

TWO-YEAR-OLD CHILDREN'S ARTISTIC EXPRESSION IN A GROUP SETTING:
INTERACTION AND THE CONSTRUCTION OF MEANING

by

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ABSTRACT

This field study of two-year-old children using art materials in a preschool setting was concerned with how children constructed meaning about the art-making process through their interactions with others. The study was theoretically grounded in the work of George Herbert Mead, Herbert Blumer and Lev Vygotsky, who share a common view that meaning is socially constructed through interpersonal interactions. The study focused on children's early use of art media and their social interaction as a significant factor in their artistic expression.

Monthly videotaped and written observations documented four 2-year-olds' participation with art media during their attendance at weekly parent-2-year old program. Over two subsequent years, the data were expanded to include observations of additional 2-year-olds, and parent and teacher interviews. Observations in a 3 and 4-year-old classroom coupled with extensive teacher interviews provided insights into teachers' assumptions and values which guided their interactions. Observations of the 2-year-olds were coded into art episodes, and analyzed in terms of behaviours, interactions, and values.

Based on Vygotsky's idea that children's shift from biological development to higher cognitive functioning occurs through interpersonal interaction, children's exploratory use of materials was described. Analysis of their explorations revealed that intentionality and visual interest were crucial components in their art experiences. Analysis suggested that children as young as 2

years possess aesthetic sensitivity. There did not appear to be any single factor that could account for children's selection or placement of colors or marks on a piece of paper.

Social interactions around art-making occurred within spatial-temporal frames which contributed to the way the art-making context was defined by the participants. Through interpretations derived from interactions with peers and adults, children constructed understanding about cultural values for work, production, ownership, and neatness. They learned little about art skills or the relationship of their art-making experiences to art in the adult world.

The study concludes with presentation of an interactionist model of children's artistic expression which describes the dialectical relationship between biological development and social interaction. The model eliminates the need to debate issues around innate or cultural origins of children's visual expression, through its inclusion of biological and social components. Using the interactionist model and Vygotsky's notion of scaffolding can help teachers address conflicts surrounding the definition of developmentally appropriate art education for young children.

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PREFACE

Articles based on the work described in this thesis have appeared in publication. Segments of the discussion about scribbling in Chapter II, and some of the anecdotal episodes cited, appeared in my 1990 article, "More than Movement: Scribbling Reassessed", published in Visual Arts Research, 16(1), 83-89 and reprinted in L. Y. Overby (Ed.) (1991). Early Childhood Creative Arts: Proceedings of the International Early Childhood Creative Arts Conference (pp. 112-120). Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.

Portions of the discussion about values, which emerged from the study of the 3 and 4-year-old classroom, will be published under the title, "Preschool Children's Socialization Through Art Experiences." It will be included in an anthology of articles about early childhood art education published by the National Art Education Association.

An original version of the discussion of Mead, Vygotsky and symbolic interactionism was published in 1987 as "Symbolic Interactionism as a Theoretical Perspective for the Study of Children's Artistic Development" in Working Papers in Art Education, (6), 69-77.

I originally cited the quotation from Elizabeth Peabody and included some of the ideas based on Efland's description of school art in a 1989 article, "Pestalozzian and Froebelian Influences on Contemporary Elementary School Art." This was published in Studies in Art Education, 30(2), 115-121.

Some of the episodes described in this study appear in the videotape, Beginnings in Art, which I wrote (David Rosenbaum, film editor) and which was produced by the University of British Columbia Child Study Centre.

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The study would not have been possible without the cooperation of the teachers, parents and children; Jeanette Andrews and Lara Lackey, observers; Isabel Spears, typist; and Sheila Hall, Ray Hartley, David Rosenbaum, and Shawn Wilson, camera operators.

Computer assistance was provided by John Risken, Gerry and Lynn Hushlak, and Sean McLennan. A number of colleagues and staff at the University of Calgary, especially Helen Diemert and Katherine Ylitalo, read drafts and offered helpful comments.

A special thank you to my family. Jennifer spent part of her summer editing this paper. My husband, Richard Hirabayashi, supplied intellectual challenges, phenomenological insights, and practical support. I am unable to express my gratitude to my mother, Audrey Sandkuhle, for her contribution so I dedicate this thesis to her.

CHAPTER I. THE RESEARCH PROBLEM

Statement of the Problem

The problem investigated in this field study is how children used art tools and materials and how they constructed meaning about the purposes of these media through interaction with peers and adults. This study is an attempt to broaden understanding of children's artistic development, and to present evidence for a theoretical model that includes social interaction as a significant factor in children's artistic development.

This contextually-based investigation focused on 2-year-old children who used art materials provided regularly as part of a weekly 2-hour, 8-month preschool program. The study was theoretically grounded in symbolic interactionism and Vygotskian psychology.

The study focuses on three aspects of the process of children engaging in art experiences:

- a) how children use materials (how children hold brushes, select colors, make marks, etc.);
- b) how children construct meaning about art-making through interaction in a group setting (a physical and social environment); and
- c) how these two components of the process of art-making are related.

Statement of the Research Questions

To facilitate identification and analysis of the relationship of social interaction to children's artistic activity, five specific research questions were addressed:

1. How do 2-year-old children use tools/implements and art media in a social setting?
2. How do adults frame the art-making process for children?
3. How do adult-child interactions define the art-making process?
4. How do child-child interactions define the art-making process?
5. What is the relationship between tool use and meaning acquisition for 2-year-olds using art materials?

Background to the Problem

Many researchers have regarded learning how to draw as a universal process (Arnheim, 1967; Lowenfeld & Brittain, 1975; Schaefer-Simmern, 1948/1961). Systematic description and classification of children's drawings in an age-related, sequential manner has existed, with variations according to individual researchers, for approximately one hundred years, beginning with Sully's (1896) description of three stages: formless scribble, primitive design, and sophisticated treatment of humans and animals. More recently, Lowenfeld (1947), Brittain (1979), and Kellogg (1970) have delineated variations of these stages. Inherent in the universal developmental model is an assumption that there is a factor (or factors), innate within the child, which directs

the child to follow a predictable progression of visual line formations. Underlying the work of researchers seeking to identify rules which children employ when drawing (Goodnow, 1977; Freeman, 1977; Willats, 1981; Wolf & Perry, 1988), may be an assumption that innate, organic factors play a role in determining the course of rule acquisition, even if children are "learning" the rules that they apply to the drawing task. However, Gardner (1980) stated, "no simple set of factors is likely to provide a satisfactory, let alone exhaustive accounting of how drawing skills develop" (p. 37). Most research in child art has focused on children's representations in drawing to the extent that studies in child art have become almost synonymous with drawing. However, there have been a few studies of children's representation in other media such as painting (Smith, 1972), and clay or play dough (Golomb, 1974; Brown, 1975). This study does not focus exclusively on drawing material because the transition from tool use to higher symbolic function is not limited to drawing, and because a variety of art media are included as part of a typical preschool art program.

In the field of developmental psychology, "development" has been used ambiguously to imply both innate or genetic factors and change that results from learning (Reber, 1985). This ambiguity is reflected in the literature on children's artistic development; researchers in children's art can be found positioned at various points between the poles of innate and learned behaviour. Developmental stage theory also carries with it an assumption

that the forms children create, although mystifying in their origins, are still the result of a relatively simple process resting primarily with the individual child, who expresses idiosyncratic and universal aspects of human development.

During the past ten years, art educators (Hamblen, 1985; Lewis, 1982; Rush, 1984; Swann, 1985; Wilson & Wilson, 1981) have begun to debate the usefulness of developmental stage theories, and have begun to seek other ways of investigating and understanding children's art. Hamblen argued for a sociopsychological framework to examine children's artistic expression on the grounds that, although developmental theories have permitted descriptions of the common forms children create, these theories are inadequate because they are based on a predefined end (realism). Cultural influences are minimized, and the relationship between child art and adult art, other than the former being preparation for the latter, is ignored. Rush (1984) wrote in a similar vein, cautioning against the use of developmental stages as prescriptions of children's potential, rather than as descriptions of what untrained children do when drawing and painting. Hamblen (1985) stated, "Artistic expression needs to be considered as consisting of selections or choices for reasons and outcomes that make sense within a given context, rather than as a development to predefined ends that are prescribed for all instances" (p. 76). Wilson and Wilson (1981) have assumed that stage theory implies an innate unfolding of development and cannot account for all the differences in children's art. They have questioned cross-cultural

or cross-generational application of age-related norms, a view supported by Hagen (1985). In response to Wilson and Wilson, Lewis (1982) countered that not all those using developmental theory agree with an innatist position. She argued that developmental theory does not necessarily preclude environmental influences. Without abandoning developmental stage research, Lewis concluded that other research strategies will provide insights into children's art. Golomb (1992) has also rejected a rigid definition of developmental stages. She makes a case for "an intrinsically ordered sequence of graphic development" (p. 338) but suggested, "we still need to examine the role of social and cultural variables" (p. 338). Swann (1985) proposed that developmental stage theory is perceived to be inadequate because research has focused almost exclusively on the products children create, and suggested there is a need to undertake studies of children involved in the process of art-making.

Common to many of the critiques of developmental theory is the notion that social or cultural factors must also be considered when formulating accounts of children's art work (Alland, 1983; McFee & Degge, 1980; Wilson & Wilson, 1984). Even those individuals who espouse a universal view of artistic development acknowledge that cultural differences appear after children begin school (Kellogg, 1970; Hamblen, 1985). Korzenik (1979) suggested that it is important to examine children's drawing in the context of socialization. Gearhart and Newman (1980) have suggested that some aspects of learning to draw are socially constructed through

teacher-child interactions. Johnson (1982) used an interactionist perspective to examine children's understanding of their art-making experiences.

Personal Search

As an early childhood educator and art specialist, working with a group of 2-year-olds for the first time in 1983, my belief in the adequacy of developmental stage theory in art was challenged when I reviewed video tape recordings of classroom activity and noticed how frequently children who were engaged in using art materials watched other children. Although I knew that watching behaviour by 2-year-olds had been clearly documented (White, 1975), my knowledge of the literature on the artistic development of young children, including an extensive review of the literature on the subject during teacher training and independent study, had not prepared me for the behaviour I was observing on video tape. I observed children engaged in using art materials, while simultaneously involved in many varieties of interactions with their teachers, parents and peers. I also observed these 2-year-old children operating at levels and in ways beyond what the literature had led me to expect.

I acknowledge the important role that understanding artistic development has had for me as a preschool teacher, because I have observed, first-hand, children creating marks and forms in a generally predictable manner. I have used this information in my discussions with parents about their children, and as one basis for

program planning. However, following extensive video observation, I became aware that perhaps I was understanding only part of a more complex process. This problem triggered my personal search for a perspective from which to study children's artistic behaviour within the preschool classroom. It might incorporate those common characteristics or universal aspects of art development I had observed, while expanding to include those social interactions occurring simultaneously within the classroom. I also became aware of how my knowledge of the literature on children's art had affected not only my expectations of children, but also the very way I planned and structured the art program, setting up an interactive and mediated set of relationships between the child, the materials, and myself as the teacher, in a network of social interactions.

A Contextualist-Interactionist View

As Swann (1985) pointed out, previous studies of children's art have focused on the products children create, so there is little in the developmental literature which provides an adequate theoretical stance from which to examine the process of art-making in a particular setting. Here, process is intended to mean experience, rather than a series of procedures. The search for a means of understanding the artistic process from this contextual view, rather than from the perspective of developmental norms, has led me to seek theoretical and methodological support in the fields of social psychology, anthropology and sociology. Thus, the theoretical roots underpinning this study originate in the

pragmatic philosophy of William James, John Dewey and George Herbert Mead which Pepper has labelled "contextualism" (Mueller & Cooper, 1986, p. 7).

Pepper has identified the contextualist stance as one of four perspectives governing western philosophical and scientific thought. The contextualist view emphasizes the primacy of the immediate situation as an area of research over a search for natural laws awaiting discovery. I will adopt the term "contextualist", rather than the more common term of "pragmatist", for the purpose of this study, because contextualist will serve more clearly as a reminder that the focus of the study is a particular situation, or context.

Support for social interaction as a factor in artistic development, as suggested by Gearhart and Newman (1980), can be found in the theoretical position of symbolic interactionism. Grounded in contextualism, symbolic interactionism is based on the teachings of G. H. Mead, and delineated by the sociologist Herbert Blumer (1969). A second source is found in the writings of the Russian psychologist, Lev Vygotsky. Although Mead and Vygotsky differed in many of their ideas, they shared a conviction that human thinking results from a process of interpersonal interactions through which individuals construct meaning about their world. This construction of meaning occurs through interpersonal interactions around objects, and ideas represented symbolically.

Denzin (1977) discussed child development from the interactionist perspective as follows:

The child, like the adult, is able to shape, define, and negotiate its relationship to the external world of objects, others and social situations. Such a self-conscious organism can define its own reality and its own relationship to that reality. In turn, the child like other actors, can enter into the organization of its own developmental sequence, by passing certain stages, regressing to others, ignoring still others, and perhaps creating stages or phases that have yet to be imagined. (pp. 9-10)

Placing the study of children's art into a contextualist framework shifts the focus from the product of children's work with art materials to the interactions which occur around art-making. This perspective de-emphasizes the linear sequence of development advocated in the universal developmental notion of children's art, in favor of emphasis on the interactions and interpretations occurring during the art-making process. In order to ground this study within a contemporary milieu, I will briefly explore why the role of social interaction as part of artistic development has been largely ignored.

Piagetian Dominance of Child Development Theory

The Piagetian view of children's cognitive development has dominated post World War II child development research in North America. Art education has been influenced by Piaget's constructionist view of child development and by the views expounded by Lowenfeld as early as 1947 (Lowenfeld & Brittain, 1975), and others, such as Kellogg (1970). Teachers were to leave children's artistic development, or production of visual forms using such media as drawing, painting, or modelling materials, to

a natural unfolding process, unimpeded by external influences. The teacher's role was to encourage children, but not to teach children how to make art. Smith (1982) criticized Lowenfeld for lacking a "general theory of cognitive-affective development in art" (p. 298). Yet, Lowenfeld's unfolding view did not conflict with the Piagetian view that children's mental constructions could not be changed by instruction. They would develop through children's experience with materials.

In conjunction with this idea of self-taught child art, one of the key words in art education in the 20th-century has been "self-expression," which became widely disseminated through publication of Lowenfeld's book, Creative and Mental Growth, in 1947. In practice, this mode of teaching encourages art based largely on affective characteristics, and skills which the child has gained from his or her own experience with materials. The Piagetian perspective has become so entrenched in the field of psychology that a reality about the nature of children's art has been constructed which in turn has determined how we interpret the developmental process, and has directed investigations which validate this perspective.

Gardner (1980; 1985), while acknowledging his debt to Piaget, has been critical of applying Piaget's model based on scientific thinking to creativity and modes of symbolic expression. Light (1986) suggested that in the area of psychology "the hegemony of the cognitive over the social has been challenged, and is increasingly being challenged in contemporary work" (p. 170).

I would suggest that the dearth of studies which have attempted to account for social influences on children's artistic development is due to the strong Piagetian and cognitivist biases in research on artistic development. Light reached a similar conclusion about the monopoly that Piaget's theory of cognitive development has had on the field of developmental psychology. He wrote, "Earlier theoretical positions which attempted to ground an account of cognitive development in the child's social experiences (Mead, 1934; Vygotsky, 1962) were almost totally eclipsed by Piaget's essentially individualistic account of cognitive development" (p. 170).

Ingleby (1986) presented arguments for a "social-constructionist paradigm in developmental psychology" (p.305). He has identified several approaches to the creation of a social-constructionist paradigm, and found a commonality among them:

What all these approaches have in common is that they break down the individual/society dichotomy via the following two-stage argument. First, human thought, perception and action must be approached in terms of meanings: secondly, the vehicles of "meaning" are codes (especially language) whose nature is inherently intersubjective. Therefore mind is an intrinsically social phenomenon. And if psychology is the science of mind, then the object of psychology is not individuals but....what goes on in the space between them: that is the codes, which structure action. (p. 305)

Vygotsky's Social View of Development

The art-making process occurs within a particular setting at a particular time, and includes the skills, interests, and meanings that the child has acquired through past experiences and interactions. Vygotsky defined this combination as the actual level of development attained by the child. Children's construction of meaning through interactions with others will occur in the area of development which Vygotsky termed "the zone of proximal development", or the level of development the child can attain with the assistance of adults or more advanced peers. From a stance bearing some similarities to symbolic interactionism, Vygotsky (1978) wrote,

From the very first days of the child's development his activities acquire a meaning of their own in a system of social behavior and, being directed towards a definite purpose, are refracted through the prism of the child's environment. The path from object to child and from child to object passes through another person. This complex human structure is the product of a developmental process deeply rooted in the links between individual and social history. (p. 30)

Vygotsky believed that the beginning of purely human intelligence, as distinct from animal intelligence, occurs when "speech and practical activity, two previously independent lines of development, converge" (p. 24). Vygotsky defined children's acquisition of culture as occurring through their acquisition of the sign systems, particularly language, of the culture. He noted that "the use of signs leads humans to a specific structure of behavior that breaks away from biological development and creates new forms of a culturally-based psychological process" (p. 40).

Vygotsky (1978) described signs and tools as having a mediating function, while retaining distinctions. The function of a tool is "to serve as the conductor of human influence on the object of the activity; it is externally oriented; it must lead to changes in objects" (p. 55). According to Vygotsky, the sign "is a means of internal activity aimed at mastering oneself" (p. 55). In other words, the sign is a psychological tool or a tool for thinking, not solely grounded in practical activity. Art and writing are included under the category of psychological tools (Werstch, 1985). Vygotsky concluded that higher psychological functioning occurs through this combination of tool and sign usage, with mediated psychological activity changing possible mental functions, and an increase in tool use expanding the scope of activities "within which the new psychological functions may operate" (p. 55).

In applying Vygotsky's notions to the study of children's artistic development, it becomes apparent that artistic expression cannot be simply an unfolding process, because artistic expression involves both tools and signs, or representations. Tool use, or in this case children's use of art materials, is socially constructed, as are the signs which are expressed with them. Consequently, it is necessary to study both tool use and children's transition from lower to higher symbolic functioning, apparent through their acquisition and use of named visual forms and recognizable representations in their art work, in order to develop

a more adequate description and explanation of children's artistic expression.

Significance of the Study

In art education, past dependence on autonomous views of development has perpetuated a belief that children's artistic development is largely an internal process where exploration or interaction with materials provides the means for mental change or growth. Looking at artistic expression from an interactionist perspective will allow the researcher to investigate the role social interaction plays in children's art. This perspective is not intended to discredit or replace developmental studies, nor challenge developmental psychologists to abandon their research, even though these two stances may seem to be philosophically contradictory. It is based, instead, on the assumption that artistic behaviour is not a simple process but instead depends on complex interactions between the child and other individuals. Individual development is one component of a more complex structure. This study is intended to demonstrate that a more comprehensive understanding of children's artistic expression can be gained through an examination of the interactions which define the art-making process for children.

Although the study is framed as one of children engaged in art-making, adults, especially teachers, become key participants in the research as, through teacher-child encounters, their conscious and unconscious notions of art and art-making are revealed within the classroom environment. Thus, the study also

will contain insights into teaching practices, and the relationship these have to learning in art. Just as the self-expression model has influenced art teachers for the past 40 years, the interactionist model may provide a relevant model for art teaching in the future (Fielding, 1989). These matters are particularly important at the preschool level, where teachers mediate children's use of materials as they move out of operating at the "biological" level of development into the socially mediated level of psychological development.

Definition of Terms

Art materials, including drawing implements, modelling materials, paint, scissors, glue and paper, are materials suggested by art education and early childhood education textbooks (Herberholz & Hanson, 1990; Lasky & Mukerji, 1980; Schirrmacher, 1988) as belonging in an art centre or art program for young children. Although textbooks may suggest additional materials, these materials are commonly used by children and mature artists alike.

In order to differentiate between children's art seen from the developmental perspective, and the interactionist position taken in this study, I will use the terms art and artistic expression to refer to children's non-representational and representational forms, and the production of these forms, which children create using materials such as drawing implements, (crayons, pencils, felt pens, oil pastels, etc.), paint, clay or play dough, scissors, glue and paper. I will retain the term artistic development where it

has been used within developmental literature. These terms do not imply a value judgment as to the artistic merit of these forms.

Swann (1985) has defined the art making process "as a situation in which children actively make sense and display meaning in their world....the situation of art process entails the use and activities of art materials by children, and the presence of peers and adults" (p. 13). I will retain her intent but substitute experience for process, to avoid any connotation of procedures.

The context in which the art making experience occurs includes the physical environment composed of the availability, arrangement, and location of materials and workspace; and the social environment of human interactions composed of teachers, parents, or other adults, and peers who may be involved in the art making experience (Kelly-Byrne, 1989; McFee & Degge, 1980).

Early childhood education is used to refer both to education for children prior to school entry in kindergarten, and to education for children up to eight years of age. I will use early childhood education in this latter sense because I will refer to texts and materials developed for children up to age eight. I will adopt preschool to refer specifically to programs which are designed for children prior to kindergarten entry at age 5 years, and preschool-age to include children between the ages of 2 and 5 years.

Overview of the Study

The first three chapters introduce theoretical background material from the diverse areas of drawing and children's art

research, social psychology, and education relevant to an early childhood art program. Specifically, Chapter II is a review of research in children's art including: developmental stage theory and rule acquisition, children's physical development, social or cultural influences, and art materials commonly provided in preschool classrooms. Chapter III presents a discussion of the symbolic interactionist perspective and Vygotsky's theories of development. In this study, theoretical underpinnings and research method are inextricably linked through common origins in the work of G. H. Mead and Herbert Blumer. Chapter IV introduces the research method, including the theoretical foundations of the research method, description of the study design and the research process. Chapter V focuses on children's explorations of the inherent properties of art materials. Chapter VI is an analysis of the art making context and how symbolic interactionism operates within this context. Chapter VII summarizes the major findings from Chapters V and VI, introduces an interactionist model of children's artistic expression and concludes with implications for the field of early childhood art education.

CHAPTER II. CHILDREN'S ARTISTIC EXPRESSION

Introduction

The primary focus of this section of the literature review is concerned with how children use art materials to create visual forms. This question, reflecting the interactive and contextualist perspective guiding the study, presents a shift away from the individualistic or developmental-psychological tradition for studying children's art. This does not mean those studies will be excluded from this review. On the contrary, they will comprise a major component of the discussion because they form the descriptive base of knowledge from which this study has grown. However, important as they are, direct applicability of findings from those studies to this study is often limited, due to differences in philosophical orientation. Additionally, the assumed qualitative differences between the art-making of presymbolic children in this study and older children (Hardiman & Zernich, 1988) make direct comparisons impossible.

Developmental Stages: Assumptions and Cautions

Probably the most common way of categorizing and viewing change in human behaviour over time has been through the concept of developmental stages. Descriptions of children's art from a developmental perspective can be found in almost any methods book for early childhood and elementary art education. The availability of these, in addition to those mentioned at the beginning of this section (Eisner, 1972; Gardner, 1980; Herberholz & Hanson, 1990; Matthews, 1987; Pariser, 1984; Salome, 1991; Schirrmacher, 1988;

Smith, 1982; Taunton & Colbert, 1984; Wilson & Wilson, 1982a; Winner, 1982) precludes dealing with them in detail here. A brief critique of developmental theory was presented in Chapter I (Hamblen, 1985; Swan, 1985; Wilson & Wilson, 1981). Some additional cautions about stage theory are worth noting here.

Feldman (1985) defines stages as prototypes "of what perfectly consistent performance would be like if a person were ever totally in one or another of the stages or levels of a domain" (p. 83). Since it is assumed here that an individual may operate at more than one stage at a time, art work may exhibit forms which can be classified as originating in different stages. So as to account for the idiosyncrasies of individual development, this review will include investigations involving subjects older than two years of age.

An additional assumption in developmental stage theory is that earlier stages are prerequisites for later stages (Rush, 1984). Kratochwill, Rush and Kratochwill (1979) challenged the notion of developmental stages, suggesting that experience and training may also influence the forms children create. Studies by Dubin (1946), Grossman (1980), and Pemberton and Nelson (1987) provide support for the view that specific kinds of teaching can increase young children's skills. Hagen (1985) suggested that while children's work may exhibit a certain kind of progression, it cannot be assumed that this progression lasts through adulthood, a point she supports by demonstrating that drawing skills required for systems

of spatial representation in different cultures are not the product of universal age-related development.

Perspectives and Guiding Questions

An extensive body of literature in children's drawing has accumulated over the past 100 years. Most researchers investigating children's art have looked at children's drawings, making a study of drawings appear to be synonymous with child art. The emphasis on drawings as a focus for discussion reflects a past emphasis in the literature. In this study, children's use of other art media (paint, and clay or play dough) will be reviewed as well.

Many researchers agree about the general course of artistic development but there are diverse theories as to the reasons for the appearance and sequence of these forms (Winner, 1982). Clarke (1979) subdivided theories of children's art into four basic categories: drawings are based on what children know, see, feel; or drawings represent archetypal images. Strommen (1988) argued that two categories suffice: children draw what they see or what they know. He contended that over the past 100 years these two basic perspectives have been recycled and reworked in three major waves of writings, in which neither view has provided a more adequate account than the other. Another debate revolves around universal (innate) versus cultural acquisition as a source of images (Wilson, 1985). Other researchers have agreed that in the early years innate factors are important but are overridden by cultural factors in late childhood or adolescence. The scope of this paper does not allow a debate on the validity of these

categories, but it will demonstrate why these separate theories are inadequate to address the question of how children come to understand the use of art materials, and how these theories may or may not fit into a comprehensive view of children's art.

In this section, the studies under review are divided into three broad categories. They are drawn from the psychological, sociological, anthropological, and art fields, which form the foundation of this investigation. The categories will help to organize the literature into a frame useful for later analysis. They include: 1) child-centered studies which describe the progression (stages) of children's artistic development, typical skills, level of symbolic functioning (e.g., Gardner, 1980; Kellogg, 1970; Matthews, 1984; Smith, 1972) or production strategies (e.g., Freeman, 1977; Goodnow, 1977; Willats, 1981); 2) socio-cultural studies designed to examine external (to the child) influences on the images children create (Alland, 1983; Wilson & Wilson, 1984; Winner, 1989); and 3) media studies that focus on a particular medium or tool rather than the visual form created with that medium.

Four questions, reflecting these three categories, guide this literature review:

- 1) what investigations about art-making have been undertaken which include 2-year-olds as part of the research sample;
- 2) what kinds of visual forms would a visitor to a preschool classroom expect to find 2-year-old children creating;

- 3) what is known about the origin of these images
(cognitive; perceptual; socio-cultural); and
- 4) what is known about how very young children use media and
tools, as distinct from the visual formations they create?

Child-Centered Studies

Lack of Research About Children's Non-Representational Forms

The lack of in-depth research in the area of children's nonrepresentational or presymbolic work, has been noted by Clare (1988), Lowenfeld and Brittain (1975), and Matthews (1984). A survey of sources for data on 2-year-olds' art-making includes writers who have referred to "presymbolic" children in their overviews of artistic growth (Arnheim, 1967; Lowenfeld, 1949), longitudinal case studies of individual children (Eng, 1954; Fein, 1976), reports by researchers who have included observations of their own children's work as part of their discussion (Clare, 1988; Gardner, 1980; Matthews, 1983, 1984, in press), and studies which include 2-year-old children as part of their populations (Berefelt, 1987; Kellogg, 1970; Gardner, 1982; Golomb, 1974, 1981; Lukens, 1896; Wolf & Davis Perry, 1988). Of these studies, Berefelt's examination of sex differences in drawings by 18-month-olds is the only study to focus exclusively on work by children under the age of 2 years. Although a number of investigators, such as Golomb (1974, 1992) and Freeman (1977, 1980), have discussed aspects of children's first attempts at representation, the data have been embedded in longitudinal or comprehensive discussions of drawing, thus limiting the depth of their discussion of work by very young

children. What appears at first to be a number of studies focusing on young children are largely findings embedded in the context of other studies, or as components of discussions about longitudinal development.

Possible Reasons for Lack of Research

Webster's Ninth New Collegiate Dictionary (1989) defines scribble as "making meaningless marks" (p. 1055). The other definitions under scribbling reflect a similar flavour, "to write hastily or carelessly, to fill or cover with careless or worthless writing" (p. 1055). The wide use of the term "scribble" to describe young children's first mark-making efforts serves both to describe and define the value of this activity. Probably the most widely disseminated description of the beginnings of young children's graphic development comes from Lowenfeld's descriptions of stages of artistic development, in which "the scribble stage" was divided into three sub-stages: disordered, controlled, and named (Lowenfeld & Brittain, 1975). This first stage has also been called "irregular" (Herberholz & Hanson, 1990; Wilson & Wilson, 1982) or "random" (Brittain, 1979). Schaefer-Simmern (1961) called the child's first scribbles "mere traces of motor activity" (p.10). All of these terms are intended to describe multidirectional marks created with inconsistent pressure on the drawing tool, which results in lines of varying width, length, and organization, yet these terms still convey the notion that early mark-making is haphazard and purposeless (Tarr, 1990). Consequently, scribbling carries negative connotations (Lowenfeld & Brittain, 1975;

Matthews, 1984; Matthews, in press; Tarr, 1990) which may have contributed to the lack of research interest in this area. To avoid a negative connotation I will use the term mark-making or Arnheim's term (visual) "presentations" (p. 166) whenever possible, although I will remain consistent with other authors' use of scribbling when it is used as a specific label or category rather than generically.

Likewise, investigations into the area of children's production strategies and rule acquisition are cognitively oriented, most frequently grounded in a Piagetian perspective which describes young children operating at a sensori-motor level or early preoperational stage (Case et al., 1986; Dennis, 1987). These terms have been used, by extension, to define and describe children's beginnings in art. Judging from the lack of interest in the earliest expressions of mark-making, it seems that a sensori-motor categorization has provided most researchers with an adequate account for drawing at this level. This lack of interest in very young children may also reflect a deficit model in which non-representational forms are discounted in favor of representational forms (Matthews, in press). Other contributing factors suggested by Tarr (1990) may include lack of communication between the fields of early childhood education and art educators (Colbert, 1984), and the priorities exacted by formal education, which have resulted in a research emphasis on children five years and older.

Sources of Art Expectations for Two-Year-Olds

Developmental Studies

The general course of artistic development has been outlined as scribbling, preschematic forms, which includes the creation of basic shapes, designs, and outlines topologically resembling objects from the child's world, followed by increasingly deliberate attempts at creating realistic drawings.

Lowenfeld and Brittain. Although not the originator of developmental stage theory, Lowenfeld provided descriptions of stages that are the most widely used in North America as standard expectations for children's art. In the early editions of Creative and Mental Growth, Lowenfeld (1949) classified scribbling (2 - 4 years) as "disordered" which is solely the visual record of the child's kinesthetic activity; "longitudinal," which consists of linear repetitions created when the child begins to relate and control the marks produced with back and forth arm movements; "circular," produced by changes in arm movements which create more controlled circular shapes (later these two were combined into "controlled" scribbling); and "named scribbling", indicating a shift from interest in motor activity to representation. It is only during this stage, according to Lowenfeld, that color may be used beyond "mere enjoyment" (p. 20).

Brittain (1979), using extensive observations of preschool children as his source, lowered the age to 1 - 2-1/2 years for random scribbling, followed by about one year of controlled scribbling, with named scribbling beginning about 3-1/2 to 4 years.

Children's first representational attempts follow named scribbling.

Holladay (Brittain, 1979) described 2-year-olds as gripping drawing implements "like a hammer," with their fingers wrapped around the tool, and drawing without moving the fingers or wrist. Drawing time was less than a minute per paper and "these drawings are scribbled with no concern about filling the paper or drawing in any particular area" (p. 51). According to Holladay, 3-year-olds seem more purposeful, attending to where they place the marks on the paper. By employing a grip more like an adult grip they could control pressure on the pencil. They spent close to 2 minutes on each drawing.

