελτιώσουν τη ζωή μας
Τα μουσεία είναι χώροι μάθησης και γνώσης			0	X		Τα μουσεία είναι χώροι ψυχαγωγίας γενικότερα
Τα μουσεία είναι δύσκολα κατανοητά			0	X		Τα μουσεία είναι εύκολα κατανοητά
Τα μουσεία είναι για τους ειδικούς			0		X	Τα μουσεία είναι για όλους
Τα μουσεία δεν είναι κατάλληλοι χώροι για μικρά παιδιά			X			Τα μουσεία είναι κατάλληλοι χώροι για μικρά παιδιά
Τα μουσεία είναι πολιτιστική κληρονομιά για τους γονείς			0		X	Τα μουσεία είναι η πολιτιστική κληρονομιά όλων

Σας ευχαριστώ για τη συμμετοχή και τον χρόνο σας.

Στην επόμενη σελίδα θα βρείτε πληροφορίες σχετικά με το πρόγραμμα επισκεψών σε μουσεία της Θεσσαλονίκης, το οποίο αποτελεί το κύριο μέρος της έρευνας. Αν ενδιέφερετε να συμμετάσχετε σε αυτό, παρακαλώ συμπληρώστε τα στοιχεία σας στο τέλος της επιστολής αυτής.

2. 3rd museum visit: Group drawing from the educational programme at the Macedonian Museum of Contemporary Art (MMCA)



Note: The skeleton, the aeroplane, and the female figure called 'Eve' at the bottom right end of the drawing are some of the exhibit pictures, which the museum educator asked the children to include in their drawings.

3. 3rd visit feedback: Child's drawing from the MMCA



Note: The skeleton figure reappears in the child's personal drawing; the female figure at the top depicts herself.

4. 4th feedback questionnaire

Δημόσια Ζώνη

Το μουσείο στην προσχολική ηλικία: Έρευνα



Οικογένεια και Μουσείο: Αξιολόγηση της εμπειρίας



Ένα από τα προστέρησών σου ακόλουθα είναι να αξιολογήσεις την ποιότητα της εμπειρίας που αποκόμισες από την επίσηή μας, ως τα μουσεία κατά τη διάρκεια του εκπαιδευτικού προγράμματος. Η αξιολόγηση αυτή περιλαμβάνει δύο μέρη. Στο πρώτο μέρος, το τίτλο «Σχόλια, εντυπώσεις και παρατηρήσεις του παιδιού» συμπληρώνετε τις εντυπώσεις του παιδιού του πρώτου χρόνου να απαντάει το πρώτο μέρος, ενώ στο δεύτερο μέρος, με τίτλο «Σχόλια, εντυπώσεις και παρατηρήσεις γονέων» συμπληρώνετε τις εντυπώσεις σας ως γονείς. Σημαδεύεται ότι όχι υπάρχουν σπουδές η ερώτηση, οι οποίες. Αυτό απαντάτε στις ερωτήσεις, ότι σας παρακαλούμε να επιστρέψετε το ερωτηματολόγιο είτε σε μικρό προσωπικό υπόβαθρο από προσωπική μας επικοινωνία (τηλ.: 2310 327 298, 697 897 7019) είτε με fax στο 2310 822 304, είτε με e-mail στη διεύθυνση azaphi@yahool.co.uk. Σας ευχαριστούμε για το χρόνο και τη συνεισφορά σας.

Όνοματεπώνυμο γονέα
Ημερομηνία.....

A. Σχόλια, εντυπώσεις και παρατηρήσεις του παιδιού

1. Τι είναι ένα μουσείο.

Είναι ένα κτίριο, όπου υπάρχουν κατασκευές, από ανθρώπους που ζούσαν παλιά, και είναι πολύ ενδιαφέροντες και είναι όμοιες με αυτές που είδαμε.

2. Τι μπορούμε να κάνουμε σε ένα μουσείο.

Στο μουσείο πήραμε πληροφορίες για να μάθουμε διαφόρων ειδών κατασκευές, και διαφόρων ειδών υφάσματα.

3. Ποιο από τα μουσεία που επισκεφθήκαμε σου άρεσε περισσότερο. Γιατί.

Στο Μουσείο Βυζαντινής Πολιτισμού, γιατί είναι διαφόρων ειδών υφάσματα, όπως τμήματα χρυσού, κομμάτια, κομμάτια, κομμάτια, και άλλα και κατασκευές.

4. Ποιο από τα μουσεία που επισκεφθήκαμε σου άρεσε λιγότερο. Γιατί.

Στο Λαογραφικό Μουσείο, γιατί εκεί μας έδειξαν πολλά, όπως ξύλινα και άλλα αντικείμενα, αλλά και άλλα αντικείμενα, αλλά και άλλα αντικείμενα.

5. Πως πιστεύεις ότι το μουσείο που σου άρεσε λιγότερο θα μπορούσε να γίνει καλύτερο και πιο ευχάριστο.

Να έχει λιγότερα παιδιά, γιατί έτσι θα μπορούσε να γίνει καλύτερο.

6. Θα ήθελες να πας σε περισσότερα μουσεία στον ελεύθερο σου χρόνο. Γιατί.

Ναι, γιατί είναι πολύ ενδιαφέροντα.

1. [The museum] is a building with constructions from people who lived in the old times and they were very good at constructions, and when they died they left them for us to see.
2. We go to museums to learn various things, like constructions, and many other pretty things.
3. [I liked best] the Museum of Byzantine Culture, because it has many pretty things, like clay pots, coins, jewelry, seals, no matter how tiring it was.
4. [I liked least] the Folklife Museum, because they talked to us for many hours. Also, when they showed us different things, I didn't see them well, because there were many kids.
5. [The Folklife Museum would become better] if it had fewer kids, so we could see better.
6. No, [I wouldn't like to visit more museums in my spare time] because the first museums I saw were a bit boring.

Β. Σχόλια, εντυπώσεις και παρατηρήσεις γονέων

7. Τι σας έκανε περισσότερο θετική εντύπωση στα μουσεία που επισκευθήκαμε. Γιατί.

Ο ευχάριος τρόπος παχιδέας των έργων, επι-
χρήση στο εκπαιδευτικό υλικό. Τόσο εφια-
λτον φασέτου.

8. Τι σας έκανε περισσότερο ικανοποιητική εντύπωση. Γιατί.

Η ευρεία ηλ. αναρριωγή ενάφηση των μικρών (επι-
τήμον, βιολογικό, μισ) αγωγή, και των επισημο-
των ενδιαφερόντων και διημερήσι μαθηματικό.

9. Προτείνετε ότι θα μπορούσαν τα μουσεία να γίνουν πιο προστά στις οικογένειες με μικρά παιδιά. Αν ναι, πώς.

