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A study of children's drawing types and factors influencing choice of subject matter

Stella Clark
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**A STUDY OF CHILDREN'S DRAWING TYPES AND FACTORS INFLUENCING
CHOICE OF SUBJECT MATTER.**

By

Stella Clark B.A. (Education) Primary.

A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

The main purpose of this study was to determine what children draw when given a free choice of subject in the context of the classroom. The social influences believed to affect children's drawings were also investigated. Another research interest related to whether or not gender was a significant factor in the production of different drawing types. The significance of this study is connected with the desirability for teachers to have an understanding of children's perceptions of the world and the factors which influence them, as it is accepted that awareness of children's interests and influences may lead to more relevant teaching. The study was also undertaken to evaluate the worth of Duncum's (1992) model and discover whether or not it was a comprehensive and appropriate model for the classification of children's spontaneous drawing types.

The sample for the main study comprised 26 Year 3 students, 16 girls and 10 boys, selected from a State Primary School in the Northern Metropolitan Region of Perth. The children were given thirty minutes to complete a drawing of their own choice in the classroom. Each child then participated in a short, semi-structured interview conducted by the researcher.

The drawings produced by the children were analysed in conjunction with the interview transcripts in order to discover what subject matter children chose to portray in their drawings, and what influences affected their drawings. A scale constructed from Duncum's (1992) grid of spontaneous drawing types was used to rate each drawing on three continuums, (Narrative, Factual and Borrowed) and non-parametric procedures were conducted on the scores to determine any significant differences between the drawing types produced by boys and girls.

Results showed that the subject matter most popular with the children studied was games, a category of drawings based on the computer game format. Drawings

containing people, animals and landscapes were also found to be popular. Influences which impacted on the children's drawings were identified as personal (out-of-school) experiences, peer influence, popular culture and school experiences. The influences the children perceived as affecting their drawings were similar to the influences identified as influencing the drawings in the study. Personal (out-of-school) experiences, peer influence, popular culture and school experiences were all identified by children as important influences on their drawings. However, the major influence identified by children was the family, a factor not covered in detail in the literature on children's drawing.

Non-parametric tests were conducted in an attempt to discover any significant differences between boys and girls on the Narrative/Separate Object, Factual/Fictional, Borrowed/Self-generated dimensions of Duncum's (1992) model of spontaneous drawing types. The Mann-Whitney U test produced a significant difference ($p=0.0063$) in the Narrative dimension, with boys producing more narrative drawings than girls; a finding which contradicted assertions by some other researchers. From the findings of the study it is clear that more research is necessary in the areas of the influence of popular culture on children's drawings and the narrative dimension of boys' drawings. A larger sample of children may reveal the trends identified in this study more clearly.

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text."

Signature..

Date.....23/4/95.....

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Chapter 1

INTRODUCTION

1.1 Background to the Study

Drawing is considered by many educators to be an important activity for children. It fulfils an important function in children's lives by helping them to make sense of the natural environment and the social world in which they live (Wilson & Wilson, 1982; McNiff, 1982). But what is drawing? According to Perry (1992), drawing may be regarded as both a process and a product. "Drawing is taken to be an activity which is completed when its product is complete. This product is also known by the same word, 'drawing' " (Perry, 1992, p. 89). Perry further stated that drawing should not be judged solely on the outcome or product, but that the preceding process should also be taken into account. If we accept this view then it is evident that an important component of children's drawing is often discounted or even ignored by parents and teachers. The experiences that the child has before, and while engaged in, the drawing process will have an impact on the drawing which is produced. These experiences should be taken into account when analysing children's drawings.

In addition to considering both the drawing process and product, it is important to acknowledge that children may draw for different purposes in different contexts. Wilson and Wilson (1982) identified two different kinds of children's drawings. The first type of drawing includes those drawings which children produce in the school context which are commissioned or solicited by a teacher or another adult. The subjects of these drawings may often be "set" or imposed on the children, or the children may produce a drawing which they believe will please the adult. Therefore, this type of drawing may not truly reflect children's concerns or the influences which may have affected them. The second type of drawing identified by Wilson and Wilson is described as "spontaneous", or

"unsolicited" drawing. Spontaneous drawings are those which children execute for their own purposes. In this second type of drawing, children are free to draw what they please and the drawings may provide a helpful insight into the influences which affected them.

Research in the area of drawing is motivated by two major concerns. The first major area of research concerns how drawing influences the social and/or cognitive development of the child (Freeman, 1983, 1990; Goodnow, 1977). The second field of research is connected with what children draw in response to their social and cultural environments (Duncum, 1990, 1993; Pearson, 1993). In this second type of research, drawing is considered a process by which children come to terms with their social realities.

Duncum (1992) carried out research to discover how children use drawing to respond to their social realities. He investigated the types of spontaneous drawings children produce and outlined the reasons why he believed children used these different types of drawings. As a result of this investigation, Duncum proposed a model for the classification of children's spontaneous drawing types (Appendix A). Duncum's (1992) three dimensional model of spontaneous drawing types will be used in this study to classify the types of drawings that children produce and to help in determining the likely influences on their drawings.

1.2 Significance of the Study

Children are influenced by, and learn from, their experiences of the natural and social environment. Teachers need to understand children's perceptions of the world and take into account the influences which have affected, and continue to affect, the children in their classroom. Children may be influenced by a number of factors which include peer influence, recent experiences in and out of school, and popular culture. Identifying the

factors which have had an important impact on children will lead to a better understanding of young children and perhaps to more relevant teaching (Waters, 1990).

This study may also gain significance from the viewpoint of theory testing, as Duncum's (1992) grid of spontaneous drawing types does not appear to have been tested by another researcher. One of the aims of this study is to determine whether or not Duncum's model is a comprehensive outline of all types of children's unsolicited drawings, and whether or not it provides a useful framework for the classification of children's drawings.

1.3 Statement of Problem and Research Questions

The main purpose of this study is to investigate the social influences on children's drawings and discover what children draw when they are offered a free choice of subject in the context of the classroom. Another area of investigation is concerned with whether or not gender plays a role in the types of drawings children produce. The problem of what children draw when offered a free choice of subject leads to the following research questions;

1. What do children draw when offered a free choice of subject in the classroom context?
2. To what extent are children's drawings influenced by popular culture, their peers, recent in-school experiences or recent out-of-school experiences?
3. Does the application of Duncum's (1992) model of spontaneous drawing types reveal gender as a determining factor in the drawings produced by eight year old students?