Gestalt perspective. Arnheim (1967) wrote about children's graphic development from the perspective of Gestalt psychology. He acknowledged the role of kinesthetic activity and vision as the child invents a "structural equivalent" (p. 162) in a given medium, proceeding from generalized or undifferentiated forms to specific and complex forms. For example, the first circular forms children create are not round objects, but are only "presentations" (p. 166) of objects, later becoming equivalents for round things. The early tadpole figure, consisting of a circular head and two straight lines, provides an adequate representation of a human to a young child who is not interested in creating a realistic representation or highly detailed depiction of a human. Arnheim's theories have been influential in the writings of other researchers, such as Golomb.

Kellogg (1970) described children's artistic development as self-taught. In the Gestalt tradition, she emphasized "brain preference" as the prime determinant in the construction and arrangement of forms in children's art. According to Kellogg, the use and continuation of particular forms in children's art are due to the brain's preference for certain balanced, "good" (p. 32) forms which the child remembers and adapts. She takes a developmental stance in describing changes in visual formations as an evolving process, in which children create forms based on earlier markings. "Scribbles" are arranged in "placement patterns" on the paper. These patterns of markings occur in particular arrangements relative to the edge of the paper and are suggestive of the "diagrams" (basic shapes) which children combine into designs and later pictorial work. Kellogg is one of the few researchers who has studied non-representational drawings and who gave them a specific, rather than a general role in the development of representational forms. Placement patterns are important to Kellogg because they indicate forming and shaping in the drawings of very young children. However, other researchers have questioned Kellogg's placement pattern theories. Golomb (1981) could not reliably replicate Kellogg's placement pattern categories when classifying children's non-representational work. Clare (1988) interpreted the patterns and position of marks on paper to be the result of the child's position relative to the paper, the hand used by the child, and the construction of arm and hand. Although he underplayed the eye-brain influence on placement of marks, he did

agree with Kellogg that vision and visual tracking of marks were important, as evidenced in his son's early drawing. The importance of vision in drawing has been supported by Brittain (1979), Gardner (1980), Gibson and Yonas, (1967) and Matthews (1983; 1984).

While unable to support Kellogg's building block theory in her own research, Golomb has accepted the view that the early work of children is largely self-taught (Golomb, 1974). She observed that children learned from previous experience, and over the course of a single drawing session could progressively draw more complex representations of human figures. She has rooted her investigations of artistic development in the Gestaltist tradition, aligning her theoretical position with Arnheim's idea that children are not interested in creating a pictorial likeness of an object, but rather in finding structural equivalences in a particular medium (Golomb, 1974).

Golomb (1981, 1992; Golomb & Farmer, 1983) found that children who usually drew non-representational forms could draw a person when requested to do so. Golomb also found that children who were not yet drawing human forms could do so when the researcher dictated body parts to the child. Golomb and Farmer interpreted their findings as not supporting Kellogg's building block notion that representational forms are dependent upon the child's ability to combine previously mastered shapes or markings. Golomb (1992) provided additional information from cross-cultural research to support her position that representational formations are not dependent upon an individual's previous scribbling experience.

Freeman (1977, 1980) suggested that children who were not yet drawing representational forms could, nevertheless, accommodate their mark-making to pre-drawn forms, because their marks were oriented to a pre-drawn circle and incomplete human face. He observed nonrepresentational children accurately completing partially drawn human figures and concluded children could be assisted toward representation.

Criticism. Wilson and Wilson (1981) have been critical of adherence to norms outlined over 40 years ago, and cite contradictions in the way in which Lowenfeld and Brittain classified specific drawings. This leaves open to question whether these stage descriptions are relevant to a contemporary class of 2-year-olds. Developmental stage theory does not account for all children's graphic depictions. Nadia, an autistic child with extraordinary drawing ability, has challenged theorists as to the origins of her graphic ability (Gardner, 1982; Pariser, 1984; Selfe, 1977; Winner, 1982). Selfe (1985) cites examples of other autistic children, Stephen and Simon, who demonstrated outstanding graphic ability.

Case Studies

Three writers who have observed individual children's artistic expressions over time are helpful in setting forth some expectations for children in their second and third year of life, and in determining how individual children may illustrate the developmental process.

Eng. In documenting her niece's drawing development, Eng (1954) noted that Margaret first scribbled at 10 months of age when a pencil was placed in her hand after her aunt had drawn a figure. Spontaneous scribbling following at just over 14 months. At this time Margaret created "typical wavy scribbling, the usual result of the first attempts of a child to draw" (p. 3) which she continued to produce until 18 months, when she created circular marks. Eng postulated that the impetus for Margaret's first marks and the change to circular marking may have come from Margaret imitating adults. At first Margaret switched hands as she drew, then settled on her right hand at 16 months. At 20 months Margaret created "variegated scribbling" (p. 5) which included a variety of loops, zig-zags, and straight and curved lines massed together. Over subsequent weeks, she began to separate and spread these across the paper as she practiced. Margaret named her scribbles at 22 months and these named forms became distinct forms created from circular and straight lines. She created her first head-legs (tadpole) figure at 22 months, adding many dots for eyes, and finally extending her figures with a vertical line from the head, to a circular scribble shape from which projected two very closely spaced lines. (Eng considered her niece precocious in developing the human figure.) At about this time Margaret began to ask adults to draw objects for her, and apparently, Margaret also began to use colored pencils. During her third year Margaret continued to draw with an adult, and continued to refine and extend her forms. She used circles rather than dots for eyes, and a single line for a

mouth. She also expanded her drawing repertoire to include rectangles and crossed rectangles (Kellogg's mandalas) which she used to create tram cars.

Matthews. Matthews (1983), documenting his three children's artistic development from birth, provided specificity to the general accounts provided by Lowenfeld and Brittain. Matthews noted that "the basis of very young children's drawing is body action" (p. 5) and three infant gestures are used when the young child begins to draw or use a tool leaving a mark: "vertical arc" created by reaching for an object, "horizontal arc" created by sweeping or smearing actions on a flat surface, and "push-pull" motions. Matthews described these gestures as used at first to create discontinuous lines, which become more complex as movements combine and new forms such as "continuous rotations" emerge. These motions are practiced with many materials other than art media. According to Matthews, these shapes and lines which originate in sensori-motor actions are "adopted and adapted" (p. 13) later for representational purposes. The gestures and related marks revolve around the child's body, and he suggested that the orientation of the child's body to the paper is part of the learning process. The marks provide a visual record for the child of the action, which provides visual feedback for the child's future action (Matthews, 1987).

Matthews (1983) wrote,

Drawing is often part of a greater spatio temporal game in which the child may be, for example, as interested in removing and replacing the pen caps, sucking the crayon, or using it as a toy. What is so striking is the

studious and often painstaking experimentation with marker, movement and mark. (p. 12)

In the early stages, according to Matthews, children represent action or the motion of objects and "figurative representation," which depicts the form that the child recognizes as having a resemblance to an object in the real world. He documented these before the child created a single closed form.

Matthews (1984) illustrated "action representation" through this example of his son Ben painting at 2.1 years:

With a paint brush on paper, Ben describes a near circular course, rotating the brush around the area of the paper in a continuous series of overlapping spirals. As he revolves the brush on its elliptical journey, he says; "it's going round the corner. It's going round the corner..." And as the paint line becomes subsumed under layers of paint, thus losing visual contrast, he says, "....it's gone now...." (pp. 4-5)

While Matthews believes that the drawing process is self-initiated and self-directed (Matthews, in press), he also has acknowledged the importance of social interaction in the drawing process. Following analysis of a painting sequence involving his daughter and her mother, Matthews (in press) described the intersubjective understanding between mother and child in which the mother scaffolded the painting situation to facilitate her daughter's independent activity. He concluded that "more research is needed into the structure and organisation of this interpersonal support."

Gardner. Gardner (1980) described in some detail his son Jerry's mark making at age 2 years. Like Margaret, Jerry was fascinated with having others draw faces for him, sometimes dictating parts to be included, even before he could draw them

independently. Gardner mentioned the role that imitation played in Jerry's development. In one incident Jerry imitated his father's banging actions with a felt marker, and in another Jerry named a mark following his father's labelling of a drawing.

Motor Activity

It is clear from these previous discussions that motor activity and symbolic representation are closely related. There is beginning to be some consensus about the concepts inherent within non-representational line formations. In a study of prerepresentational children, Holladay described seven different aspects to mark-making: "Differentiated scribbles; random length directional marks, longitudinal, circular, individual circles, combinations of lines and shapes and geometrical drawings or decorative drawings with some degree of symmetry" (Brittain, 1972, p. 22).

In her study of children's development in painting, Smith (1979a) identified a sequence of linear explorations, which occur once the child has completed an initial exploration period. These are similar to those Holladay identified, and include:

movement, continuity, discreteness, beginning and ending, curvedness and straightness, direction relative to itself, orientation relative to itself, orientation relative to the paper space, length, width, combinability, capability of defining shape, and capability of defining and separating two continuous shapes. (Smith 1979a, p. 21)

Three researchers (Matthews, Clare, Smith) have examined the role of gesture and motor activity in artistic development as symbolic activity. Matthews (1983; 1984) focused on infant gestures

and the relationship these gestures have to later art forms. He concluded,

Because similar body dynamics are enjoyed by most children this tends to govern the form of early drawing and direct its future course. In these self-generated two-dimensional stimuli children often notice the same or similar correspondences in the world. Thus, we see a similar content in the drawings over a wide social range of children. (1983)

Smith has written extensively on symbolic development, particularly as it relates to painting (1979a, 1979b, 1982, 1983). Using Werner and Kaplan's theory of symbolic development, Smith described the relationship between the "vehicle", or medium used, and the "referent", or concept being represented, as an interactive process in which the symbol modifies the concept of the medium and the medium modifies the symbol. The forms of symbolization available to the child and the child's experiences with the material synthesize in the symbol the child creates, through what Smith terms as "a kind of dialogue between the nature of the paint and the ever growing mind of the child" (1983, p. 6).

Smith (1972) concluded that children employ similar motor actions as they use various media and "the same limited motor-rhythmic movements by the child produce different results" in different media, thus acknowledging a relationship between material and action (1979a, p. 20). Smith (1972, 1981), drawing from Berger and Luckmann (1966), acknowledged that mind is socially constructed, in a dialectical relationship in which people shape reality, which in turns shapes them. According to Smith, the symbol and the individual's conception of objects are constructed

by the mind and come to constitute reality. Relating this perspective to painting, she includes motor, media and cognitive factors as contributors to the child's artistic development, but her model is inadequate in that it stops short of providing a full account for the social construction of mind as it relates to young children. This may be due to some major assumptions and conditions of her study: 1) she was grounded in an innatist developmental view, and her youngest subjects were 3 years-old, still largely influenced by genetic factors, and 2) she worked from a strong Piagetian base which allowed for less emphasis on social interaction.

Production Strategies

Researchers who have investigated children's production strategies, or the rules they use in creating visual forms, have identified such production strategies as "to each its own space" (Goodnow, 1977), arm placement on the largest of two body segments (Freeman, 1977), and use of transformation and denotation systems in object representation (Willats, 1981). More detailed accounts can be found in Butterworth (1977) and Freeman and Cox (1985). These studies form a major component of the literature on children's drawing, particularly in the 1970s and 1980s. The cognitive perspective inherent in these studies and the age of their research populations, (usually 5-year-olds) means that they are not particularly informative for a contextual study of 2-year-olds.

As part of the Project Zero research, Wolf and Davis Perry (1988) extended the notion of children acquiring a system for symbolization to a multi-systems approach in which children may acquire several systems for graphic depiction and notation. They defined a drawing system as

a set of rules designating how the full-sized, three-dimensional, moving, colored world of ongoing visual experience can be translated into a set of marks on a plane surface. At least implicitly, any drawing system contains two types of rules: (1) rules specifying the kinds of information it is crucial to represent (e.g., characteristic motions, position, size, etc.), and (2) rules regarding which aspects of the individual drafter's behavior (e.g., his motions, speech, marks, etc.) are entitled to carry meaning. (p. 19)

Wolf and Davis Perry (1988) have identified the following drawing systems utilized by children under the age of 3 years. Children begin with "object-based representations" (12-14 months) when they use or substitute drawing materials for other objects. This symbolic activity is followed by "gestural representations," or what Matthews called "action representation". According to Wolf and Davis Perry,

children first make planful use of graphic properties in their "point-plot representations" which appear at approximately twenty months. In these primitive drawings, children manage to record the number and location of an object's features, using the paper surface to integrate these parts into a whole....Here only existence, number and position -not shape or color or volume-are being inscribed. Nevertheless, such plottings mark the first system in which it is the qualities of marks, more than the attendant behaviours of the child, that carry meaning. (p. 20)

Wolf and Davis Perry propose that children incorporate a new drawing system when they attend to the traces of marker on paper (18-30 months) which they call "discovered geometry" because it now

includes relative size and shape. This system is "refined" at about age 3, when children can deliberately create line formations which include "rules about representing outside contours, surfaces, and relative sizes" (p. 21).

According to Wolf and Davis Perry, children's development then progresses in two ways: acquisition of new systems and refinement of existing systems. A key point raised by these authors is that these systems are not all developed to create realistic representations, but to fulfill a variety of symbolic functions.

From these general discussions about the developmental process and specific examples of children's growth, it becomes clear that a variety of factors come into play, e.g. kinesthetic activity, vision, and cognitive activity.

Development in Other Media

Very little work has been done investigating children's visual expression in media other than drawing. Project Zero researchers have included cross media representations (Gardner, 1982); Smith (1972, 1981, 1983) has examined children's painting from ages 3 - 11 years; Golomb (1974), Brown (1975, 1984) and Brittain (1979) have been the major researchers to address children's use of clay and play dough.

Painting. Based on her 1972 doctoral study of children's development in painting, Smith (1981, 1983) synthesized painting stages rooted largely in the Lowenfeldian tradition. Stressing that young children must build up an understanding of paint as a unique material, as well as building concepts of line, shape and

color before they can represent objects through painting, Smith (1983) defined the first stage of development as "motions and the marks they make" (1-1/2 - 3 years). During this time the child learns about lines, shapes, color change, and paper space from the visual record of kinesthetic activity left as the child moves the brush and paint around on the paper. During Smith's second stage "finding out about lines, shapes and colors (3, 4, 5 years)" the child experiments and makes deliberate choices with regard to mixing colors, creating areas of particular colors, and the location, direction and variation of lines. According to Smith, during the age range of 4 - 6 years the child begins to create designs with the lines, colors, and shapes explored and mastered during previous stages. Smith uses the same sequence of beginning representation as Lowenfeld, naming marks, modifying designs to fit an idea, and finally selecting a theme prior to beginning a painting. Children then reach a point where they can choose to paint a design or a representation. Smith (1972) accepts that "this phasing of behaviour is genetically innate, though of course, dependent on opportunity and experience" (p. 3) with increasing influence by the culture over time.

Clay/Play dough. Although researchers and educators support using clay in classroom situations (Smilansky, Hagan & Lewis, 1988; Williams, 1988), and despite the accepted place play dough and similar modelling materials have in early childhood classrooms, there has been little systematic investigation about children's use of these materials (Golomb, 1988; Smilansky et al, 1988).

Three researchers have examined children's use of a modelling material. Golomb (1974) asked 300 children, between the ages of two and seven years, in the United States and Israel, to draw a man and to make one in play dough. Golomb found the youngest 2-year-olds most passive in their use of play dough; sometimes, they used it with other toys such as cars. She found a change at around 2.8 years when children's marking became more skillful and controlled, and they employed a variety of motor actions to push, pull, squeeze, pound, and join pieces of play dough. She identified the first articulated object as the coil snake.

Golomb also found a close relationship between object and action. She cited examples of children engaged in "action representation" where they used actions as an aid to representation or to suggest the function of an object. In some cases, such as making pancakes, Golomb claimed both action and shape were used to suggest the object. Language was also an important part of representation in Golomb's study. In samples of older 3 and 4-year-olds, children used "verbal designation," naming parts that were not clearly visible on the representation more often when using play dough than in drawing (p. 11).

According to Golomb (1974), the first representations of humans in play dough took three forms: "the upright standing column, the ball or slab of dough with facial features, and the array of separate parts, consisting mainly of facial features but occasionally including limbs" (p. 19). Golomb noted that Israeli children flattened the play dough less frequently than American

children, and suggested that Israeli children were less familiar with the material and did not have those preconceived notions of "dough" and cookie making often associated with it in North American centers, where children are frequently provided with rollers for flattening the dough.

Brittain (1979) compared clay forms with drawing, hypothesizing that representing a 3-D object in a 3-D material would be easier for children than transforming the representation to a 2-D space (e.g. drawing); however, this hypothesis was not supported. Although some clay pieces compared equally with drawings, none was more advanced. Some children attempted to use the clay in a 2-dimensional manner, constructing a human out of flattened forms and coils, similar to children in Golomb's study of play dough. Brittain found that if children could not draw a person, they could not make one in clay.

Brown (1975; 1984) studied children's clay figures when they had been asked to "make a man." Some of her findings for 3-year-olds in the 1975 study (not included in her 1984 study) were that 32% of the girls did so, compared to 4% of the boys. Eighteen percent of the 3-year-olds created forms that were recognizable as figures, or heads, which usually consisted of mounds of clay with some markings in them. Brown observed children using squeezing, pulling, and patting actions similar to those that Golomb had observed in her study. Brown's comparisons between clay figures and drawings were similar to Brittain's findings: drawings rated higher. Mostly, children used the additive method of construction.

In the 1984 study, Brown found that the clay figures by the 5-year-olds were more sophisticated than those of 1975 study, in that they more often included arms, legs and chins.

Golomb (1988) noted that little is known about children's conceptions of dimensionality, plasticity, and the relationship of a clay creation to an object, and suggested that much research is needed to answer these and other questions. Of the limited number of clay studies which do exist, a proportionately large percentage examine the effect of teaching strategies on children's use of clay (Douglas & Schwartz, 1967; Grossman, 1980; Smilansky et al., 1988), in contrast to drawing research where there have been a large number of studies of children's spontaneous drawings or of drawing tasks, and relatively few which examine the result of drawing instruction (e.g., Kratochwill, Rush & Kratochwill, 1979; Dubin, 1946; Pariser, 1984.). An inherent assumption seems to be that clay or play dough images are less inner-directed than is drawing, and consequently children require instruction in these media.

The Relationship of Media to Representations

Researchers have questioned the role media have on children's representations (Ives, Silverman, & Gardner, 1981; Gardner, 1982; Seidman & Beilin, 1984; Golomb, 1974; Brittain & Chien, 1980; Brittain, 1986). Seidman and Beilin described the situation as containing two positions: the Piagetian one, which suggests that representation is similar in all symbolic media due to the fact that representation reflects children's cognitive level of development, and the position (Gardner; Golomb) which suggests that each medium places its own demands on the child, and calls forth different cognitive skills).

Golomb (1974) stressed that the forms children create are dependent upon the task, the medium and the mental age of the child. In her study of children creating a human in an independent drawing task, a dictated drawing task, in play dough, or assembling puzzle pieces, children created representations unique to each task.

Ives, Silverman, Kelly and Gardner (1981) compared children's storytelling, drawing and clay modelling and found in the first year of their study that "while symbolic competence in the arts does increase with age, development does not proceed at the same pace or in the same manner across all media" (p. 94).

Multi-Domain Symbol Systems

Increasingly, researchers are focusing on children's acquisition of interrelated symbol systems of gesture, drawing, and language (Dyson, 1990; Gardner & Wolf, 1979; 1987; Matthews, 1987;

Pemberton & Nelson, 1987). Robbie Case (Case, Marini, McKeough, Dennis & Goldberg, 1986) developed a theory of cognitive development based on the child's ability to access working memory capacity. Case's neo-Piagetian model describes horizontal mental structures across diverse domains such as story telling, drawing, and a balance beam task, which remain constant within a particular stage of development. The first stages are the sensorimotor stage (0 to 1 1/2 years) followed by the relational stage (1 1/2 - 4 1/2 years). During the relational stage, children have moved beyond being able to coordinate a simple means-end relationship between action and object characteristic of the sensorimotor period. Now they "can represent the relationships between objects, and act on or manipulate these two components in a means-end relationship" (Dennis, 1987). Dennis applied Case's model to children's drawing to describe a link between the production of a drawing and stages of drawing development. She used Case's model to demonstrate common structures between children's problem solving, story telling and drawing at specific ages (4, 6, 8 and 10 years). While this model may be useful in understanding symbolic development across domains, and children's production strategies in a single drawing, it has limited applications to this study. The early stages of the Case model, as they have been described in these studies, do not shed additional insights into what 2-year-old children do. The descriptions of common structures closely relate to investigations of the Project Zero Research Project.

Gardner and other Project Zero researchers at Harvard investigated children's symbolic development in 7 areas: language, drawing, 3-dimensional depictions, music, gesture, pretend play, and numerical comprehension (Gardner & Wolf, 1987, p. 309). United in the view that humans possess multiple intelligences or domains, these researchers divided the acquisition of symbolic systems into two main components: streams, which describe those aspects unique to each symbolic domain, and which are non-transferable between domains; and waves, mental processes which traverse the seven symbolic areas. According to Gardner and Wolf, the waves occur in a developmental sequence between ages of 2 and 6 years, beginning with the ability to structure roles and events, as evidenced in symbolic play; the ability to represent the world through topological or analogical mapping; understanding numerical relationships; and lastly, the ability to use second-order symbol systems such as reading and writing.

Gardner and Wolf acknowledged cultural-biological relationships and cross-cultural differences in symbolic representation, but cited some examples that indicate that they have remained locked into a representational notion about the purpose for art-making. They imply a hierarchy of levels of symbolic development that promotes a deficit view of the beginnings of symbolic thinking.

Research undertaken by Project Zero investigators included a longitudinal study of nine children from one year of age to elementary school age. Some of the children were interested in

creating patterns by ordering and arranging the materials, while other children preferred to use the same materials as a basis for communicating with others or telling stories. Gardner (1980) acknowledged that not all subjects could be neatly classified as either "patterners" or "dramatists," but some children showed clear propensity toward one mode or the other.

Media Studies

Investigators have attempted to examine common materials within the classroom to determine what differences there are in how materials are used, which focused directly on the material as distinct from the child's symbolic development or cognitive structures, e.g. wide and narrow paint brushes, thin and thick colored pencils, painting at the easel or on horizontal surfaces. These studies provide insights into children's artistic expression which lie within the possibilities and limitations of a particular material presented in a particular manner. Findings from these studies influenced the teachers' choices of materials for the 2-year-olds' classroom in which the present study took place. For example, drawing materials included both thin and thick crayons, felt pens, and pencils; wide and narrow paint brushes were available at the easel.

Griffin, Highberger and Cunningham (1981) compared 3-year-olds' painting on a table, with easel painting. This team of researchers found that for this sample, boys used both hands more frequently than girls, and made more clockwise circular strokes than girls, who made more line strokes. In examining hand positions

on the brush, color changes, and the paintings, they concluded that teachers could facilitate "a more rapid transition to adult grip by eliminating easels from the classroom" (p. 45). This position reflects an assumption that the faster children adopt an adult grip, the better. It also is rooted in the deficit model, which in this case assumes that early hand holds or early paintings have less value than later ones. The children were studied in isolation from the classroom, and other components may have come into play: such as social experiences provided by easel painting which outweigh or equalize the drawbacks of easel painting when compared to table painting. Most helpful about the Griffin et al. study is the classification system designed for the study to document children's hand positions and brush strokes.

Seefeldt's study (1973) of kindergarten children's use of wide and narrow paint brushes set the stage for making both types of paint brushes available to the two-year-olds of this study in order to provide children with an opportunity to choose which they preferred. The children Seefeldt studied did not demonstrate a preference for either wide or narrow brushes but did include more detail in paintings when using narrow brushes, and more often portrayed a theme or story with narrow brushes. When using wide brushes they experimented with designs and color. Salome (1966) found no significant hand-cramping in kindergarten children who used colored pencils for drawing, and found they did not include more details in their drawings, unlike Seefeldt's findings with regard to narrow paint brushes.

In a study of the relationship of handwriting and writing tools in first-grade classrooms, researchers Lamme and Ayris (1983) determined that there were variations in teacher and student preferences for specific tools, with the primary pencil being least preferred by children, and suggested that children could be offered choices for writing. There did not appear to be any advantage to using thick primary pencils in terms of legibility over felt pens or regular pencils.

Castrup, Ain and Scott (1972) described 4 and 5-year-old children's use of materials. This study set some guidelines for expectations of younger children. For example, most children could make balls, flatten forms and join clay together; tear paper along a line, and hold scissors correctly, but fewer than half could hold a brush in adult grip, use a "proper" amount of glue or mix paints thoroughly.

Socio-Cultural Studies

Studies in Non-North American Cultures

Gardner and Wolf (1987) acknowledged that despite controversy, there is "increasing recognition that culture plays a formative role in human psychology and it is a mistake to think of the individual (or his mind or his brain) as divorced from such formative influences" (p. 307). Korzenik (1979) combined theories of Piaget, Berger and Luckmann, and Speier to suggest that children's art is closely related to the process of socialization, with links between children's drawings and children's social maturity. In other studies, the Wilsons, Alland, and Court all

found support for peer or cultural influences on children's drawings. Traditionally, artists have learned to draw from other artists (Duncum, 1984) and from cultural images (Robertson, 1987; Wilson & Wilson, 1982a, 1982b, 1984, 1987) yet these influences have not received much recognition in the traditional study of children's artistic development.

The Wilsons investigated peer influence on children's artistic development and concluded that in the beginning there are innate factors which influence children's drawings, but by elementary school-age, children have learned to draw forms from each other (Wilson & Wilson, 1982, 1984, 1987). The drawings by Onfim, a 13th century child, lend support to universal aspects of drawing (Yanin, 1985). While Onfim's drawings bear resemblance to drawings of contemporary young children, the linear body-leg depiction is not one typically described in contemporary literature.

The Wilsons used the "disappearance of the two-eyed profile" (1982a, 1982b), a graphic form once considered innate, as an example of a visual image passed from child to child which has now disappeared in North America. They found differences in the graphic forms created by city and rural Egyptian children which they attributed both to peer and cultural influences, such as television (Wilson & Wilson, 1984). In a more recent study (1987) they extended their comparison to include narrative drawings by rural Egyptian children with those by Japanese children. In Japan, there is an abundance of narrative graphic images, particularly in the form of comics, which are widely read by all ages. They found

that the 3rd and 6th grade Japanese children's work illustrated fewer features which have been considered typical of child art, such as isolated rather than overlapped figures. The Japanese drawings more closely resembled the graphic models of the comics, while the Egyptian village children's work more closely resembled what is considered typical for children's composition. They concluded that these differences occurred because Japanese children were

able to override many innate dispositions toward producing simple nonoverlapping perpendicularly ordered forms. By contrast, the Egyptian children got two doses of intrinsic biases - one from their biological heritage and one from their cultural heritage. This explanation is supported by other studies which provide evidence that children's art from different times and cultures is as stylistically distinct as that of adult artists who worked at different times and in different places. (p. 15).

Court (1989) concluded that "change in drawing performance, after infancy, is more closely associated with social influences such as the pool of available imagery and the opportunity to draw than it is to natural factors such as age or ability" (p. 65). For her investigation of drawings by rural Kenyan children, Court collected data in several traditional cultural groups. She found distinct subject preferences for free choice drawings by each of the groups, with rural Kikuyu youngsters featuring houses as the focus of their drawings, Luo children drawing small figures with other images such as boats, and Samburu children frequently including animals. In drawings of themselves eating, the children included tables, something not part of their traditional culture. Court concluded that these depictions of tables using an inverted

perspective had been influenced by "the school art style" since this drawing device appeared in teaching materials common throughout the country. In a pilot study of Kenyan 3- to 8-year-olds attending school, Court found that after age 5 years, children's figure drawings were highly conforming and changed little, apparently due to "overly directive teaching techniques" (p. 77).

Winner (1989) reported on a visit to China where she observed children being taught two modes of representation, traditional watercolor techniques and a western influenced painting technique. In each, the teacher carefully structured the lesson, showing step-by-step procedures for creating particular images which children were expected to copy and master. Winner did not observe children creating "typical child art forms," nor did she observe children appearing to be interested in developing their own graphic symbols. Based on her observations, Winner concluded there were two aspects of art education in China: "the value placed on neatness and uniformity rather than on deviation and creativity; 2) the value placed on schema mastery rather than on training the eye to break away from schemas" (p. 58).

Alland (1983) watched children drawing with felt pens in six countries: United States, France, Taiwan, Japan, Bali and Ponape. He provided markers and a spiral notebook and asked each subject to draw one picture for him. He attempted to include, as often as possible, children prior to school entry. His subjects included children as young as 2 years and as old as 13 years. He selected

his research sites to reflect diverse cultural emphasis on visual art forms: those with a rich art tradition, those where children's experience with art was limited, and those in a culture without a visual art tradition. Like Court, Alland concluded that cultural influences are apparent in children's drawings as soon as they have passed the scribbling stage. He did not find support in his data for the notion that children's art develops in a sequential way toward representation. He concluded, "I believe that representation and symbolization are things which children are consciously or unconsciously taught to do by adults and other children" (p. 214). As an example, he specifically noted the relationship between Balinese children's work and their cultural art forms,

Overall, Balinese paintings, carving, dance and music are all pointillist in style. This style is also characteristic of Balinese children's drawings. These children lack the representational skill of adult artists, but they successfully imitate the style of adult art. (p.216)

Peer or Adult Influences

During a five year study of preschool children working individually with clay and styrofoam scraps, Sherman (1984) began to question whether children would use the materials in a similar way when they worked in groups. Sherman observed that the 3- and 4-year-olds went through the same progression, from using the materials in an exploratory way to using them increasingly for expressive purposes. She found that children exchanged ideas through verbal interaction and gestures. They imitated each other's actions and adapted these actions for their own purposes.

They transmitted ideas both through verbal interaction and gestures. Art became a social experience for these children as they used the materials as components of dramatic play, or worked cooperatively to create a form. Renninger (1989) also found peer influence strong during play dough use in a class of 3-year-olds.

Gearhart and Newman (1980) described a similar incident of peer imitation and interaction, in which the marks on the children's papers could be understood only through observing the social interaction between the children as they drew. In other examples, they cited teacher-child conversations as a means whereby the teacher transmits ideas about the nature of the drawing task.

Rosario and Collazo (1981) observed two preschool classrooms to explore how preschool children were socialized into particular aesthetic values. They found that this was accomplished as teachers expressed, or did not express, value for particular kinds of activities. They suggested that teachers tended to ignore spontaneous art activities in favor of activities in which the end product was predetermined, even in unstructured activities. For example, a painting on the newspaper covering of the easel was ignored, while paintings on plain paper were displayed.

Green (1975) used Transactional Analysis to suggest how parental comments and attitudes about art in general, and their children's art in particular, are transmitted across generations through parent-child interactions. She stated,

parents tell the child whether it's ok to look at art,
what kind to look at, how to respond to it, and/or

whether it is ok to make art and, if so, what kind. In other words, parents play a dominant, if not total, role in controlling the child's artistic development through injunctions, permissions and biases" (p. 12).

Matthews (in press) provided a particular example of how 2-year-old Hannah and her mother were involved in a painting experience in which Hannah's mother supported and interacted with Hannah in a verbal and non-verbal manner to support her daughter's engagement with the painting experience. Matthews concluded that,

although drawing behaviors are self-initiated and self-driven, it does not mean that development can occur within a social vacuum or a hostile environment. On the contrary, the programmes of representation are extremely sensitive to interpersonal engagement. In the hands of 2-year-olds, drawing becomes a medium capable of recording subtle stresses or nuances occurring within a social setting. (Matthews, in press)

These examples of children learning from peers or other sources are important because they demonstrate that children's artistic development is susceptible to external influences. However, they do not address the question of how this social influence occurs. Gearhart and Newman, and Green suggest ways that address the broader context of art making and theoretical frames for examining how art making is socially constructed.