Εκπαιδευτικό διαδραστικό των ενδιαφερόντων των
παιδιών να προσεγγίσουν με τα παιδιά (επισκεπ-
τες, σπουδές, χαρτί, σχεδιασμός, πώς να επιταχύνουν τα παιδιά).

10. Θα επιθυμούσατε να επισκεφθείτε περισσότερα μουσεία στον ελεύθερό σας χρόνο με την οικογένειά σας. Γιατί.

Ναι, περισσότερο για εκπαιδευτικό και εκπαιδευτικό
και λοιπούς, τα εκπαιδευτικά ενδιαφέροντα, χρονο-
κρίσι, ελπίδες, περιεχόμενα.

11. Γενικά, κατά πόσο είστε ευχαριστημένοι από τη συμμετοχή σας στο ερευνητικό πρόγραμμα επισκέψεων σε μουσεία της Θεσσαλονίκης. Γιατί.

Ναι, με ενδιαφέρει η ευκαιρία να έχω και να επιταχύνω
εμπειρία τα παιδιά με τα παιδιά των περιεχόμενων,
υπάρχει και μια ευκαιρία για την παιδεία και την
παιδεία.

12. Ο πίνακας που ακολουθεί παρουσιάζει εννέα (9) ζευγάρια αντίθετων απόψεων σχετικά με το μουσείο.

Παρακαλείσθε σημειώστε Χ στο τετράγωνο που βρίσκεται πιο κοντά στην δική σας άποψη σε κάθε ζευγάρι.

Παραδείγματα: σημαίνει το σκούρο τετράγωνο που βρίσκεται δίπλα στην άποψη. Τα μουσεία είναι ενδιαφέροντα, σημαίνει ότι
σημαίνει με τον τρόπο αυτό. Αν παλι σημειώσατε το σκούρο τετράγωνο σημαίνει ότι το τετράγωνο δίπλα τη δεξιά, σημαίνει ότι
σημαίνει με τον τρόπο αυτό. Αλλά αν σημειώσατε το λευκό τετράγωνο σημαίνει ότι σημαίνει ότι η άποψή σας είναι ο αντίθετη και ότι σημαίνει ότι τα
μουσεία μπορεί να είναι αδιάφορα και άλλα ενδιαφέροντα.

	Αντίθετη	Αποφασιστική	Ομοτίμη	Αποφασιστική	Αντίθετη	
Τα μουσεία είναι ενδιαφέροντα			0	X	Τα μουσεία είναι αδιάφορα	
Τα μουσεία δεν αφορούν την οικογένειά μου			0	X	Τα μουσεία αφορούν την οικογένειά μου	
Τα μουσεία είναι ακριβά			0		X	Τα μουσεία δεν είναι ακριβά
Τα μουσεία δεν μπορούν να βελτιώσουν τη ζωή μας			0	X	Τα μουσεία μπορούν να βελτιώσουν τη ζωή μας	
Τα μουσεία είναι χωρίς μάθηση και γνώση			X		Τα μουσεία είναι χωρίς ενδιαφέροντα μαθησιακά	
Τα μουσεία είναι δύσκολα κατανοητά			0	X	Τα μουσεία είναι εύκολα κατανοητά	
Τα μουσεία είναι για τους ενήλικες			0		X	Τα μουσεία είναι για όλη την οικογένεια

Δήμητρα Ζάπρη

Το μουσείο στην προσχολική ηλικία: Έρευνα

Τα μουσεία δεν είναι κατάλληλοι χώροι για μικρά παιδιά		0		X	Τα μουσεία είναι κατάλληλοι χώροι για μικρά παιδιά
Τα μουσεία είναι πολιτιστική κληρονομιά για τους νέους		0		X	Τα μουσεία είναι η πολιτιστική κληρονομιά όλων

Σας ευχαριστώ.

Ευχαριστώ και τους
Nanira, Kiriakos, Lina

We thank you
too
[family names]

7. [What made a positive impression was] the contemporary way of displaying the exhibits, which were integrated in the architectural form of the building.
8. [What made a negative impression was] the necessity to read text panels (explanatory, biographic etc), which functions at the expense of enjoying the exhibits themselves, and creates a sense of enforcement.
9. [Museums could be more accessible to families with young children] perhaps if exhibits that more easily understood by children are displayed in areas that are specially designed for children's body type.
10. Yes, [I would opt to visit a museum with my family in my spare time] for more new experiences and for tangibly maximising our spare time, without any other distractions.
11. Yes, [I am happy with my participation in the project] because I was given the opportunity to perceive and elaborate on certain experiences with my child; at the same time, it was for me a good excuse to spend some time for museums.

5. Parents' diary

6/2/04: She seems to have understood pretty well the programme plan. She prepares herself for the visits, and she expects us to ask for her impressions. She gives details on what she expects to see and impress her (shape, object, colour).

7/2/04: She is impatient to know when we are going to the museum. She seems proud to participate in this programme.

14/2/04: After visiting the Byzantine Museum, she tells her brother and sister about certain things she saw there. But she is probably aware of the fact that everybody's attention is on her, rather than on the content of the Museum itself.

March

She's happy with the visit at the Folklife Museum. Once she gets back to her visit, she talks about what she saw. However, she's not willing to draw anything from this museum and she doesn't get back to the content of the exhibition.

April

She's much happier after her visit at MMCA. Soon, she draws what she liked. Initially, she's negative to the idea of the repeat visit, but, in the end, she's convinced, in order to bring her drawing.

6/2/04: She seems to have understood pretty well the programme plan. She prepares herself for the visits, and she expects us to ask for her impressions. She gives details on what she expects to see and impress her (shape, object, colour).

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She's happy with the visit at the Folklife Museum. Once she gets back to her visit, she talks about what she saw. However, she's not willing to draw anything from this museum and she doesn't get back to the content of the exhibition.

April

She's much happier after her visit at MMCA. Soon, she draws what she liked. Initially, she's negative to the idea of the repeat visit, but, in the end, she's convinced, in order to bring her drawing.

Мен в края на 7 векиса
на ММДТ били дотъ бържидирин
не бива да не аман бис видирате
на фиброне Кини атеора
този то фибират ва бис
бископийи се хире лан бейон
пайи не та видирате. А бивире
то ома видире зениц

She says that it is the only museum [the MMCA] she would like to revisit. Perhaps, her initial negative attitude doesn't have to do with any rejection of museums in general, but with her own personal traits, related with her lack of confidence in participating in group activities.

After the end of the second meeting at the MMCA, she is very happy. She is comfortable with showing me around the museum exhibits. She moves around the museum all by herself, she looks to be very familiar with the space, and she almost plays with the exhibits. Her experience is totally

6. Final feedback questionnaire (after a year)

Page 1 of 2

Zapri, D.