1.4 Conceptual Framework

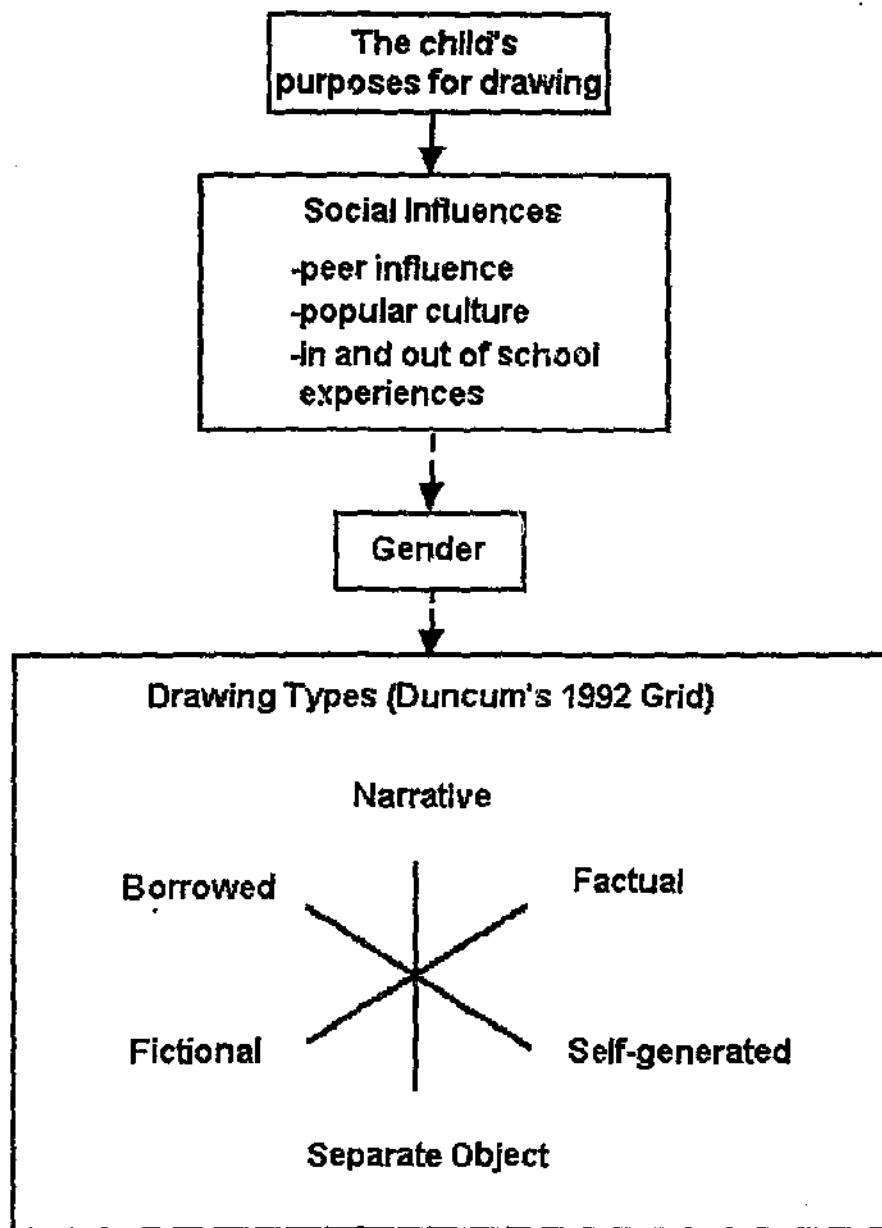


Figure 1. Conceptual Framework.

This framework was developed by identifying the influences believed to impact on children's drawing. Children's motivations for drawing are varied, as are the stimuli for the production of drawings. It is important to remember that each child will have a different purpose for drawing. Social influences may affect what children draw, and

these influences may include peer influences, popular culture and experiences both in and out of the school context. Gender is an important variable under investigation in this study and was considered a major factor influencing what children draw. All these factors are believed to affect children's spontaneous drawings. The framework culminates in Duncum's (1992) grid of spontaneous drawing types, which for the purposes of this study is used as a model for the analysis of children's drawings. Duncum's model includes the following elements;

1. Narrative/Separate object- Drawings can have a story created around them (Narrative), or can be an object with no narrative dimension (Separate object).
2. Factual/Fictional- Drawings can be based on real events (factual), or invented by the child (Fictional).
3. Self-Generated/Borrowed- Drawings can be generated by the child (self-generated), or can be copied from another source (Borrowed).

Combinations of these categories may be created, e.g. a drawing can be a Factual Narrative, or a Self-generated, Fictional, Separate object. This model was the basis for the analysis of data, and was used to classify children's drawings and create a number of categories of drawing types. It was also used to discover whether or not gender was a factor which significantly affected the types of drawings which the children produced.

1.5 Limitations, Assumptions and Definitions of Terms

1.5.1 Limitations

It is acknowledged that there are a number of limitations connected with this study. The study focussed on a limited number of eight year old children, from one class in an Perth Metropolitan Primary School. The class studied had sixteen girls and ten boys, rather than an equal number which was the preferred sample. Due to these factors, the

findings may not be generalized to other settings. A second limitation relates to the fact that a single response was obtained. The children may have generated different types of drawings displaying different influences had they produced drawings on subsequent occasions, and/or over a longer period of time. The socio-economic profile of the sample may have also influenced findings. Therefore the findings of this study could not be generalized to other socio-economic groups.

A further limitation relates to data collection. When asked to produce a drawing, the subjects may have felt under pressure to produce a drawing for the benefit of the researcher. Although every effort was made to minimise the impact of the researcher, some children may have produced a drawing unlike that which they would execute when drawing spontaneously. As it was necessary for the researcher to request the drawings, they cannot be classified as being completely spontaneous. However, the subject matter in the drawings was generated entirely by the children, as the researcher deliberately made no suggestions concerning subject matter.

1.5.2 Assumptions

The major assumption connected with this study was that the children involved comprised a "typical" group and therefore would provide drawings which were representative of the types of drawings other groups of children of the same age would produce. It was also assumed that when asked, the children involved in the study would produce a drawing which reflected their true interests, and/or the factors which may have influenced them. It was anticipated that the children would be able to draw freely in the context of the classroom, they would not be influenced by the setting to produce school-influenced drawings, and that the school's art specialist would have a minimal effect on the children's drawings.

Although the time period the children required for completing their drawings was trialled in the pilot study, individual differences in working time meant that findings could not be

generalized with any certainty to other groups. However, it was assumed that the children would complete a drawing in the time provided, and that the children would be willing to discuss their drawings with the researcher.

Another assumption was made concerning Duncum's (1992) model. As the model was used for the data analysis, it was assumed that the model was comprehensive and would provide a useful instrument for the analysis of children's drawings. It was also assumed that the children's interview would provide useful data to assist in the determination of the Narrative dimension of the drawings.

1.5.3 Definitions of terms

The following definitions are provided to clarify the meanings of important terms used throughout this thesis.

-Drawing - "Drawing is taken to be an activity which is completed when its product is complete. This product is also known by the same word, 'drawing'... drawing is an activity which produces a great variety of outcomes. It is making marks on a surface, with or without line, with or without colour, with or without black and white, with tools and selected surfaces or dispensing with them, with or without prior aim and purpose" (Perry, 1992, p. 90)

-Gender - "While sex differences are understood as biological, gender differences refer to those behaviours and attitudes which are constructed through social practice."
(Australian Education Council, 1993, p. ii)

-In-school experience - Those experiences which have occurred in the school context, including previous art lessons, other lessons, visitors to the school, and playground experiences.

-Out-of-school experience - Those experiences which occur outside the school context.

-Popular culture - "Mass-produced, mass distributed, and mass consumed artifacts; typically involving content that is relatively clear and simple; and produced by a small group of professionals for the consumption of others." (Duncum, 1987, p. 6)

-Spontaneous/Unsolicited drawings - Both these terms are recorded in the literature, and for the purposes of this study they are taken to be synonymous in meaning.