Art Understanding

A few studies have examined children's understanding about art. Johnson (1982), using symbolic interactionism as a base, interviewed children grades kindergarten to 12 about art. Kindergarten and grade one children defined art as "making or doing". Older primary-aged children began to define art also as a place or time, or in terms of specific content. Stokrocki (1986b) interviewed second grade children about art and formed similar categories which related to space, activity and object. Johnson concluded, as did Stokrocki, that the students' responses reflected cultural values. Both found that younger children preferred holiday themes such as Halloween, and utilized common commercial or popular images in their work.

Research in the area of artistic development has, perhaps, largely overlooked peer and social influences on young children's art production because the possibility of influence conflicts with the view of children's art as an internal process which gradually unfolds. Also called into question is the view that children develop new strategies for visual representation based on past experience with materials, and that shifts in cognitive thinking that make them dissatisfied with their earlier visual forms. It is extremely difficult to systematically investigate the role of imitation or influence in young children's artistic expression because the child may not imitate a form or action immediately after observing an event or representation. Nevertheless, on-site, direct observation, rather than adherence to notions of linear

progression, is most likely to provide new evidence concerning the nature of interactive learning in art.

Summary

I have tried to demonstrate through this discussion that although an extensive body of literature about children's art exists, particularly drawing, there are gaps and contradictions in this accumulated knowledge. General stage descriptions provided by Lowenfeld, Brittain and others, with specific examples illustrated by case studies such as Eng's, have provided a basis on which to begin an investigation of what to expect from young preschool children. However, caution must be used in applying these stages because they are general progressions, perhaps obsolete in terms of sequences and abilities for contemporary children, and they underplay the role that cultural images or human interactions contribute to children's artistic expression. Developmental stage theory assumes an innatist position, even if it is viewed from a Piagetian perspective which acknowledges that the child learns through experience with materials. As useful as discussions of developmental theory are for building generalized profiles of expectations, autistic children such as Nadia (Selfe, 1977, 1985), Stephen and Simon (Selfe, 1985) challenge developmental theory with their extraordinary drawings.

Theories have been developed primarily from examining the products children create. Collecting single examples, or judging art products according to a particular developmental level, does not present an opportunity for the child to provide an account of

intentionality, but assumes that the child's purpose is the same as that of the researcher or examiner.

Attempts to uncover a single cognitive, social or kinesthetic account for children's art-making may represent a simplistic solution to an immensely complex process. I am not suggesting that previous findings be rejected wholesale, but that there is room for an account of children's artistic expression which can accommodate the role of vision, body position relative to the paper, medium used, possible interaction between peers or adults, and a growing awareness of a variety of symbol systems within the child's culture.

The following is a summation of some of the specific findings from this chapter.

1. Specific studies of how children use materials and hold tools are helpful in illuminating part of the complex relationship between the child, tool, media, and visual expression. These studies may influence the teacher's choice of materials provided in the classroom. Like general developmental theory, these studies of how children grip pencils and brushes, and children's general art skills provide a beginning framework for categorizing the art behaviours of children.

2. Studies of children's acquisition of symbol systems across various media provide additional information about common and unique aspects of development of representational concepts, and suggest very early relationships between visual expression and

cultural understanding. These studies help support the Vygotskian and symbolic interactionism perspective of this study.

3. Specific examples cited by Gardner (1980) and Eng (1954), where children imitated an adult's actions, lend support for a Vygotskian view of development in which adults or advanced peers help children attain a more advanced level of development. However, neither author built any discussion around children's imitation. Golomb's (1974) finding that children could draw more advanced forms when given dictation tasks can also be used to support an interactionist view of artistic growth.

4. Studies which examine cultural influences set the stage for expanding the person-centered view of artistic expression, by exploring how the social-cultural environment mediates the art-making experience for children.

5. Evidence has accumulated for considering the relationship between the child's invention of symbols, motor activity, and the medium used. What children do is influenced by the medium they are using, by what they are doing and who they are with while doing it.

6. Clear support for imitation and assimilation of cultural expectations has been provided. However, specific answers to questions of sequencing and production strategies, and drawing systems employed, still lack a comprehensive framework with which to give an account of visual expression.

Finally, most research begins too late in children's development. It begins when children are starting to depict recognizable or symbolic forms. Matthews (1983, 1984) has

demonstrated that children engage in symbolic activity thorough action-representation, before they depict these forms graphically. This suggests that children understand more about symbolic representation, and hence are more acculturated into the symbol systems of their culture than can be understood by looking at their drawings.

CHAPTER III. THEORIES AND FOUNDATIONS OF INTERACTIONISM

Symbolic Interactionism and Children's Artistic Development

Symbolic interactionism forms the foundation for this study. Meltzer, Petras and Reynolds (1975) defined "symbolic interaction" as "the interaction that takes place among the various minds and meanings that characterize human societies. It refers to the idea that social interaction rests upon a taking of oneself (self-objectification) and others (taking the role of others) into account" (p. 1). The roots of symbolic interactionism originate in pragmatic philosophy and from specific ideas, such as Cooley's notion that an individual can see only an idea one has constructed about the other person, not the "real" person, and Thomas' "definition of the situation," which states, "if men define situations as real, they are real in their consequences" (Collins, 1985a, p. 199; Collins, 1985b; Meltzer, et al., 1975).

Writings by Mead, Vygotsky and Blumer are united by a common concern for relationships between individual human behaviour and development, social interaction and development of societies. George Herbert Mead, pragmatic philosopher and contemporary of John Dewey at the University of Chicago, developed theories unifying individual behaviour, mental development, mind with social development, society and social change (Baldwin, 1986). Baldwin suggested that Mead's theories have been under-utilized in developing social theory. Blumer, a student of Mead's during the 1930s, expanded Mead's ideas into "symbolic interactionism." During the 1950s and 1960s Blumer published a series of papers as

a sociological perspective connecting theoretical and methodological components of symbolic interactionism.

Vygotsky, researching and writing in Russia during and following the Russian revolution, was strongly influenced by Marxism and the emerging Russian society of the 1920s and 1930s (Wertsch, 1985a; Scribner, 1985). According to Wertsch (1985b) Vygotsky independently developed ideas similar to those of Mead and Peirce, and was perhaps influenced by the work of William James. Given the close connection between James, Dewey and Mead, it is conceivable that there was more cross-continental influence than was directly apparent. Vygotsky and Mead shared an understanding of human behaviour as "interaction", or interrelationships between biological and social behaviour impacting upon each other. Wertsch (1985b) divided Vygotsky's work into three thematic areas: genetic development (ontogeny and phylogeny), social origins of cognition, and the mediating function of tools and signs on cognition. Vygotsky's thoughts about language as signs closely resembles Peirce's idea that the sign always serves to mediate thinking (Collins, 1985a; 1985b; Wertsch, 1985b). The similarities indicate that these theorists' views have parallel components which make them compatible, but does not imply that they were in total agreement. A more detailed comparison of their differences can be found in Wertsch (1985b).

Mead (1934/1966) defined social psychology as follows:

Social psychology studies the activity or behavior of the individual as it lies within the social process; the behavior of an individual can be understood only in terms of the behavior of the whole social group of which

he is a member, since his individual acts are involved in larger, social acts which go beyond himself and which implicate other members of the group. (pp. 6-7)

These social acts then not only include individual social development but also micro and macro levels of society.

Mead was influenced by Watson's behaviourism but disagreed with the laboratory orientation of Watson's stimulus-response theory. Mead wanted to account for the reflective, thoughtful aspect of behaviour. In separating his definition from Watson's behaviourism, Mead wrote (1934/1966):

Social psychology is behavioristic in the sense of starting off with an observable activity--the dynamic, on-going social process, and the social acts which are its component elements--to be studied and analyzed scientifically. But it is not behavioristic in the sense of ignoring the inner experience of the individual--the inner phase of that process or activity. On the contrary, it is particularly concerned with the rise of such experience within the process as a whole. (pp. 7-8)

In Mead's theory, the process of interaction is the process of developing the experience of meaning. Interaction with another is based on a triadic sequence of verbal or non-verbal "gestures" in which the first individual's gesture invokes a response in the second individual, which is in turn acted on by the originating individual, thus completing the interaction cycle. Meaning is established at the completion of the third component of the gestural sequence. Mead stated, "responses are meanings in so far as they lie inside of such a conversation of gesture" (p. 181). Gestures are "significant" when both parties have a common response.

Through this process of constructing meaning, ideas are communicated within the social context and the self-concept develops. Mead viewed the physical body and the self as being separate, with the self being socially constructed through interactions with others. Mead recognized that this cycle begins in early infancy with the infant's ability to mimic and respond to gestures. More recent infant research (Trevathan, 1980; Bruner, 1983; Meltzoff, 1985; Rogoff, Malkin & Gilbride, 1984) has upheld Mead's view about the active role infants take in adapting to, and interacting with, their social environment. Construction of the self occurs as the individual takes into account the attitudes or perspectives of others, "within a social environment or context of experience and behavior in which both he and they are involved" (Mead, p. 138).

In the process of developing the self, an individual absorbs and generalizes the attitudes others hold toward a social activity. This self-reflection forms what Mead called "the generalized other" (p. 152), or the common view (norms), which influences the social behaviour of an individual.

Mead (1934/1966) stated that through play the child is "gradually building up a definite self that becomes the most important object in his world" (p. 369). During play the child takes on roles in games that involve rules of behaviour. First, the child learns about attitudes significant persons have towards him/her, and later internalizes the societal attitudes or attitudes of the "generalized other". Mead saw the family unit, designed to

meet the "socio-physiological" needs of the species, as the basis for all social organization.

Mead believed that the personality which appears in a social experience is composed of two parts "I" and "Me". The "I" component of self reacts to the attitudes of others which is represented by "Me". The dialectical relationship between these two separate parts of self allows the individual to react in novel ways, and also to retain a conscious social responsibility. Baldwin (1986) summed up the relationship of the individual to society as follows:

Each individual's socialization structures the mind and self in two important and complementary ways, producing (1) common traits that are shared with others, and (2) unique, personal traits that make the person a distinctive individual As a result, each person feels a sense of belonging and sense of being different from others. (p. 112)

In common with James, Mead conceived of the self as being a multifaceted entity expressed through the unique relationships individuals have with others or with social groups, a theme Goffman (1959) developed later in his dramaturgical theory of social interaction.

The tenets of symbolic interactionism were formulated from Mead's posthumously published teachings. In the 1960s, Blumer consolidated Mead's views into what became known as symbolic interactionism. Blumer (1969) presented the following three premises as crucial to the symbolic interactionist perspective:

Human beings act toward things on the basis of the meanings that the things have for them. (p. 2)
The meaning of a thing for a person grows out of the ways in which other persons act toward the person with

regard to the thing. Their actions operate to define the thing for the person. (p. 4)

These meanings are handled in, and modified through an interpretative process used by the person in dealing with the thing he encounters. (p. 2)

Important to the understanding of symbolic interactionism is the definition of "objects", which Blumer has defined as social objects or people, physical objects or things, and abstract objects or ideas.

Blumer (1969) found the psychological interpretation of meaning arising out of psychological processes of "perception, cognition, repression, transfer of feelings, and association of ideas" (p. 4) limiting as to the kind of meaning which could be constructed. Instead, he has described meaning as being constructed "through a process of interpretation" (p. 5) by actors engaged in social interaction. Meanings, according to Blumer, are "creations that are formed in and through the defining activities of people engaged in social interaction" (p. 5). This process of interpretation requires that actors, (1) first note to themselves the objects with which they are interacting, then, (2) process the meanings the things have for them and finally, (3) interpret them in terms of the situation.

In more recent writing from the interactionist perspective, McCarthy (1989) returned to Mead to define social objects to include "mind, self, as well as all the 'things' human beings produce" (p. 81). He explained that "they are social objects in that they have no existence except for the specific contexts of social relations and language within which they emerge and in which

they flourish or wane" (p. 81). McCarthy concluded that the study of social objects,

engages one in the three fields within which they are generated. The "language and speech" forms by and through which they are developed and are sustained, the "types of knowledge which communicate them as real, the "social relations" within which they develop and occur in time and space. (p. 82)

Like Mead, Vygotsky explored the dialectical relationship between development of an individual and development of society. This discussion will focus on three specific components of this relationship relative to young children: language and thinking, drawing, and play. In play children form links between lower and higher cultural based cognitive processes as they transform objects and take on imaginary roles. Play promotes the child's acquisition of the use of sign systems which include art, spoken and written language (Scribner, 1985). According to Scribner,

Natural processes regulate the growth of elementary psychological functions in the child - forms of memory, perception and practical-tool using intelligence, ...that are continuous with the mental life of apes and other species. Social and cultural processes regulate the child's acquisition of speech and other sign systems, and the development of "special higher psychological functions" such as voluntary attention and logical memory. (p. 124)

In ontological development, biological and cultural development occur concurrently and fuse (Scribner, p. 125). In Mind in Society, Vygotsky wrote,

From the very first days of the child's development his activities acquire a meaning of their own in a system of social behavior and being directed towards a definite purpose, are refracted through the prism of the child's environment. The path from object to child and from child to object passes through another person. This complex human structure is the product of a

developmental process deeply rooted in the links between individual and social history. (p. 30)

The linkage between the individual and society occurs through signs or symbols in the form of language, which serves to mediate thinking. Vygotsky drew parallels between language acquisition and the relationship of learning and development. Vygotsky (1986) acknowledged the influence of Stern, who described language and thinking as operating separately until the child is about two years of age. The unification of the two, and the major shift in development, occurs when the child ceases to be solely a receptor of language and begins to understand the connection between sign and meaning. The child then begins to initiate acquisition of new words.

A similar shift occurs when the child uses other tools, which are later mediated by, and act to mediate thinking. Drawing from Lewin's work, Vygotsky believed that very young children were limited in their actions by the inherent properties of an object, or the situational constraints defined by links between perception and motor activity. He stated (1978), "It is impossible for very young children to separate the field of meaning from the visual field because there is such intimate fusion between meaning and what is seen" (p. 97). He suggested that this relationship dominates children's use of objects up until approximately 3 years of age.

As young children actively acquire speech, they begin to use this speech to guide their activities. Vygotsky explained (1978) "Children not only speak about what they are doing; their speech

and action are part of 'one and the same complex psychological function', directed toward the solution of the problem at hand" (p. 25). Once this external (egocentric) speech becomes internalized it organizes the child's thought.

Vygotsky based his discussion of children's drawings on the work of others, e.g. Sully, Buhler and Hetzer. He concurred with Buhler that speech "shapes the greater part of inner life in accordance with its laws. This includes drawing" (Vygotsky, 1978, p. 112). Vygotsky called early drawing a kind of "graphic speech" similar to "verbal concepts that communicate only the essential features of objects" (p. 112).

Citing Hetzer's evidence that a child will relate to drawings of objects as objects rather than representations of objects, Vygotsky argued that discovering a relationship between a drawing and object does not mean the child understands the symbolic function of drawing. Vygotsky accepted Hetzer's view that, "it is on the basis of speech that all other sign systems are created" (1978, p. 113). Vygotsky stated that speech dominates drawing in school-aged children. While his conclusions may reflect an accurate relationship between drawing and speech, his specific example does not provide a strong argument, since it was based on a situation in which the child was depicting a verbal statement, rather than depicting something visual in origin. Vygotsky apparently valued drawing primarily as part of the process of acquiring written language, rather than as a unique mode of human expression. This focus on language is relevant to this study in

two ways: 1) through the assumption that drawing and other art-making processes are mediated by language, and 2) by recognizing that the language-drawing link may diminish the uniqueness of visual expression.

Vygotsky (1978) discussed the important role of play in children's development. In imaginary play children 3 years and older utilize rules embedded in a higher level of functioning, and are freed from the constraints of the actual situation. Mead held a similar view of the function of play for the child. In play, objects are freed from their actual meaning and may become "pivots" (p. 97) for symbolic functioning in which meaning dominates action, rather than the child's usual mode of functioning in which action is dominant.

Links to Artistic Expression

Some of the ideas basic to symbolic interactionism may now be related to children's artistic expression. They are important to children's creation of visual forms in two ways: the first is the development of the child's sense of self, and the second is the meaning objects come to have for the child, including art materials and objects represented. The child's self-concept and the use and meaning of tools arise from interactions with others. Denzin

(1977) wrote,

the term "childhood socialization", which describes those experiences and interactive relationships that build human nature into that object and person called "child," rests on special languages, is located in special kinds of social situations, and is focused around special classes of social objects (including clothing) that endow the child with "human-like" qualities. (p. 3)

Infancy research has demonstrated that the construction of self through interactions with others begins at birth. When children begin to engage in the use of art materials, the self is well under construction through interactions composed of gestures and language. At about age three, children begin to take on the roles that others in their environment take toward them.

Children bring their self-view to their interactions with art materials. This self-view includes the child's feelings about previous experiences with the material. Children begin to express their sense of self through the use of art materials. In cultures where art is perceived to have functions other than personal self-expression, children are carefully directed in particular ways of mark-making, and ultimately, symbolic formations. Soviet preschool children are given direct instruction in art (Morton, 1972); Gardner (1989) and Winner (1989) described highly structured art lessons in China. Alland (1983) found that Taiwanese children were encouraged to learn to make Chinese characters at home, rather than encouraged to draw or paint pictures. The expectations and values inherent in these structured lessons have a direct impact on how children use materials.

This mediation also holds true for the transmitting of the symbolic potential of the materials. Not only does children's sense of self have an important role in how they use materials, but also, the ways in which materials are expected to be used are mediated for the child by society through significant individuals (Rogoff, Malkin, & Gilbride, 1984).

One way that adults mediate activities for children is through what Bruner (1983) and Wood (1980) have called "scaffolding". Bruner (1985) wrote,

I agree with Vygotsky that there is a deep parallel in all forms of knowledge acquisition - precisely the existence of a crucial match between a "support system" in the social environment and an "acquisition process" in the learner. I think it is this match that makes possible the transmission of the culture, first as a set of connected ways of acting, perceiving and talking, and then finally as a generative system of taking conscious thought, using the instruments of reflection that the culture "stores" as theories, scenarios, plots, prototypes, maxims, and so on. (p. 28)

Bruner (1983) and Rogoff, Malkin and Gilbride (1984) cite examples of "scaffolding", in which adults structure play sequences with their children which allow children to participate and gradually take over the game until the children can initiate and carry on the game independently. Rogoff, Malkin & Gilbride, (1984) also offer examples of scaffolding, which parents do on an unconscious level.

Vygotsky (1978) described this process as learning in the "zone of proximal development" (p. 86), or learning that occurs with the assistance of an adult or advanced peer. Such learning allows the child to accomplish a task at a higher level of cognitive functioning than the child could accomplish independently.

McFee (1970; 1980) set a precedent in taking a multidimensional approach to art teaching by developing her Perceptual - Delineation Theory. This is a complex model which recognizes individual differences in students' backgrounds and

learning styles. McFee drew from the fields of sociology, anthropology and psychology to develop her theory.

The Perceptual-Delineation III Theory states that "transactions between people and their environment (other people being part of one person's environment) are the action points where learning, creating, expressing, and evaluating take place" (McFee & Degge, 1980, p. 324). According to McFee and Degge, learning depends on: a) the student's readiness, which is based on past opportunities "to use their potential to learn as it has been encouraged through interaction with their "psychocultural-physical environment", b) the learning context, c) the "psychocultural environment" composed of the interpersonal transactions and relationships which occur within the setting, d) the "visual-physical environment", which includes the materials for learning, and e) the change in student's readiness based on these ongoing experiences (pp. 324-325).

The Perceptual-Delineation III model was designed to provide teachers with a means of creating effective learning environments for their students. This theory is compatible with the tenets of symbolic interactionism in its contextual orientation, and in its incorporation of human interaction as part of the learning-teaching process. McFee and Degge describe an ever-changing, dynamic situation which allows for the interpretive process essential to symbolic interactionism, with interpretive possibilities occurring at each of the "action-points" described in the model. Although this theory does not provide a direct model for the investigation

of how two-year-olds construct meaning about the use of art materials, it illustrates a framework for developing a multidisciplinary approach to young children's artistic expression. It is informative in diagramming relationships between key components of the learning environment of an art classroom.

Summary

This chapter has described the theoretical positions of George Herbert Mead, Herbert Blumer and Lev Vygotsky which are linked through the focus on human interaction as the mediating factor in an individual's thinking and functioning within a social context. Mead described how an individual develops a sense of self through interpersonal interactions and Blumer detailed how individuals come to understand the meaning of objects from the defining activities which occur through interactions concerning those objects. Vygotsky placed particular emphasis on the importance of language in cognitive development. Learning and development are linked through Vygotsky's notion of the "zone of proximal development" where children are able to accomplish a task with assistance which they could not do independently. North American researchers (e.g., Wood and Bruner) have adopted "scaffolding" to describe this assisted learning. These ideas provide a suitable framework for describing the events in this study.

CHAPTER IV. METHOD

Fieldwork Theory

Assumptions

The contextualist-interactionist orientation which focuses on the "immediate event" and its relationship to connecting or closely related events (Mueller & Cooper, 1986) requires a naturalistic research paradigm. In educational research, terms such as field studies, ethnographies, naturalistic studies, qualitative studies have been used synonymously, and it must be said, imprecisely. Still, all are united by some common assumptions: human behaviour is inexplicably linked to the setting in which it occurs (Denzin, 1977; Wilson, 1977). The complexity of the interrelationships within the research domain precludes identifying cause-effect relationships. The research involves and accepts its value-laden position, and the researcher is the "instrument" of research (Lincoln & Guba, 1985; Wolcott, 1975). Assumptions include that data will be gathered through a variety of means, including interviews and direct observation in the setting (Spradley, 1980).

Blumer (1969) described the methodology appropriate to field research, as well as contributing to the theoretical position of symbolic interactionism. His position is similar to Glaser and Strauss' (1967) definition of grounded theory, which comes directly from the data collected and which may then modify or corroborate provisional value frames. Blumer stated that social science theory should "arise out of, and remain grounded in, the empirical life under study" (p. 40).

More specifically, Blumer identified the framework for studies within the symbolic interactionism tradition as follows:

Its methodological stance, accordingly, is that of direct examination of the empirical social world....It recognizes that such direct examination permits the scholar to meet all of the basic requirements of an empirical science: to confront an empirical world that is available for observation and analysis; to raise abstract problems with regard to that world; to gather necessary data through careful and disciplined examination of that world; to unearth relations between categories of such data; to formulate propositions into a theoretical scheme; and to test the problems, the data, the relations, the propositions, and the theory by renewed examination of the empirical world (pp. 47-48).

Blumer argued that if researchers are to understand the lived social world of a group, the researcher must come to understand the meaning "objects" have for individuals in that group, and how meanings are constructed, interpreted, and transformed through social interaction (p. 10).

Ethnographic Roots

Ethnography is generally defined as a description of the way of life of a group, recounted from the perspective of the group's members in such detail that the reader will have some notion of how to behave if the reader were to visit the group (Delamont, 1992; Heath, 1982; Spradley, 1980; Wolcott, 1975; Woods, 1986). This tradition can provide knowledge about "how experience is sorted and classified, and cultural knowledge constituted" (Whittaker, 1986, p. 6). The ethnographic tradition requires that the researcher take time to observe many situations in order to identify emergent patterns, including time to change the focus of the study as new patterns become apparent; maintaining a balance between the

insider-outsider (emic-etic) perspective, and what Wilson (1977, p. 261) called being "a sensitive research instrument". These are crucial because, as Hymes (1982, p. 25) stated,

though one may live nearby, speak the same language, and be of the same ethnic background, a difference in experience may lead to misunderstanding the meanings, the terms and the world of another community.

There has not been consensus on what constitutes ethnography in educational settings (Ettinger, 1987; Hymes, 1982; 1982; Wolcott, 1985). Heath (1982), noted that the term ethnography as been applied to studies using "participant observation, naturalistic inquiry, and open-ended research designs" without distinguishing between "true" ethnographies and studies utilizing some of these methods. She concluded,

if the term ethnographic is to have a consistent identity in educational studies, researchers must be able to identify what it is that makes a particular study ethnographic. For example, they should be able to distinguish an ethnographic study from an ethological work, from field studies, from systems analysis interpretations, and from case studies. Only in doing so can ethnographers meet the challenge of specificity of procedures, clarity of goals, and relevance of interpretations to theoretical considerations demanded in the numerous institutions now sponsoring ethnographic research in education. (p. 34)

Wolcott (1985, p. 188) was more specific in stating,

- (1) Ethnography is not field techniques.
- (2) Ethnography is not length of time in the field.
- (3) Ethnography is not simply good description.
- (4) Ethnography is not created through gaining and maintaining rapport with subjects.

Wolcott (1985, p. 190) stated simply that an ethnographic study "must be oriented to cultural interpretation".

Descriptive Research in Art Education

Qualitative research methods are accepted in the field of art education (Stokrocki, 1991). But this was not always the situation. In 1972, Pohland presented arguments to support the use of participant observation as an appropriate research methodology for art education. This position was followed by written debate. Lewis (1972) expressed concerns for reliability due to researcher influence and bias. McFee (1972) provided cautious support, suggesting that experimental and observational research methods were important. Wilson (1972) supported Pohland, writing,

(1) participant observational methods allow the researcher to attend to a great number of variables and their interrelations concurrently. In art where variables of the work of art such as media, process, visual structure, images, and symbols, are related to the personality factors of the teacher and the student, and to the cultural, institutional, and physical settings in which art is taught, the correspondence between complexity of method and subject seem appropriate and desirable; (2) participant observational methods are nonstandard and flexible allowing the researcher to switch or devise new methodologies mid-stream just as art redefines itself and the art teacher and student chart new courses on the basis of opportunities which present themselves contextually; and (3) participant observational methodologies generally require close qualitative relationships between the inquirer and the situation being studied, and when the situation studied is as qualitative as art the fit of methodology and subject again seem most satisfying. (p. 23)

Ettinger (1987) facilitated understanding of qualitative research methods for the field. She applied Wolcott's 1982 taxonomy of on-site descriptive research to 31 existing studies from the field of art education to aid prospective researchers in defining research methods. Stokrocki (1991), building on

Ettinger's taxonomy, examined qualitative studies in art education since Ettinger's work was published. Stokrocki classified these studies into categories, e.g. pedagogical issues, such as teaching/learning relationships, contextual variations in teaching methods, and children's understanding about art.

Following Ettinger's taxonomy and Wolcott's definition of ethnography, this study has an ethnographic orientation, is microethnographic in its selection of a small segment of cultural life, and includes both participant observation and non-participation observation data collection techniques. It fits into Stokrocki's classification related to the relationship between teaching and learning through its interactionist perspective. Additionally, it examines children's understanding about art.

Phenomenological Aspects

Phenomenological sociology is grounded in German philosophy and the writings of Husserl, who believed that the "true essence of things" could be found in experience. More direct applications of this viewpoint to sociology were developed by Alfred Schutz, who specifically examined people's experience in the world (Collins, 1985a). The intent of my study is to examine the lived-world of the art-making experience for young children. Recognition is given to the uniqueness of each individual's experience in the research setting. In these ways, the study is influenced by phenomenological thinking.

Fine and Sandstrom (1988) present arguments by Waksler, who suggested that an adult can experience the world through a child's

eyes. However, because of my role as teacher, I was not as free to participate in a manner open to negotiation between children and adult as other researchers, such as Cosaro (1985) or Kelly-Byrne (1989). Fine and Sandstrom expressed doubt that true bracketing of the adult experience can occur. With regard to this investigation of children using art materials, I agree. Due to the limited language capabilities of the children, this study cannot depict the lived world as they experience it, because their viewpoint is always mediated through adults' interpretation of their world. Therefore, it cannot be considered a truly phenomenological study.

Preliminary Procedures

Spradley (1980) outlined a series of procedures for engaging in an ethnographic "developmental research cycle". In this study, procedures are loosely organized around Spradley's framework: selecting the project, locating the situation, data collection and record keeping, analyses and refocusing, further analyses and conclusions. Throughout this cycle I will discuss how my view and perceptions changed because of my deeper understanding of the complex relationships embedded in the context, coupled with a growing understanding of the theoretical stance which I brought to the investigation.

The investigation has three major phases: Phase I- core study, from which the bulk of the data has been collected (year 1 and 2); Phase II, which involved stepping away from the core study by moving into another classroom (year 3); and Phase III (year 3),

which involved moving back into the original classroom and expanding the scope to include additional 2-year-olds and teachers working in the same physical setting as the core study.

Researcher Reflexivity

To address the issues of reliability and validity, my role as "researcher as instrument" (Denzin, 1978, p. 294; Johnson & Altheide, 1990) necessitates that I explicate as clearly as possible the background of the original study and its changing orientation based on my beliefs and values. Delamont (1992) and Hammersley and Atkinson (1983) stressed "reflexivity" as a crucial component of ethnographic research at all stages of the investigation. Delamont defined reflexivity as becoming self-conscious about each component of the research process, and describing the researcher's decision-making process as clearly as possible. Johnson and Altheide echoed this position,

If we are to offer our interpretation of social worlds to members of various communities, we must assume what interactionists have known for decades: perception is active and not passive; language and experience are mediated and are mediating of experience; and research is but a kind of experience and sense-making....What we must do is attempt to communicate the research experience to others, including the process of inquiry and discovery. To do so makes us co-participants with self, subjects, and readers in interpreting the phenomenon. (p. 32)

Project Selection

Two key elements determined the origins of this study. The first arose from my experience as a teacher in a parent/2-year-old program. At the time, I was also teaching an art methods course to early childhood education students. I wanted to create a

teaching video to illustrate children's developmental stages in art to these prospective preschool teachers. This would provide them with an understanding of how artistic developmental theory looked in the real-life experience of children in a classroom. Based on the view that preschool children's artistic development was largely an unfolding process, I asked the camera operator to film children working independently with art materials. When I reviewed this video tape, I was struck by the disjuncture between the literature on children's art as an unfolding process and the children's art engagement in this social context. I observed behaviours which appeared to be advanced for my "traditional norm" expectations of 2-year-olds. It seemed to me that children's artistic development was much more complex than I had believed.

The second impetus for undertaking this study came from an assignment to design an ethnographically or behaviourally oriented study for a survey course in research methods for art education. The design I presented was naturalistically oriented but strongly rooted in the child study tradition of developmental psychology. The child study approach assumes that a greater understanding of children's development can come from the systematic study of a single child (Cohen & Stern, 1975). Cohen and Stern wrote, "when we have come to see children's behavior through the eyes of its meaning to them 'from the inside out', we shall be well on our way to understanding them" (p. 4). This understanding can then be utilized to make pedagogical decisions. However, this view is strongly biased towards an adult's interpretation of the situation.

Sevigny (1988) argued that "the shortcoming of traditional observation systems is that they quantify through the screen of the observer and they do not qualify through the screens of the participants" (p. 616). The design of phase I of this study clearly reflects these biases.

Study Design

The original "foreshadowed problems" (Malinowski, quoted in Hammersley and Atkinson, 1983, p. 28) guiding the formation of the core study were concerned with

1. individual children's progression in the development of pictorial forms,
2. two-year-olds' approaches and skills in handling art materials,
3. the influence of the environment (human and physical) of the subjects' work,
4. possible stylistic consistency in the work of 2-year-old children.

Site Selection

My role as teacher in the Centre, my awareness that little research had been undertaken on art making by 2-year-olds, and the willingness of the Centre Director and my academic advisor to become involved in the project, determined the selection of the research setting. This setting facilitated the research as a whole. Specifically, I intended to focus on the art activities in one particular classroom.

Following approval from the Centre Director, and some funding availability, I submitted a more formal proposal and budget to engage in my study of "Two-year-olds using art materials in a group setting".

Gatekeepers

Atkinson defined "gatekeepers" as "actors with control over key resources and avenues of opportunity" (Hammersley & Atkinson, 1983, p. 38). In this situation, the problem of gaining access to a research setting was resolved through the work I was already doing. I had support from the Centre Director, who might have been the first major obstacle to the study. The second problem, of funding, was alleviated by my academic advisor who secured financial support for an observer, camera operator and video tape costs. Other gatekeepers were the parents, who could have denied permission for their children to be involved in the study. The Centre functions as part of the Faculty of Education and serves as a demonstration and research site. Though the parents had previously signed a general release for videotaping and observation, separate permission was required for specific studies. For this study, the parents signed an agreement to participate. The research was presented under the umbrella of previous piloting research of children's aesthetic responses.