From:

Sent: 10 April 2005 18:36

To: Zapri, D

Subject: Nantina



Οικογένεια και Μουσείο: Εντυπώσεις και Σχόλια



Σας ευχαριστούμε που αποκαλύψατε είναι να αξιολογήσει αν και με ποιο τρόπο η εμπειρία της συμμετοχής στο πρόγραμμα επισκέψεων έχει επηρεάσει στο παιδί. Θα σας ήθελαν να γράψετε αν υπερέβαινε ένα λεπτό από τον ποσοστό που σας ζητείται συμπληρώσετε τις απαντήσεις σας. Δε σημαίνει ότι το ερωτηματολόγιο αυτό δεν είναι ποτέ ρητικής ή ανώμαλο π.χ. παρόμοιο ή του αντίθετου, όπως δεν πάχυνον ποσότητες και λάθος απαντήσεις. Σας ευχαριστούμε για τον χρόνο και τη συνεργασία σας με το πρόγραμμα.

Ονοματεπώνυμο γονέα

Ημερομηνία: 21/2/2005

A. Ερωτήσεις για το παιδί

Οι παρακάτω είναι ερωτήσεις απαντήστε στο παιδί. Παρακαλώ συμπληρώστε τις απαντήσεις του παιδιού, χωρίς να συμπληρώσετε τη γνώμη ή τη γνώμη τους. Αν το παιδί δεν μπορεί να απαντήσει σε κάποια ερώτηση, αλλά αφήστε την απάντησή του.

1. Τι θυμάσαι από τις επισκέψεις που κάναμε στα μουσεία πέρυσι;

Θυμάμαι ένα σκελετό (το θέμα που ζωγράφιζε στο ΜΜΣΤ), κοσμήματα, τη διαδικασία γαστήματος του μωλού για την κατασκευή υφαντών, κάποια στερά με από μικρές λωρίδες χαρτί, και την εργασία που κάναμε εκεί.

2. Τι νομίζεις ότι είναι ένα μουσείο;

Είναι ένας χώρος όπου βλέπουμε και μιλάμε για πολλά πράγματα. Βλέπουμε πως ήταν τα πράγματα τα παλιά χρόνια.

3. Τι μπορούμε να κάνουμε στο μουσείο;

Μπορούμε να πούμε στους φίλους μας τι είδαμε, και να κάνουμε διάφορες εργασίες σχετικές με τα πράγματα που είδαμε εκεί.

B. Ερωτήσεις για τους γονείς

4. Ήχατε την ευκαιρία να επισκεφθείτε κάποιο χώρο πολιτισμικής αναστολής (μουσείο, πινακοθήκη, αρχαιολογικό χώρο) με το παιδί σας, μετά το τέλος του ερευνητικού προγράμματος; *επισκεφθήκαμε* *σε κάποιο* *την απάντησή σας* ☒ ΝΑΙ ☐ ΟΧΙ

5. Αν όχι, για ποιο λόγο;

6. Αν ναι, ποιους χώρους επισκεφθήκατε και ποιος ήταν ο σκοπός της επίσκεψής σας;

Μουσείο μοντέρνας τέχνης, τριστικής ιστορίας, επιστημών, πλανητάριο, ιστορικά μουσεία, κέντρον αναστολής, εκθέσεις, κ.π. Ο σκοπός ήταν η επιμόρφωση, η παροχή ερεθισμάτων και η συσχέτιση με τη συνολική συμμετοχή της οικογένειας.

συνέχεια

11/04/2005

7. Κατά πόσο πιστεύετε ότι η εμπειρία της συμμετοχής στο πρόγραμμα επισκέψεων έχει επηρεάσει το παιδί; *(παρακαλώ βάλτε σε κύκλο ένα από τις παρακάτω απαντήσεις)*

α. Ποτέ
β. Λίγιστο
γ. Λίγο
δ. Καθόλου
ε. Δεν ξέρω

8. Αν έχετε απαντήσει *α*, *β* ή *γ* στην παραπάνω ερώτηση, πώς καταλαβαίνετε ότι το παιδί έχει επηρεαστεί; *(παρακαλώ βάλτε σε κύκλο μια από τις παρακάτω απαντήσεις και σημειώστε συγκεκριμένα παραδείγματα για τις απαντήσεις σας)*

α. Έχει μιλήσει από μόνο του σε σας ή σε άλλους (π.χ. στο σχολείο, σε συγγενείς ή φίλους) σχετικά με την εμπειρία του.

β. Έχει μιλήσει σχετικά με την εμπειρία του σε σας ή σε άλλους με κάποια συγκεκριμένη αφορμή (την παρουσίαση, έχει ανακαλέσει στοιχεία της εμπειρίας του, όταν το ρώτησαν, ή με αφορμή κάποιο ταξίδι ή κάποια επίσκεψη σε μουσείο)

γ. Έχει εκινήσει κάποια δραστηριότητα (π.χ. συλλέγει, ζωγραφίζει, παγαίνει σε μουσεία), έχοντας πάρει το μήθημα από τις επισκέψεις του προγράμματος.

δ. Στις ζωγραφίες του έχει απεικονίσει στοιχεία που αναφέρονται σαφώς στην εμπειρία που αποκόμισε από τις επισκέψεις του προγράμματος.

ε. Άλλο (παρακαλώ προσδιορίστε):

Παραδείγματα: *(παρακαλώ αναφέρετε παραληρητικά συγκεκριμένα περιστατικά και, αν θυμάστε, περίπου τη χρονική περίοδο που σημειώθηκαν)*

Κάποτε όταν βρέθη φωτογραφίες που τριβήθηκαν στο χώρο των μουσείων, ή άλλες φορές συνειρμικά όταν έχω κάποιο σχετικό ερεθίσμα, ιδίως όταν βρεθεί σε κάποιο άλλο μουσείο, ανακαλεί μνήμες από προηγούμενες επισκέψεις. Το κοζοκυρί επισκεφθήκαμε το μουσείο των Δελφών και το Οθινόπορο μουσεία του Λονδίνου. Έκτα η Νάσσα έδειχνε εξαιρετική με τη διαδικασία και κάποιες φορές ίσως αναφερόμκε σε προηγούμενες εμπειρίες.

Child's answers

1. I remember a skeleton (what she drew from MMCA), jewelry, the way they turned wool into thread to use it for weaving, some wings made with small paper bands, and the drawing we did.
2. [A museum is] a place where see and talk about many things. We see how things were in the old times.
3. [In a museum we can] tell our friends what we saw, and take part in many activities that have to do with what we saw.

Parents' answers

4. Underlined 'YES' (i.e. visited museums with family after the project).
6. [Visited sites] Museums of modern art, natural history, science, planetarium, history museums, wax museums, churches etc. The purpose was to learn, gain new experiences and entertain ourselves with the participation of the whole family.
7. Underlined option 'b' (quite a lot).
8. (Underlined statements 'a' and 'b') Examples: She recalls things from past visits, mainly when she looks at pictures taken at museums, or spontaneously when she visits a museum. In summer, we visited the museum of Delfi [Greece] and museums of London. There, she seemed to be familiar with the process of visiting and may have referred to past experiences.