Following Wilson and Wilson (1982, p. xv) spontaneous drawing is taken to refer to "the art that comes from the child's own desire to create" - not commissioned by a teacher, or other adult.

-Subject - "The object, experience of, idea or event used as the motivation for a drawing or work of art." (Linderman, 1990, p. 291)

1.6 Plan of Investigation

This investigation is reported according to the plan set out below.

Chapter Two contains a discussion of the literature related to this study. Literature advanced relates to the theories concerning children's motivations for drawing, and some factors which may affect children's drawing such as the influence of peers, the influence of the teacher, personal experiences, and cultural influences. Subjects which commonly appear in children's drawings, the narrative dimension of children's drawings, and possible gender differences in children's drawings will also be discussed. Finally, the issue of research into children's drawing will be considered and deficiencies highlighted.

Chapter Three identifies the methodological procedures which were followed in both the pilot and main study and outlines the scoring procedures used to rate the drawings. The

results from the study, in the form of frequency tables and graphs, are presented in Chapter Four and discussion relating to the results of the study takes place in Chapter Five. Chapter Six contains recommendations for future research and a concluding statement which draws together the findings and results of the study.

Chapter 2

LITERATURE REVIEW

2.1 Overview of Chapter

The literature related to this study is covered in six broad areas. This chapter includes discussion of the theories concerning the motivations children have for drawing and some factors which may affect children's drawing; the influence of peers, the influence of the teacher, personal experiences, and cultural influences. In addition, the subjects which commonly appear in children's drawings, the narrative dimensions in children's drawings and the differences in children's drawings which may be attributed to gender are discussed. Finally, the issue of research into children's drawing is considered and deficiencies in reporting are highlighted.

It is important to note that this chapter is quite heavily based on the work of particular authors. The field of children's drawing does not contain many recent reports on the topics relevant to this study, and for this reason the discussion relies on the work of Duncum, and Wilson and Wilson. The work of Duncum is especially important as he is an Australian researcher and his work is based mainly on findings from Australian children.

2.2 Theories Concerning Motivations for Children's Drawing

Researchers have found that children have a number of different motivations and purposes for drawing. A number of interconnected theories have been advanced in an attempt to explain why children draw, although none of these theories seem to have gained widespread acceptance from educators. Major theories advanced include the Compensation, Cathartic, Psychoanalytical, Stimulus Seeking for Optimal Arousal, and

Competence/Effectance Theories. In this review of literature, attention will be given to the Psychoanalytical and Competence/Effectance Theories as they are most relevant to the aims of the study and the research questions. It is important to identify and discuss theories concerning children's motivations for drawing in order to establish a theoretical context for the study.

2.2.1 The Psychoanalytical Theory

The Psychoanalytical Theory is based on the Cathartic Theory which was developed from the work of Freud. The Cathartic Theory was explained by Ellis as a "process whereby relief of any pent-up emotion or feeling was achieved by the exhibition of that emotion" (Ellis, 1973, p. 54). Duncum (1980) suggested that some children may use drawing as a Cathartic process; as a means of allowing the partial release of powerful emotions. This view was supported by Wilson (1976), who wrote that children sometimes use drawing for the release of tension which might be caused by a number of factors such as "under-stimulation, interrupted actions, uncertainties, conflicts, boredom and curiosity" (p. 49).

However, Duncum (1980) cautioned that the Cathartic Theory was based on speculation rather than empirical evidence. Ellis (1973) previously suggested that the theory has lasted simply because of the lack of any alternate theory which would account for (and therefore try to control) violent emotions. Ellis explained that findings from empirical data showed that the expression of violent or aggressive behaviour might not actually help in reducing those feelings of aggression or anger, and he therefore refuted the claims of those who suggested that children use drawing as a way of controlling or releasing violent emotions.

As previously stated, the Psychoanalytical Theory is based on the Cathartic Theory. Although the Psychoanalytical Theory incorporates the concept of catharsis, it develops the concept further (Duncum, 1980) and is the preferred theory amongst researchers

and educators. However, there is a fundamental difference between the Psychoanalytical Theory and the Cathartic Theory despite similarities between the two theories. The major belief associated with the Cathartic Theory is that children use drawing as a means of "purging" themselves of unpleasant experiences. On the other hand, the major belief associated with the Psychoanalytical Theory is that children take in unpleasant experiences and use drawing as a way to adapt to these experiences. In the Psychoanalytical Theory, the process of adaptation to unpleasant experiences is termed "substitution", a process whereby the child uses symbolic means (i.e. drawing) to contend with an issue which is important to him/her. Duncum (1980), illustrated the concept of substitution with the example of a child who, by drawing scenes of violence, avoided the need to actually engage in violent behaviour.

Duncum (1980) reported that the notion of assimilation has been advanced in preference to the theory of substitution. He argued that if children were engaging in a cathartic process then they would have no need to repeatedly explore issues in their play or drawings as they would have purged themselves of the issue. However, Duncum noted that children's drawing was very repetitive and so concluded that children use drawing as a way of representing a part of their world which they do not understand and, through the repetition of this aspect in their drawings, they may gradually come to understand it, through the process of assimilation.

Lowenfeld and Brittain (1987) offered another viewpoint on the Psychoanalytic Theory. They asserted that the theory was concerned with the notion that art was used by the child as a "projective technique" (p. 23). This term was used by the researchers to advance the concept that the child may use drawing to portray those things which are important to him/her, or perhaps use art as a form of therapy by drawing events or situations which may have caused problems in everyday life. Lowenfeld and Brittain (1987) further noted that "feelings, desires and thoughts ... will all appear in the painting [or drawing]" (1987, p. 30).

Another belief associated with the Psychoanalytical Theory is that play activities (in this case drawing), are usually undertaken for their pleasure value, for the gratification that the activity brings, or for external rewards such as praise. This concept has been discussed by several researchers, including Ellis (1973), Kellogg (1970) and Wilson (1976).

Wish-fulfilment is another concept associated with the Psychoanalytical Theory. This idea was explored by Wilson (1976), who believed that by using drawing for wish-fulfilment, the child could symbolically possess whatever he/she portrayed, or in his words, "even though the ownership may be illusory it has a element of reality since the drawing is a tangible record of what was wished for" (Wilson, 1976, p. 56). Duncum (1980), who also explored this notion, cited an example of a child using drawing for the purpose of wish-fulfilment. A child drew many houses, and informed the researcher that they were similar to the house he would like to live in when he was older.

Wilson (1976) provided an example of another facet of wish-fulfilment through drawing. He believed that children can create their own worlds through drawing and in so doing become the creators of all things. Wilson provided an example of "world-creating", by citing the example of novelist C. S. Lewis, who as a child created a magical world called "Animal Land". Wilson (1976) wrote that the young Lewis created (through drawing) every aspect of life in this imaginary world, and was able to manipulate it in any way he chose.

The Psychoanalytic Theory seems to be generally accepted by most researchers with the notable exception of Arnheim who opposed the theory on the grounds that it was "open to serious objections" (Arnheim, 1972, p. 21). Arnheim posited that there were no alternate theories concerning artistic motivation and so the Psychoanalytic Theory could not be seriously considered as a theory explaining children's motivation for drawing.

However, Arnheim was not specific about which aspects of the theory he found to be unsatisfactory and as his work referred to the situation in the early 1970s, his claims may have lost their relevance today. There are now many different theories concerning children's motivations for drawing and the Psychoanalytic Theory is still considered valid by researchers.