Site Description

The site for this study was a university laboratory preschool center serving children of professional families. The Centre had classes for children from 2-years through kindergarten in classroom

groups composed of children of homogeneous ages. There were three classes of 2-year-olds per school year (September - May) at the Centre. These children attended the program once a week for two hours with their parents. The parents met in a separate room for discussions with a parent-facilitator, and to watch closed-circuit video observations of their children. Allowances were made for individual differences in parent-child separation, so at times parents were in the classroom either as participants or as observers. Classroom activities were video-taped on a regular basis and so the video camera and operator were familiar to both the children and adults attending the program. There were two teachers for each class. A visiting professor (Oliver) was a regular participant in one of the classes.

The specific context for this study was art-making and art watching behaviours of 2-year-old children. The focus centered on the art area in the 2-year old classroom, but was not always confined to that area.

The Observed Group

The group observed in this study was drawn from three classes of children in the 2-year-old program. Children attending this group must have had their second birthday by December 31st. Consequently, children who entered the program in September varied in age from 1 year, 9 months (1.9 years) to 2 years, 9 months (2.9 years), although this range did not exist in all three classes. The three classes, limited to 8 or 10 children each, were composed of an equal number of boys and girls (4 and 4 or 5 and 5), with a

total population of 24 to thirty 2-year-olds attending the Centre during one year. Since the observations took place during class time, children's participation in the Centre program was not disrupted.

Role of the Researcher as Participant

Participant observation has become a major means of data collection in field research. This includes multiple strategies such as observation, participation, interviews, analyses of written materials and a variety of record keeping devices such as field notes, audio, photography and video tapes (Delamont, 1992; Denzin, 1978; Sevigny, 1988; Spradley, 1980). Denzin stated, "Participation observation is one of the few methods currently available to the sociologist that is well-suited to an analysis of complex forms of symbolic interaction" (p. 183).

Spradley (1980) categorized participation on a scale of "complete participation with high involvement in the setting, low involvement with passive participation, to no involvement" where the researcher merely observes. Researchers in educational settings have taken a variety of participant roles in the dual role of researcher as instrument. Woods (1986), Wolcott (1967) and Pollard (1985) became full-time teachers in their research settings; Burgess (1984) became a part-time teacher. Cosaro (1985) took an active participant role in his study of nursery school children's friendship and peer culture, as did Silver in a study of preschool children's sociodramatic play (Silver & Ramsey, 1983). Rist (1975) acted primarily as an observer, participating only when

the teacher needed assistance. Lubeck (1985) began as an observer but gradually became involved in a teaching role in her comparative study of "early education in black and white America."

Woods (1986) made a strong case for teachers acting as ethnographers for the benefit of their own teaching, evaluation, and understanding of interactions and structures within their classrooms. Cosaro (1985) suggested it is unrealistic to expect teachers to act as ethnographers given their job demands, but proposed that teachers could benefit from working with ethnographers. Bogdan and Biklen (1982) suggested that the role an observer takes depends on who the observer is, and the observer's personality and values. I could act as "participant as observer" (Denzin, 1978) though my observations were limited by my teaching role.

My dual roles of researcher and teacher created problems for defining how I could practically undertake these roles simultaneously. Teaching in the parent/two-year-old program (described in detail by Kasting, 1991) required the teacher and assistant teacher to develop and maintain relationships between 2-year-olds entering a group situation for the first time, and their parents, who remained on-site as both participants and observers in the classroom, or as observers linked to the classroom by video monitor. Close contact was also maintained with the parent group facilitator. Due to the complexity of this teaching situation, the actual recording of research data was undertaken

by a non-teaching observer, with the video data recorded by another individual.

Dual roles of teacher/researcher can lead to ethical dilemmas with regard to protecting confidentiality of the school membership (Pollard, 1985; Burgess, 1984) and the degree of disclosure the researcher will make about the nature of the project (Burgess, 1984; Delamont, 1992; Spradley, 1980). In addition, an adult conducting research in a group of children may be confronted with issues of responsibility for safety, discipline, and maintenance of trust within the setting (Cosaro, 1985; Fine & Sandstrom, 1988; Rist 1984). Roles may blur as participants and researchers forget about the research (Delamont, 1992; Geertz, 1973; Kasting, 1991; Pollard, 1985; Wax, 1971).

Phase I

Data Collection

As the teacher-researcher in the classroom I was an active participant in the setting; yet I recognized that it would be impossible for me to record in detail the quantity of observations needed to develop the thick descriptions (Geertz, 1973; van Manen, 1990) which the study required. To keep the quantity of data manageable, the Centre Director, who had previously used video taped data collection as a research strategy, suggested that recording four children once a month would provide ample data. During the first year of the study observations were made of the two youngest girls and two youngest boys (youngest girl and youngest boy in two classes) as they used art materials or observed

others using art materials. The youngest children were selected so that they could be observed as 2-year-olds for as much time as possible. In the second year, the youngest boy and girl enrolled in the 2-year-old program were observed. By coincidence, they attended the same class. They were observed once a month during free play (approximately one hour) for the seven months of the school year remaining after the program's gradual entry period. This strategy resulted in a maximum possible observation of seven hours of behaviour for each of the six target children. However, less observation data were collected, because not all of the targeted children's non-art activity was documented.

As a full participant in the research setting, I could direct the camera operator's focus to a particular incident, or ask the observer to record additional information, e.g., a comment a parent might make relevant to the situation being recorded. In this way I took a small but active role in guiding the observations as they occurred. At times, when none of the targeted children were engaged in art-related activities, the camera focused on the children using other materials, such as puzzles or books. The camera position, located across the art area from the observer, changed at times due to changes in room arrangement, or the position of an activity.

The instructions given to the camera operator and the observer were to record the target children's behaviour as (1) they watched others engaged in art activities and/or (2) were using art materials themselves. The video camera operators were student

assistants who regularly video taped activities in the classroom. They received no additional training for this project. The observer was an art education graduate student. During the second year of the study, one observer was a former high school art teacher and university instructor.

Although there was limited formal training for the observers, "how to observe" was taught informally. I suggested that the observers record how long each child stayed at an activity. I said that I was interested in specific tool use, who was involved in the activity, and what kinds of mark-marking the children engaged in. Hence, these early observations were guided by my "foreshadowed questions".

Limitations of collection methods. Since a video camera provides a narrow, tightly focused view of a situation, a second non-participant observer sat in the art area of the classroom to record children's behaviours, with the possibility of recording language and behaviours inaccessible to the camera. Sound recording was limited to what the camera microphone could capture as portable microphones would have been intrusive. In addition, the camera was not on continuously during the free-play session, so time sequences may have been distorted. For example, what might have been recorded as closely connected events might actually be separated by a time lapse of several minutes. The non-participant observer could record continuously, noting times and durations of behaviours.

The observers were limited by the quantity of information which could be recorded manually. Each continually engaged in a selection process based on interpretations of the instructions for observing and whether one or both target children were participating in art activities.

Finally, as teacher-participant, the research reflected my interests and biases. In turn, my interactions as a teacher were shaped by my reflection on the data and the theoretical underpinnings of the study.

Reliability and Validity

Triangulation

Sevigny (1988) stated, "triangulated inquiry employs multiple operations each of which is, in effect, a small study with a research design of its own, but each of which is important and holistically related to others" (p. 630). Denzin (1978) identified methodological and theoretical ways data could be triangulated to provide validity in the study. He suggested that data could be triangulated by using different data sources: through collecting data from situations which varied in time, space or level of person to person interactions; through use of more than one observer for the same situation; and by bringing multiple theoretical perspectives to the data (p. 295). Data for this study were collected by a variety of means: non-participant observer and video camera, interviews with teacher, interviews with parents of the original targeted children, parent questionnaires, and observations collected in a second classroom.

Refocusing to increase triangulation possibilities. The original data collection strategies in Phase I were focused on individual children, which permitted "aggregate analysis" or analysis of separate individuals without social links (Denzin, p. 296). Although these children were socially connected through program attendance, the original focus was on the children as individuals. In Phase II, observations were directed toward an area of the classroom which permitted "interactive analysis" (Denzin, p. 296). The documentation by observer and video camera also provided means of triangulation (Denzin, 1978; Hammersley & Atkinson, 1983).

During Phase I of the study, parents were given questionnaires about their children's art background which included questions about their child's experience with materials at home and parental responses to their children's art, to provide another component for data triangulation (Sevigny, 1988). (See Appendix K.) This questionnaire was a modified version of Green's (1975) questionnaire for college students about their art backgrounds. In March, the observer interviewed each of the targeted children's mothers about their children's art experiences prior to entry into the program. These interviews were audiotaped.

Parents were asked to save samples of their children's work to coincide with the monthly taping sessions. The intent was to rate these along with the children's classroom work, to compare work from home and school for similarities and differences.

"Indefinite triangulation". Cosaro (1985, pp. 48-49) used Cicourel's notion of "indefinite triangulation", where same and different respondents react to information obtained on a previous occasion. That form of triangulation was used in each phase of this study. In Phase I, the Centre Director (who also acted as the Parent Facilitator for the parent observation component of the 2-year-old program), the observers, the academic advisor and I met and reviewed the tapes. The general procedure was to sit at a common table and review segments of the tape, taking independent notes. Each shared comments, which became part of the observation record. We discussed and confirmed what we were observing on the video. We verified the written observations with the video, clarifying language and events either the camera or observer had not recorded. In this way, we built up "thick descriptions" of information about each child's use of materials. As a result, there are systematic notes about each videotaped session, and observation notes which were jointly constructed. This plan followed a pattern described by Cosaro (1985) who found it necessary to work with a research assistant to review and analyze audio and visual data.

Whittaker (1986) wrote, "field data are the experiences of the ethnographer, consciously constructed..... One is aware of the external cultural constraints that manage and produce meanings, and one becomes equally aware of how the internal order responds" (p. 57). At this stage of the study, I did not keep notes or reflect on the process of interaction between the research team members.

What we were doing, as I now understand it, was constructing meaning between ourselves about the significance of the events unfolding (Denzin, 1978).

As a research team, we also began to develop some hunches about what seemed to be children's patterns of behaviour. Examples include:

looking for empty places on the paper to paint or draw;

having a conscious desire to select a specific tool;

having a sense of completion of their work;

lacking a sense of territory about their work, and not seeming to mind if others painted on it;

making "aesthetic" decisions about material selection or placement on a work;

having a greater sense of intent with regard to color and placement of marks, and choice of marking tool than had previously been described;

scribbling did not appear to be random (Tarr, 1990).

Constructing a Taxonomic Analysis

I did not begin my research with a hypothesis, but instead posed some questions which might guide the study. I assumed that from these questions patterns would emerge which might support existing theory or lead to the generation of new theory (Glaser & Strauss, 1967). Whittaker (1986) described some of my feelings which became more intense as the study progressed,

although I went to the field with my head full of non-positivistic theoretical intentions, I constantly felt the demanding incantations of positivismsometimes I acted and made decisions that seemed designed for the sole purpose of meeting, in fantasy, the piercing comments and embarrassing questions hurled at me by an unsympathetic positivist. I came to think of it as positivist guilt, a puritanical moral

correctness that a mere exhortation of alternatives could not appease.
(p. 57)

I independently reviewed each tape, documenting the episodes. I timed the episodes for the length of time each child remained at the activity, which activity the child participated in, and the manner in which the child held or handled the media, such as holding a brush at the tip of the handle, away from the bristles. I noted where other children or adults were, and the interactions that occurred.

From the events recorded I built a taxonomy to show patterns by uncovering terms which described the behaviours. Using the literature on children's artistic development and categories which emerged from the data, I constructed a taxonomy of art behaviours. Material centered behaviours included: behaviours with clay (Brown, 1975; Golomb, 1974) painting behaviours (Griffin et al, 1981; Kellogg, 1970): brush strokes, manner of application, hand position of brush, color choice; behaviours with drawing tools (Golomb, 1974; Holladay, in Brittain, 1979; Kellogg, 1970); behaviours with scissors; behaviours with glue; handedness, manner of application, body position, and visual attention. Social behaviours included: proximity of others, imitation of others, verbal interaction, watching, task sequences on independent work, asking permission, understanding of task completion, attention span, use of language and affective behaviours, and expressing pleasure or frustration, verbally or non-verbally.

Reflection and Refocusing Leading to Phase II

In my search for some understanding of artistic development and outside "influence" I was still firmly grounded in a child/art developmental model. Instead of a single case study, I had four case studies, sharing a common context. I assumed that by looking at the child working in the group, categorizing behaviours, and contrasting this with parents' reports, I would be able to uncover rules or universals. Other studies had not provided some of these insights because they had looked only at children's art products or had taken a limited view of the process. Case studies, which looked at children in the real world, had largely ignored the interactive component.

I gradually came to realize my research study was operating under similar assumptions, only in a more complicated situation. Speier (1971) reinforced this notion as a problem, "The classical formulation of the problem of socialization has centered on treatments of the child's entry and incorporation into culture as a 'developmental process'" (p. 188). Speier suggested an alternative, stating "socialization is the acquisition of interactional competencies" (p. 189).

In reconstructing events of the first two phases of the study, I can view them only from my current perspective. Whittaker (1986) addressed this problem by citing G. H. Mead,

Materials out of which the past is constructed lie in the present...any interpretation of the picture we form of the past will be found in the present and will be judged by the logical and evidential characters which such data possess in a present [1959:29]. (p. 69)

Although during this stage, I reflected on the data, I did not reflect on my role as participant in the setting. I recall observing my own interactions, and those of the assistant teacher, approvingly at times, and critically at others. The research was still strongly influenced by my initial video tape record of children's "natural" use of materials, where adults did not figure prominently in the picture. Most of the inferences I was drawing had to do with single children. Since development is highly idiosyncratic, I was becoming uncomfortable with what the study might really contribute, other than more case studies of artistic development. The data did not respond to the question about the role of interaction in the setting. Influence and imitation do not necessarily occur in a direct cause-effect sequence, and lacking the interactionist perspective, there was no easy way to verify or discuss influence.

Superficially, through construction of taxonomic analyses of behaviours and developing ideas from data to explore further, I looked on this as an ethnographically oriented study. Yet I failed to see the quantitative grounding of the study. I was looking at development, but not culture.

In my dual role of researcher and participant, I was guided by several assumptions:

1. appropriateness/inappropriateness of specific materials for 2-year-olds;
2. sequence and presentation of these materials;
3. the teacher's role;

4. foreshadowed problems underpinning the study.

After I began to review the data, I reflected on my own actions and underlying assumptions, beyond the beliefs I might articulate to parents about art and child development. My awareness of the underlying assumptions did not enter into the study until Phase II. However, each of these assumptions formed an interactive component guiding my understanding of the data.

I had an increasing sense of being overwhelmed by my data. The categories were useful, but lacked theoretical grounding, which might explain the "whys." I realized I would have to draw from other areas besides art literature. Again, Whittaker (1986) expressed some of my frustration, "Driven by positivistic notions of rigor, I scheduled over a hundred formal interviews....When I later attempted to work with the results, however, they gave me little satisfaction, hovering on the borders of banality" (p. 59).

Phase II

Origins

Two reasons ultimately prompted me to undertake a second phase to the study. The first reason emerged from a need for a theoretical perspective with which I could analyze my data. I read about symbolic interactionism, and Vygotsky's theories of the social construction of mind. I also read extensively in the area of anthropology and ethnography. As a consequence, I became increasingly dissatisfied with the original design of this study. The initial set of questions, while still reflecting viable problems, were gradually replaced by a stronger view, supported by

my reading of Mead, Blumer and Vygotsky, which argued that social interaction was a key theoretical construct for the study.

The second reason was my growing awareness that, having followed six children over a long period of time, I might have narrowed my view in such a way as to obscure the relationship of the children to the art center, i.e. the ebb and flow of the activities within the room as these related to art-making. Representative as these children might be, I could be missing important clues about the values and assumptions which guided the program, and which could influence the interactions around art-making. Whereas Spradley (1980) described the ethnographic research cycle as beginning with a broad focus which gradually narrows to more specific observations, I had begun with a narrow focus and needed to engage in observations on a broader scale. Denzin (1977) suggested that researchers in childhood socialization should study the entire population of the setting. I was feeling overwhelmed by observations which were not providing insights about the tacit knowledge (Polyani, 1983) and assumptions which guided the interactions occurring in the classroom.

Site Selection

To further distance myself from my own classroom in order to understand the life-as-lived experiences of teachers and children (Garfinkel, 1967), I observed the art area of a preschool program for 3- and 4-year-olds at the same center. My position as a teacher in the center facilitated access to this classroom as I required permission only from the Centre Director and the Head

Teacher. Parents were also notified by letter of my presence in the classroom.

Description

The 3 and 4-year-olds' program was staffed by a Head Teacher, Sharon, and an assistant teacher, Mary. Sharon had a Master's degree in Child Development, as well as over 20 years of experience in the field of early childhood education, teaching children's programs in the United States, Canada and England. She had been an instructor in a training program for early childhood education students. Her assistant teacher was a graduate student in education.

The art area of the 3 and 4-year-olds' classroom consisted of two hinged shelf units which held felt pens, paper, scissors, glue and collage materials. These shelves created a room divider for a round table. Although the teachers sometimes put felt pens or other materials on this table, it was usually the place where children could select their own art materials and plan their own projects.

A long rectangular table with wide traffic patterns around it provided the place for most of the teacher-initiated art activities. A 2-sided easel and a small table used for play dough, completed the spaces used for art. (See Appendix C.)

Researcher's Role

This insider position and my knowledge of the program facilitated communication with the teachers. On the other hand, stepping into the role of an outsider and questioning the taken for

granted assumptions originating in our common background as early childhood educators was difficult. At times, we could discuss the program as colleagues; yet concurrently, I was thrust into the role of an outsider by my role as researcher, and by my expertise in art education. These perspectives had led me to construct views about art for preschool children which differed from the teachers' views.

Although I was accepted as a researcher, my position still required negotiation and clarification about my purpose and role (Olesen & Whittaker, 1967; Wax, 1971). I wanted to contribute in some way to compensate for the time Sharon was spending with me. She was anxious that I share some of my observations with her, but I respected her as a professional and did not want to be in the position of evaluating or judging the quality of the program. I did share my observations and comments, but not all of my personal reflections, which might have been construed as being judgmental. My biases guided my questions and frequently determined the course of our discussions, as I pushed for clarity of definitions. In the end, these discussions were a large factor in our mutual construction of this account (Light & Kleiber, 1981). I tried to remain enough of an outsider to reflect on the underlying assumptions, values, and knowledge of the teachers which guided the art experiences in this classroom.

While I knew some of the children who had been in the 2-year-old program, I remained primarily a non-participant observer, with an occasional situation when I offered assistance,

talked to a child who initiated a conversation with me, or was invited to join the group for snack time.

Procedures

I observed the class during their free-play time on six occasions over a 2-month period. I met with Sharon on five separate occasions to discuss her program, her views about the art component of her program, her planning strategies, and her evaluation of the activities on those days that I had observed. After observing, I interviewed Sharon about her goals, and shared my observations with her. Following these interviews I shared my notes with her to ensure that I was "seeing the world from her point of view." Through this process the uniqueness of this "school art world" (Efland, 1976) emerged.

In this situation I took field notes, reviewed them, made comments and notes of patterns, and shared my observations with Sharon. I also reflected on my own definitions and interpretations of terms which arose in these discussions. These talks provided insights into my own beliefs and practices. From the field notes I began to determine some underlying values and assumptions which operated in this preschool center. I created a taxonomic analysis of the contrasting terms "messy" and "non-messy" art, which seemed to provide a conceptual framework for Sharon's program planning (Frake, 1962). I began to reflect on how such terms as "product", "ownership" and conflicts between "messy and non-messy art" operated in my classroom. In this way, I had accomplished my goal of distancing myself to gain insights into cultural understandings

and values of the classroom. Following the completion of an analysis of this phase of the study, I returned to my original data, and Phase III of the research.

Phase III

The purpose for Phase III of the study was to continue observing 2-year-olds engaged in art experiences, but with the addition of researcher distance. I wanted to maintain the etic perspective of Phase II observations in the context of the 2-year-old program, anticipating that this would provide insights into my own interactions in the program.

In this Center there was one class of 2-year-olds that I did not teach. Each child in the 2-year-old program was videotaped for one morning, beginning with the child's arrival and ending with departure for outdoor play. In reviewing these single-child tapes I found four children who had been involved with art during the morning. I added these art segments to my data for analysis. While the tapes focused on an individual child, some art episodes included other children.

As part of indefinite triangulation for Phase III, I interviewed three teachers involved in the 2-year-old program. I showed each teacher segments of video tapes in which they had been involved. I asked them to interpret their interactions with children. I also asked them to explain or expand on some of the teacher-held values which I had derived from observations in Phase II, e.g., neatness, product and ownership. Where necessary, I have filled in missing words from interview transcriptions to create

coherent dialogues. The teachers reviewed interview transcriptions to ensure that I understood their meaning.

Summary of Phases I, II and III

The critical steps in the three phases of the research data collection can be summed up as:

Phase I

Year 1 - Observed four, 2-year-old children using art materials once a month for seven months. Tape review and development of a taxonomy of art behaviours. Parent interviews.

Year 2 - Observed two additional children once a month for seven months. Tape review and continued categorization of art behaviors.

Phase II

Year 3 - Observed the art area of a 3 and 4-year-old classroom. Interviewed classroom teacher. Developed additional categories.

Phase III

Year 3 - Selected five single-child videotaped observations from a 2-year-old class where I was not the usual teacher. Interviewed teachers in 2-year-old program.

Limitations

Descriptive or naturalistic studies may not provide data which can be generalized to other situations (Lincoln & Guba, 1985; Patton, 1990). The original design and subsequent refocusing

through Phases II and III have placed limits on the conclusions which may be drawn from the study. The study is limited by the specific setting in which it was conducted. Assumptions which guided the researcher and other participants in this preschool may not guide preschool programs in other settings. It was taken for granted that understanding was being mutually constructed throughout the study by the researcher and all participants, the result of which limits the generalizations that may be drawn from this study and applied to other contexts.

The study was limited by the research methods employed. A non-participant observer and video camera are limited by the amount of information which can be recorded. Often the "camera's eye view" of the classroom eliminated information which might have clarified an individual's purpose or intention in a particular situation. Poor microphone reception resulted in many verbal interactions being lost, or totally reconstructed from the written observation. Time and budget also placed constraints upon the study. It was only after reviewing parent interviews that it became clear that additional interviews would have added information about ways in which parents had interacted with their children around art materials, prior to the children's entry to school. Additional information would have helped to clarify children's understanding about the purpose of art materials. Additional teacher interviews that focused on even more extensive video observations would have added to the reliability of the interpretation of data.

The final limitation of the study rests within the documentation of the study and the representation of this art world. Post-modern ethnographers deal with issues of how to represent experience and what voice is appropriate for that representation (Clifford & Marcus, 1986; Denzin, 1991; Manning, 1991). Although this study remains within a traditional model of field study and reporting (Denzin, 1991), something is lost in reducing lived experience to text. As Denzin put it, "the subject is more than can be contained in a text...." (p. 68). In this situation, there are several stages of removal from the lived experience of the participants through the use of manually recorded notes, personal recall, the narrow focus of the video camera, and the almost mute voices of the children whose experiences are described. Even a short review of video taped data reminds the viewer how distant a text is from the complexities of the lived experience.

Additionally, how to express my own position became problematic. Reviewing the tapes over a period of several years provided a certain distance to my own experience as teacher. In the Meadian sense, I have come to see myself as an object in the context of this study. To reflect this position, I have chosen to use my first name in descriptive episodes. The names of all other individuals have been changed to provide anonymity.

Within these limitations, the purpose of this investigation is to provide a rich description of art-making in a preschool classroom which may present a "working hypothesis" (Cronbach, cited

in Lincoln & Guba, 1985) that other investigators may use to examine children's art-making in other contexts.

Definition of Terms

Art materials

For the purposes of this study, art materials include: pencils, pens, chalk, crayons, felt pens, glue, paper, scissors, clay, play dough, paint and miscellaneous materials used for collage and construction. Blocks were not included because they are not usually treated as art materials, even though block building is related to sculpture and architecture.

Episodes

An art episode begins with the child observing or making physical contact with an art material or materials, and ends when the child ceases to observe or leaves the material. An art episode may be a solitary activity or it may involve other people.

Using a computer card filing system, I categorized each video observation into episodes, adding information from written observations. This organization resulted in 278 cards describing 159 separate art episodes. An episode was counted twice when both targeted children participated, because each child had a unique experience within the episode. Time of participation in the episode could also be different for each child. The targeted child, date of observation, location, materials used, people involved, anecdotal records of the event and classification descriptors were identified for each episode. The descriptors came from the taxonomy of art behaviours that I developed from the

original analysis of the tapes and the research meetings in Phase I. Descriptors also came from categories of behaviours and understandings derived from observations of the 3-4-year-old group in Phase II. From these data, I added categories of ownership, product, permission, neatness, and order to those I had developed originally. This system provided the opportunity to sort and recall information in a flexible manner, e.g. by child, material, peer or adult interaction, etc.. In selecting anecdotal examples for this analysis, I scrutinized each episode for elements which make it a typical/non-typical situation. Episodes are referenced by a six digit number and date. The first four digits refer to the episode number, while the last two digits refer to the computer file card number. The date is indicated by month and day. For example, a cutting episode involving Kate is coded 018100.04/19. The computer program determined the numbering system and so episode 018130 means that the activity required three file cards to fully describe the episode.

Interaction

Goffman (1959) defined interaction

as the reciprocal influence of individuals upon one another's actions when in one another's immediate physical presence. An interaction may be defined as all the interaction which occurs throughout any one occasion when a given set of individuals are in one another's continuous presence. (p. 15)

Cosaro (1985) more precisely defined interactive episodes as:

those sequences of behaviour which begin with the acknowledged presence of two or more interactants in an ecological area and the overt attempt(s) to arrive at a shared meaning of ongoing or emerging activity. Episodes end with physical movement of interactant from

the area which results in the termination of the originally initiated activity. (p. 24)

For this study, interactions about art may begin with a child, adult, or peer making a verbal or non-verbal indication with regard to an art material, and conclude when the child either leaves the material or continues to work alone. An art episode may be composed of one or more interactive episodes. In some cases, interactive episodes are very brief or lack the mutual engagement of an interaction.

Transitional Episodes

A transitional episode is one in which the child briefly uses the materials, without apparent meaningful or thoughtful engagement, between two other interactions or episodes. For example, following an easel painting episode Beth (007500.02/18) returns with Pat after washing her hands. She carries her apron to the easel and drops it on the floor. She turns toward the easel, briefly, to watch Pat write names on paintings. As she turns she sees the clay table where Ruth rolls and flattens clay, and Ruth asks her, "Do you want to try it?" This is the beginning of another episode (new material) and a new interaction.

Interrupted activity

An interrupted activity is an activity where the child leaves the activity or changes focus for a period of time but returns to work at the original activity in a manner that suggests a continuity with the original engagement with the material. Newman (1978) recognized the mutual maintenance of interactive episodes,

stating that they "must be maintained among participants and others" (pp. 215), otherwise distractions may break them up.

This interruption may be self-initiated or initiated by others. An example of a child initiating an interruption occurred when Michael was gluing yellow cellophane onto a sheet of paper (episode 012200.12/14) He returns the glue stick to its container and runs to the rocking boat. One minute later he returns, searches through the collage pieces, selects several pieces of paper. He finds a piece of yellow cellophane and glues it onto his original paper. He leaves the table.

Newman noted (1978) that participants and non-participants cooperate in maintaining an episode,

In a nursery school classroom, the production of an episode is a cooperative venture not only of the participants, but to some extent, of the outsiders as well. The episode is not so powerful an institution that it can withstand the attacks of an outsider who refuses to remain excluded. The episode, then, must be seen as constructed from both the inside and the outside. (p.217)

Interruptions may arise from teacher, peer or parent interferences, in the form of external program constraints such as: clean-up time, hand-washing or toileting, another activity occurring in the room, a parent joining or leaving the classroom, an adult making a comment to a child, an adult leaving the encounter, or another child's involvement in the situation.

The following abbreviations indicate data sources:

T.I. - teacher interview
P.I. - parent interview
O.N. - observation note.

CHAPTER V. HOW CHILDREN USED ART MATERIALS

The original focus for the first phase of the study was on how 2-year-old children use art materials. This focus relates to sensori-motor, or exploratory behaviour, and is closely connected to Vygotsky's definition of biological development. Vygotsky (1978) defined biological development as "practical activity" (p. 24) without the unification of speech and activity. He drew parallels between young children's and chimpanzees' preverbal and presymbolic use of tools. Vygotsky suggested that at the biological level, young children respond first to the inherent physical properties of materials. This section sets the foundation for the discussion of the relationship between children's use of materials and their social interactions. It is composed of two main parts: a) specific ways children explored and experienced the properties of particular art materials, and b) children's intentionality in the use of materials. These characteristics are examined in relationship to other research results, as discussed in Chapter II. The episodes described in Chapter VI provide other illustrations of how specific children responded to the art materials in this setting, either within a single episode or over a period of time. In addition, a number of non-media-specific tendencies appeared from the written and video observations.

Children's Responses to Inherent Properties of Materials

The children carefully studied properties of each material. They explored the tactile qualities of clay and play dough. They visually tracked their marks across the paper as they painted or

drew, watched glue drip from the paint stick and explored how they could spread it on the paper. They investigated ways to hold scissors and changed their hand holds on paint brushes. According to Renninger (1989), children will continue investigative and manipulative play behaviours with certain materials such as play dough, painting, and pasting, but not with other play materials such as blocks or trains, once an initial exploratory period had passed. Children's re-engagement was apparent throughout the year with painting, gluing and play dough, as the dates of episodes illustrate.

Drawing Materials

Drawing media were located on the art shelf next to the round table and included pencils, a variety of crayons (round and block crayons), oil pastels and felt marking pens, and "Verithik" pencils (solid sticks of color like colored pencils without the wood covering) in plastic containers or baskets. Paper was placed on the table and on the adjacent art shelf. Thick and regular size chalks were available at the chalkboards. Drawing materials were the first materials introduced during the initial gradual entry period of one-hour per session.

Children explored the marking potential of various marking tools: crayons, felt pens, chalk, oil pastels, pencils and ball point pens. For example, Jason (003300.11/05; 010000.04/22) tried out thick and thin chalk as he moved along the chalkboard, drawing; as did Carolyn (019000.11/06). In spontaneous drawings, the 2-year-olds most frequently selected a variety of colors for each

drawing (Kate 0010500.11/02; Michael 014210.01/25). Sometimes, they changed drawing media in a single picture, e.g., incorporating crayon and pencil in a single drawing (e.g., Kate 0010500.11/02). This contrasts with Golomb and Farmer's (1983) finding that when drawing about four themes, "the majority of 3-year-olds, used only a single color on any given task" (p. 95). Golomb and Farmer suggested that when given a drawing task, the children were possibly more concerned with depicting the content of their drawings than depicting colors in those drawings.

The children discovered and explored graphic concepts of lines, directionality, shapes, and the relationship of these marks to objects in the world, in ways similar to the 3 to 5-year olds in Smith's (1972) painting study. In doing so, they employed a variety of hand positions on the marking tool. Kate employed an adult grip on her pencils as she drew (Kate 010500.11/02), well in advance of expectations for hammer-like, or fist-grip described by Holladay (Brittain, 1979). The children generally behaved more like the 3-year-olds in the Holladay study, paying careful attention to the arrangement of marks.

The children explored by arranging crayons and oil pastels in their containers. This interest seemed to have less to do with the child's internalizing the adult value of neatness, and more to do with the inherent properties of crayons aligned in a box (Beth 006310.01/21; Carolyn 022240.03/22; Jason 006510.01/21; Kate 015910.2/15; Michael 015100.02/15).

Paint

The paint was powdered tempera paint, pre-mixed by the teachers and placed in cans at the easel. At the beginning of the year, teachers placed a brush in each color. Thick and thin brushes were also placed in a can at the end of the row of paints, allowing children choices of brush size. Later in the year, children chose their own brushes. The primary colors were set out at the beginning of the year, later other colors, including black and white, were added. Small baby food jars of tempera were put out at the table during Phase III. Tempera blocks in small containers and cans of water, were available at the table. However, there are very few documented uses of these paints in the video episodes. Teachers reported that they were used more often on non-observation days.