REFERENCES

- Anderson, D. (1994). Museum education in Europe: Societies in transition. *Journal of Museum Education*, 19(1), 3-6.
- Alwin, D.F. (1995). Taking time seriously: Studying social change, social structure, and human lives. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 211-262). Washington, DC: American Psychological Association.
- American Association of Museums. (1984). *Museums for a new century: a report of the Commission on Museums for a New Century*. Washington, DC: American Association of Museums.
- Anderson, D. and Piscitelli, B. (2002). Parental recollections of childhood museum visits. *Museum National*, 10(4), 26-27.
- Anderson, D., Piscitelli B., Tayler, C., Everett, M., Skoien, P. and Weier, K. (2000). Children's perceptions of museums: Data analysis for pilot of Child Focused Questionnaire (CFQ) Version 3 – Kelvin Grove State School and St Martin's School Sample. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Anderson, D., Piscitelli, B., Weier, K., Everett, M. and C. Tayler. (2001a). Parent Focused Questionnaire (PFQ): Data analysis-main study. Unpublished report, QUT Museums Collaborative Project, Queensland University of Technology, Brisbane, Australia. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Anderson, D., Piscitelli, B., Everett, M., Weier, K. and Tayler, C. (2001b). Child Focused Survey (CFS) report. Unpublished report, QUT Museums Collaborative Project, Queensland University of Technology, Brisbane, Australia. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Anderson, D., Weier, K., Everett, M., Tayler, C. and Piscitelli, B. (2002). The impact of multi-visit museum programs on young children's learning. Paper presented at the 75th NARST Conference, New Orleans, USA. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Anderson, D., Piscitelli, B., Weier, K., Everett and Tayler, C. (2002). Children's Museum Experiences: Identifying Powerful Mediators of Learning. *Curator*, 45(3), 213-231.

- Anning, A. and Edwards, A. (1999). *Promoting children's learning from birth to five*. Buckingham, Philadelphia: Open University Press.
- Aubé, S. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (p. 82). Montréal: Société des Musées Québécois.
- Aubrey, C., David, T., Gadfrey, R. and Thompson L. (Eds.). (2000). *Early childhood educational research: Issues in methodology and ethics*. London and New York: Routledge/ Falmer.
- Barret, G. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 130-131). Montréal: Société des Musées Québécois.
- Beauregard, L. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 25-26). Montréal: Société des Musées Québécois.
- Bergeron, C. (1991). Pratique d'un service de l'éducation dans un musée thématique. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 108-116). Montréal: Société des Musées Québécois.
- Binette, L. (1991). Reflexion sur l'apprentissage et la didactique du musée technique. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 119-123). Montréal: Société des Musées Québécois.
- Blais, J-M. (1991). Les adolescents, les musées et l'approche inductive. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 83-87). Montréal: Société des Musées Québécois.
- Boucher, S. (1991). Le rôle de l'agent dans la mise en place des approches didactiques au musée. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 12-14). Montréal: Société des Musées Québécois.
- Borstelmann, L.J. (1983). Children before psychology: Ideas about children from antiquity to the late 1800s. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 1-40). New York: Wiley.
- Bower, T. (1977). *The Perceptual World of the Child*. Glasgow: Fontana/ Open Books.
- Bradley, R.H. (1995). Environment and parenting. In Bornstein, M. (Ed.), *Handbook of Parenting – Volume 2: Biology and Ecology of Parenting*. New Jersey: Lawrence Erlbaum, p. 235-259.

- Breuse, E. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (p. 92). Montréal: Société des Musées Québécois.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1983). The evolution of environmental models in developmental research. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 1-40). New York: Wiley.
- Bronfenbrenner, U. (1986). 'Ecology of the family as a context for human development: research perspectives'. *Developmental Psychology*, 22(6), 723-742.
- Bronfenbrenner, U. (1995a). The bioecological model from a life course perspective: Reflections of a participant observer. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 599-618). Washington, DC: American Psychological Association.
- Bronfenbrenner, U. (1995b). Developmental ecology through space and time: A future perspective. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 619-647). Washington, DC: American Psychological Association.
- Bronfenbrenner, U., and Ceci, S.J. (1994). Nature-Nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, 101(4), 568-586.
- Brooks-Gunn, J. (1995). Children in families in communities: Risk and intervention in the Bronfenbrenner tradition. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 467-519). Washington, DC: American Psychological Association.
- Brûlé-Currie, M. (1991). Famille et amis. In Société des Musées Québécois, *Actes du Colloque: 'A propos des recherches didactiques au musée'* (pp. 66-71). Montréal: Société des Musées Québécois.
- Brûlé-Currie, M. (1996). When three-to-five-year-olds and adults look at modern and abstract art together. In Lefebvre, B. and Allard, M. (Eds.), *Le musée : un projet éducatif* (pp. 109-126). Montréal : Editions Logiques.
- Cairns, R.B. (1983). The emergence of developmental psychology. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 41-102). New York: Wiley.

- Carr, D. (2003). *The promise of cultural institutions*. New York and Oxford: Altamira Press.
- Ceci, S.J. and Hembrooke, H.A. (1995). A bioecological model of intellectual development. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 303-345). Washington, DC: American Psychological Association.
- Chamberland, E. (1991). La démarche de contextualisation du visiteur adulte. In Société des Musées Québécois, *Actes du Colloque: 'A propos des recherches didactiques au musée'* (pp. 72-77). Montréal: Société des Musées Québécois.
- Christensen, P. and James, A. (Eds.). (2000). *Research with children: Perspectives and practices*. London: RoutledgeFalmer.
- Chrysoulaki, S. (1995). Δώρο ασημένιο ποίημα ή ο κοινωνικός ρόλος του μουσείου (The social role of the museum). *Αρχαιολογία και Τέχνες*, 57, 82-85.
- Clausen, J.A. (1995). Gender, contexts, and turning points in adults' lives. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 365-389). Washington, DC: American Psychological Association.
- Cox, M. (1986). *The Child's Point of View* (2nd edn). London: Harvester Wheatsheaf.
- Cox, M. (1996). 'Just like drawing in your dinner...': *The story behind START – the first interactive art gallery experience designed for three to five-year-olds*. Walsall: Walsall Museum and Art Gallery.
- Crowley, K. and Callanan, M. (1998). Describing and supporting collaborative scientific thinking in parent-child interactions. *Journal of Museum Education*, 23(1).
- Csikszentmihalyi, M. and Robinson, R.E. (1990). *The art of seeing: An interpretation of the aesthetic encounter*. Los Angeles, CA: J. Paul Getty Museum-Getty Education Institute for the Arts.
- Csikszentmihalyi, M. and Hermanson, K. (1995). Intrinsic motivation in museums: Why does one want to learn? In J. Falk and L. Dierking (Eds.), *Public Institutions for Personal Learning* (pp. 67-77). Washington, DC.: American Association of Museums.
- Dalkos, G. (2002). Η στρατηγική ανάπτυξης μουσειοπαιδαγωγικών προγραμμάτων για την πρωτοβάθμια, δευτεροβάθμια και τριτοβάθμια εκπαίδευση (The strategy of developing museum education programmes for primary, secondary and higher education). In G. Kokkinos, G. and Alexaki, E. (Eds.), *Διεπιστημονικές Προσεγγίσεις*