2.2.2 The Competence/Effectance Theory

A more recent theory concerning children's motivations for drawing is the Competence/Effectance Theory, as advanced by Duncum (1980). The belief associated with this theory is that art is used by the child as a way of demonstrating competence and ability in the skill of representation and control of the medium in which he/she is working. Through the demonstration of skill, the child experiences the satisfaction of achievement through drawing. Other researchers (Lowenfeld & Brittain, 1987; Kellogg, 1973) have also supported the notion that drawing can be used to attain a sense of achievement.

According to Duncum (1980), the Competence/Effectance Theory explains why some children repetitively draw a single object. He stated that when children repetitively drew an object such as a cartoon character, they were actually attempting to demonstrate their competence and mastery by producing an image which they had "perfected" through practice. Gardner (1980) discussed the importance which children from the age of eight or nine attach to achieving "realism" or depicting things "how they really are" in their drawings. This striving for realism may be a manifestation of the Competence/Effectance Theory.

2.2.3 Theory of "Realities"

Another theory concerning children's motivations in drawing was advanced by Wilson and Wilson (1982) who asserted that children use drawing to experiment with several "realities". The concept of different realities was taken from the work of Swiss

psychologists, Kreittler and Kreittler (1972; in Wilson & Wilson, 1982). Wilson and Wilson adapted the Kreittlers' theory to suit their beliefs about the nature of children's drawings. Wilson and Wilson identified four realities which they believed children explored through drawing; the common, archeological, normative, and prophetic realities.

The common reality deals with the notion that children represent people and objects from their environment and experiences. Everyday domestic experiences, outings and occurrences are depicted. This reality is what Wilson and Wilson (1982) referred to as the "real reality" (1982, p. 23). They suggested that adults often try to convince children that there is only one reality, the common reality.

Archeological reality is concerned with identification of the self and experimentation with the alternative ways that one could be. In this reality, drawing is used to discover the possibilities which lie within oneself. An example of a child using drawing to explore the archeological reality was cited by Wilson and Wilson (1982). A young girl created a cast of characters in her drawings, including spies, acrobats, superheroes and dancers, who were good, powerful, evil or brave, thus representing a range of possible states and occupations. The girl used drawing to manipulate her characters to explore a host of possibilities and because of her exploration of these behaviours in the drawings, had no need to actually engage in the behaviours.

The archeological reality is closely related to the normative reality. Wilson and Wilson (1982) stated that children use drawing in the normative reality to re-invent standards of good and bad. Children may use characters, such as superheroes, to explore issues of good and evil. Issues of appropriate and inappropriate behaviour are also investigated through drawing, together with the consequences resulting from the different types of behaviour explored.

Finally, Wilson and Wilson wrote that children may use drawing for the purpose of exploring prophetic realities. Wilson and Wilson (1982, p. 35), described prophetic reality as "a vehicle for children to develop a model for their own future selves, actions, and worlds." In this reality, drawing is used by children to explore future possibilities and provides a safe way for children to experiment with, and confront many issues and to discover many things about themselves and their world.

Wilson and Wilson (1982), described the activity of experimenting with realities as "drawing to know". They also stated that drawing was very important for children who were experimenting with the four realities, as drawing provided a concrete and visual record of their efforts.

2.3 Influences Which Affect Children's Drawing

A common theme identified in the literature on children's drawing concerns the way in which children use drawing as a means of expression to explore the social influences which have affected, and continue to affect, them. Robertson (1987) found from the results of a longitudinal case-study that a child was influenced in his drawing by a number of factors which included personal experience, fantasy, the cultural environment and the media. The extent to which these influences are significant in children's drawings will be explored in this study.

Personal experience was identified by Robertson (1987) as being an important influence on children's drawings. Personal experiences cover a wide range of activities in a child's life and because the child knows most about his/her own experiences, these will obviously have an impact on the drawings which are produced. The influence of personal experience on children's drawings was demonstrated in a study by Wright (1993), where children were asked to produce a "happy" drawing and a "sad" drawing. It

was found that personal experiences were the most common bases for the "happy" and "sad" drawings.

As previously stated, the "common reality" deals with the depiction of everyday events or personal experiences. Children who are motivated to depict the common reality will be influenced by their experiences in the everyday world - experiences both in and out of the school context.

For most children, school is an important part of everyday experience and part of their common reality. Therefore, it may be expected that interactions and experiences which occur in the school context will have an influence on the children's drawings. Kakas (1991) reported that there have been an increasing number of researchers focussing their attention on peer interactions and teacher-pupil communication in classrooms (e.g. Cadzen, 1988; Evertson & Green, 1986; Wilkinson, 1982; in Kakas, 1991). These studies indicated that lessons are influenced by the social discourse occurring in the classroom.

A child's peers may also have a number of influences on his/her drawings. According to Johnson (1981), the school and the classroom are made up of a number of interpersonal relationships and these relationships will affect the ways in which children perceive the world. Peers are an important element of the school environment and have been shown to have a powerful impact on children's drawings. Wilson and Wilson (1977) wrote that they were surprised at the extent to which peers "teach" one another how to draw, as well as influencing what is drawn. This view is supported by Korzenik (1979), who also believed that children learn and copy from each other.

Subsequent studies have also described the influence of peers on the drawings of children. Alexander (1984; in Kakas, 1991) observed spontaneous peer interaction, defined as "an information exchange unstructured or unplanned by the teacher,

occurring while students work independently on lessons" (Kakas, 1991, p. 22), which was also the focus of attention in an ethnographic study by Swann (1985; in Kakas, 1991). In Swann's study, peer communication was analyzed to determine the kinds of talk which might influence the art-making process. Two main types of interactions were discovered. Swann found that one category of talk derived from the self, when children told each other about personal experiences, engaged in peer teaching and critiqued each other's work. When engaging in the second category of talk, based around the art work, Swann found that one of the behaviours involved copying the art of others. From these studies, it can be seen that peer influence can be a important influence on children's drawing/art-work.

To this point it has been shown that peer influence, including copying the work of others, peer teaching and critiquing, will all influence children's drawings. Although the studies mentioned above were conducted in a classroom setting, Pearson (1993) discovered that these influences also occurred outside the school context. In a longitudinal case-study, Pearson (1993) discovered that the child he was studying was fascinated by depicting images and figures from popular culture. Pearson concluded that the image-making was very important in the child's social relations because being able to draw these figures gave him a certain status in his peer group, as the other members also endeavoured to draw figures from popular culture. Pearson found that by copying and critiquing each other's work, the children engaged in behaviours that influenced the drawings which were produced.

Kakas (1991) reported on studies which had been conducted to investigate the influence of the teacher on the art lesson. Findings showed that teachers' conversations with children in the context of the art lesson influenced the children's drawings. Conversations between the teacher and the child during the art lesson included the teacher making evaluative statements about the child's work and stimulating the child's decision-making and/or reflection (Kakas, 1991). The teacher's direct influence in the art

lesson will obviously have an effect on the child's drawings but the teacher may also provide other indirect influences through the experiences provided in other lessons.