Children began their paint explorations with visual examination, followed by stirring and jabbing brushes in the paint cans (Jason 003400.11/05; Beth 008700.03/18; Kate 016900.03/22). They looked at the paint-covered bristles of the brush as they removed and replaced their brushes. They watched other children painting. Through touch, stirring and applying brush to paper they explored the texture and consistency of the paint (Beth 003900.11/05; Jason 003400.11/05; Allan 020610.12/04). They explored various surfaces for painting such as hands and furniture (Jason 010110.04/22). They noted when their brushes ran out of paint, examining the tip of the brush before replacing it in a

container (Beth 007300. 02/18; Jason 007110.02/18). They tried different brushes in the same can of paint (Beth 008700.03/18).

The children utilized various hand-holds on the brush as they worked (Teri 001620.01/21; Leanne 002300.4/15). Sometimes, they held the brush at the tip of the handle (e.g., Kate 011700.11/30). Other children used a fist-grip mid-way along the handle, and still others employed a more adult-like grip using their fingers. Hand-holds on the brush also changed, depending on the child's body position in relationship to the paint container and easel. Smith (1983) noted, children often switched hands and used the hand closest to the color they were using (e.g., Jason 004800.11/26). Beth did this in her first painting (003900.11/05). However, later in the year, she consistently used her right hand for the brush, reaching across her body to use paints on the left side of the easel. She had a tendency to begin her brush stroke above her selected can of paint, but she did not confine her brush stroke to this area. This pattern was noted in other children's paintings as well.

The most frequently employed arm movements (identified by Matthews, 1983) were the push-pull actions which resulted in vertical/horizontal lines, horizontal arcs, "bang dots" (Smith, 1972; 1983) and closed circular shapes. When Teri (0016200.1/21) painted bang dots on her paper, she needed to shift hand positions from a fist-grip on the brush to one where she held the tip of the brush handle like a lever.

When Kate began to paint at the easel, she used lines, dots, and circular shapes, similar to those in her drawings. It wasn't until January that her paintings become masses of color and less linear in appearance. Later, her paintings varied between those which seemed to have been done quickly and are largely composed of single line brush strokes, and those in which brush strokes have been expanded or overlaid to create masses of color.

In contrast, Beth's paintings began as masses of overlaid colors, indicative of the long time spent on each painting, and her experiences at home with fingerpaint. Later in the year her paintings became more linear, and also appeared to be completed more quickly.

Corcoran (1954) found there was a tendency for children to select paints by systematically working down the array, and Biehler (Lowenfeld & Brittain, 1975) found that children applied paint in relationship to the location of the color on the easel tray. Some children in this study did systematically work their way along the paint tray (Teri 001500.01/21; Kate 013410.01/25). However, not all children used this approach. Some children also painted directly above the paint container (008700.03/18).

Glue

The glue used in the Centre was white glue poured into small baby food jars and applied with plastic glue spreaders.

Renninger (1989) and Smith (1979) suggested that children engage in similar action patterns with a variety of materials rather than use material-specific action patterns. In other words,

the repertoire of behaviours was child-related rather than material-related. Each medium responds differently to the child's action pattern, which provides different results (Smith, 1979). This transference is clear with respect to children's first experiences with glue, discussed below, and was apparent in Kate's first paintings, when she created line formations which were similar in her drawings and paintings.

The inherent properties of glue are similar to paint, and suggested similar actions to the children: stirring and jabbing the substance in its container, spreading it across a surface (Jason 009700.04/22), and dripping it from the glue applicator held above the paper (Kate 012300.12/14; 0163.03/22). Children were concerned about getting it on their fingers, and quickly wiped it off (Beth and Jason 006800.01/21; Kate 012300.12/14; Richard 000900.12/10).

In their first gluing experiences, some children spread glue across paper without sticking things down. Only through intervention by adults or peer modelling did the children began to understand the difference between glue and paint. For example, after Beth watched Susan drip glue, she took her own glue stick and dabbed it onto the paper, repeatedly jabbing the glue stick into the container and then onto the paper, pushing the glue around the paper. She continued to watch Susan. Pat showed Beth paper pieces for gluing but she did not take any (005210.12/10).

In her first gluing experience, Kate peered into the jar of glue, holding the glue stick at the tip of the handle, spread the glue gently onto the paper. She commented that she got "sticky"

and dripped the glue onto the paper. She glued one white square onto her paper (012300.12/14). She was more engaged with the properties of the glue than with its purpose. Two months later, she commented that another child was "painting a white house" as he spread glue on his paper (015800.02/15).

Collage

Collage materials included a variety of colored paper pieces, e.g, construction paper, tissue paper, cellophane and geometric sticker shapes. These materials were available on the art shelf and sometimes set out on the art table.

Once children understood the purpose of glue, they carefully selected specific materials for gluing, and seemed to pay close attention to where they placed these materials on the paper. They usually spread the glue liberally onto the paper, then put the collage pieces down. Michael's first gluing experience, where he selected yellow cellophane pieces, is an example of a young child making specific choices of collage materials.

When the video camera first focuses on Michael, he has just glued a single piece of yellow cellophane onto a sheet of green construction paper. He has also applied a strip of glue with a plastic glue spreader, about three inches from the cellophane. He carefully takes a second piece of yellow cellophane from the container on the table, unfolds it, peers at it intently, then carefully places it to the left of the glue strip. He spreads more glue about one inch away from the strip which is still visible, and chooses a black square. He puts this on the paper and carefully adjusts it to fit precisely between the two strips of glue on the paper. He drips and spreads glue in a patch adjacent to the black piece and leaves to explore the rocking boat, a new piece of equipment. Shortly, he returns to the table and picks up three pieces of collage material, dropping one as he does so. He returns this piece and another to the container,

retaining one piece of yellow cellophane which he applies to the glue patch on the paper. He leaves the table. (012200.12/14) (Tarr, 1990, pp. 87)

In Kate's extended gluing experiences in March and April (016300.03/22; 017800.04/19), Oliver commented that she seemed to know what she was looking for. At that point she clearly understood the purpose of glue, demonstrated by her selection and placement of paper shapes on her paper, but spent the majority of the episode dripping glue to create masses of glue lines across her paper.

Scissors

The scissors provided in the program were children's plastic "safety" scissors. These cut more efficiently than children's metal scissors. They can also be used in either hand, eliminating the need for right-handed and left-handed scissors. Children began the process of learning to use scissors in an exploratory way. They began to make the connection between an awareness of the function of scissors to cut, and translated that to understanding how to manipulate the scissors to accomplish that function. They visually examined the scissors, turning them around, and in some cases, mouthing them. The actual form of the scissors suggested several approaches to the children. A common way was the 2-handed approach of holding one handle in each hand (Allan 02310.3/12; Richard 00100.12/10; Carolyn 022600.03/12).

A second approach was the midpoint hold. Both Kate (015930.02/15) and Teri (01100.01/21) attempted to cut by holding the scissors at the point where the blades cross. This freed up

one hand for holding the paper, but did not prove to be effective. A third approach was to place fingers into the holes of the scissor handles, with the thumb down so that the hand is turned and the back of the hand is toward the body (Jason 009710.04/22; Ruth 00100.12/10; Tina 022610.03/12; 0244.04/09).

Clay/Play Dough

The presentation of clay and play dough in the classroom was similar. The teachers made the play dough before the children arrived, and kept it in a covered plastic container. It was used directly on the tabletop, or on small plastic mats. Clay was kept in a small plastic covered garbage can and was used on pieces of particleboard to keep it from sticking to the plastic-laminate tabletops. When tools were used with these materials, the tools included wooden chopsticks, toothpicks, wooden stir sticks, dull knives, 1" diameter wooden dowels cut into rollers and some large rolling pins. Sometimes scissors were used with play dough as a means of facilitating children's acquisition of cutting skills. Cookie cutters were not provided. Children would bring plastic dishes, cars, animals and other small toys to the play dough table, and took the play dough to the doll center. A teacher usually wedged the clay to see that it was an appropriate consistency for use.

Children's responses to the inherent properties of clay and play dough fit closely to Golomb's (1974) and Brown's (1975) descriptions: pushing, pulling, rolling, squeezing, patting, pulling it apart and poking things into it. Examples of these

behaviours are included in Chapter VI because of the social nature of play dough and clay use in the 2-year-old program, and will not be described here. Renninger (1989) noted that children worked with play dough in close proximity to others. She concluded, "What a child does with playdough appears to develop out of the possibilities for manipulating playdough and what others are doing with playdough in that classroom" (p. 152). Sherman (1984) also commented that imitation had an important place in 3 and 4-year-olds use of play dough. In the 2-year-old program, there were only three play dough/clay episodes documented where a child appeared to work alone, so that it is difficult to separate inherent uses of clay from socially constructed uses, in this study.

The manipulative and modelling potential of the material contains an implicit relationship to objects which is different from two-dimensional materials. It can be used manipulatively, for "action representation" (Matthews, 1984) or used to create representations of things. Renninger (1989) found that play dough leads other materials in transformational play, where it becomes something else which is played with. The 2-year-olds transformed play dough/clay into balls (009140.03/18; 0022100.02/05), a boat (018700.10/09), a birthday cake (025310.05/07), and food in the doll center (001110.01/21).

Intentionality

One of the most striking features of 2-year-old children's use of art materials which emerged from this study was the careful

attention they paid to their placement of marks and selection of materials. They clearly demonstrated intentionality in their use of art media. According to Reber (1985), intentional behavior and intentionality are defined as follows,

Intentional - Deliberate, purposeful, goal-oriented. Generally used to characterize acts undertaken consciously. Intentionality - internal mental or cognitive states in that they are focused outward at objects, events and states in the real world. (p. 366)

Intentional, focused behaviour is very different from the notion of "random" "haphazard" scribbling, or marking behaviour done for kinesthetic enjoyment perpetuated by some authors (Herberholz & Hanson, 1990; Lasky & Mukerji, 1980). In contrast, Gardner (1980) and Smith (1983) cited examples of young children's deliberate and purposeful behaviour while drawing and painting. The following two episodes are illustrative of the kinds of intentional behavior the children in this study demonstrated. The first is a condensed description of a 5-minute chalkboard drawing episode during which Jason systematically explored the thickness and color qualities of chalk.

Jason holds two pieces of chalk. He draws with the thin chalk in his left hand, then tries a large piece of chalk in his right hand. He switches and marks the board with a piece of fat white chalk, then an thin orange piece, then switches again to a large white piece. He gazes at the thick chalk. He watches the marks he makes on the board as he works. He tries drawing with his left hand again, holding the chalk eraser in his right hand. He draws with his right hand, and rubs out his marks. After he does this, he draws his finger across the wooden molding of the chalk tray, feeling the chalk dust. He looks at the brush side of the eraser intently. Then he shakes the dust off it. He draws again, making horizontal arcs, stretching as if to test how high he can reach. He makes a similar back and forth mark below the first one. He turns away from

the board, wiping his hands together, and crosses to the small table in the doll center. (010000.04/22)

The second episode focuses on Allan (2.2 years) easel painting. He not only looks away from his painting but leaves it briefly, and returns to continue to paint from one of his original brushstrokes on the paper.

Allan, wearing a solid colored, green shirt announces, "I want to paint", as he approaches the easel. Watching Sam paint, Allan walks to the unoccupied side of the easel. Standing on the right-hand side of the easel, left arm on his hip, he picks up a brush in his right hand and paints a green downward vertical mark on the right-hand side of his paper above the can of green paint. He enlarges the brush mark, ending in a circular line to the left, then walks to the other edge of the easel dragging his brush along the paper as he does so. He looks away, swings his arm on the paper, continuing to make a few marks as he looks across the room. He looks at the paper, marking and noticing that very little paint is being left on the paper. He examines the tip of the brush closely and replaces it in the green can. He moves back to the left side of the paper, looking at the cans of paint as he goes, and selecting purple on the far left end of the paint tray. He makes a vertical stroke downward, roughly centered on his paper, curving the line to the right in a reverse "j" form. He paints over part of the line, and makes a few brush jabs at the base of the curve, then walks around the easel to watch the teacher take the other's child's painting off the easel. He goes to the adjacent table where the teacher is writing Sam's name on the paper. Allan sits down and manipulates scissors. He "suddenly" returns to the easel, picking up the purple brush, places it on the purple line, about one-third down, and makes a downward curving line. He dips the brush in the can, watches the paint drip from the end, then makes a sweeping line which crosses the vertical line at the junction of the two previous lines, sweeping the line in a curve up to the left corner of the paper. As he sweeps the brush upward, parts of the line are thicker and darker. He replaces the brush in the can and leaves. (0020610.12/04) (Tarr, 1990, p. 86)

When he began painting, Allan's position at the easel determined the arrangement and placement of the green paint on the

paper as noted by Clare (1988). However, body placement or body dynamics do not seem to account for the build-up of strokes on the center line, nor does it account for his return to the easel and continuation of marks along the center line. It appears as if his finger grip on the brush did not allow him to keep continuous pressure on the brush as he swung it upward. Only when he was making vertical lines was he able to keep a constant pressure on the brush. It is apparent from his rejection of the brush that had run out of paint, and his painting over some lines, that his primary intent is to create marks and lines in paint, rather than for the pleasure in moving his brush across the paper. (Tarr, 1990, pp. 87)

Allan selected specific colors from the array on the easel, even though he systematically moved along the easel as he made his selection. The care Allan and other 2-year-olds took in making marks or creating visual formations was not limited to painting, but was a component of other typical art activities such as Michael's first collage, described previously.

Part of the careful attention to placement relates to "fill the format" principle (Wilson & Wilson, 1982a, pp. 43). Usually this principle has been applied to symbolic drawings where children will add fingers or legs on animals until the available space is filled. In the case of 2-year-olds, this principle can be applied to situations where children deliberately searched the paper for unpainted, or unmarked places. This was most frequently documented in paintings because the camera could more easily focus on the

paper as the child painted. Smith (1972) noted that older children also searched for spaces on the paper to paint color shapes.

Attention Shifts

Another striking observation was children's ability to shift their attention back and forth between art-making and classroom activity. Children frequently turned to watch other children or events while engaged in using art media. Sometimes children stopped their marking, or glue dripping, etc., in mid-action, and sometimes they continued with this activity, although their visual attention was focused elsewhere. In these cases, kinesthetic pleasure in the activity did not seem to be the primary reason for continued marking. For example, during the chalkboard episode, Jason frequently turned to watch other activities in the room, especially a group playing musical instruments just out of camera range. At one point he moved his arm in the air in time to the sound. He then continued to draw. It appears from this episode that Jason has internalized, or understands, the result of his action to the extent that he can shift his attention to keep track of other events in the room. Marking becomes part of his unconscious behaviour while he consciously attends to another event. The continued marking may serve as a "marker" which assists him in his re-engagement with the drawing activity.

When children did re-engage, they frequently continued to work with the material in a way that was fully integrated into the original work. This suggests that the work, itself, has a visual

integrity created by the child's intentional use of the materials. It also suggests that this visual integrity, or "completeness" (Webster, 1989, p. 388) results, in part, from the "dialogue" between the child and the media (Smith, 1972; 1983) in part from the visual concepts the child is exploring through this dialogue, and in part from the young child's innate preference to create balanced forms (Kellogg, 1970). There were times when children did not refocus on the art experience, or left to pursue another activity. These were conscious choices. In two situations, children chose to abandon their activity but later returned to continue on the same piece of artwork (Michael's collage and Allan's painting).

Both Jason and Allan were able to shift attention, then refocus on a work and retain a continuity and unity with the work. When Allan returned to his painting, his lines connected to lines he had made previously and served to "finish" his work. This would be less clear had he returned and begun to paint in any blank area on the paper. Jason's placement of yellow cellophane also retained the continuity of the original work.

Aesthetic Sensitivity

Aesthetic response for very young children is the innate human capacity to respond to sensory input in which thinking and feeling are unified, and on which more sophisticated responses are constructed (Feeney & Moravcik, 1987). Flannery (1977) defined it as follows:

We come into aesthetic feeling when we allow feeling to command our full attention. Aesthetic feeling, because

it completely floods consciousness, increases the intensity of feeling. It is feeling with the volume turned up. It does not lead to practical, efficient, or productive ends in and of itself. It has its own end.
(p. 22)

Matthews (in press) provided an example of this heightened feeling demonstrated by his 2-year-old daughter, Hannah, as she linked sounds and marking. He argued that this multi-sensory expression is the beginning of "aesthetic sensibility."

The children in the 2-year-old program expressed their aesthetic sensitivity through the form of heightened response combined with intentionality. This is not the kind of aesthetic response which is taught by philosophers, art critics or art educators who strive to inculcate specific cultural values and standards for beauty. That kind of educated aesthetic response is socially constructed. Young childrens' responses to materials were very personal, although they lacked verbal skills to explain their experiences. However, this lack of verbalization does not mean that the children were incapable of responding in a highly sensitive way to particular colors, lines or shapes or textures or sounds. Brittain (1979) provided additional evidence of young children's aesthetic responses.

When Jason (005900.01/21) selects a piece of collage material, fingers it carefully, and holds it to his chest, we might surmise that he is having an aesthetic response to this material. To dismiss his experience as lacking aesthetic quality is to treat Jason as less than fully human. Michael also demonstrated this kind of aesthetic response when he carefully chose yellow

cellophane from a container of collage materials. Kathy Stinson (1982) attempted to articulate this kind of heightened feeling through a young girl's responses to her favourite color, in the picture book, Red is Best. Parents and teachers easily recognize the sentiment when the protagonist in the story declares, "But juice tastes better in the red cup" (p. 16).

This discussion has highlighted the approaches children took as they explored art materials in the 2-year-old program. In keeping with the contextual perspective of this study, the purpose was to build up descriptions of how they used the material rather than to standardize or quantify a range of normal developmental patterns. The wide range of the art behaviours for these 2-year-olds illustrates the limitations of developmental norms and highlights the complex nature of children's explorations. Whereas findings from many of the research studies cited in Chapter II were corroborated in some instances, e.g. the relationship of body position to marks on a paper (Clare, 1988), color selection at the easel (Corcoran, 1954), grip on brushes and drawing implements (Griffin, et al., 1981; Brittain, 1979) there were exceptions and variations and one explanation did not apply to all cases. Although the children demonstrated clear intentional behaviour as they used the materials, research about production strategies for creation of symbolic forms was not useful for the exploratory aspect of artistic expression. The study did not address children's cognitive style, although personality differences

clearly contributed to variations in children's responses to the use of materials.

Social Factors

Discussion of how children used the materials should not be interpreted to mean that children use these media without social mediation. From their first use of a specific art medium or tool, the experience is mediated by another individual. Renninger (1989) stated this in terms of a child's "stored knowledge" of the potential of a particular play object which includes "the functional properties of the play object, as well as the culturally prescribed use of the play object" (p. 152). The culturally prescribed use of the material is socially mediated. Children's experience with tools or materials and the social mediation surrounding the use of the media move them into more advanced levels of mental functioning expressed through symbolic use of the media. This dynamic relationship serves to expand the symbolic possibilities of the material (Vygotsky, 1978). This interplay of social mediation, tool use and symbolic expression extends the possibilities for artistic expression available to the child, while also constraining the child to culturally prescribed uses of the materials.

CHAPTER VI: INTERACTION IN THE CLASSROOM

Values, Frames, and Interactions

Introduction

This discussion of how interactionism was seen to operate in a preschool classroom is divided into three parts: values, frames and interactions. Although each of these is inextricably connected to the others, for clarity they are presented under three separate sections in this chapter.

Values are principles which direct interactions and frames. Values are not always explicit, nor does the teacher convey them directly. Within the context of the environment, meaning is constructed, and situations are defined through human interactions which frame expectations and occurrences within the preschool program. Implicit and explicit cultural values are transmitted to the children through these interactions. These components are complexly interwoven and fluid, creating the fabric of the lived world of the classroom. Interactions include person-to-person encounters related to art-making activities. Frames are the specific contexts in which the interactions occur. Context includes the dynamics of space, time, materials, and human participants.

The complexity of context is described by Kelly-Byrne (1989) in her study of one child's play. She included as part of context "premises, evaluations, associations, biographical factors, ecological factors, and intentions and rules about the behavior

in which the participants are involved" (p. 223). Bernier (1981) expressed a similar definition of context,

a sociopsychological reality embedded in ideological constructs. These constructs emerge from unique biographies of individuals, the histories of settings, and the activities of individuals within the settings. Transactions are dynamic processes which alter perspectives but which are also defined by preestablished orientations. (p. 295)

Pedagogy is also inextricably woven into this investigation, in the sense that Max van Manen (1991) understands the construction of meaning as originating in pedagogy,

Pedagogical action and reflection consist in constantly distinguishing between what is good or appropriate and what is not good or less appropriate for a particular child or group of children. In other words, pedagogical life is the ongoing practice of interpretive thinking and acting --on the part of adults, but also and especially on the part of the children who continually interpret their own lives and who constantly form their own understandings of what it means to grow up in this world. (p. 60)

The description of the interactions which define and frame the art-making experience for children in this research setting, within van Manen's definition of pedagogical life, form the essence of discussion on interactions. Teachers' interactions are guided by their explicit assumptions about children, learning, and art. Explicit assumptions include those ideas which the teachers articulate to parents about their program, or include in a brochure or philosophy statement. Implicit or tacit values which guide the teachers' interactions will form part of the discussion under Values.

Values

Tobin, Wu and Davidson (1989) studied preschool education in three cultures. They concluded,

Preschools, although a relatively new invention, are more a force of cultural continuity than cultural change. Preschools work more to instill than to subvert the values parents in China, Japan and the United States wish to pass on to their children. (p. 221)

Implicit values which emerged from the interactions of the participants in the research setting form part of this discussion of how meaning about art-making is constructed. Bernier (1981) stated,

Perceptual frames of reference emerge from a complex mixture of factors and influences but central to the process of perceptual orientation are the ideological maps which individuals have internalized. These belief systems provide a foundation for the selection and sorting processes involved in perceiving, categorizing, excluding, judging, inferring defining and intending. (p. 293)

Throughout the three sections of this chapter, assumptions are expressed through the conversations and interactions between teachers and children. The teachers in the 2-year-old program expressed common assumptions about art and the purpose of art in the classroom. Their words appear within the context of specific art episodes described in this chapter. As part of Kasting's study of Parents and Educators Learning Together in a Preschool Program, I was interviewed in 1989 about my role as a teacher in the 2-year-old program. The following is extracted from Kasting (1991) to provide my own perspective, as I explained it to her:

...I see my role as setting the environment...It is always evolving based on my past experience and what I understand about two-year-olds. What I have observed of

children within that particular [age] group, their interests, how they use materials, what kinds of materials intrigue that group or individual children within that group. And then within that allowing them a long period of time in which to explore the environment at their own pace; the human environment and the object environment. [Time] to explore each other, develop relationships, become involved, [and] time to make choices about how they will use it. The focus is on them rather than on standards or expectations that I might have for their use. I don't have a major agenda for those children that they must accomplish this kind of thing within a day. Sometimes parents have an agenda, they will see that there are so many things and it would be lovely if the child would use all those things or many of them. Whereas, I see that the child really deserves the respect and the opportunity to do it at his or her own pace and to make the kinds of use out of that space, time, and materials that are appropriate for whatever issues or interests that the child has...what they are resolving or working on.

Often the decisions as to what to put out initially are things we know from the home visits that they do have in their home. It is a way of making that connection between their home and the Centre. So, over the first few weeks things will always be in the same place and we will not offer too many new things because we want it to be predictable. Because when [the child] comes once a week and you try to retain some...expectations about what you are going to do when you get there.... When I go to school I [child] like to use this so it is important that it is there and that it is there predictably. As the year goes on then you can see that they are ready for new things and a greater range, it is not so important to have the same things.

....Part of my responsibility is interpreting to parents and helping them to see a sense of competency and mastery that children gain through repetition, through having time to explore things in depth, not just superficially (pause) going beyond the first level of doing something. There are many ways you can explore a crayon. If you only have a crayon that you use to make a few lines with and then you are offered felt pens then that is a different thing. Now, if we want kids to really see the options that there are many ways that you can use crayons you need many experiences. (Kasting, 1991, pp. 127-128)

In the context of that interview, my values emerged as having children make choices, become independent, and have opportunities

to explore the properties of materials and gain mastery of tools and materials. These coincide with those expressed by Lasky and Mukerji in Art: Basic for Young Children. Interviews and observations in the 3 and 4-year-old classroom during Phase II of the study revealed to me some of the underlying values and assumptions which I brought to the analysis of the data collected in the 2-year-old program. From these interviews and observations, it became apparent, also, that Sharon's art program was guided by three key explicit assumptions: 1) creativity is an important mental process which can be stimulated by giving children art materials to use; 2) children have a basic need to be messy which can be met through the provision of wet art materials such as paint, fingerpaint and printing; and 3) children learn to do art by doing it, and not through direct instruction in "art skills." The following points have been extrapolated from interviews with Sharon, and are expressed in her own words,

Art is important. Art is important for these children because they don't get it at home every day. They may not even get much art later on in school. Even though they come from advantaged homes, the kind of art materials most parents provide are felt pens and other things to draw with. They don't provide children with messy kinds of activities like paint and fingerpaint. I even sent my own children to preschool because I couldn't provide messy art at home. Here at the Centre the children can get messy without being frowned on.

Self-concept. One of my main goals for children is for them to feel they "can do"; they can succeed and have a real sense of mastery. Art materials feed into that important goal because there is no "right way" to use them. Children can manipulate, explore, change and create, which in turn gives the child a sense of power. I feel art and large motor activities feed self-concept more than other curriculum areas, such as dramatic play or blocks, and in turn, confidence for other aspects of

the program can come from the child's success using art materials.

Process of creating. Art is really anything they produce in that learning center. If teachers provide children with materials, time and support, then children's creativity can be nurtured. I strongly believe that the process of creating and of doing is far more important for children than the product. This is a hard concept to relate to parents as they often expect and encourage their children to bring art home, which stresses the product. As teachers, we do get excited about the product, but I try to de-emphasize it by putting work up on the walls rather than sending it home every day. Consequently, parents do not expect or put pressure on the child to produce something each day.

Displaying art. One of the things I learned from a teacher I worked with in England was how important it is to arrange children's work aesthetically. It shows respect for the work when it is displayed attractively. How the art is displayed reveals a lot about a preschool. You can tell about the teacher's understanding of developmental levels and whether her choices of art activities are appropriate for the ages of the children. If the art is good, then I feel it communicates about the quality of the entire program.

Teacher's role and program planning. I think it is critical to provide the messy art activities which children aren't given at home. This includes easel and table painting, string painting, printing, fingerpainting, paper maché, and collage. I also want to provide some activities which are cooperative activities. This may include painting with a friend or working on a mural or group project over several days.

In planning activities for 3's and 4's, especially for 3's, the activity should be self-evident through the arrangement of materials, and should not require a lot of instruction. Children don't always see the potential of a material, so you may have to do some "teaching" or showing them possibilities. I might just do it without saying anything, just fold a piece of paper, for example, and those who want to do it will. They will also pick up on the reinforcing comments you make to other children about their work. Certainly the relationship the teacher has with the children, being there and talking with them, changes what they will do. The teacher must be attuned to children, and be encouraging so that children will take advantage of the activity. I think it is important to repeat activities. This repetition is important because some children will

watch for several days before they try an activity. It isn't necessary to put everything out every day but to keep stability by not changing things every day either. What is important is keeping a balance between familiar and new materials. I am constantly looking for things that will give the art a spark, new colors, a new material, or a new position for the easel or art table. These changes will also influence how children view the material or how it is used.

Contrived art. When I talk about art that is not contrived, I am talking about experiences in which, as I mentioned before, children have choices in their use of the material. I call the contrived art 'teacher art'. You see a lot of it in schools, like the Halloween pumpkins with shapes for faces. When children are finished all the products look alike. I try to provide an opportunity for children to combine colors, textures or different shapes so that each work is not going to look the same. Even when I cut out fish shapes, which does provide a stimulus for children, each fish will look different in the end. Each child has the freedom to make the fish his or her own. The connection between the unit and the activity has to be a real connection not a contrived one. I couldn't imagine doing an art activity on a health unit for this age group of children, for instance. What could you do for this age group that wouldn't be contrived?

Messy/non-messy art. I want to go back to what I said about messy art being a critical part of the art program. I really classify art activities into two kinds: 'wet' or 'messy' and 'dry' or 'non-messy'. This gives me a way to view the activity and clues for planning and preparation. Knowing an activity is 'messy' I know that I will present it on the large rectangular table which has lots of space around it, and that I will need aprons and water for clean up. Wet or messy art says to me that it is big, dramatic and often cooperative. Dry art usually takes place on the round table. This doesn't need as much supervision, it is more crowded in space, and is near the shelves where children can help themselves.

"Work and play", "product and ownership", "messy and non-messy art" which emerged from these interviews with Sharon, as well from my own experiences in the classroom, provided themes around which social interaction, in the 3 and 4-year-old classroom and in the

2-year-old classroom, might be observed and compared. In these extracts, the values of the teachers, as well as the emerging values of the children, may be identified. For the purposes of this study, the modifying effects of dialogue, among peers and between teachers and children, are particularly significant.

Work and Play

Examining teacher's language through semantic analysis around participation in classroom experiences revealed a dichotomy between notions of work and play. Implicit notions about work emerged as one of the salient implicit values operating in these classrooms which influenced interactions across a variety of levels.

Work and play are adult concepts which adults apply to activities and experiences in the classroom (Suransky 1982). Children "act", experience, and play but do not naturally divide these activities into categories of work or play. Suransky wrote,

It was Marx who advanced the thesis that work is the mode basic to the development of the self. While "man" is of the world, he changes and transforms his world through his labor; hence man makes his own history through his work.... Play that is meaningful, play that fashions and transforms the landscape of the child, becomes authentic labor in the very act of playing; hence, childhood as a life phase does not dichotomize the meaningful purposive human activity of "work-play" for the child works while playing and plays while working. (p. 98)

Froebel, who is considered the "father of kindergarten" was also work oriented in his creation of gifts and occupations which were given to children to be used in a structured sequence and in specific ways (Tarr, 1989). When Peabody (1890, p. 274) wrote about the values of a kindergarten education she stated that

children would "learn consideration of other through working together and creating gifts for family and friends" (cited in Tarr, 1989) and would have acquired habits of "docility, industry and order" (Peabody p. 277).

According to Efland (1983), "the central characteristic of all school art styles is that their form and content are determined by the purposes of schooling. In the case of the common schools in the 19th century, the purpose was to socialize youth into a system of industrial education" (p. 150). These work related terms have carried over into contemporary programs for young children. In the preschool classroom, activities are frequently introduced as, What "jobs" would you like to do today? Where would you like to work? Teachers will ask children if they want to play in: the block center, or housekeeping center; do they want to play with water? Sand? Play dough? Teachers usually ask children if they want to work at: the art center, the art table?..or on puzzles ? They may ask children if they would like to paint at the easel, make a collage, draw a picture, paint a picture, or do a painting. Teachers do not ask children if they want to play at the art center or at the easel. Carolyn tells her mother, "Mummy play with that," pointing to felt pens (022600.03/12). But an adult was more likely to say, "What's Ross working on? He's busy, isn't he?" (012900.12/14), thus expressing the relationship of work to art-making.

Product and Ownership

Work is directly related to issues of product and ownership. Drawings, paintings, and collages are saved. Works on paper are saved. These are easier to save than 3-dimensional objects, but the willingness to save them also has to do with what is valued and why. It may be that creations on paper are work-related because of the relationship of the tools to reading and writing. If the paper was getting thoroughly covered, or in danger of tearing from an abundance of paint, teachers were quick to suggest starting on a new piece of paper (001700.02/15).

Interactions occurring about clay and play dough use suggest that these materials are perceived to be more process-oriented. Creations in these materials were rarely saved, but were returned to a container to be reused, in the same way sand constructions and block constructions were put away for another time.