- στη Μουσειακή Αγωγή (Cross-disciplinary approaches to museum education) (pp. 163-178). Αθήνα: Μεταίχμιο.
- Dansereau-Dorais, S. (1991). Les vieux, les personnes âgées, les aînés: Une nouvelle segmentation. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 93-97). Montréal: Société des Musées Québécois.
- Department for Employment and Skills. (1997). *Learning for the 21st century: 1st report of the National Advisory Group for Continuing Education and Lifelong Learning*. United Kingdom: Department for Employment and Skills.
- Department for Employment and Skills, National Advisory Committee on Creative and Cultural Education. (1999). *All our futures: Creativity, Culture and Education*. United Kingdom: Department for Employment and Skills.
- Dewey, J. (1963). *Experience and education*. London and New York: Collier Books.
- Doliopoulou, E. (1999). Σύγχρονες τάσεις της προσχολικής αγωγής (Contemporary trends in preschool education). Αθήνα: Τυπωθήτω – Γιώργος Δάρδανος.
- Donaldson, M. (1978). *Children's Minds*. London: Fontana Press.
- Dufresne-Tassé, C. (1991). Approches didactiques et âge des visiteurs. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 58-60). Montréal: Société des Musées Québécois.
- Duncan, C. (1994). Art Museums and the Ritual of Citizenship. In S.M. Pearce (Ed.), *Interpreting Objects and Collections* (pp. 279-286). London and New York, Routledge.
- Elder, G.H., Jr. (1995). The life course paradigm: Social change and individual development. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 101-139). Washington, DC: American Psychological Association.
- Falk, J.H. and Dierking, L.D. (1995). *Public institutions for personal learning: Establishing a research agenda*. Washington, DC: American Association of Museums.
- Falk, J.H. and Dierking, L.D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. New York: Altamira Press.
- Fasoli, L. (2001). Research with children: Ethical mind-fields. *Australian Journal of Early Childhood Education*, 26(4), 7-11.
- Fasoli, L. (2003). Reflections on doing research with young children. *Australian Journal of Early Childhood Education*, 28(1), 7-11.

- Feldman, M.S. (1995). *Strategies for interpreting qualitative data*. (Qualitative research method series, vol. 33; Manning P.K., Van Maanen, J. and Miller, M.L., Eds.). California: Sage Publications.
- Fielding, N.G. and Fielding, J.N. (1986). *Linking data*. (Qualitative research method series, vol. 4; Van Maanen, J., Manning P.K. and Miller, M.L., Eds.). California: Sage Publications.
- Filiatrault, L. (1991). L'enfant du préscolaire au musée: Acquisition des concepts en sciences humaines. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 61-65). Montréal: Société des Musées Québécois.
- Filiatrault, L. (1996). Les enfants de la maternelle et le musée. In Lefebvre, B. and Allard, M. (Eds.), *Le musée : un projet éducatif* (pp. 99-108). Montréal : Editions Logiques.
- Fine, G.A. and Sandstrom, K.L. (1988). *Knowing children: Participant observation with minors*. (Qualitative research method series, vol. 15; Van Maanen, J., Manning P.K. and Miller, M.L., Eds.). California: Sage Publications.
- Forest, L. (1991). Elaboration d'une grille d'observation des habiletés intellectuelles mises en oeuvre au musée chez des écoliers. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp.78-81). Montréal: Société des Musées Québécois.
- Friedman, L. (1979). *Children visit the Brooklyn Museum: An evaluation*. (Doctoral thesis, Columbia University Teachers College; published 1985 by University Microfilms International, Michigan).
- Galipeau-Doré, M. (1991). Le musée d'art et une approche didactique adaptée. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 102-108). Montréal: Société des Musées Québécois.
- Gallimore, R., Weisner, T.S, Kaufman, S.L., and Bernheimer, L.P. (1989). The social construction of ecocultural niches: family accommodation of developmentally delayed children. *American Journal of Mental Retardation*, 94(3), 216-230.
- Gazi, A. (2004). Μουσεία για τον 21^ο αιώνα (Museums for the 21st century). *Τετράδια Μουσειολογίας*, 1, 3-12.
- Gibson, J.J. (1986). *The Ecological Approach to Visual Perception*. New Jersey and London: Lawrence Erlbaum.
- Goodnow, J.J. (1995). Differentiating among social contexts: By spatial features, forms of participation, and social contracts. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.),

- Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 269-301). Washington, DC: American Psychological Association.
- Graham, J. (2002). The kids are all right. *Museum Practice*, 19, 43-47.
- Harris Qualitative. (1997). *Children as an audience for museums and galleries: Report prepared for the Arts Council and the Museums and Galleries Commission*. Surrey: Harris Qualitative.
- Hedge, A. (1995). Human-factor considerations in the design of museums to optimize their impact on learning'. In J.H. Falk and L.D. Dierking (Eds.), *Public Institutions for Personal Learning* (pp. 105-117). Washington, D.C.: American Association of Museums.
- Heft, H. (2001). *Ecological psychology in context*. New Jersey: Lawrence Erlbaum Associates.
- Hein, G.E. (1995). The Constructivist Museum. *Journal of Education in Museums*, 16, 21-23.
- Hein, G.E. (1998). *Learning in the Museum*. London and New York: Routledge.
- Hein, H.S. (2000). *The museum in transition: A philosophical perspective*. Washington and London: Smithsonian Institution Press.
- Hellenic Ministry of Education and Religious Affairs and Hellenic Ministry of Culture. (1997). *Πρόγραμμα ΜΕΛΙΝΑ: Εκπαίδευση και Πολιτισμός* (MELINA Programme: Education and Culture). Αθήνα: ΥΠ.Ε.Π.Θ, ΥΠ.ΠΟ, Γενική Γραμματεία Λαϊκής Επιμόρφωσης.
- Hellenic Ministry of Culture (2002). *Παιχνίδια Πολιτισμού. Εκπαιδευτικές δράσεις του Υπουργείου Πολιτισμού* (Playing with culture: Educational activities of the Ministry of Culture). Αθήνα: ΥΠ.ΠΟ.
- Hellenic Ministry of Education and Religious Affairs, Pedagogical Institute. (2003). *A cross thematic curriculum framework for compulsory education*. Translated into English from the Official Gazette, issue B, no. 303/13-03-03, and issue B, no. 304/13-03-03, on the Pedagogical Institute website, www.pi-schools.gr, last visited on 13/09/05.
- Hellenic Ministry of Culture website (link to Museums and Archaeological Sites), last visited on 3/5/2005: <http://www.culture.gr/2/20/201/2011/201101/>
- Hellenic Statistical Services website, last visited on 10/4/2005: <http://www.statistics.gr/>
- Hendrick, H. (2000). The child as social actor in historical sources: Problems of identification and interpretation. In Christensen, P. and James, A. (Eds.), *Research with children: Perspectives and practices* (pp.36-61). London: Routledge Falmer.