Fantasy was another factor which Robertson (1987) identified as being influential in children's drawing. Fantasy is a prevalent element in the world of children - television, books and games can all incorporate elements of fantasy. Wilson (1976) indicated that if children become bored, they may resort to engaging in fantasy in an attempt to alleviate that boredom. Duncum (1985) presented an alternate Psychoanalytic perspective concerning the role of fantasy stating that one of the reasons children engaged in fantasy was that it provided "a way of materially realizing their fears, to make them more real, and so more easily negotiated" (1985, p. 44).

Duncum (1985) wrote that he discovered through talking to children that many of their drawings were part of rich worlds of fantasy, even those drawings which at first glance seemed to be merely a drawing of a separate object on a page. Duncum believed that it was only possible to discover these fantasy worlds through discussion with the child involved. A study by Fein (1976; in Duncum, 1985) which documented one girl's drawings of horses over a period of fifteen years was criticized by Duncum (1985), who reported that, although Fein meticulously presented and described the girl's drawings, at no stage was the girl consulted about the drawings. Duncum concluded that a whole dimension of the girl's art, that of fantasy and narrative, was overlooked.

The cultural environment was also identified by Robertson (1987) as being an important influence on children's drawing. The work of Duncum (1990) supported this notion. In one study, Duncum discussed the impact that the social environment had on children, with a major focus on violence as a social reality. Duncum asserted that the children in the study depicted violence as a way of trying to understand and come to terms with the ambiguities associated with violence in society. He wrote that violence is "so common

on television - our major communications system - that it might appear that society encourages violence" (Duncum, 1990, p. 252).

Mass media is another aspect of the cultural environment that has become an increasingly powerful influence on children's drawing. The mass media, which includes television and film, radio, magazines, comics and newspapers, reaches the wider population and is therefore a powerful and persuasive cultural form. The products of popular culture are mass-produced, predictable and, some would say, unoriginal (McQuail, 1984). Duncum (1982) stated that many children were influenced by images associated with popular culture. He identified imagery from picture-books, magazines and newspapers, drawings and photographs, political cartoons, comic books, joke books and television (especially cartoons) as major influences (Duncum, 1982, p. 70) on children. As Duncum was writing in the early 1980s, and popular culture continues to change, there are a number of contemporary items such as sports cards, video clips and computer games which perhaps should be added to the list of possible influences on children's drawings.

Children are the target audience for popular culture. Much of the advertising and spin-off products from popular culture are aimed at children. Using the example of the cartoon, "The Simpsons", which achieved cult status in the early Nineties, it can be seen that all the products based on this series were aimed at children - t-shirts, action figures, pencil cases etc. Many researchers (Wilson & Wilson, 1982; Lark-Horovitz, Lewis & Luca, 1973; Robertson, 1987; Gardner, 1980; Pearson, 1993) have described children's preoccupation with depicting cartoon figures, especially superheroes, and other forms from popular culture and concluded that it is an indication of the influence that popular culture exerts over young children.

There have been many studies conducted in an attempt to determine why children are so fascinated by popular culture, what motivates them to draw characters and symbols from this genre and whether the act of copying has any artistic merit.

Many children draw cartoon figures, and copy figures from comics. Some educators believed that the act of copying was inappropriate and harmful to the artistic development of the child (Lowenfeld & Brittain, 1975; Korzenik, 1979). However, more recent research has found that copying cartoon figures and other figures from popular culture may have potential benefits for the child (Hoff, 1982; Wilson & Wilson, 1982; Gardner, 1980; Goodnow, 1977; Cox, 1992; Smith, 1985). The benefits identified include stimulation for the child, modelling and improvement of drawing skills through many hours of copying. In addition, when creating their own comic strips, children have the opportunity to experiment with representing their feelings and emotions in a safe environment.

Smith (1985) stated that the work of the psychologist, Piaget, showed that imitative behaviour developed spontaneously in children and that such imitative behaviour played an important role in learning. Smith (1985) also asserted that children copy cartoon figures and comics as a way of acquiring knowledge, in response to a need for factual information, to learn an adult convention/technique, or to reproduce an image they admire. Smith stated that children needed to "express deep feelings within the safety of socially recognized forms such as comic strips" (1985, p. 148).

Gardner (1980), as previously discussed, advanced the notion that children around the age of eight or nine became increasingly concerned with the depiction of a literal reality, or drawing things "how they really are". Gardner (1980) stated:

The child has now become fascinated – even tyrannized – by the drawings of others in his culture. He abandons, without regret a carefree approach to paint and paper in favour of a more restricted and controlled orientation and

In its wake there emerges an increasing preoccupation with depicting a world in as realistic and literal a manner as possible (p. 168).

Gardner further stated that "cartooning represents a compromise between a desire to draw really well, to capture the precise expressions he [the child] sees in his mind's eye, and his anxiety lest he fail to render something in a convincing manner" (1990, p. 168). Thus, children around the age of eight or nine who are becoming interested in depicting "reality" but who feel inadequate in representational aspects, may choose to use cartooning to express themselves. To illustrate this point, Gardner (1980) provided an example of one child who produced cartoons; as no-one could determine whether or not he had intended to produce a certain figure in such a way when he started drawing, so no-one could label his completed drawing as being inadequate.

In summary, the results from a study by Wilson and Wilson (1977) concluded that nearly every image drawn has its origins in a "previously existing graphic source" (1977, p. 7) which may include images which have been drawn from the media, (such as cartoons and television), or from images gained from family members, or peers. These are the main influences which may affect children's drawings which have been discussed in this section of the review.

2.4 Subject Matter in Children's Drawings

A number of studies were carried out before 1940 with the intention of discovering children's choices of subject matter when drawing. Although these studies were conducted by various researchers over a number of years they generated similar findings. In these early studies, humans, animals, plants and vehicles were reported as being the most common subjects of children's drawings (Maitland, 1895; Katzaroff, 1910; Ballard, 1912; Anastasi & Foley, 1936; Lark-Horovitz, Barnhart & Sills, 1939; in Lark-Horovitz et al., 1973).

At the time they were writing, Lark-Horovitz et al (1973) noted that there were no recent studies extensive enough to be compared with these early studies, so there is a period during which there is little information about children's choices of subject matter in drawing. However, more recent studies have investigated the subject matter of drawings by contemporary children. Interestingly, the results of the earlier studies discussed were similar to the findings of more recent studies.

All studies, from the earliest to the more recent, have identified a number of separate objects as being popular subjects in children's drawings. One of the separate objects most popular in children's drawings today was identified by Duncum (1992) as the human figure. One suggestion as to why the human figure is so popular as subject matter in children's drawings is forwarded by Wilson and Wilson (1982) who wrote that children used drawings to experiment with issues relating to the self, and as a result drew themselves and their interactions with others.

Animals, caricatures, landscapes, buildings, ships and trains have also been identified as being popular subjects in children's drawings (Duncum, 1992; Alberthy & Cogan, 1984), as they were at the time of the earlier studies mentioned above. Other subjects have also been shown to be popular in children's drawing. Long-time universal favourite subject matter have been identified and include trees and flowers, games and amusements, and houses (Lark-Horovitz, 1973; Alberthy & Cogan 1984). Contemporary children's drawings have also been shown to contain space-vehicles, and rockets (Duncum, 1992). Lark-Horovitz et al (1973) asserted that children have a fascination with anything new and modern and that, in particular, the phenomenon of space exploration provided a source of inspiration for children's drawings.