One of the values Sharon stressed in her art program, and is expressed in the literature describing art programs for early childhood education, is the importance of process over product. This is closely related to the Piagetian and Lowenfeldian notion that the child will learn to make art by doing it. However, classroom observations in all phases of this study point to contradictions in this value of process over product. The child's ritual of taking an artwork to the teacher for acknowledgment upon completion illustrates this contradiction. Teachers acknowledged the product and wrote the child's name on it. In addition, teachers frequently suggested that the child put the work in some

safe place, or assisted the child in hanging it up. This is indicative of product and property. The name identifies the object with the self. The child and the work become part of each other. Sharon expressed this in terms of developing positive self-concepts in children.

Children developed an understanding of this through adults' routine encounters and would announce, "I did", or "I painted." If teachers really believe that the process is what is important, saving work and putting names on it would not be important. At the beginning of the year in the 2-year-old class, most of the children were content to walk away from the easel when they finished painting. Shortly afterward, another child might begin to paint on this painting. Often, neither child expressed concern about this. Children who did object tended to be children with older siblings, or who had attended other kinds of preschool programs. For example, when Allan painted on Jennifer's painting, she jumped up and down and cried, so Pat set up painting on the table for Allan (019600.11/06). (Jennifer has two older and a younger sibling.) The importance of ownership and product were systematically taught to these children through examples such as the following,

Carolyn watches Valerie pour more green paint. Carolyn strokes orange paint on Dan's painting. Dan, "You don't paint with me". Valerie, "Go to the other side,".. Later, Valerie, "Did you finish your painting? Let's go get your painting, Carolyn, and put it on the wall."
(021800.01/15)

At the beginning of the year, Michael had no sense of ownership of his or other children's drawings or paintings. His

typical style was to cruise by the easel on a wheel toy, stopping to paint if the paper and paint caught his attention. In an early painting episode, he moves in next to Lara to paint and they begin to paint side-by-side. Catherine joins them and the three children rotate sides and painting positions in a playful manner (011500.11/30). However, in April he claims ownership of a painting he has just completed (017600.04/19).

An implicit work-related assumption underlies the interactions around ownership. A job has a beginning, middle, and end which result in a product. When you finish the job you leave. Leaving any activity whether it is the block area, puzzle area, or art area means the child is finished in that area or with that job, unless it has been specifically determined that the child is leaving to go to the bathroom and will return. The regulation of routines and equipment use did not encourage children to return to their works, as illustrated in this example,

Allan, who has been working with clay, goes over to the art table but returns to clay. "That's mine," he claims, as Valerie picks up clay where he had been working. Pat, "I think Valerie thought you were finished with it, Allan, because you were over at the other table." Allan leaves to get a fire hat. (022400.02/15)

Teachers negotiate turn-taking, sharing equipment (Tobin, et al, 1989), and this applies equally to art-making. This contradicts a process or experience orientation because it tends to place emphasis on a product. Following the lead of the teacher, who inquires if he would like a new piece of paper, Jason quickly catches on to the idea that the paper can be changed and attempts to change the paper himself (003440.11/05).

In the 2-year-old class, the children were not encouraged to take work home on a daily basis. Work was filed in portfolios for each parent to have at the end of the year. This was established so that the target children's work could be saved and examined longitudinally without setting them apart. The work did go up on the wall as a place to dry and to form part of the decor for the classroom. Children who did wish to take a particular item home were allowed to do so.

Messy Art as Purification

One of the prime concerns, judging from comments by teachers, is keeping art activities within acceptable limits of messiness, or maintaining a balance between order and disorder. Swann (1985) mentioned that in her research site some materials were kept in a closet because they were "considered too messy to be used without protection of clothing, work space, and close supervision" (p. 111). Many teachers' comments to children concerned maintaining this balance, e.g., "No painting with glue, remember. You have far too much glue," (O.N. 01/19) and "If you are going to do painting (black paint on papier maché whale) you desperately need an apron, sleeves pushed way up" (O.N. 02/02). Teachers' comments also attempted to set limits for the use of materials and provide appropriate ways for containing messiness to easily washed surfaces.

Paint is acceptable on hands in some situations but not on clothes. If we consider this in light of Douglas's (1966) definition of dirt as an offense to order, it fits completely with

teachers' attempts to maintain order within the classroom, yet provide what is considered an essential component of preschool-messy art. Sharon defined messy art through categories of inclusion and exclusion: things which are wet, gooey or sticky, such as those that use paint or glue comprise messy activities, and activities which have dry components, such as crayons, comprise non-messy activities. (Appendix I)

At the Centre, children were involved exploring this risk-taking ground between messy and non-messy. Although there were several episodes where children painted their hands, the following situation, demonstrates how two boys in the 3 and 4-year-old class push the boundaries of acceptable messiness, and how it became dangerous territory for them:

Stuart draws on his hands with felt pens while Nathan watches. Stuart asks him, "Want to color yourself?" Nathan tries drawing on his hand with a green felt pen, then changes to a red one, draws, and selects a brown pen. Stuart continues to draw with a single color over his hand and fingers. They continue to draw on their hands for a few minutes before one of them says, "When we get through we'll have to wash it up, right?" The other remarks, "Yeah, but we like it." Nathan suggests, "It'll never come off, right?"

When Mary, the assistant teacher, sees the boys drawing on their hands, she intervenes, "What are you doing. Remember these are not for coloring hands. Time to wash up." As the boys stand at the wash basin one comments, "It won't come off." Mary concludes the episode, "It'll come off when you have a bath tonight. You must remember not to paint your hands with the felts. It doesn't come off." (O.N. 02/02)

In her classroom, Sharon controls the messiness of messy activities through the planning and location of the activity. Messy activities are set out on the large table with ample space around it so children do not walk through the area. Aprons are

placed there and water is available for clean up. Participation is limited to a few children at one time. This is common sense knowledge for any preschool teacher who has had messy art become chaotic.

However, there are less obvious reasons for providing messy art activities for children. Preschool teachers do this as part of the socializing process of teaching children to become orderly, and therefore neat and clean. Each of these messy activities becomes a ritualized means of providing an opportunity for children to be messy, yet within acceptable limits, since teachers believe being messy is important to children. Lowenfeld and Brittain (1975) cautioned that the children's interest in smearing fingerpaint could retard their graphic development, revealing a bias towards order and representation, rather than sensori-motor manipulation of materials. Periodically preschool teachers offer what I call "the ultimate cleansing ceremony." This ceremony involves the messiest art activity teachers provide for children: fingerpaint. Teachers provide fingerpainting, not because they really believe that children need to paint with their hands, although educators have constructed an account of how it is valuable for large motor development, and direct manipulation of the medium without interference from a tool, but because they believe if they offer children this opportunity to muck in paint, children will become cleansed or purged of this desire and other painting opportunities will remain neat and orderly. Teachers often provide fingerpaint when they notice children beginning to paint their hands, or with

their hands. Following a fingerpainting experience, preschool teachers may say to a child, "Paint the paper, not your hands; we had finger painting last week." This reflects an underlying belief that having participated in the ceremonial opportunity for this painting experience, the children should now be able to use brushes and other tools, rather than their hands for painting.

Frames

Definition: Frames in the ECE Setting

One of the foreshadowed questions guiding this research was, "How do adults frame the art-making experience for children?" The specific contexts in which interactions occur comprise the second element through which meaning is created. Reber (1985) stated that,

any social situation can be "defined" in accordance with basic principles that will affect and control the ways in which people involve themselves with and experience that situation. These "definitions" are frames.... the term is used here specifically to refer to the "perceived" and "experienced" organization, the "agreed-upon frame" within which people function. (p. 286)

Reber's definition is closely linked to Goffman's writings about frames. Elkind (1981) applied Goffman's frame concept to the preschool setting. He included, as frames, activities such as "block play, dramatic play, circle activities, outdoor activities, nature walks, and story time" (p. 6). Elkind wrote,

the fundamental unit of social learning is the frame and that even infants acquire rudimentary frames.... Each has a set of expectancies, rules and understandings which allow the activity to successfully run its course. ... Each of these frames has its own emotional rhythm because everyone who participates in a frame is "invested" in it. Investment means you have put something into it and want to get something out of it. (pp. 5-6)

Elkind described frames as one of the "mediating" structures from which the child derives behavioural rules from adult behaviours. This position is congruent with Vygotsky's belief that learning takes place externally before it is internalized by the child, and with Bruner's notion of scaffolding.

In her observations of a university pottery course, Stokrocki (1986a) divided the teaching-learning setting into "spatial, pedagogical, extra-structural, and self-reflective ones". Nash (1981) studied classrooms for 4- and 5-year-olds, also basing her analysis on the dimensions of the use of time; spatial arrangement; availability and quality of materials; and human interactions. Spatial constraints will limit the range of possible actions with materials (Renninger, 1989; Susi, 1986). In her study of child care centers, Suransky wrote,

The separation and division of our lived-world into strict spatial and temporal boundaries is functional and utilitarian in most institutional settings, of which schools are but one example.I observed space was demarcated into areas for free play, motor and cognitive activities. Time modules were allotted to specific program events. Artifacts and materials belonged in particular places. (p. 137)

The following categories for framing art-making experiences emerged out of an analysis of the data. These components are consistent with the categories set out by Nash and Stokrocki.

Physical Space Expectations

In the 2-year-old-classroom the art area was located in one corner of the room, with the clay/play dough table located closer to the middle of the room for most of the time. For about one month the art area was located near the doorway, but was moved back to its original location. In this classroom the only activities presented at tables were art-related: clay or play dough, drawing, collage, and sometimes paint. Most painting took place at the easel. These activities took up approximately 1/3 of the room.

The Centre was located in an old elementary school building. Hence, there were chalkboards around the room, which were accessible to children in several places. The location of pencils, crayons, etc. on a shelf adjacent to the circular art table was intended to suggest to children that those materials were to be used at this table. Teachers placed materials on the table at the start of the day as a means of introducing children to the materials, and as an indication of where the materials were to be used. (See Appendix A and Appendix B.)

Primary-aged children responded "art was a place" when asked by researchers Johnson (1982) and Stokrocki (1986b). Related to this spatial frame is an underlying notion of order. Materials belong in certain places. Children were not encouraged to take materials to other places in the room, with the exception of play dough, which could be used in the doll center as pretend food. Other toys could be brought to use with the play dough, e.g. dishes, toy cars, plastic animals. One way teachers reinforce this idea of spatial frames is through clean-up time, when children are encouraged to return materials to their places.

This spatial frame has ramifications for material use at a variety of levels. The following expectations have been extrapolated from classroom dialogues and episodes.

Painting usually occurs at the easel

This was expressed by such comments as, "If you want to paint, paint here (easel). I can get you a fresh paper. If you want to glue do it at the table. You decide what you want to do." (001500.01/21)

Kate watching at the art table announces, "I want to paint" Pat responds, "There's nobody painting at the

easel right now....there's the paint right at the easel." (0015700.02/15)

Carolyn says that she wants to paint. Pat responds, "You want to paint? I don't have any paint at the table. You can glue or draw." Carolyn indicates she wants to fingerpaint (like last week) . Pat, "Not today, its too late, soon it will be time for clean-up." (025000.05/07)

Each color of paint has its own brush. Brushes can be selected from a large can at the easel and put into individual paint containers.

A teacher tells one prospective painter, "The brushes are in the can so you can choose which brush you want." (007100.02/18)

Kate puts brushes into paint containers, one in each color. A teacher reflects, "You've got all the brushes in their places and now you're ready to paint." (00169.03/22)

Beth, putting one brush in each can asks, "Where does this brush go?" The teacher responds, "Where would you like it to go?" (007300.02/18)
 "You're putting the green brush in the yellow paint, and the yellow brush in the green paint." (010100.04/22)

Michael breaks the frame of brushes to be used at the easel. At the same time acts on his understanding of things belonging in specific areas. Michael goes to the storage cupboard where teachers keep supplies and takes out a watercolor brush. He puts it in his mouth and carries it to the small climbing structure. He "paints" the slide with the brush, and puts it into a slot where the ladder hooks onto the structure. Brush in mouth, he stands on top of the slide, slides down. He then returns the brush to the cupboard. (015400.02/15)

Spatial framing was an important part of the framing activity in the 3 and 4-year-old classroom. The space for art occupied approximately 1/3 of the classroom. The majority of the table space was used for art activities. The art spaces were also centrally located so that children would pass through them on the way to circle area and when they entered and left the room through

main door or cubby area. The other areas of the classroom included a table for manipulative toys, a block area, housekeeping area, and circle area which contained a book shelf and record player and musical instruments. (See Appendix C.)

Routines as Temporal Framing

Routine is "any regular course of action" (Webster, 1989, p. 637). Program planning for young children is structured around a daily routine schedule which happens in a predictable way on a day-to-day basis. Within the schedule are subroutines which guide individual program components. Early childhood practitioners assume that the routines give teachers and children security and freedom to function effectively throughout the day. These routines can also be seen as a means of transmitting cultural values and structuring experience for the creation of meaning. Just as the amount and arrangement of the space communicates the relative values of art-making, time allocation also communicates worthwhileness of the experience. Within this temporal framework routines have a spatial-temporal component. Activities take place in specific locations for certain lengths of time, e.g., outdoor time, circle time, snack time, free-play time. In both the 2-year-old class and 3 and 4-year-old class, art-making occurred during "free play" time. Free-play time lasted approximately one hour in the 2-year-old class and 45 minutes in the older class.

Neither class used temporal framing to set aside a specific time in which all children were strongly encouraged or required to use art materials. This was based on a belief by the teachers that

involvement in art-making should be a child's choice. Typically the teachers used other means such as spatial cues, adult presence, and art displayed on the walls to define art-making as a valuable experience.

Parents had a part in the construction of routine schedules. In the 2-year-old program this took the form of expressing directly and indirectly through early or late arrival how the starting time of the program fit into their personal schedules. The daily arrival time for the program was a mutual construction based on the requirements of the Centre, teachers, parents and children. Although seemingly unrelated to art, children's arrival time did impact on their length of involvement in free play activities.

Media Centered Routines and Rituals

Media centered routines are those uses of materials which became a regular, or somewhat predictable way of using a material, evolving from the child's exploration of the inherent properties of the material, and from social interactions with respect to the medium or the material. Underpinning these social interactions were some common expectations about art.

According to Abercrombie, Hill and Turner (1984) and Reber (1985) a ritual is a stylized or rigid pattern of actions which symbolically express a shared meaning. In discussing the function of rituals Mary Douglas (1966) explained that rituals provide focus or "framing" for certain experiences. She wrote,

It enlivens the memory and links the present with the relevant past. In all this it aids perception. Or rather, it changes perception because it changes the selective principles....It can come first in formulating

experience. It can permit knowledge of what would otherwise not be known at all. It does not merely externalise experience, bringing it out into the light of day, but it modifies experience in so expressing it. (p. 64)

Power (1985) suggested that ritualized conversations "are endowed with a special emotional significance and are performed to acknowledge regard toward and confer respect on another" (p. 216). In the Centre, ritual as a means of externalizing and modifying experience and conferring respect could be clearly seen as children completed an art work. As each child took the completed piece to one of the teachers, the teacher would characteristically respond with comments like, "Beautiful", "Lovely", or "I like... (all the colors you used, the fish, etc.)". Sometimes the teachers would engage in a conversation about the subject matter of the work, such as "that looks just like a squirrel," or "tell me about your picture" but the majority of the responses were generalized adjectives like "beautiful".

Through these interactions children received acknowledgement from their teacher that they had done something deemed worthwhile by an adult, and they were sometimes provided clues for acceptable levels of performance for future experiences. Swann (1985) described this kind of behaviour under one category of child/adult interaction as "approval seeking" (p. 202) where children either overtly sought adult approval, or used verbalization about the work to gain recognition from an adult. Efland (1976) described the teacher's role in this kind of interaction as that of "client-patron" (p. 41). To extend this model even further, the

teacher becomes the curator who selects and displays the work and may serve as mediator between child artist and parent-patron.

Teachers and children in the 2-year-old program engaged in this product completion ritual. In this classroom, teachers might also respond, with a reflection, "I see you have....". In my own case, based on my desire to extend children's knowledge of the art elements, I would also respond by labelling the colors, lines and shapes the child had used in a work. This did not change the ritualized action itself, only the specific content of the interaction.

The following episode illustrates Kate's understanding and utilization of this closure ritual at school. Her mother commented that at home, although she might ask to have a work hung up, she did not seek adult response to her works upon completion (P.I.). The following incident took place in January:

Kate is painting at the easel. She holds the brush in her right hand, left arm up in a body guard position. She paints with yellow and black, then adds blue. She stands at the left side of the easel, then moves down, looking at all the colors. She works down the line of colors as she paints, painting over some paint which Michael had added to her picture. She sees Pat who gets down low, waves a finger back and forth over the picture, while labelling the colors. Kate responds, pointing at the painting (inaudible on tape), and begins to paint again. She paints over the existing colors; green over green, red over red. She twists her brush, leaving a dot. She then announces, "I finished. I did. Look at my picture." Pat returns to the easel and comments, "Look, it's different now. Black and a little yellow. "

Kate points and says, "Blue and green and red." Pat repeats, "Blue, green, red. Did you put the blue on or did Michael put the blue on?" (comment for research purposes).

Kate pushes up her sleeves and begins to paint again. She continues to paint down the line of colors,

putting the same color on top of previous paint. She proclaims, "I did, Pat. I did." She brings Pat to the easel. Pat asks, "Is it finished now?" Kate pushes up her sleeves, and paints more black on the black followed by yellow and blue over the black. She turns and asks, "Where's my Mom?"

Kate has moved to the art table where she briefly engages in gluing a piece of paper to another and then returns to the easel. She adds more black to her original painting and declares, "I did it."
(013400.01/25; 014000.01/25)

Not only has Kate engaged in this ritualized interaction of completion, which she repeats several times, she also demonstrates her understanding of the generalized routine of painting. Golomb (1992) wrote that children's sense of ownership of a work occurs when children begin to have representational intent. However, for the 2-year-olds in this study, a sense of ownership was constructed through this ritualized interaction which occurred upon completion of a work, and was not dependent upon the child's ability to name or represent forms in the work.

Although routines and rituals are closely connected, the routines for using materials are less rigid or formal than the rituals around media use. In recalling Vygotsky's theory concerning the shift from biological to higher psychological functioning being socially mediated, it seems that these routines serve to unite the child's biological level of using tools, or responding to the implicit nature of the media with the socially mediated use of the media.

Wertsch (Rogoff & Wertsch, 1984) explained how intersubjectivity between participants operates at a range of levels from one where they share "the same situation definition and

know that they share the same situation definition" (p. 12) to a situation where they must negotiate the definition of the situation. He said,

This change can involve the child's shifting to the adult's situation definition, or it can involve a shift to a viewpoint somewhere between the adult's and the child's original intrapsychological situation definitions. (p. 13)

This concept of levels of intersubjectivity and asymmetrical definitions is particularly relevant to children's routines around the use of materials, where adults and children did not always share the same definition, especially with respect to neatness.

Drawing routines. This episode of Kate drawing while her mother looks on was noted on the first day of formal observations and at a time when few other art materials were available, e.g., the easel or glue. The episode closely follows her mother's description of their pattern during the summer. It is illustrative of the drawing interactions which parents and children have had prior to Centre entry.

Kate and her mother are seated at the art table. Kate holds a pencil as if she is writing. She makes careful lines, watching her paper closely. She leans into her paper as she draws. Kate labels her drawing "Babies". Her mother leans in toward Kate. Kate picks a second pencil, holding it close the point makes circular forms, dots, and short lines from the center outward. She deliberately places the shapes on her paper. She switches pencils. She speaks to her mother who says, "Long hair? That's a good idea." Kate puts eyes in the drawing at her mother's suggestion. She chooses a thick orange crayon from the basket and makes careful circular lines with it, then shorter back and forth lines. She chooses a red crayon. It slips and she puts it back, choosing a brown crayon. The lines go off the paper and her mother responds, "Oh, oh. It slipped off the paper." She chooses a basket and from it takes a yellow crayon, making more careful lines, holding the paper with her

left hand. Her mother comments, "That's sunny like the sun." (010500.11/02)

This second example illustrates drawing as a social activity involving both children and adults during which routines and procedures were introduced and reinforced,

Carolyn and Allan come to the art table. Carolyn chooses a brown felt pen and her mother helps her take the lid off. She marks, watching Dan, who is drawing, glances back at her paper and at Valerie. She makes slow circular marks.

Valerie asks Allan if he would like to use the felt markers too? Allan picks a green pen and says, "I'm going to draw Mommy a picture." Pat inquires, "Have you used felt markers before, Allan?" "No, I din't." He draws back and forth make horizontal lines. Carolyn hands her drawing to Pat, sitting next her. "Would you like another one, Carolyn? What color would you like now?" Drawing continues with some conversation. Allan looks up from drawing, down at paper, and stops drawing. He looks under the table at Lop, the rabbit. Paul comments, "Brown." Pat expands, "Three shades of brown. That's the same brown, Carolyn." Carolyn draws with turquoise over her brown marks. Paul announces, "I want to hang it up." Pat points to the wall over the cubbies. Paul, "No. Put it on another wall." Valerie and Paul go to find a place to hang his drawing. Other children continue to draw.

Carolyn draws with yellow and another child comments, "I use that." Carolyn uses purple. Allan stops drawing, watching. He refocuses, then, using the pen wrong side down makes bouncing motions with the pen as he watches a child playing the piano. He leaves but Pat asks him to come back to put the top on the pen. When he does, she comments, "You made dots and lines." Allan points, "Put it right here." Valerie puts it on the wall near the back door. "

Carolyn draws briefly in brown, replacing the top carefully,. She leave the table, following Allan. Valerie hugs her asking, "Did you finish your picture? Come and show me." They return together to look at Carolyn's drawing. (021200.01/15)

Painting Routines. Teachers and children have separate routines which coincide at particular points during the activity. For children in the 2-year-old program, the general routine

included: deciding to paint, getting an apron (sometimes), selecting brushes if they were not in the individual paint containers, applying paint to paper, determining completion, and finding a teacher to respond to and hang the painting up, washing hands, if needed, and returning the apron to the easel. For teachers, the routine included giving permission to paint (if needed) at the easel, or at the table, putting an apron on the child, writing the child's name on the paper, responding to the painting, removing the finished painting and hanging it up or finding a place for it to dry. The teacher also assisted the child in washing up, and reminding the child to hang up the apron.

For Beth, not only was painting "scaffolded" for her by Mark and Michael but the routine of painting was introduced by her mother, reinforced by Pat and later by Ruth.

When Beth approaches the easel where Mark and Jason are painting, her mother directs her to the opposite side. She pushes up Beth's sleeves, and puts an apron over Beth's head, saying, "This is an apron for painting." Later in the episode when Beth watches Jason, her mother, comments, "Yes, Jason is doing another one. Yes, he has an apron on. Yes, that's fine.Jason is painting a picture too. It's a lovely picture too." Pat tells Beth, "I'm going to write your name up here, so we'll remember this is yours." Beth's mother concludes, "I think Jason's all finished now.... You're doing a wonderful painting. All done? Oh, very nice." Pat comments to Beth, "Look at all the colors you put on the picture." (003900.11/05)

The sequence in this event is similar to a painting episode involving Beth and Ruth, described under "Teacher Scaffolding". Although two different teachers and a parent are involved, the routines are similar. Adults indicate the unoccupied place at the easel, push up sleeves, put an apron on the child, write a name on

the work, respond and remove the painting and assist the child in handwashing.

In Allan's first school painting experience (018600.10/06) he dipped the brush into the paint, then crossed the room to the water table where he dipped the brush in the water, returned to the easel and applied paint to the paper. He did this about three times during the episode. It is unclear from the video tape whether he was adding water to the paint on the brush, or washing the brush. His father, who was observing this process commented that at home Allan had been painting with tempera blocks in a muffin tin with water to rinse his brush since he was 18 months old.

Typically, adults watched while children painted. They seldom directly modelled or scaffolded painting for children. Adult painting routines coincided with children's painting routines with regard to neatness, order and product, rather than around actual painting techniques. Painting was done in a particular place, for a period of time, with a product at the end. This was true even though all the teachers would state that the importance of the experience for young children was in the process of painting. Children incorporated these routines into their personal painting routines.

Parents influenced the use of aprons because as participant observers in the setting, they acted on their concern for their children's clothes by putting aprons on their children, or expressing their concern to the teachers. Since the parents' were observing classroom activities on video, teachers were continually

"on stage" and felt the pressure of this expectation. It was only after reviewing tapes made in the first years of the program and tapes made five and six years later that I became fully aware of how much parental expectations had shaped my concern about paint on children's clothing.

Clay/Play dough routines. The routine for using play dough or clay was simple. The play dough or clay was often set out on boards before the children arrived. Sometimes play dough was left in a large lump in the center of the table or in the covered bucket. If tools were used, they were in a container placed on the table or on the art shelf. An apron was not usually necessary but children were encouraged to push up their sleeves. Play dough/clay use was conceived as more process-oriented than drawing, painting or gluing because childrens' work was not saved. At the end of the free play time, the play dough or clay was put back into the container to be reused. The play dough table was centrally located to provide for ease of access and wide view of the classroom.

The following of episode illustrates the social nature of the activity and how adults are actively involved in the direct use of the material.

Several children, two parents and a teacher are seated at the play dough table. The purple play dough was freshly made and still warm. One mother comments, "Doesn't that have a nice feel to it?" Allan patting a ball, pushing it. He pulls off a little piece, flattens it and pokes his finger into it. One child says "Hot", as he uses it. Pat responds, "A little bit hot, that's warm". Valerie and Carolyn joins the group. Valerie asks, "You want me to make a ball?" She rolls the play dough between her fingers. Carolyn brings her a piece of play dough and Valerie rolls this into to a ball. Allan says, "Cut me a ball" holding out a piece.

Carolyn takes hers, holding out her right hand, "Mine, Mine, mine." Carolyn and Ann hand pieces of play dough back and forth to each other. Pat, manipulating the play dough, "Four small lumps of play dough, now there are ...big ones!" Carolyn gives more play dough to Valerie, who remarks, "I seem to be turning into a ball factory." Carolyn tries pushing a ball across the table, flattening in the process.

Allan watches. Valerie shows Carolyn how to roll a ball. Allan asks her to show him saying, "I can't make a ball." Carolyn is holding her blanket and drops the play dough several times. Carolyn asks Valerie to help her roll another ball. She throws the piece across the table and departs. She returns shortly. Allan remains, toy truck in hand. Allan begins pushing the truck and filling the back of it with play dough. He rolls it and buries it in the play dough. Carolyn continues to roll and push the play dough, taking a piece from Allan when he doesn't seem to be watching. He takes it back. Carolyn pushes a piece of play dough to Valerie, leans into her and snuggles in Valerie's lap, holding her blanket. Allan and Carolyn push cars into the play dough. Allan leaves for painting.

Later Carolyn is back at the play dough table watching children play the piano and manipulating the dough with both hands. She pulls pieces off a large lump of dough while she watches. She throws the play dough at Pat, and takes it back and rolls a piece back and forth. Pat fingers the play dough while Valerie is flattening it between her palms. Carolyn gathers up lumps of play dough, hands them to Pat. She picks up her blanket and runs out as Valerie leaves the room. (020000; 020400; 020900.12/04)

Making things is paramount in our understanding of these media. Rolling coils and balls may be an accomplishment for 2-year-old children, equal to creating a circle when drawing or painting. In the routine of using clay/play dough teachers seemed to assume that children could make the leap from making balls to creating more complex representational forms. They did not make these assumptions for painting or drawing. For children such as Carolyn, making balls became a routine for using these media which persisted over most of the year.

Glue and collage routines. Glue and collage were left very much up to children to do independently, although an adult might be involved as a supportive observer, as in the following example. Kate had established a routine of dripping the glue from the end of her applicator. Late in the spring, Kate spent time creating wiggly lines with glue as part of her collage making experiences. The following is one of two examples which stood out as she worked next her friend Oliver, a regular adult visitor to the program.

Oliver greets Kate as she approaches the art table, "Hi. Would you like to use the glue like the others are doing?" He arranges the materials, setting out a handful of collage materials. "Then you can put these things on it." Kate drips the glue onto the paper from the glue spreader. She lets it drip for a long time. Pat comments, "Kate is watching the glue drip. Look at those lines." Oliver reflects, "Look at those lines. Yes, you can make all those wiggly lines." Kate continues to drip the glue. Oliver suggests to Jody, "You might put some glue on that or they won't stick." Kate continues to glue, commenting, "I'm getting glue." Oliver, "Yes you are, I think you are making a very interesting design." Kate comments on the smell and Oliver asks, "Is it smelly?....Oh, I think you are making a very interesting design." Kate drips the glue from about 8 inches above the paper. She places a yellow circle on her paper. She searches for another piece to glue down, settling on a second yellow piece. She wipes her fingers and continues to drip the glue. She picks a purple circle and Oliver comments that she is working deliberately. She places another yellow circle on the paper and continues to drip glue on top of the circles. She comments to Oliver that she is covering the paper. She looks into the jar as she dips the glue stick. She adds more shapes then holds out her fingers, which have dried glue on them, "Oh look at that." Oliver, "It will wash off." Oliver turns to Jody who is seated at the table, "Lovely, put your name on it." Oliver asks Kate, "what do you need now?" She replies, "I need purple." She takes two pieces from the collage basket and one falls onto her paper. Oliver removes this one, saying, "You didn't want that one did you?" He lifts it off. He puts an apron over her head. Kate, "I'm doing wiggly lines." Oliver, "I can see what you're making." Kate, "I'm doing glue." She places a

piece of orange cellophane on next. Pat comments, "You can see through that." She adds more pieces, labelling as she places them down, "Two squares. Triangle. Square." Kate continues to drip, stir and drip the glue onto the paper. Oliver asks, "How's your painting?" "I'm gluing," declares Kate. "Ah" she remarks as she adds another square and drips glue over it. She places one more piece and announces, "I'm going to show Pat." (016300.03/22.) (Tarr, 1990)

This 15 minute episode demonstrates both the teacher's and the child's understanding of the gluing routine. Kate expresses the difference between glue and paint. She still is concerned with the sticky properties of glue and is fascinated by its properties which she utilizes as she works on the collage. The adults express their concerns for extending vocabulary and neatness. Kate also understands the activity-completion ritual of showing her collage to a teacher.

There were no episodes recorded of adults demonstrating gluing. Instead, they relied on verbal directions. For example, on the first day glue is put out in Michael's group, Pat tells him he can put glue on the paper and put the paper on the glue. No attempts were made to demonstrate "just a little glue" or wiping excess glue off onto the edge of the jar. Teachers allowed children the opportunity to explore its properties within the context of collage-making. Children watched other children for cues. They were beginning to understand that gluing means to drip or spread this sticky white substance onto a sheet of paper, with the possibility of sticking things down.

Interactions

Interactions as Defining Activities

The process of creating meanings (Blumer, 1969) in the classroom was not a one-way process in which teachers transferred these assumptions to children, but a negotiated and recreated process of defining art-making in this context. The defining activities occurred through diverse kinds of encounters:

- one-to-one encounters between a target child and an adult
- group encounters between an adult, the target child and the child's peers
- child to child interaction (one-to-one)
- child to child interaction (group)
- adult - child interaction - (indirect) inferences drawn by other children from observation
- adult to adult - (indirect) inferences drawn by children from observation of adults.

In keeping with the presence of parents in the classroom, adults includes both teachers and parents. Consequently, meaning about art-making was not only created between teachers and children but also between the teachers, and between teachers and parents. These encounters contained both nonverbal and verbal gestures which served to define the art experiences in the classroom.

Nonverbal Interactions

In Vygotsky's view, language is considered one of the primary means for conveying meaning. Mead's "conversation of gestures"

includes nonverbal and verbal responses. In this research setting, teachers consciously used non-verbal forms of communication which gave importance to art-making in the classroom. Predominant was "being there". The presence of a teacher at the art table, play dough table, or near the easel, provided support and validity for the activity. It also provided a context for interaction to occur. Browne and Hopson (1983, p. 172), wrote, "An appreciative adult nearby, who shares the experience and observes the process, gives the process more meaning for children who then invest themselves in it. It is this investment of the self that turns materials and process into art." In interactionist terms, this "investment" involves children interpreting the situation and acting according to their definition of it.