- Heywood, M. (1970). *Children and museums*. Unpublished M.A. dissertation, University of Leicester).
- Hill, M. (1999). Towards effective ways of working with children and their families. In Hill, M. (Ed.), *Effective ways of working with children and their families*. London and New York: Jessica Kingsley Publishers.
- Hodge, R. and D'Souza, W. (1994). The museum as a communicator: A semiotic analysis of the Western Australian Museum Aboriginal Gallery, Perth. In Hooper-Greenhill, E. (Ed.), *The Educational Role of the Museum*. London and New York: Routledge.
- Holstein, J.A. and Gubrium, J.F. (1998). Phenomenology, ethnomethodology and interpretive practice. In Denzin, N.K. and Lincoln Y.S. (Eds.), *Strategies of Qualitative Inquiry* (pp. 137-157). London: Sage Publications.
- Hooper-Greenhill E. (1994a). Communication in theory and practice. In Hooper-Greenhill, E. (Ed.), *The Educational Role of the Museum* (pp. 28-43). London and New York: Routledge.
- Hooper-Greenhill, E. (1994b). Education, communication and interpretation: Towards a critical pedagogy in museums. In Hooper-Greenhill, E. (Ed.), *The Educational Role of the Museum* (pp. 3-27). London and New York: Routledge.
- Hooper-Greenhill, E. and Dodd, J. (2002). *Seeing the museum through the visitors' eyes: The evaluation of the Education Challenge Fund*. Leicester: Research Centre for Museums and Galleries, University of Leicester.
- Hooper-Greenhill, E. and Moussouri, T. (2001). *Researching learning in museums and galleries 1990-1999: A bibliographic review*. Leicester: Research Centre for Museums and Galleries.
- Hooper-Greenhill, E., Moussouri, T., Hawthorne E. and Riley, R. (2001). *Making meaning in art museums 1: Visitor's interpretive strategies at Wolverhampton Art Gallery*. Leicester: RCMG, West Midlands Regional Museum Council, Wolverhampton Museum.
- Hooper-Greenhill, E., Moussouri, T., Dodd, J. and Van Loenen, C. (2001). *Making meaning in art museums 2: Visitor's interpretive strategies at Nottingham Castle Museum*. Leicester: RCMG, University of Leicester.
- Hortarea, I. (2002). Ιστορική εξέλιξη των εκπαιδευτικών προγραμμάτων μουσείων στην Ελλάδα και στο εξωτερικό (A historical development of museum education programmes in Greece and abroad). In Kokkinos, G. and Alexaki, E. (Eds.),

- Διεπιστημονικές Προσεγγίσεις στη Μουσειακή Αγωγή* (Cross-disciplinary approaches to museum education) (pp.179-196). Αθήνα: Μεταίχμιο.
- Ioannidou, M. (1997). *Το Παιδί για το Μουσείο – Το Μουσείο για το Παιδί* (Children for Museums – Museums for Children). Θεσσαλονίκη: Παιδικό Μουσείο Θεσσαλονίκης.
- Jenks, C. (2000). Zeitgeist research on childhood. In Christensen, P. and James, A. (Eds.), *Research with children: Perspectives and practices* (pp.62-76). London: RoutledgeFalmer.
- Kalessopoulou, D. (1999). Ανοιχτός διάλογος με την κοινότητα: μια ελληνική πρόταση στα προγράμματα προσέγγισης (An open dialogue with the community: a Greek proposal on outreach projects). *Αρχαιολογία και Τέχνες*, 73, 69-74.
- Kaftantzoglou, R., Toundasaki, I., and Frydakis, M. (2005). Ιστορία, δομή και λειτουργία των εθνικών μουσείων της Αθήνας: Εθνικό Αρχαιολογικό, Βυζαντινό και Χριστιανικό, Ελληνικής Λαϊκής Τέχνης – Μια έρευνα κοινού (History, structure and function of the national museums of Athens: National Archaeological, Byzantine and Christianic, Greek Folk Art). *Τετράδια Μουσειολογίας*, 2, 71-73.
- Kasvikis, K., Nikonanou, K. and Furliga E. (2002). Εκπαιδευτικά προγράμματα αρχαιολογίας στην Ελλάδα: τα αποτελέσματα μια έρευνας και μιας εναλλακτικής πειραματικής εφαρμογής (Educational archaeology programmes in Greece: results of a research and an alternative experimental project). *Αρχαιολογία και Τέχνες*, 85B, 103-113.
- Kathimerini*. Σερφάροντας στον Βυζαντινό Πολιτισμό (Surfing in Byzantine Culture). Press release, 25/2/2005.
- Kindler, A.M. and Darras, B. (1997). Young children and museums: The role of cultural context in early development of attitudes, beliefs, and behaviors. *Visual Arts Research*, 23(1), 125-141.
- Kindler, A.M, Darras, B. and Kuo, A. (2000). When culture takes a trip: Evidence of heritage and enculturation in early conceptions of art. *Journal of Art and Design Education*, 19(1), 44-53.
- Kirk, J. and Miller, M. (1986). *Reliability and validity in qualitative research*. (Qualitative research method series, vol. 1; Van Maanen, J., Manning P.K. and Miller, M.L., Eds.). California: Sage Publications.
- Kohn, M.L. (1995). Social structure and personality through time and space. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the*