If we accept the assertion by Lark-Horovitz et al (1973) that children have a fascination for all things new and modern, it is only logical to expect that comic strip and cartoon characters from popular culture (which is continually changing and being renewed), will

appear in their drawings. As previously discussed, many researchers have investigated the phenomenon of copying cartoons (Robertson, 1987; Wilson & Wilson, 1982; Gardner, 1980; Cox, 1992; Smith, 1985). In addition to this, there have been several studies which have investigated the drawings of cartoon or comic-strip characters by children who are prolific drawers (e.g. Robertson, 1987; Wilson & Wilson, 1977, 1982; Gardner, 1980; Pearson, 1992).

Robertson (1987), in a longitudinal case-study of her son from the age of 6 to 16, found that a large number of his drawings contained cartoon figures. Robertson observed that although her son employed the techniques and conventions of caricature and comic strips, he was averse to actually copying what he saw. Wilson and Wilson (1977, 1982) also observed some children who spontaneously produced a number of cartoon drawings. It is interesting to note that, of the children observed who were producing cartoons, boys were in the majority. Wilson and Wilson (1982) believed that boys were more influenced by the media than girls, which may account for this phenomenon.

Another influence provided by the media was identified by Lark-Horovitz et al (1973), who reported that through media forms such as newspapers and television children become interested in politics, peace and war, crime, and social changes. In a study previously discussed, Duncum (1990) discovered that the social environment was reflected in the subjects of children's drawings, particularly in the form of violent drawings. He wrote that these unsolicited drawings of violence are common, a view supported by Feinburg (1975, 1976), who studied children's battle drawings, and wrote that one explanation as to why children participated in this kind of aggressive behaviour is that they were stimulated by the media.

Feinburg (1976) studied the drawings of her son over a number of years and reported that from the age of four, her son began to draw what the author described as "battle scenes". Military equipment, boats, vehicles, guns and soldiers were dominant in the

child's drawings, but sometimes subjects were extended to include battles involving athletics and sports events. The author stated that:

Specific subject matter was less a common denominator than the general orientation and disposition of the activity, i.e. the process, the purposes it seemed to serve, the inclusion of such elements as confrontation, danger, motion, power, and co-operative effort (Feinburg, 1976, p. 59).

2.5 The Narrative Dimension in Children's Drawing

In speaking to children about the narrative or story which may accompany their drawings, the researcher may discover a great deal about the child who has produced the drawing, because, as Duncum wrote, "the fantasy world that so frequently accompanies children's drawings is often so rich in speculation about and exploration of the world children are coming to master that they reveal more clearly than the drawings themselves their author's preoccupations, their hurts, fears, and delights" (1985, p. 44). Because drawings by children will often be connected with a world of fantasy, it is necessary to talk to children to discover the often rich narrative element which may be associated with their drawings. The presence of a narrative can only be established in this way because "the drawings emerge as only the visible tip, as it were, of an iceberg of fantasy" (Duncum, 1985, p. 43).

Wilson and Wilson (1979) believed that most of the spontaneous drawings produced by children had a narrative dimension. Duncum (1985) wrote that he believed narratives were important as they "stimulate or provide pleasure, they inform and instruct, especially by framing social ideas, attitudes and beliefs; they allow wishes and desires, often of a socially taboo kind, a vicarious indulgence; and they help work through fears and establish identities" (Duncum, 1985, p. 218).

Duncum (1992) identified a number of types of narrative drawings. These drawing types were partially based on the work of Luquet (Trans. 1985; in Duncum, 1992), and Duncum identified a type of narrative not reported by Luquet. The first types of narrative drawing identified were the repetition and juxtaposition narratives. The repetition narrative is a drawing with only one main setting but the characters involved in the narrative might appear a number of times in the same setting. For example, if a child's narrative drawing involved a tiler falling off the roof of a house, the house would only be pictured once. The tiler, however, would be drawn a number of times in the same drawing, in different positions, to represent the series of events which lead to him falling off the roof. Juxtaposition narratives are similar to repetition narratives in that a series of events is portrayed. However, in the juxtaposition narrative there is no repetition in the drawing. Duncum (1992) quoted an example of juxtaposition:

The subject portrayed is as follows: a man throwing stones and breaking an electric bulb of a street lamp. Policemen arrest him, take him to a station where "they write down his name" and finally he is put into prison. In the drawing, the main character is portrayed only once, when he is throwing stones at a lamp; he does not appear again in the following scenes. The station in which only the policemen are portrayed and the prison in which only the "thieves" with whom he is imprisoned are portrayed. (Luquet, 1985, in Duncum, 1992, p. 7)

The third type of narrative identified by Duncum (1992) was the event narrative, which Luquet described as a *symbolic narrative*. An event, or symbolic narrative, is a drawing which represents a narrative by portraying one scene by which the viewer can see what has happened before, and what might happen after, the particular scene pictured. An example of an event narrative is a drawing of a battle-scene. The picture, although it shows only one moment of the battle, represents the entire battle, in a way "summing it up".

Separate object narratives were the next type of narrative identified by Duncum. Separate object drawings are representations of objects, such as a horse, or a figure.

As previously discussed, these types of drawings are difficult to categorise as narratives without consultation with the child, as there may be no indication that the drawing is actually part of a narrative.

The fifth type of narrative identified was the comic strip narrative, described by Luquet as an *epinal narrative*. Comic strip drawings consist of a sequence of events which may, or may not, be separated by clear divisions. Duncum (1992) reported that sometimes the comic strip drawings may appear to be random images scattered over the page, with the connections only occurring in the child's mind.

One type of narrative not identified by Luquet was the superimposed narrative (Duncum, 1992). The superimposed narrative type involves a number of successive events drawn on top of each other. The resulting drawing may be very difficult to distinguish through all the layers of action. In all, six narrative types were identified in this article and in addition to the reported frequency of the occurrence of narratives in children's drawings (Wilson & Wilson, 1979) demonstrated that narratives are an important element in children's drawings.

However, although Duncum (1985) believed that narratives were a very important type of drawing and popular in children's drawings, he disagreed with Wilson and Wilson (1982) in their assertion that almost every drawing had a narrative element. Duncum wrote that he believed there were many other types of drawing and that a more balanced view than presented by Wilson and Wilson should be taken when considering children's drawing types. In support of the argument he presented in 1985, Duncum proposed the (1992) model of spontaneous drawing types in which he outlined the different types of drawings children might produce when drawing spontaneously.

2.6 Gender Differences in Children's Drawings

Wilson and Wilson (1982) stated that "as nearly as we can determine, the drawings of the very youngest boys and girls contain no differences" (p. 163). This lack of differentiation between the drawings of young boys and girls changes as children grow older, and by the age of nine there seems to be an increase in differences between the sexes (Lark-Horovitz et al, 1973). Lark-Horovitz et al (1973) asserted that they found no significant differences which could be attributed to gender in children's art ability among children aged nine. However, they believed that there were differences in interest, content and character of drawings which could be attributed to the different sexes.