Part of "being there" had to do with children's entry into the 2-year-old program, where the children were facing separation from their parents. Fucigna, Ives and Ives (1983) stated, "As separate people toddlers are interested in exploring their capabilities and exercising their new-found independence. This need for independence simultaneously exists with the need to be supported, protected and helped" (p. 48). The teachers recognized the children's need for independence from their parents, and that these children also needed sensitive adults to support them in the social setting of the preschool classroom. Children formed attachments with specific teachers as a way of becoming secure in the situation and often chose to participate in an activity based on this

teacher's presence. (See Kasting, 1991 for discussion of the separation process in this program.)

Being there was based on the teachers' belief that allowing children to shift their attachment from parent to teacher would facilitate the child's adjustment to the group setting. Once this teacher-child relationship was formed, and the child felt secure in the setting, teachers assumed that the child would be able to develop relationships with other children. Thus, the teacher mediated the child's socialization process in the group, while modelling values and expectations for specific experiences within the setting. Although this behaviour may seem obvious to North American teachers, it is not the role taken by Japanese or Chinese preschool teachers as described in Preschool in Three Cultures (Tobin, Wu & Davidson, 1989), and so cannot be generalized to other cultures. The teachers used their presence in a particular area of the classroom in five ways: 1) to attract children to an area, 2) to develop positive relationships with children, 3) to support children engaged in an activity, 4) to observe the specific activity and the general classroom, and 5) to model ways of using specific materials. Although three of these categories did not originate with goals associated with art-making, teachers selected art-making situations because they perceived these situations to be important and potentially interesting to children.

The general arrival procedure was for one teacher to remain near the door to greet children and parents, while the other teacher would place herself in one of the activity centers. This

was to draw children and parents into the room, away from the doorway, and specifically to provide a focus for children who wanted to begin the program by connecting with a teacher. The parent might walk with the child to the teacher, or remain for awhile before joining the parent group. Consistent with interactionism, teachers selected this location based on their interpretation of specific situations which included knowledge of individuals in the group, their interests, their relationship with that teacher, and teachers' preferences for specific materials.

When I asked Ruth if it was important for teachers to be at the art table she responded, "Yes. Presence...trust. When a child trusts you, the child will come."

During an interview Joan described her role at the play dough table,

I would usually go when children are there, or go at the beginning of class and make pizza or cookies, something children are familiar with. They could participate in groups or make their own.... to draw them in. Play dough seemed like my spot. Often Ruth was in the doll center.

At the beginning of the year, Kate's involvement in art seemed to be determined by her mother's location in the room (011600.11/30). Later in the year, other adults assumed this role for Kate. In one situation, a teacher, knowing it was an art observation day and of Kate's attachment, moved to the art table, announcing, "I wonder if Kate knows where I am." Kate quickly sat down at the art table and selected paper for a collage activity (017800.04/19).

Conversely, teachers may see children working independently and consciously avoid an area. In the 3 and 4-year-old class, both Mary and Sharon remarked that they had stayed away from the art table so children could work on their own (O.N. 02/26).

Once the child has joined an art activity, the situation can provide an opportunity for teachers to foster their relationship with the child through their focused attention on what the child is doing. Tina was describing one of her first days as a teacher in the 2-year-old program. She was engaged in a cutting activity with Carolyn. "I liked doing it with her as a way of being there." Ruth commented that showing Jason some possibilities with play dough was a means of communicating with him (004500.11/26).

Brittain (1979) concluded that children spent nearly twice as long drawing and painting when an adult was present as when no adult was there. A review of the episodes in this study has revealed that adults were present at some point in the activity approximately 80% of the time. Even when children were engaged in transitional activities, adults were present approximately 75% the time. Sometimes children changed activities to be near or to follow one of the teachers as they moved about the room (e.g., Carolyn 020900.12/04). Some of the transitional activities arose from an individual child's desire to be near one adult on a specific day. For example, Jason attempted to leave the room several times and spent time shadowing Pat (008600.03/18), which accounted for three transitional episodes in a single morning.

In one early episode, Jason began by the routine rolling of dough. Ruth introduced the possibility of making animals, e.g., a dragon, in dough (004500.11/26). When interviewed, Ruth explained she was showing Jason possibilities with the material and using it as a means of communicating with him. She recognized that the dragon (probably) didn't have any meaning for Jason. She was interested in the social aspect of working with the play dough with several children together. She made an "extra push" to socialize as a means of keeping them interested. "I don't expect them to make animals. (This was) an opportunity for Jason to stay and to feel comfortable." (T.I.) At the end of the year, Oliver's position at the art table and his attention to Kate, encouraged her to spend about 15 minutes on a single collage (016300.03/22).

Matthews (in press) described how his wife, Linda, through facial expressions and body position, supported her daughter's painting activity. He also noted that Linda "stage manages" the activity through unobtrusive gestures which he likened to a "ballet." In a similar manner, teachers also used the opportunity of being there as support to facilitate children's engagement with materials. They noted children's interest in a material and facilitated children's access to the material (Lackey, 1988). Sometimes this took a non-verbal form such as pushing glue and paper closer to a child (e.g., 06500.01/21).

The children's parents also used their presence to support their child in a particular activity. Kate's mother sat next to, and slightly behind her as Kate drew. She also adjusted her body

position and facial expressions to express her interest and help Kate sustain her interest (011300.11/02).

When Beth saw Jason painting at the easel, her mother reflected her desire to paint and guided Beth to the empty side of the easel. She then sat just behind Beth while she painted (003900.11/05).

Sometimes children took the initiative to involve an adult at an activity. Allan took his father by the hand and pulled him over to the play dough table (018800.10/09). Earlier in the day he had told his father to "sit down" at the play dough table (018700.10/09).

Reciprocal engagement in the activity depended on each participant's interpretation, as in the following episode between Michael and Pat.

Michael fingers the scissors, holding them to the paper. He holds them out, "Pat," he says. He picks up a second pair, opening and closing them. He picks up a third pair and holds them close to the paper. He then mouths them. (014800.02/15)

When he holds the scissors out, it is unclear whether he is asking for assistance or indicating that he is using scissors. Pat interprets this gesture to mean he is showing her the scissors. She makes no attempt to show him how they work, believing that he is self-motivated in his independent exploration of the scissors and he is not yet "ready" for instruction. He accepts her interpretation, continuing to explore the scissors.

The central position of the play dough/clay table provided an excellent vantage point from which teachers could observe the

activities within the room while simultaneously attending to the immediate activity. Video episodes of activity centered around clay/play dough use show teachers scanning the room while manipulating clay or play dough. Children also observed the room while using clay or play dough, e.g., Carolyn watches children playing the piano while she manipulates the play dough with both hands (020900.12/04). The tactile, manipulative qualities of clay and play dough make these materials easy to use without looking. The frequency with which both children and adults used this center as an observation post suggests that, not only are the location and materials conducive to this, but also the behaviour may be mutually constructed. Teachers note what children are observing while children notice teachers scanning the room.

Browne and Hopson (1983) noticed that some children used the easel as a place to observe classroom activities and suggested that the easel be in a "private place overlooking the room" (p. 170). While there were frequent easel painting episodes where children stopped and looked around, they did so largely in response to noises occurring elsewhere. Children used the water table, climbing structure or play dough table frequently for observation posts.

Renninger (1989) stated that "what the child understands as possibility for action is informed by the functional properties of the play object, as well as the culturally prescribed use of the play object" (p. 152). Modelling interactions with materials without verbal comments is another way that adults engage children

or create meaning for children. Sharon playfully printed a fish-shaped sponge across the paper (O.N. 01/22). In this manner she demonstrated a printing technique to children, who otherwise often scrub back and forth, rather than stamp or print with objects ostensibly set out for the purpose of printing. When discussing this episode Sharon stated, "Children don't always see the potential of a material, you have to do the teaching or showing them. I might just do this, without saying..." (T.I. 03/06). Ruth responded in a similar manner, "We have to guide and show the potential of the material" (T.I.). Although Renninger (1989) did not support the view that there are "cultural prescriptions" (p. 152) for using play dough by either children or adults, she saw children's use of play dough being highly susceptible to how others used it in a particular classroom. As a teacher, I would often sit at the play dough or clay table rolling coils or balls. This was based on my belief that this activity was within capabilities of the 2-year-olds, and might encourage them to move beyond flattening and squeezing the dough. However, there was only one documented incident in Phase I of the study where a teacher made a representational object as part of modelling behaviour (Lackey 1988), and two incidents from the single child tapes.

Modelling behaviour is one component of "scaffolding" because it assists children to attain a more advanced level of development. I have included these nonverbal examples as a discrete category because they may be employed without the use of other scaffolding techniques. Teachers may use them less consciously than other

scaffolding techniques. Scaffolding, as described in the following section, may include multiple strategies, both verbal and nonverbal.

Verbal Interactions

The main categories of verbal interactions which emerged from the data included labelling things and behaviours, and providing verbal reinforcement or recognition for children's visual expressions or their behaviour. Verbal interactions conveyed messages about completion, ownership, and limits to the ways in which materials were to be used. (Language around ownership and product was discussed under those topics.)

Labelling. Labelling things and actions are part of language acquisition. Young children come to the program understanding this process. Language interactions under the heading "labelling" can be divided into labelling actions or labelling things, which includes words around art elements (color, lines, shapes, etc.). These labels can be used by both children and adults. They include generalized responses such as "beautiful", "lovely." Through this labelling adults set expectations for representations or particular qualities in works. Teachers did supportively accept children's non-representational work, but expectations for representation were expressed in the 2-year-old classes and the 3 and 4-year-old classes.

Labelling may be part of a teaching, or "scaffolding", interaction but may be used independently, when it is employed solely as a response to a completed work. The following painting

episode involving two children and a teacher illustrates labelling which conveys expectations about paintings:

Joan holds up Tanya's painting for Andrew to see. "Here's Tanya's painting, isn't it great? Lots of color." Andrew doesn't appear to look at the painting but is interested in identifying components of his own painting, indicating "A person, a red mouth." Joan asks him, "Do you have any other words to tell me about your painting?" She writes a word and his name on the paper. (001620.01/21)

In this situation, Joan has expressed the value that using many colors is good in paintings and that paintings may be representational. She also connects the written word with the visual expression.

The following dialogue at the clay table includes labelling as part of the scaffolding process of creating a representation in clay. Three children and a teacher are working at the clay table:

Richard is pushing clay down on the table. Ruth hands him a clay animal which she had made, "Richard can have that one". We can give it some hair. Roll out little things, like this." She demonstrates rolling. Andrew joins them.. "We're making some animals. You can give it some hair, eyes..." I'm making a mouth". Ruth asks Andrew, "Do you want to put the tail on, Andrew?" He starts to put the animal down and push on the tail. Ruth continues, "Do you want to give him some eyes? You can roll a tiny ball like this?" Andrew rolls a ball. Ruth "Shall we give him another eye?" (002200.04/15)

Mark identifies colors for Jason in his first school painting experience. "Red", says Mark. At the end of the month, Jason labels "anodder red" in a drawing (004600.11/26).

In the example following, Pat uses another child's work to identify colors for Jason. Not only does she use the painting for language development, she implicitly conveys that paintings can be about colors and this aspect of thingness can be labelled:

Jason and Pat are working at the clay table. Pat leaves to hang up a painting that Beth has just completed. Jason follows. She traces her fingers around the lines and shapes and comments, "Big red line, yellow, blue, blue, blue and red. A big red circle." Jason repeats, "blue, red." Pat, "What's this color?" Jason, "White. Pat, "That's yellow. I'm going to hang it up." Jason, "Right there." Pat, "How's that?" They return to the clay table. (008800.03/18)

Late in the school year, Michael labels his own work in the following episode:

Michael rides by the clay table on a wheel toy, dismounts and goes to the easel. He makes a quick blue stroke and says "Bu" He chooses a new brush, puts it into the green and makes another quick stroke. He selects another brush, painting on the green with yellow, saying "yeyow". He goes around to the other side of the easel and paints. When a teacher approaches, Michael says, "I make that. That's mine." (017600.04/19)

Children also began to label the subject matter in their work, "babies" (Kate 010520.11/02), "Mummy whale and baby" (Jason, 05/06). Naming objects in their drawings and paintings was less prevalent by the 2-year-olds than naming their play dough or clay formations.

The above episode and the following one of Beth painting, illustrate how, according to Vygotsky (1978, p. 25), children use language to guide their actions. Michael has internalized the labelling of colors and ownership which have been part of his interactions around art-making throughout the school year. He now uses this language to guide and label his own actions.

Beth has approached the easel. Pat tells her that the brushes are in the can at the end of the trough holding the paint cans. Beth puts one brush in each can, naming the colors as she goes. She does not work down the easel systematically but selects certain colors for brushes. She asks, "Where does this brush go?" Pat

responds, "Where would you like it to go?" Steven gives Beth a brush which has been in blue paint, telling her to place it in a can containing black paint. She pauses awhile before she does place the brush in the black can. When Steven leaves, she watches him. Then announces, "I'm using paint," to no one in particular. She glances to see what Michael is doing at the other side of the easel and declares "I'm all done." (007300.02/18)

Recognition. Teachers may indirectly encourage a particular form of art through recognition of the work of a child in the presence of other children. This example from the 3/4-year-old class illustrates this technique:

Sam has made an outline of a house using wooden stir sticks which he has left on the table. Stephanie is in the process of making a similar house when Sharon comments, "Well, Stephanie, What are you up to? " Stephanie, "I'm making a house." Sharon, "That's a good idea. Where did you get that idea?" Stephanie, "From that." pointing to Sam's house. Sharon comments to Sam, "Stephanie thought that was a good idea and she's making one too." (O.N. 02/26)

Sharon described her recognition of a painting by one of the younger children in the group in the presence of older children:

I just really stopped and said, Stephanie, did you see what Rhiann did?" I wanted to make a big deal of it for Rhiann's sake. I think it is important for some of the older ones who are producing to see that Rhiann can do it too. And I really thought it was spectacular. But you can't set those things up. (T.I. 03/06)

The following is similar recognition from one 2-year-old class:

A teacher in the background can be heard to ask, "Do you know who painted this picture? I'll put their name on it. It has beautiful colors." (002330.04/15)

Through vocabulary instructional strategies of pointing to and naming actual objects in the environment, and representations of objects in pictures, children acquired an interactive pattern of

naming things with adults which they brought to the art-making experience. The episodes described illustrate how adults label actions and objects in their own and children's work. They verbally indicated the representational potential of materials. Play dough and clay seemed to be most frequently described as things, which relate to the transformative potential of these media. Thus, these experiences set the stage for children to label and identify the visual forms they create. The notion of marks and forms representing things is socially constructed, and is deeply embedded in our culture. In my experience as an art educator, I have found that adults are often at a loss to talk about abstract visual images without resorting to "it reminds me of..." When children first name their marks, it may come from a desire to please adults (Golomb, 1974; 1992) but the pattern to do so has become well established through language acquisition strategies.

Scaffolding

Scaffolding (Bruner, 1983; Wood, 1980), or learning in the "zone of proximal development", (Vygotsky, 1978, 1986) occurs when an adult or peer provides guidance to complete an activity just beyond what a child can accomplish independently. Gradually the "teacher" turns the task over to the child to do without assistance. Scaffolding situations can include both verbal and non-verbal components. In interviewing teachers, Edwards and Mercer (1987) found that,

All teachers in our sample appeared to operate with something like the scaffolding and handover principle as

an implicit part of their teaching methods, though none of them talked of it in interviews, where their conceptions of education appeared to be dominated by the twin principles of Piagetian experiential learning and of innate intellectual ability. (p. 88)

Of the five teachers who were part of this study, Ruth most directly expressed the idea of scaffolding,

Some children need demonstrations with material. With a good recipe you can make variations on the recipe. Teachers provide the ingredients and recipe so children can start. Once they get the hang of it, they can start to explore so they can use those skills. (T.I.)

There were a number of examples where teachers engaged in scaffolding the activity for children. Most often these focused around cutting which requires specific skills to master. The following is one example of these cutting interactions in which Oliver engaged in an interpretative, reflective dialogue with Kate about her intent.

Oliver is seated at the art table with Kate. Kate takes a sheet of green construction paper from the shelf. She struggles to fold it, managing a kind of 3-way fold. She picks up the scissors, commenting, "I did." Oliver, notices, and responds, "I think you are trying to do what I did before." Kate tries to cut out a shape as Oliver had done for Ross a short time earlier. He asks, "Do you want me to cut out a circle?" Kate, "No, just a rectangle." Oliver cuts, and asks, "Is that OK?" Kate cuts his piece again, scissors toward her. Oliver watches, holding the paper up. Kate tears the last bit. She picks up the cut pieces. She cuts a piece toward her body. Oliver, "There." Kate, "Pants." Oliver, "They're pants. They are a pair of interesting pants. What do you want to do with the pants? I thought you had pants here and I guess that you cut the pants. Is that what you did?" Kate wiggles. Oliver interprets, "You don't know?" Kate begins to cut on a new piece of paper. She hands the paper to Oliver, who asks, "What should I do?"

"Cut a worm," Kate tells him. He cuts a wavy piece. Kate then announces, "I need a spatula." Oliver laughs, "How should I make a spatula?" He cuts a wider piece. Kate asks for a squirrel. Oliver cuts. Kate turns the

paper over and fits the pieces back into the larger piece from which they were cut. She drizzles glue over them. She says, "That's enough." She continues to place the pieces. Oliver asks, "That's very interesting. Shall I put your name on it. Shall I say anything about it? Kate walks away without responding. (018100.04/19)

In this scissor cutting episode, the on-going, reciprocal interpretative quality of the interaction is apparent. Oliver actively attempts to understand Kate's intentions, and adjusts his actions to hers. He is receptive to her requests to cut things and as he cuts, she continues to redefine the interactive potential of the situation, both with the media and with Oliver. In the end, Oliver's values for representation and ownership emerge when he asks if Kate would like her name on it, or to have him write something about her work.

In this second cutting episode, Tina also scaffolded Carolyn's cutting experience, attempting some direct instruction. This situation is an example of an asymmetrical intersubjective interaction (Wertsch, 1984),

Carolyn's mother is sitting next to her at the art table. It is Tina's first day working in the Centre and she joins them. "Look at this, Mummy," Carolyn says as she opens and closes the scissors. She begins to snip at the edges of the newspaper which cover the table. She holds the scissors in two hands as she cuts. She gets a second pair of scissors. Tina offers Carolyn a piece of paper. She holds the paper vertically for Carolyn so that she can cut more effectively. She offers encouragement and turns Carolyn's hands so they are vertical, showing her another way to cut. Tina encourages, "You can make frills. Good stuff." Carolyn's mother has left and Carolyn continues to snip, 2-handed. Tina, "You're making all kinds of patterns. Want a new piece of paper? A different color? What color do you want?" Carolyn starts to cut on a new blue sheet of paper, still using both hands to manipulate the scissors.

Tina positions the paper so that Carolyn's cutting is effective. Carolyn is involved, smiling, and concentrating. Tina points out that the paper has to be at a particular angle for the scissors to cut. "Did you notice?" she asks Carolyn. Carolyn indicates she wants a third piece of paper. Her cuts become more vigorous. Tina, "You're doing a big one now. You're cutting right across the page." Carolyn asks for another sheet. Tina asks, "Can you do it by yourself? Let's see. Can you do it?." Carolyn has trouble so Tina props the paper vertically, then resorts to holding it. "See how I hold it? She demonstrates holding the paper with her left hand and snipping it with her right. They start a new white sheet of paper, with Tina cutting one side and Carolyn the other. Another child joins the table. Now Carolyn tries holding the paper herself and cutting one-handed. Unsuccessful, she returns to her original method. She switches to using glue, then crayons. (022600.03/12)

When Tina reviewed the tape she responded to her original interpretation of the situation,

I was operating in my "parental mode" which is product oriented rather than process oriented. I could have been her Mom. She left as soon as I took over. Now my values have changed. I would now take the time to facilitate Carolyn in the cutting task, rather than directly teaching cutting. In the video Carolyn is on a different task than I was. She was figuring out how to practice rather than mastering scissors. I assumed that she had mastered the first step of how to go about practicing.... I remember thinking "Bandura - modelling". I clicked back to a piece of knowledge about social modelling and saw a different avenue...thinking "oh, model it. I'll do it too and she can see me do it, and we can do it together.

Tina also explained that she expected her modelling would facilitate Carolyn "getting it." She commented, "I liked doing it with her as a way of being there. It started as one thing and become something else" (T.I.).

Ruth engages Beth in a painting episode. This was the only video example where an adult painted on the easel with one of the target children.

Beth is watching Ruth and Catherine painting. Ruth remarks, "Beth has come to help us. I think she's very good at doing tigers. Are you, Beth?" Beth, "Yep." Ruth directs, "You need a smock. Stick your head in the hole. Push your sleeves up." She puts the apron over Beth's head. "You know, on the other side there's an empty piece of paper." Ruth guides Beth around the easel and asks, "Do you want a chair like Catherine?" "Yep," replies Beth.

Ruth lifts each can of paint, asking, "what color do you want to use first?"

Ruth paints, working down the colors as they are placed on the easel. Beth takes the brush in her left hand and paints, yellow, which is adjacent to her. She switches hands to reach the red and green paint. As Ruth stirs the blue paint, she exclaims, "Oh, what a neat blue color!" At one point, Beth switches to blue, jabbing and stabbing at the paper with her brush. She also watches other children in activities around the room. About four minutes into the painting activity, Pat asks, "Are you finished, Beth?" Beth responds affirmatively, and as Pat removes the painting, Beth rubs her hand across the paint. Pat asks, "Where shall I put it? On the wall?" Beth points, "Put it on the wall." They leave to wash Beth's hands. (005400.11/26)

This episode occurred about the third week painting was offered to the group. Ruth introduced a variety of values related to individuality, ownership, place and choice. As well, she demonstrated how to apply paint to the paper. Ruth singled out the blue paint as special, which Beth recognizes through her use of the blue. Pat also reinforced the completion of the activity by hanging the painting on the wall.

As children actively interpret and construct their own meaning in a situation, they may not share the teacher's interpretation. In this case the child rejects the teacher's attempt at scaffolding the drawing experience through extending the child's mental image. Mary was engaged in a dialogue about drawing a shark, following a field trip to the aquarium.

"How will you do it? Eyes, teeth? Remember the shark we saw yesterday?" The child responded, "I'm not making the teeth." (O. N.01/22)

Children came to the program already having experienced parental interactions which clearly fit the definition of scaffolding. The following examples came from parent interviews.

Beth was given crayons when she was 1-years-old. She was not overly keen. I would draw a line or two and she would draw a little bit. Now when she draws with us she is really into it, if we're sitting at the table drawing. She tells us, "Mommy draw". "Daddy draw." When I work with Beth I draw, then she draws. She usually tells me what to draw and decides what color. She likes to draw Sesame Street characters. She likes cars, feet, big toes, but is not much interested in people or animals. She likes us to do it first to see what it looks like. She has felt pens and crayons on a coffee table in the living room with a huge pad. She goes there a lot to draw. She also has a chalkboard and chalk in the hall.

Early in the year, Beth's mother demonstrated this kind of drawing interaction at the classroom chalkboard with her daughter.

Beth began by drawing on the chalkboard with a piece of yellow chalk. She approaches her mother who tells her to take the chalk back to the board. Beth gets a chair, pushing it close to the board, saying something to her mother who joins her at the board. Her mother draws a large sun with a face high on the board. Beth, underneath her, makes a large circular shape in pink chalk. She turns away, then makes a second oval form. Beth looks up at her mother's drawing and draws a loop shape. (003000.11/05)

Kate's mother told a similar story about drawing at home with her daughter:

Kate was given crayons for her first birthday, or Christmas of that year. My husband likes drawing and painting. He made sure she had crayons early. She used to like to sit on my lap and I would ask "What shall I draw?" and Kate would reply, "Draw a baby." I would draw a stick figure baby. I would also draw faces, trees, houses, stars, birds, trucks, cars and buses. Kate would specify what to draw but wouldn't do any of

the drawing herself. After awhile she would put on hair, or a wheel on a truck. Shortly after, we got the chalk board which is in her room. We did some of that on the chalk board. Most often we did it. She occasionally does it with her Dad. She gradually took that over herself. She has an older sister and brother. She draws with them. Donna prefers coloring books and Kate will color with her. She only uses crayons in the coloring books. I try to buy coloring books with blank space on the side. Kate will add on to the coloring book. It seems to me to be legitimate to see the figures there, especially if she is tired. When they are drawing together using felt pens, they always use them on blank paper and Donna will follow Kate's lead. Brian prefers to draw on blank paper.

Jason's mother commented that he had probably had crayons for the first time when he was about a year old. She stated,

When we are doing things together, I often want to direct him so he does it in an improved way. I get frustrated. He gets angry. He prefers to do it his own way. He works with an older sister. She will tell him what to do and he will tell his younger sister what to do. They play school and my older daughter will suggest something. He copies and tries to paint in the lines using the "right colors".

It is clear from these interviews that in the second year of their lives, Kate, Beth and Jason developed an understanding of representational possibilities of drawing media. Beth and Kate understood that they were not capable of creating representational forms, and actively engaged their mothers in drawing dialogues.

One episode, involving three children illustrates how scaffolding occurs between peers. It occurred during Jason's and Beth's first painting experience at the Centre. In this situation, Mark does more than model the painting process for Jason. He takes an active teaching role, and remains sensitive to Jason's engagement with the paint as he redefines his own interactions with painting and with Jason.

Mark has been painting at the easel, when Jason arrives and picks up a brush. Mark tells him, "I'm painting. You can't come." Mark pushes the brush down but Jason continues to paint. As Jason replaces his first brush and tries the yellow paint brush with his right hand, Mark changes his approach, announcing, "We're painting." Jason swirls his brush in the can of paint, and creates up/down strokes on the paper. He watches Mark, but does not appear to imitate him directly. Pat brings Jason a paint shirt, and adds his name to the paper. Mark labels "Iss Red" for Jason, directing Jason's attention to the can of paint. Mark walks around Jason to reach the other side of the paper. He leaves but later returns to continue painting with Jason. (003400.11/05).

Beth approaches the easel with her mother and watches Jason paint, "E peting", pointing to Jason. At this moment, Jason is wiping his paint-covered fingers on the paper. Her mother guides Beth to the opposite side of the easel, telling her, " This isn't fingerpainting. This is brush painting." During this painting episode, Beth walks around the easel several times to observe Jason painting. In turn, he watches Beth as she paints. (003900.11/05)

In the above episodes, Mark scaffolded the painting process for Jason, who in turn demonstrated it for Beth. Unlike Mark, Jason did not redefine his activity or deliberately demonstrate painting to Beth, so in this way their interaction is not a scaffolded experience as Bruner (1983) or Wood (1980) described. Indirectly, however, his painting activity facilitated Beth's painting experience, and he is conscious of his interaction with her.

CHAPTER VII. CONCLUSIONS

Review of the Study

This chapter reviews the original foundation and purpose for this study, and summarizes the major findings. The original questions are divided into three categories: a) children's use of materials, b) social interactions and the context of art-making, and c) the relationship between children's use of materials and the social context in which they use these materials. The findings are integrated into a model formulated to describe the complex relationships between the child, art media, and the art-making context. The last section of the chapter addresses the implications these findings have for early childhood art education.

In setting the foundation for the study, I argued that researchers have largely ignored children's presymbolic work, and there is little knowledge about the process (experience) of art-making within a social context. Support for a contextual study of children's art making came from infant research (Meltzoff, 1985; Trevarthan, 1980) which has demonstrated infants' capacity to engage in reciprocal, intersubjective interactions. According to Mead and Vygotsky, these mutually constructed interactions enable infants to gain understanding of their world.

Additional support came from researchers, representing diverse orientations to studying children's artistic development (Gardner, 1980; Golomb, 1992; Korzenik, 1979; McFee & Degge, 1980; Wilson & Wilson, 1982a, 1982b, 1984), who recognized that children's art-making occurs within a social context. Although researchers

debate the impact culture makes on the children's visual expressions, cultural influences go deeper than visual forms. Social interactions determine children's understanding about the values and purposes of art within that context, whether or not that understanding is overtly expressed in the visual image.

Two threads have been interwoven throughout this paper: the symbolic interactionist perspective, which explains how individuals come to understand themselves and objects in their world through interpersonal encounters, and the Vygotskian perspective, which links changes in children's cognitive functioning to interpersonal interactions which assist children to operate at levels beyond their independent ability. The purpose of this study has been to investigate the relationship between 2-year-old children's involvement with art media and the social interactions they have concerning these media.

Summary of the Findings

Children's Use of the Tools and Art Media

1. How 2-year-old children used tools/implements and art media in a social setting

The study began with collecting video and written observations of children using media and tools. Originally, the intent was to focus on children's "natural", or unmediated use of these materials in order to understand, in more detail and depth, children's artistic development. I also wanted to reconcile children's watching behaviour with developmental stage theory.

Observational data showed that the basis of the 2-year-old children's experiences lay in the exploratory behavior characteristic of very young children, as they investigated the inherent properties of materials (Vygotsky, 1978). While kinesthetic movements provided the foundation for their marking behaviours (Smith, 1972, 1983; Matthews, 1983, 1984), visual interest in the properties of the media and results of their actions appeared to have a stronger impetus in their painting, drawing, and collage behaviours. Their interest was apparent through their visual tracking and deliberate placement of marks or collage pieces in blank areas of the paper. This deliberate selection of specific materials and placement of marks suggest that young children as young as two years possess aesthetic sensitivity (Matthews, in press).

Initial data analysis revealed that there was not one simple answer to questions about children's color selection and placement on the paper, the role of body position in relation to the marking surface or grip of drawing and painting implements, or obvious gender differences. Detailed observations of individual children made on a more frequent basis would be needed to tease out any consistent patterns.

Children's behaviours were manipulative, rooted in kinesthetic activity consistent with the physical properties of play dough and clay. The children's interest seemed to be primarily in manipulative and transformative possibilities of play dough or clay

(Renninger, 1989), rather than in the visual configuration of the formed material.

Analysis of the data during Phase I of the study revealed that social interaction played a large part in the art-making experience for these children. The frequency of children's involvement with others during art experiences and their ability to shift their attention from their activity to classroom activity and back, without apparent disruption, stood out in the review of the data. As a result, the focus of analysis shifted from examining children's imitation of others, although imitation did occur (Lackey, 1988), to an interest in how they were interpreting and understanding their experiences within the social context.

The context in which children used art materials included the physical environment and social interactions (Kelly-Byrne, 1989) of each art episode. For clarity, analysis of the context was divided into the components of values, frames and interactions, each interwoven with the other in a dynamic, fluid relationship. Physical space is one part of this relationship, mediating and being mediated by social interactions.

2. How adults frame the art-making process for children

Framing was interconnected with values and interactions and it is difficult to separate each into distinct categories. Frame construction originated in adult values for symbolic representation, order, work, independent production, and ownership which identified the individual with what they created. Analysis

of the context of art-making revealed that art-making served as a vehicle for inculcating these cultural values.

Adults framed art-making through arranging and defining the physical space and time in which art-making could occur. Spatial framing occurred at levels from micro spatial framing - marks belong on a specific sheet of paper to using materials in specific locations within the classroom. Temporal framing limited the time to use the art materials. Scheduling constraints terminated children's experiences. Temporal framing also communicated that art-making is a linear process consisting of a beginning, a middle and an end, determined by the child leaving the work. This termination did not support the idea that children might wish to re-engage with a work, or the concept of process as a spiralling activity, rather than a linear one.

Media centered routines directed the art-making process. Teachers promoted routine use of art media through verbal instructions and modelling which guided children's behaviour in routine ways, such as making balls with play dough. Through routine and procedure-centered interactions with children using art media, teachers expressed their values for particular visual qualities in a work, such as neatness, completed products, and ownership, which culminated in the product-completion ritual. Through these interactions children adopted patterns which led to routinized use of media as the children re-engaged with them in a predictable pattern over a period of time.