- Ecology of Human Development* (pp. 141-168). Washington, DC: American Psychological Association.
- Kouzinopoulou, M. (2002). Άδειες αίθουσες, επισκέπτες με το...κιάλι (Empty museum rooms, visitors in a distance). *Αγγελιοφόρος*, 21/3/2002.
- Laboratory of Comparative Human Cognition. (1983). Culture and cognitive development. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 295-356). New York: Wiley.
- Lakasas, A. (2005). Παιδεία: Πρότεινε κι εσύ κάτι, τώρα μπορείς (Education: Make a suggestion, now you can). *Kathimerini*, 9/3/2005.
- Lamarche, H. (1991). Le visiteur seul. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 53-55). Montréal: Société des Musées Québécois.
- Laszlo, E. (1969). *System, structure and experience : Toward a scientific theory of mind*. New York, London and Paris: Gordon and Breach, Science Publishers.
- Lacroix, L. (1991). Muséologue et éducateur, même combat?. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 15-17). Montréal: Société des Musées Québécois.
- Lajoie, R. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 31-32). Montréal: Société des Musées Québécois.
- Lefebvre, A. (1991). Des groupes d'enseignants font l'expérience de quelques types de visites de lieux muséaux. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 124-130). Montréal: Société des Musées Québécois.
- Lefebvre, H. and Lefebvre, B. (1991). Le visiteur de musée: Motivations et bénéfices. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 88-90). Montréal: Société des Musées Québécois.
- Leichter, H., Hensel, K. and Larsen, E. (1989). Families and museums: Issues and perspectives. *Marriage and Family Review*, 13 (3/4), 15-50.
- Lerner, R.M., Castellino, D.R., T.A. Patterson, Villaruel, F.A., and McKinney, M.H. (1995). Developmental contextual perspective on parenting. In Bornstein, M. (Ed.), *Handbook of Parenting – Volume 2: Biology and Ecology of Parenting* (pp. 285-309). New Jersey: Lawrence Erlbaum.

- Lewis, A. and Lindsay, G. (Eds.). (2000). *Researching Children's Perspectives*. Buckingham, Philadelphia: Open University Press.
- Lüscher, K. (1995). *Homo interpretans*: On the relevance of perspectives, knowledge, and beliefs in the Ecology of Human Development. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 563-597). Washington, DC: American Psychological Association.
- Maccoby, E.E. (1995). The two sexes and their social systems. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 347-364). Washington, DC: American Psychological Association.
- Macedonian Press Agency. Κινητές βιβλιοθήκες του YMA-Θ στο νομό Κοζάνης (Mobile library units of the Ministry of Macedonia-Thrace in the Prefecture of Kozani). Press release last visited on 25/2/2005: http://www.mpa.gr/article.html?doc_id=512904
- Magnusson, D. (1995). Individual development: A holistic, integrated model. In Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.), *Examining lives in context: Perspectives on the Ecology of Human Development* (pp. 19-60). Washington, DC: American Psychological Association.
- Martineau, R. (1991). L'éducation au musée: Vers un savoir apprendre. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 27-31). Montréal: Société des Musées Québécois.
- Mason, J. (1996). *Qualitative researching*. London: Sage Publications. (Repr. 1997, 1998).
- Mayall, B. (2000). Conversations with children: Working with generational issues. In Christensen, P. and James, A. (Eds.), *Research with children: Perspectives and practices* (pp.120-135). London: RoutledgeFalmer.
- McBurney, D.H. (1983). *Experimental psychology* (2nd edn). Belmont, California: Wadsworth.
- Melton, A.W., Goldberg Feldman, N. and Mason, C.W. (1936). *Measuring museum based learning: Experimental studies of the education of children in a museum of science*. Washington, DC (Repr. 1996).
- Merriman, N. (1999). Ανοίγοντας τα μουσεία στο κοινό (Opening museums to the public). *Αρχαιολογία και Τέχνες*, 72, 43-46.
- Messick, S. (1983). Assessment of children. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 477-526). New York: Wiley.

- Milligan, M.J. and Brayfield, A. (2004). Museums and childhood: Negotiating organizational lessons. *Childhood*, 11(3), 275-301.
- Moen, P., Elder G.H., Jr. and Lüscher, K. (Eds.). (1995). *Examining lives in context: Perspectives on the Ecology of Human Development*. Washington, DC: American Psychological Association.
- MORI (Market & Opinion Research International Limited). (1998). *Attitudes to learning '98: MORI State of the Nation Survey: Summary Report*. London: Campaign for Learning.
- Morris Hargreaves McIntyre. (2002). *Start with the child: The needs and motivations of young people. A report commissioned by Resource & The Chartered Institute of Library and Information Professionals*. On Museums, Libraries and Archives Council website, www.mla.gov.uk/documents/re179rep.pdf, last visited on 13/09/05.
- Moss, R. (1999). *The under-fives: Improving provision in museums and art galleries*. Unpublished M.A. dissertation, University of Leicester.
- Mouliou, M. (1999). Από την ιστορία της αρχαιολογικής επιστήμης στην ανάγνωση μουσειακών εκθέσεων του παρελθόντος (From the history of the archaeological science to the interpretation of past exhibitions). *Αρχαιολογία και Τέχνες*, 73, 53-59.
- Mouliou, M. (2005). Μουσεία: πεδία για την κατανόηση του κόσμου (Museums: fields for understanding the world). *Τετράδια Μουσειολογίας*, 2, 9-17.
- Moussouri, Th. (1997). *Family agendas and family learning in hands-on museums*. Unpublished doctoral dissertation, University of Leicester.
- Moussouri, Th. (1999). Έρευνα κοινού και αξιολόγηση στα μουσεία (Audience research and evaluation in museums). *Αρχαιολογία και Τέχνες*, 72, 56-61.
- Moussouri, Th. (2002). Μουσεία και κοινότητες ερμηνευτών (Museums and interpretative communities). In Kokkinos, G. and Alexaki, E. (Eds.), *Διεπιστημονικές Προσεγγίσεις στη Μουσειακή Αγωγή* (Cross-disciplinary approaches to museum education) (pp. 76-98). Αθήνα: Μεταίχμιο.
- Myroghianni-Arvanitidi, E. (1999). Ο ρόλος του μουσειοπαιδαγωγού στην Ελλάδα (The role of the museum educator in Greece). *Αρχαιολογία και Τέχνες*, 71, 50-53.
- Mussen, P.H. (Ed.). (1983). *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen). New York: Wiley.
- Nammer, G. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (p. 91). Montréal: Société des Musées Québécois.