Gender differences have also been identified in children's subject choices. As previously discussed, it appears to be a common phenomenon for boys to produce cartoons and other media-influenced figures. Other common elements in boys' drawings have been identified as cars, trucks, monsters and dinosaurs, space ships and rockets, scenes of war and armies, robots, sports and cartoon figures (Duncum, 1985, 1992; Robertson, 1987; Wilson & Wilson, 1982; Lark-Horovitz et al 1973). Common subjects in girls' drawings have been found to be animals (especially horses), kings, queens and princesses, domestic subjects and everyday events (Duncum, 1985; Wilson & Wilson, 1982; Feinburg, 1977).

Feinburg (1977) asserted that;

No single subject remains only within the province of a given sex for individuality dominates, but the relative exclusivity of these themes from a sex vantage point is striking. Boys rarely examine horses and royalty, girls rarely select monsters and vehicles. (1977, p. 63).

It seems to be generally accepted in the literature that boys and girls do produce different subjects in their drawings and these subjects tend to fall into patterns. McNiff (1982) conducted a study to investigate possible gender differences in the subject matter

of drawings produced by 26 children aged six, seven and eight. Eighteen hundred drawings were collected and differences in the subject matter of boys' and girls' drawings were noted. McNiff reported that the girls involved in the study drew more people than boys, producing 68% of the total drawings of people, and that girls produced over 80% of the plant drawings produced. She noted that while both girls and boys produced drawings of the outside environment, girls were more interested in weather and the seasons and also tended to draw the outside places with which they were familiar, with the examples cited being the home and the school. McNiff (1982) also found that girls drew more animals than boys, with the exception of sea animals, where boys predominated.

Significantly, McNiff discovered that conflict dominated the drawings of boys, supporting the findings of Feinburg (1976) previously discussed. The subject of conflict manifested itself in a number of ways in the boys' drawings. McNiff identified four categories of conflict in the drawings produced. The first category included drawings which depicted conflict between opponents, which could be animals, humans or machines. The second included drawings of natural or man-made disasters. The third category consisted of drawings of monsters and the fourth category were drawings which the researcher termed "outer space art". McNiff also wrote that boys often drew machines such as motorcycles and trucks, with an emphasis on the power of these machines.

McNiff (1982) summarised her findings by listing the subjects most dominant in the drawings of boys and girls. The subjects which dominated the drawings of girls studied included; designs, people, holidays, animal and plant life and the outdoor environment. The subjects of the boys were quite different and included conflict/power, sea animals, exotic places (e.g. Egypt), outer space and sports.

Many studies have been conducted with individual children who were prolific drawers and results have also tended to confirm sex-related preferences in subject matter

(Pearson, 1992; Feinburg, 1976; Gardner, 1980; Duncum, 1985). A phenomenon investigated by many researchers is the fascination girls have with depicting horses (Gardner, 1980; Duncum, 1985; Feinburg, 1977; Wilson & Wilson, 1982). Likewise, the battle drawings of boys have been explored (Feinburg, 1977; Gardner, 1980; Wilson & Wilson, 1982).

Wilson and Wilson (1982) asserted that more boys than girls are prolific spontaneous drawers and also that boys are more influenced by the media, which may account for the profusion of cartoons and violent subject matter in boys' drawings. Lark-Horovitz et al (1973, p. 127) wrote that boys tend to represent "actions that are joyful, extraordinary, heroic. They show man's activities and his power". Conversely, Feinburg (1977) found that the subject matter of girls' drawings is more likely to contain elements of beauty and tranquillity. In one study, Feinburg (1977) drew a comparison between girls' horse drawings and boys' monster drawings, subjects which are typically produced by children. The horse drawings were concerned with depicting the beauty of the animal and usually showed the surroundings as peaceful and tranquil, whereas boys' monster drawings were concerned with showing fearsome, powerful beasts.

Lark-Horovitz (1973) noted that children's choices for subject matter in their drawings were conditioned by the culture in which they lived and that any data collected which concerned gender differences in children's drawings would reflect attitudes of the society and the culture from the time that the data was collected. "As attitudes change, so will their reflection in the drawings of children" (Lark-Horovitz, 1973, p. 127). This prediction may be significant in relation to this study, as there is greater emphasis on gender equality in society today.

2.7 Methodological Issues

Research in the field of children's drawing covers a wide spectrum of motivations, ranging from theory-formulation, to empirical studies using children's drawings to confirm developmental theories, to practical help for teachers and parents. Paine, (1992), identified the many different types of researchers in the field of drawing development as including psychologists, artists, teacher-educators, designers, art historians, philosophers, sociologists and anthropologists. Research will obviously vary according to the aims and the viewpoint of the researcher. As a result of the different aims of the researchers, the study of children's drawings has been conducted in a variety of ways.

Duncum is a prolific writer on the subject of children's drawing. However, an analysis of his writing shows that he does not provide a great deal of information about how he arrived at the findings and conclusions reported in his articles. Although Duncum may have conducted systematic investigations which would support the claims made, the procedures themselves are never actually reported. Duncum seems to use children's quotes and drawings as examples to support a particular theoretical viewpoint he is advancing, rather than providing empirical data, which may suggest that he is more concerned with theory-forming and reviewing the work of others. Wilson and Wilson are also very influential writers and researchers in the area of children's drawing. When reporting their findings, Wilson and Wilson wrote that their conclusions were arrived at "from talking to children". As in the case of Duncum, their procedures may be based on a systematic approach but their methods are not reported.

As previously noted, several researchers have carried out longitudinal case-studies of specific children. However, this approach has a potential problem in that the children studied are often prolific drawers, or atypical cases in some other aspect, and therefore any results reported are not able to be generalized to a wider group. Both Robertson (1987) and Feinburg (1976, 1977) conducted longitudinal case-studies. The subjects involved in these case-studies were the researchers' own children which, although

providing interesting information, highlights the researchers' special interest. Pearson's (1993) case-study of a child makes no attempt to disguise the fact that the child studied was atypical, being a child of Samoan background in a New Zealand school setting. The reader must be aware of the limitations connected with case-studies and not seek to generalize the conclusions to other children in different contexts.

It can be seen from the review of the literature that there are deficits in the study of children's drawing. Few carefully documented studies in the area of children's spontaneous drawing have been reported in the literature. There is a need for empirical research in this area to record the effect of social change on children's drawing.

2.6 Summary of Chapter

There has been a variety of theories advanced in the literature concerning the motivations children have for drawing. A selection of relevant theories has been discussed in Chapter 2 in an attempt to provide a sound background for the study. Other important factors connected with the study were discussed in the literature review, including some of the social influences which may affect children's drawings (peer influence, popular culture, in-school and out-of-school experiences), the subjects which are commonly found in children's drawings, the importance of the narrative dimension of children's drawings, and the differences in children's drawings which may be attributed to gender. Finally, methodological issues from the area of the study of children's drawings were reported, and some deficiencies highlighted.

Chapter 3

METHOD OF INVESTIGATION

3.1 Overview of Chapter

This chapter describes the method of research employed to answer the research questions posed in the study, and provides a justification for the selection of the data-gathering instrument used. The procedures and results from the pilot study are discussed and the procedures used for the main study are described. An explanation of the scoring procedures used for the classification of the drawings is also provided.

3.2 Method of Research

The method of research followed in this study was a mixture of both the qualitative and quantitative paradigms. The format of the research was naturalistic inquiry based on the collection of qualitative data and inductive analysis of the data. Naturalistic inquiry was described by Patton (1990) as conducting inquiry with a degree of openness, without predetermined constraints. Patton also described inductive analysis as attempting to "discover important categories, dimensions and interrelationships" (1990, p. 40).