3. How adult-child interactions define the art-making process

Three major categories of adult-child interactions contributed to the definition of the art making process: being there, verbal interactions and scaffolding.

Being there formed a major component of non-verbal interaction, and served a variety of purposes: to attract children to a particular activity, provide support and encouragement for the activity, facilitate the experience through making materials accessible, and demonstrate or model actions with certain materials. Adult presence served to enhance and lengthen children's engagement in the activity. In being there, teachers took a modified parental role, utilizing some of the non-verbal behaviours parents used when drawing with their children at home.

Verbal interactions were an important part of the dynamics around art-making. Tobin, Wu and Davidson (1989) observed that American preschool teachers have a preoccupation with monitoring and encouraging children's use of language, which was not apparent in the Japanese or Chinese preschools they observed. Most often, teachers at the Centre used verbal interactions to promote cultural values for cleanliness and order, the notion of work to produce and complete a product, and recognition of that product. This recognition included comments about children's work habits, and generalized expressions of acceptance.

Language interactions which directly related to art concepts served to encourage children to create and identify representational art forms through object naming interaction

patterns. Through labelling, teachers encouraged children's acquisition of vocabulary relating to the colors of the materials. Less frequently, teachers talked to children about other visual or sensory qualities relevant to children's art experiences. Teachers encouraged children to use bright colors in two-dimensional work through the provision of such colors, and enthusiastic comments about the many colors, or brightness of the colors in a painting.

Scaffolding strategies reflected teachers' and parents' differing perspectives about children's artistic expression. Parents took a direct teaching role when scaffolding art experiences for their children at home. In the observations, teachers relied on language to suggest media possibilities or to introduce materials, rather than modelling behaviours for drawing, painting, or collage activities. When teachers did model behaviours, they were usually of an exploratory or manipulative nature, such as rolling play dough balls or coils. Teachers scaffolded children's cutting with scissors by holding the paper in order to facilitate children's success. Classroom teachers scaffolded the routine tasks around art-making, rather than teaching children procedures for drawing or making something.

4. How child-child interactions define the art-making process.

Children were in the position of defining and helping to define the art-making process for other children, through their behaviours. The extent to which this occurred was not quantified because children did not necessarily define the action in terms of imitation, and imitation does not necessarily happen immediately

after the behaviour is modelled. Children did provide scaffolds for the experience for others, as in the painting episode where Mark scaffolded painting for Jason. They modeled the procedures for using a material, as Jason then did for Beth when she began to paint. Children also reinforced the cultural values which they were interpreting from adults through their interactions with each other, e.g., "I'm painting here" as an expression of ownership and engagement with art production.

5. The relationship between tool use and meaning acquisition for 2-year-olds using art materials

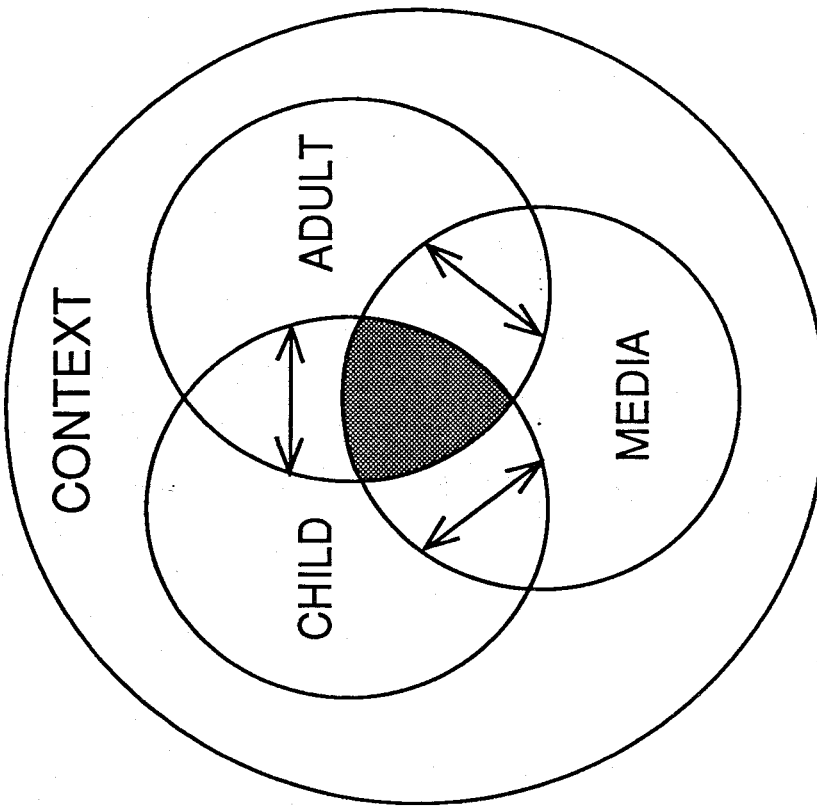
The last question is answered in the form of a model. This question is grounded in Vygotsky's dialectical relationship between biological development and cultural mediation and Mead's description of the unified relationship between body, mind, and society. Recognizing that theories about the social construction of mind do not negate biological, or mental structures which may, in part, direct the kind of visual images children create, I propose a model to depict the relationship of young children's uses of tools and art media, and their acquisition of meaning about these tools and media. This model focuses specifically on the individual's interpretation and intersubjective construction of understanding. The model is designed to provide a way to describe children's artistic expression which takes into account the complex, interpretive relationships which exist between children, their visual expressions and the external world, making it possible for the model to accommodate both innate and cultural components

of artistic expression. The model is a static presentation of a dynamic system, and demonstrates the interrelationships between elements. It is not intended to represent proportional relationships between the key components of the model. In a phenomenological sense, each interactive situation is unique, and is uniquely interpreted by each individual. As meaning is constructed through this interpretative process, experiences are reinterpreted in a continuing dialectical cycle.

An Interactionist Model of Children's Artistic Expression

Child

1. Self
 - biological
 - mental
 - a) past experiences
 - b) reflexivity
2. Interest
3. Potential for interaction



Adult

1. Self
 - biological
 - mental
 - a) past experiences
 - b) reflexivity
2. Interest
3. Potential for interaction

Media

1. Inherent properties
2. Potential
3. Cultural Expectations

An Interactionist Model of Children's Artistic Expression

The largest circle represents the framing context in which the art-making experience occurs. It may be delineated at increasingly expansive levels from the micro level of a particular location such as the easel, the art area, or the preschool classroom within the Centre, to a macro view of the Centre within a particular community. It is permeable in that participants may flow in and out of the context, creating potential for change.

The shaded center area of the circle represents the point in the art experience where the participants interact to define and interpret the situation of art-making within the broader context represented by the outer circle.

The arrows within the intersections of each pair of circles (child-adult; child-media; adult-media) indicate that this 2-way interaction is also a dynamic changing relationship.

The elements which the child and adult bring to each interaction come from Meadian and Vygotskian psychology.

1. The self is composed of a biological component and a socially constructed mental component. Crucial to social construction is the individual's reflexive ability, which allows the individual self-objectification and integration of past experiences which they bring to their interpretation of the immediate situation.

2. Interest - Renninger's (1989) definition of interest reflects a symbolic interactionist perspective,

interest is the individual's cognitive and affective engagement with the identified object of interest,

perception of possibilities for action, representation of these possibilities to the self, making of choices about activity, and finally the setting, resolving and resetting of challenges. (p. 148)

3. Potential for interaction

The Tools/Media have inherent properties which limit or direct their use. Within the limitations of their inherent properties lies the potential for the medium to be transformed or used to express meaning. The potential for use is not culturally specific. The actual use of the medium or tool is culturally constructed through the interactions which occur around their use.

This model depicts the surface level of these interactions but may be read three-dimensionally with layers of interactions and interpretations interweaving into the fabric of classroom life.

Implications of the Study

The Interactionist Model of Children's Artistic Expression

The Interactionist Model of Children's Artistic Expression provides a way to describe children's art-making useful to researchers and teachers alike. The dialectical relationship between biological development and social interaction from Mead's and Vygotsky's theories of mind eliminates the need to debate issues revolving around innate or cultural origins of children's visual expressions. The model is not limited to describing children's drawings, but may be utilized to describe children's visual expressions in any two-dimensional or three-dimensional medium. The design can accommodate more traditional areas of art research such as production strategies and children's mental structures which are classified as part of the biological component of the model. Mental structures must be seen as part of the dynamic relationship between the biological and social components. The model can be useful to assist teachers in addressing the relationship between what they do in the classroom and children's visual expressions.

Limited Comparative Possibilities

The dearth of research about children's art-making within a social context has meant that limited comparisons could be made between the findings from this study and other contextual studies. This leaves the area open to many possible areas of research for contextual studies utilizing qualitative research methods, and quantitative studies examining specific aspects of presymbolic

children's art-making. In addition, there have been only a few investigations about children's use of three-dimensional materials, such as play dough, and few, if any, about children's work with collage materials. Findings in this study, as well as those by Brittain (1979) and Matthews (in press), suggest that the nature and origins of young children's aesthetic sensitivity would be worth further investigation.

The descriptive design of this study means that findings cannot be generalized to other settings. Nevertheless, common experience on the part of preschool teachers should satisfy them, and the non-specialist reader, that the conclusions might be equally appropriate to similar settings. Some corroboration with Swann's (1985) findings about children's interactions with adults and peers suggest that values of neatness and ownership are not site specific. Further descriptive research in other preschool programs for 2-year-olds would provide additional insights into how these and other values direct art experiences. Research studies in populations representing other socioeconomic or cultural groups both within North America and in other countries would also provide opportunities for comparison. Studies in these diverse settings can aid in developing additional insights about the researchers' own values. Gardner's (1989) and Winner's (1989) descriptions of art classes in China, where children are taught step-by-step techniques for creating visual images, and Tobin, Wu and Davidson's (1989) comparison of preschools in Hawaii, Japan and China have provided insights about cultural values and expectations for young

children. These studies from other cultures helped to clarify the implicit values operating in this research setting.

Uncovering Teachers' Values and Assumptions

The study uncovered as much about teachers' values and assumptions which guided their pedagogical practices in this setting as it uncovered about children's artistic expression. The art-making experiences served as transmitters of broad cultural values. Children were learning about the relationship of self-concept to work, production, and ownership within temporal and spatial constraints. These temporal and spatial limitations conveyed values for neatness and order. Children were beginning to acquire skills such as cutting, and art-related vocabulary, such as color names. They did this within a cultural context which valued realistic representation in artistic expression. They learned little about the adult world of art or art-making, and had few opportunities which would promote their understanding that adults use these materials for their own unique expressive purposes.

Teachers' stated beliefs and assumptions about early childhood education, and the importance of art for young children placed them, often unconsciously, in contradictory situations. For example, teachers strongly believed that the process is more important than the art product for the young child, but many of their behaviours contradicted this belief. Through adults' ordering of the temporal-spatial components of the art-making experience, children were not allowed to engage in a process of

creating art that might parallel the working mode of mature artists, who may have several works in progress over a period of time. Values of order, seriality, and production overrode the process or experience emphasis in art-making. Sharon expressed a dilemma that teachers continually attempt to reconcile: young children's need to explore and experience materials, and the teachers' need for order in their classrooms.

The developmental perspective of child art has been useful to teachers as they plan art experiences which are "developmentally appropriate" for young children. But connotations of child autonomy within that developmental perspective have discouraged teachers from taking an active role in the art education of young children. This was in strong contrast to the direct role parents said they took when guiding their children's art experiences at home. They scaffolded experiences by drawing objects that their children named, then gradually involved them in contributing to the drawing. This practice is in direct opposition to many teachers' beliefs about developmentally appropriate art experiences which are assumed to encourage children's independent exploration of drawing media. We do not know whether this structured drawing interaction is a common parental practice, but it raises questions about the origins of children's graphic forms, and highlights the extent to which art-making occurs within a context of social interaction.

As Woods (1986) suggested in discussing the value of teachers' engaging in ethnographic studies, I gained insights about my own values and how these directed my teaching practices, through my

dual roles of teacher-researcher. This involvement caused me to reflect about my role as an early childhood art educator in a preschool classroom. This discovery was true for other teachers at the Centre. For example during an interview, after reviewing some of the video tape segments, Joan commented that as teachers we often talked about children, but as a staff we seldom reflected on why we did certain things.

Using the "Interactionist Model of Children's Artistic Expression" as a guide, self-reflection and discussions with peers could help teachers clarify their values, their beliefs about children and children's artistic expression. Self-reflection and discussion can help teachers understand how their values, frames and interactions provide an art-making context which directs children to engage in specific kinds of art behaviours and create specific kinds of visual forms. The last step in this reflective process is to examine the relationship between children's artworlds and adults' artworlds, to determine what is unique to each artworld and what can be shared. Vygotskian theory of teaching in children's "zone of proximal development" suggests a means for bridging the distance between these artworlds.

Conclusion

Interpreting early childhood art education from an interactionist view can provide a resolution to the question of the role of the teacher in relationship to the learner. In the interactionist perspective, each is inextricably linked to the other. Teachers who reflect on the role art can play in the lives of young children may be better equipped to engage in meaningful gestural dialogues with them.

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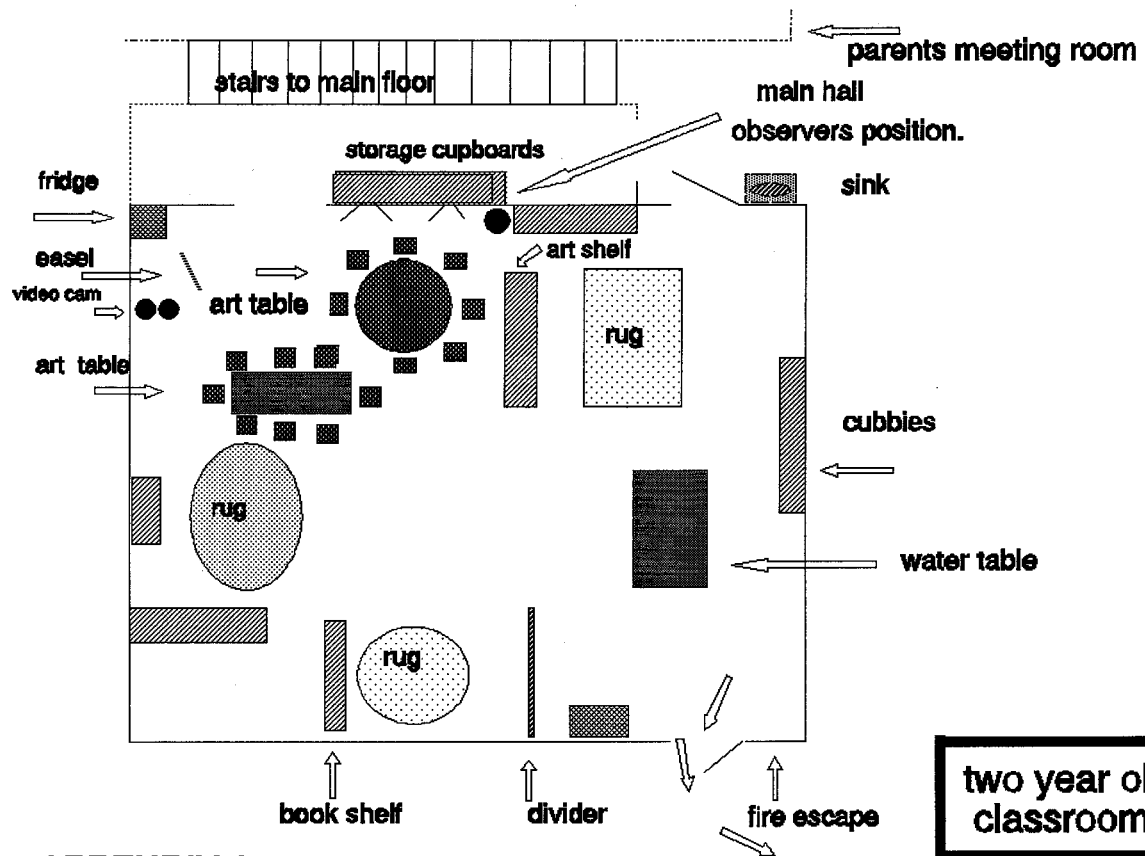
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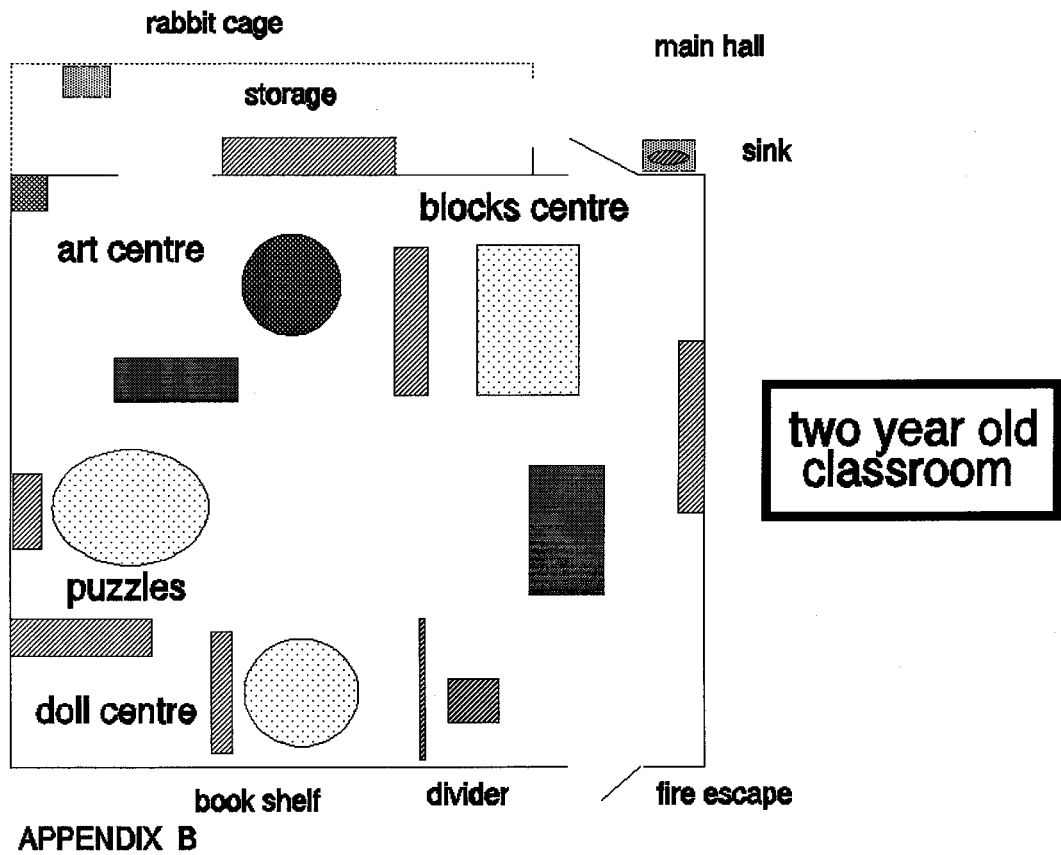
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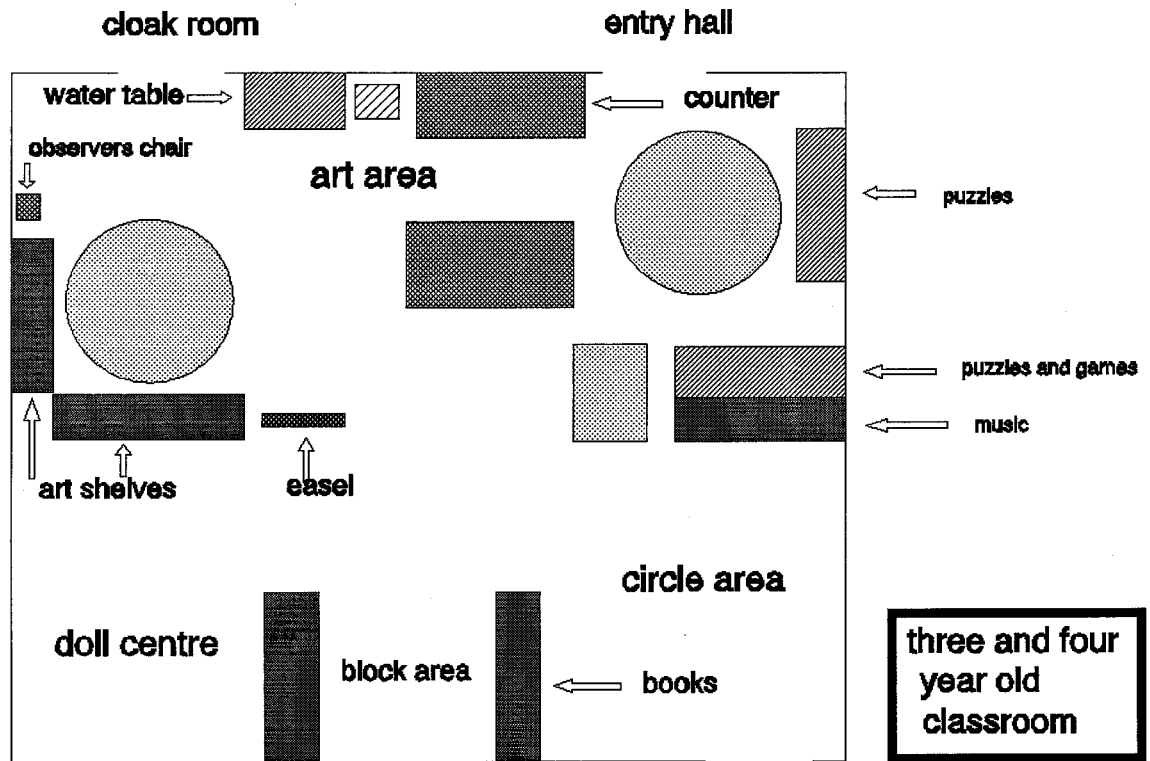
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APPENDIX A
DETAIL OF ART AREA





APPENDIX C
CLASSROOM LAYOUT

APPENDIX D

AGES OF TARGETED CHILDREN IN 2-YEAR-OLD PROGRAM

Name	Birthdate (Month/Day)	Age in September (years/months)
------	--------------------------	------------------------------------

Phase IYear 1 (1984-1985)

Beth	September 11	2.0 years
Jason	July 7	2.2 years
Kate	July 22	2.2 years
Michael	September 9	2.0 years

Year 2 (1985-1986)

Allan	October 16	1.11 years
Carolyn	December 19	1.9 years

Phase IIISingle-Child Tapes (1986-1987)

Deborah	October 8	1.11 years
Keri	June 15	2.3 years
Leanne	March 4	2.6 years
Richard	September 15	2.0 years
Tanya	July 1	2.2 years

APPENDIX E

DATES OF OBSERVATIONS

2-YEAR-OLD PROGRAM - YEAR 1

<u>Class 1</u>	<u>Class 2</u>
November 5	November 2
November 26	November 30
December 10	December 14
January 21	January 25
February 18	February 15
March 18	March 22
April 22	April 18

2-YEAR-OLD PROGRAM - YEAR 2

October 9
November 6
December 4
January 8 (no video)
January 15 (Allan - single child observation)
February 5
April 9
May 7 (Carolyn - single child observation)

2-YEAR-OLD PROGRAM - YEAR 3Dates of Single Child Tapes

December 10 (Richard)
January 21 (Tanya)
April 8 (Deborah)
April 15 (Leanne)

APPENDIX F

OBSERVATION AND INTERVIEW DATES - 3 AND 4-YEAR-OLD CLASSROOM

Observations

January 19
January 22
January 29
February 2
February 26
March 5
--

Interviews

January 20
--
--
February 9
February 24
March 5
March 6

Breaks occurred in the observations and interviews due to field trips, other research projects, and University semester break.

APPENDIX G
STAFF MEMBERS

2-Year-Old Program

Year 1

Pat - Head Teacher
Ruth - Assistant Teacher
Oliver - Regular visitor

Year 2

Pat - Head Teacher
Valerie - Assistant Teacher, September - March
Tina - Assistant Teacher, March - May

Year 3

Ruth - Head Teacher
Joan - Assistant Teacher

3 and 4-Year-Old Program

Sharon - Head Teacher
Mary - Assistant Teacher

APPENDIX H

ART BEHAVIOURS TAXONOMY

Behaviours with Drawing Tools

Sources: Brittain, 1979 (Holladay); Golomb, 1974; Kellogg (1970).

Specific Tool:

crayons
 felt pens - thick or thin
 Verithik* (Registered trade name)
 pencils
 ballpoint pen
 oil pastels
 chalk

Grip:

fist
 adult

Hand:

right
 left
 both

near writing tip
 end of marking tool
 mid-marking tool

Choice of tool

proximity (nearest)
 deliberate
 changing tool
 drawing media
 color

Visual focus

on work
 away

Positioning of marks

looking for empty place on paper (deliberate)
 apparent random positioning of marks

Marks (Kellogg, 1970):

circular semi-circle enclosing multiple overlaid
 horizontal
 vertical
 dot

Tool interest other than mark-making

admiring
 fingering
 arranging/sorting

Behaviours with Paint

Sources: Griffin, Highberger, & Cunningham, 1981; Kellogg, 1970.

Hand positions:

- fist - brush held against palm, fingers wrapped around it
- fist up - fingers facing upward
- fist down - fingers facing downward
- writing position - brush held in finger with thumb and index opposing.
- palm - index finger extended - tip of brush held against palm, all fingers stretched along handle
- tips of fingers - tip of brush handle held in finger tips

Hand location:

- near tip
- middle
- near bristles

Color Choice

- random (no apparent reason)
- placement at easel - painting above color
- deliberate searching for color
- painting along array of colors

Brush strokes

- circular semi-circular
- vertical
- horizontal
- dot
- roving line

Application

- jabbing
- up/down
- down/up
- back and forth
- bouncing brush off paper
- paint on paint
- separate color/line

Other Behaviours

- paints on blank paper
- paints on another child's painting
- makes attempt to write name
- gets smock
- puts brushes in paint cans
- in sequence
- selects specific colors for brush
- returns brush to specific color
- attempts to remove painting from easel
- calls adult to remove painting

Behaviours with Clay/Play Dough

Sources: Brown, 1975; Golomb 1974.

Flattening
 hands
 tool

Pulling pieces off

Pushing pieces together

Rolling coils
 on surface
 between hands

Rolling balls
 on surface
 between hands

Fingering

Making piles

Cutting
 knife
 cutting string
 scissors

Folding

Squeezing

Patting

Pounding

Poking objects into it

Using with other objects from room

Naming created form

Making recognizable form

Behaviours with Glue and Collage Materials

Stirring glue
 Jabbing glue stick in jar

Spreading on paper
 back and forth
 up and down
 other

Dripping/drizzling glue onto paper

Gluing without sticking anything down

Applying glue to piece to be stuck down

Apparent random selection of item to be glued

Apparent interest in selection of item

Placement
 random
 deliberate

Concern for sticky fingers

Uses with other media or tool
 drawing
 paint
 scissors
 other

Observing properties of
 glue
 collage material

Behaviours with Scissors

Holding
 part other than handles
 2 hands
 1 hand
 hand turned
 fingers in correct position

Cutting
 towards self from top of paper
 away from self
 successful
 unsuccessful

Mouth opens/closes with cutting action

General Behaviours

Body position

sitting
 standing
 head position (near work)
 position of other hand/arm
 mouth/tongue

Visual Attention

on work
 elsewhere - continues working
 elsewhere - stops working
 frequency of distractions

Watching

peer	engaged in similar task	engaged in other activity
adult	engaged in similar task	engaged in other activity

Proximity of others

alone
 near peer(s)
 near adult

Imitation of other

adult
 peer

Verbal Interaction

peer	initiates	responds
adult	initiates	responds

Task Sequence

begins independently
 asks permission

gets materials from shelf or clay container
 uses materials on table

gets smock
 pushes up sleeves
 puts material away

apparently understands task sequence

demonstrates exploratory use of materials
 demonstrates past experience with material
 mastery
 demonstrates familiar technique in new material

task completion

attempts to remove work or put it away to dry

calls adult to assist

Attention span

Language

names: colors, shapes, other

labels work: "romancing" (Golomb, 1974)

"reading off" (Golomb, 1974)

Affective

expresses pleasure verbally nonverbally

shares with other

adult

peer

expresses displeasure

frustration

APPENDIX I

MESSY AND NON-MESSY ART ACTIVITIES AND MATERIALS
PRESENTED IN 3 AND 4-YEAR OLD CLASSROOM

Messy Art	Messy/Non-Messy	Non-Messy Art
fingerpainting sponge painting string painting fish prints chalk table paints stuffed paper fish paper maché whale	easel paint collage collage w/legumes collage w/natural materials on sea theme collage with paper bags collage w/shapes	crayons felt pens play dough scissors
Rectangular Table	Rectangular/Round Table/Easel	Round Table Small Table

Messy and Non-Messy Art Activities with Location of Presentation
Based on typical activities presented during observation period.
Classification came from Teacher Interviews and Classroom
Observation.

APPENDIX J

SAMPLE PARENT/TODDLER SCHEDULE, FRIDAY CLASS, JANUARY - MAY 1984

- Jan. 11 - Gradual re-entry. Emphasis on readjustment to class after holidays.
18 - VTR observation and discussion of single child.
25 - Discussion of home observation (getting up, breakfast and morning routines).
- Feb. 1 - VTR observation and discussion of single child.
8 - Discussion of home observation (dinner and bedtime).
15 - VTR observation and discussion of single child.
22 - midterm break - Centre closed.
- Mar. 1 - VTR observation and discussion of single child.
8 - Discussion of sibling rivalry (new babies and older sibs.).
15 - Discussion of home observations (discipline, setting limits, dealing with conflicts).
22 - Discussion of language research project.
29 - VTR observation and discussion of single child.
- Apr. 5 - Good Friday Holiday - Centre closed.
12 - Expectations for 2 - 3 year-olds.
19 - VTR observation and discussion of single child.
26 - VTR observation and discussion of single child.
- May 3 - Discussion of TV and the young child.
10 - VTR observation and discussion of single child.
17 - Discussion and review of growth observed throughout year.
24 - Parents participate in classroom. Last class for children this term.
31 - Parent-Teacher Conferences this week. No class.

APPENDIX K

ART BACKGROUND QUESTIONNAIRE

Date: _____

I. Personal Information

Sex of Child _____ M _____ F

Current Age of Child _____ years _____ months

Child is enrolled in _____ day care _____ preschool

II. Art Materials Available at Home

Check if child uses at home	Material	Frequency			Access	
		often	sometimes	rarely	you put out	child can help self
_____	colouring books	_____	_____	_____	_____	_____
_____	crayons	_____	_____	_____	_____	_____
_____	pencils	_____	_____	_____	_____	_____
_____	felt pens	_____	_____	_____	_____	_____
_____	paper	_____	_____	_____	_____	_____
_____	glue	_____	_____	_____	_____	_____
_____	scissors	_____	_____	_____	_____	_____
_____	paint	_____	_____	_____	_____	_____
_____	fingerpaint	_____	_____	_____	_____	_____
_____	play dough	_____	_____	_____	_____	_____
_____	other	_____	_____	_____	_____	_____

Where does you child use art materials? (kitchen table, etc.)
_____Do you mind if child makes a mess or gets dirty
while working? _____yes _____no

Does your child use art materials with adults? _____yes _____no

other children? _____yes _____no

if yes

_____years _____months
sibling or friend _____

III. Attitudes towards Children's Art

What do you do with your child's art work? (display, save, throw out, etc.?) _____

Do you talk to your child about his/her work? ____yes ____no
Give an example of what you might say: _____

IV. Exposure to Art

1. Do you take your child to art galleries and museums?
____often ____sometimes ____rarely ____never

2. Do you look at art books in the library?
____often ____sometimes ____rarely ____never

3. Do you have original art works in your home?
____yes ____no If yes, state kind _____

4. Do you have art reproductions in your home?
____yes ____no If yes, realistic style _____
abstract style _____

5. Do you have art books in your home?
____yes ____no

6. Do you display your own art work in the home?
____yes ____no

7. Do you talk about your art work to other adults?
____yes ____no

8. Do you have any favourite artists?
____yes ____no If yes, state _____

9. Do you talk about art work with your children?
____yes ____no