- Nanou, Ch. (2002), Μουσεία χωρίς επισκέπτες (Museums without visitors). *Αγγελιοφόρος*, 21/9/2005.
- Nikonanou, N., Kasvikis, K. and Furliga E. (2004). Alternative ways into teaching archaeology: Design, implementation and evaluation. *Museology – International Scientific Electronic Journal*, 2.
- Nikonanou, N. (2005). Ο ρόλος της μουσειοπαιδαγωγικής στα σύγχρονα μουσεία (The role of museum education in contemporary museums). *Τετράδια Μουσειολογίας*, 2, 18-24.
- Oloffson, U. (Ed.). *Museums and children*. Paris: UNESCO.
- Paquin, M. (1991). Le rôle de l'agent dans l'éducation muséale. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 20-25). Montréal: Société des Musées Québécois.
- Pearce, J. (1998). *Centres for curiosity and imagination: When is a museum not a museum?* London: Calouste Gulbekian Foundation.
- Pedagogical Institute website, last visited on 9/5/2005: <http://www.pi-schools.gr>
- Pepper, S.C. (1942). *World Hypotheses*. Berkeley, Los Angeles and London: University of California Press.
- Piscitelli, B. (2001). Young children's interactive experiences in museums: Engaged, embodied, and empowered learners. *Curator*, 44(3), 224-229.
- Piscitelli, B. (2002). How museums grew to love young children. Paper from the Museums Australia National Conference 2002, Adelaide. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Piscitelli, B. and Anderson, D. (2000). Young children's learning in museum settings. *Visitor Studies Today*, 3(3), 3-10.
- Piscitelli, B. and Anderson, D. (2001). Young children's perspectives of museum settings and experiences. *Museum Management and Curatorship*, 19 (3), 269-282.
- Piscitelli, B., Everett, M. and Weier, K. (2003). *Enhancing young children's museum experience: A manual for museum staff*. Brisbane: Queensland University of Technology Museums Collaborative. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Pittman-Gelles, B. (1981). *Museums, Magic and Children*. Washington, DC: Association of Science-Technology Centers.
- Platten, M.R. (1976). *The effects of a museum esthetic education program on self concept, selected attitudes and school absences of elementary school children*. Doctoral

dissertation, Texas Tech University; published 1985 by University Microfilms International, Michigan.

Pournara, M. (2002). Τα μουσεία να συνδεθούν με την κοινωνία (Let museums connect with society). An interview with D. Konstantios, Director of the Athens Byzantine Museum. *Kathimerini*, 23/06/2002

Psathas, G. (1995). *Conversation analysis: The study of talk-in-interaction*. (Qualitative research method series, vol. 35; Manning P.K., Van Maanen, J. and Miller, M.L., Eds.). California: Sage Publications.

Qvortrup, J. (2000). Macroanalysis of childhood. In Christensen, P. and James, A. (Eds.), *Research with children: Perspectives and practices* (pp.77-97). London: Routledge Falmer.

Reed, S. E. (1996). *Encountering the world: Toward and ecological psychology*. New York: Oxford University Press.

Sameroff, A. J. (1983). Developmental systems: Contexts and evolution. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 237-294). New York: Wiley.

Scott, J. (2000). Children as respondents: The challenge for quantitative methods. In Christensen, P. and James, A. (Eds.), *Research with children: Perspectives and practices* (pp.98-119). London: RoutledgeFalmer.

Shaw, R. and Bransford, J. (Eds.) (1977). *Perceiving, acting and knowing: Toward an ecological psychology*. New Jersey: Lawrence Erlbaum.

Shaw, R. and Pittenger, J. (1977). Perceiving the face of change in changing faces: implications for a theory of object perception. In Shaw, R. and Bransford, J. (Eds.), *Perceiving, Acting and Knowing: Toward an Ecological Psychology*. New Jersey: Lawrence Erlbaum.

Société des Musées Québécois. (1991). *Actes du colloque: 'A propos des recherches didactiques au musée'*. Montréal: Société des Musées Québécois.

Spencer, C.A. (1974). Museums and children out of school. Unpublished M.A. dissertation, University of Leicester.

Stevenson, H. (1983). How children learn – The quest for a theory. In Mussen, P.H. (Ed.), *Handbook of child psychology – Volume I: History, theory, and methods* (vol. ed. W. Kessen) (pp. 213-236). New York: Wiley.

- Stierer, B., Devereux, J., Gifford, S., Laycock, E. and Yerbury, J. (1993). *Profiling, recording and observing: A resource pack for the early years – Teacher's guide*. London: Routledge.
- Strauss, A. and Corbin, J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. London: Sage Publications.
- Trudel, J. (1991). De l'importance des stratégies de présentation dans les musées d'histoire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 166-170). Montréal: Société des Musées Québécois.
- Tsaousis, D.G. (1997). Μουσεία και κοινωνική πολιτική (εισαγωγική ομιλία) (Museums and social policy : keynote speech). In Velioti-Georgopoulou, M. and Toundasaki, I. (Eds), *Μουσεία και Άτομα με Ειδικές Ανάγκες: Εμπειρίες και Προοπτικές* (Museums and people with special needs: experience and perspectives) (pp. 27-34). Αθήνα: Gutenberg.
- United States Department of Health and Human Services, Administration for children and families, Head Start Bureau website, last visited on 9/5/2005: <http://www.acf.hhs.gov/programs/hsb>
- Vadeboncoeur, G. (1991). Les approches didactiques selon le type de musée'. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp. 100-102). Montréal: Société des Musées Québécois.
- Vouri, S. (2002). Μουσείο και συγκρότηση εθνικής ταυτότητας (Museum and construction of national identity). In Kokkinos, G. and Alexaki, E. (Eds.), *Διεπιστημονικές Προσεγγίσεις στη Μουσειακή Αγωγή* (Cross-disciplinary approaches to museum education) (pp.55-66). Αθήνα: Μεταίχμιο.
- Watkins, J. (1991). Commentaire. In Société des Musées Québécois, *Actes du colloque: 'A propos des recherches didactiques au musée'* (pp.117-118). Montréal: Société des Musées Québécois.
- Weier, K. and Piscitelli, B. (2002). Hot and sweaty in the museum: Young children learning about nature, culture and science. On QUT Museums Collaborative website, <http://eab.ed.qut.edu.au>, last visited on 10/06/05.
- Weil, S.E. (2002). *Making museums matter*. Washington, DC, and London: Smithsonian Institution Press.
- Weltzl-Fairchild, A. (1991). Phenomenological description: an instrument to elicit esthetic response. In Société des Musées Québécois, *Actes du colloque: 'A propos des*

recherches didactiques au musée’ (pp. 141-147). Montréal: Société des Musées Québécois.

Winstanley, B.R. (1967). *Children and museums*. Oxford: Basil Blackwell.

Wolcott, H.F. (1990). *Writing up qualitative research*. (Qualitative research method series, vol. 20; Maanen, J. Van, Manning P.K. and Miller, M.L., Eds.). California: Sage Publications.

Wood, R. (1990). Museum learning: A family focus. *Journal of Education in Museums*, 11, 20-23.

Woodhead, M. and Faulkner, D. (2000). Subjects, objects or participants? Dilemmas of psychological research with children. In Christensen, P. and James, A. (Eds.), *Research with children: Perspectives and practices* (pp.9-35). London: RoutledgeFalmer.

Zapri, D. (2004). Changing perceptions of early childhood museum research. *Museological Review*, 11, 64-79.

Zapri, D. (2006). ‘So near, so far: Ecological considerations of museum education in the Greek context’, *Museology – International Scientific Electronic Journal*, 3.