It was important to use a qualitative style of research in this study because of the necessity of interviewing the children. The interviews were necessary in order to discover the influences which affected the children's drawings so that they could be placed, as accurately as possible within Duncum's model of spontaneous drawing types. Statistical analysis, in the form of non-parametric tests, was also carried out on the data in an attempt to discover any statistically significant differences between the drawing types of boys and girls (as identified by Duncum's 1992 model), with Alpha set at 0.05.

3.3 Selection of Data-gathering Techniques

3.3.1 Drawings.

The drawings produced by the children were the most important data in this study. The aim of this study was to investigate children's drawings and it was necessary to ensure that the drawings were as spontaneous (unsolicited) as possible, so that they would reflect the children's real interests and any influences which might impact on their selection of subject-matter. It was also necessary for the children to produce their drawings in the presence of the researcher so that anecdotal notes relating to the children's behaviour during the drawing process could be recorded.

While particular social influences on the children could be partially ascertained through the analysis of their drawings, the interview was a necessary instrument, as it augmented the information gained from the drawings. This was important because, as Duncum (1985, p. 45) stated, "what children do not picture may often play as important a role as what they do picture". For example, a drawing may have an unpictured narrative element and, if the child is not consulted, the drawing may be incorrectly categorised as a separate object drawing, a drawing type unlikely to contain a narrative element.

3.3.2 Interviews.

It was necessary to develop an interview guide for this study to ensure that all the appropriate information was gained from the children. The interview questions were trialled in the pilot study to ensure that they elicited enough information to enable the researcher to place the drawings as accurately as possible into the categories outlined by Duncum's (1992) model of spontaneous drawing types, and also to identify any social influences impacting on the children's drawings. To satisfactorily answer the research questions, information needed to be elicited from the children about whether their drawings were influenced by peers (or others), in-school experiences, out-of-school/personal experiences or by popular culture. For further classification purposes it

was also necessary to collect information to identify the extent to which the drawings were Borrowed/Factual/Narrative. As previously stated, some of the necessary information was determined by careful analysis of the drawings. However, in cases where there was some discrepancy or confusion, the interview was a helpful instrument.

The first item in the interview (Appendix C) was a general question designed to put children at their ease by providing them with an opportunity to talk about their drawing. The children's initial response provided an opportunity for the researcher to determine which further questions were necessary in each case. A set interview or questionnaire was deemed to be unsatisfactory in this context as each child produced a different drawing and voluntarily offered different comments, which meant that each child required different questions and/or prompts to elicit the required information. To provide some measure of consistency, a number of set questions was asked of all the children. These questions were to assist in the classification procedures and to determine possible social influences. The last question asked in the interview was open-ended, thus providing the children with an opportunity to discuss anything he/she believed had not been covered in relation to their drawing.

3.4 Pilot Study

In order to trial a number of factors central to the main study, a pilot study was conducted. One factor trialled was the time needed by the children to complete the drawings, so that the amount of time allocated for the drawing process could be established. The size of the paper was also trialled to ensure that the children were not daunted or restricted by the size of the paper provided. Other factors trialled were the children's reactions to the presence of an observer and participation in a tape-recorded interview. These factors were trialled to ensure that the children were not made uncomfortable. The most important aspect of the data collection procedures to be trialled was the interview. Trialling of the interview was necessary to ensure that

appropriate information in enough detail was elicited from the children to be able to accurately place each drawing into Duncum's (1992) model of spontaneous drawing types.

The pilot study was conducted in a small Catholic Primary School in the Northern Suburbs. Permission to conduct the pilot study was granted by the principal and the classroom teacher. Ten children, (five boys and five girls) were randomly selected for participation by the classroom teacher. The researcher explained to the children the purpose of the study and requested that they complete a drawing of their own choice of subject matter. She then informed the children that they would each participate in an individual interview.

3.4.1 Results From the Pilot Study

The results of the pilot study revealed that most of the necessary information was obtained from the children. However, in reviewing the interview procedures, information concerning possible peer influence on the children's drawings was found to be inadequate. A new, more explicit question was developed in order to gain information about the influence of peers. Another problem discovered when studying the interview transcripts was that the researcher had asked some leading questions of the children. Awareness of this potential problem was important, for although researcher influence cannot be eliminated, it can be minimised.

Paper size and the time allocated for the children to complete their drawings were found to be satisfactory. Some children did not complete their drawings, but it was judged that because of individual differences in working times, it was unrealistic to expect that every child would finish irrespective of the time available. However, the time allocated for the drawing process meant that all children completed at least a rough draft of their drawing. The children reacted very well to the presence of the researcher and were not at all reticent about discussing their drawings with her.

3.5 Main Study

3.5.1 Sample/Subjects

The sample comprised 26 children (one class), from a State Primary School in Perth's Northern suburbs, who were eight years old and at grade three level. Sixteen girls and ten boys were involved in the study. Eight year-old children were selected for study as this was the age group which Duncum and other researchers typically used in their research; thus most of the literature was relevant to children of this age. Duncum (1980), stated that although there were many studies which focussed on the spontaneous drawing of young children, there is little known about the work of older children. The reason why most of the literature is based on the drawings of young children may be because at this age they are still willing to produce drawings spontaneously and talk about their drawings with others.

3.5.2 Procedure

The drawing session took place during an art lesson. The researcher explained the purpose of the study and asked the children to produce a drawing on any subject they wished. The children were given 30 minutes to complete their drawings. On completion, all children resumed their regular lessons and each child was interviewed individually by the researcher. The child's drawing was before him/her on the table during this time.

The order in which the children were interviewed was determined by their position on the class list, with girls and then boys in alphabetical order. The interviews took place outside the classroom but close enough to minimise movement around the school. The researcher sat side-by-side with each child, with the tape-recorder resting in the middle. Each interview lasted for approximately 3-5 minutes depending on how much information the child provided concerning his/her drawing.

3.6 Research Validity

In an effort to obtain as much information about the drawing episode as possible, three types of data were collected: the drawings, the interviews and the anecdotal notes. The researcher conducted all the interviews in an attempt to provide research consistency. Although the interviews contained different questions depending on the drawing the child had produced and the comments they offered voluntarily, there was a core of common questions which was asked of all participants. These core questions were to provide some measure of consistency. Many of the supplementary questions were "variations on a theme" and were designed to elicit much the same information as the core questions. As noted previously, the interview questions were trialled in the pilot study, to ensure that the necessary information was elicited from the children.

The interviews were tape-recorded and transcribed for the purpose of noting (for future reference) the actual questions asked and each child's responses to the questions. Anecdotal notes were taken to ensure that any interesting behaviours exhibited by the children were documented.

3.7 Research Reliability

Inter-rater reliability was provided by having two members of Edith Cowan University Art Education staff independently rate the drawings and interviews from the pilot study using the scale constructed from Duncum's (1992) model of spontaneous drawing types. A comparison was made between the ratings by the researcher and the two independent raters. Some variation between scores was found, due mainly to the independent raters' interpretations of the categories within Duncum's model. The differences in scoring may have been due to the fact that the independent raters had the understanding that the categories of Duncum's model were straight-forward and that the classification task would be uncomplicated for those with experience in the area, but perhaps further

discussion between the researcher and the independent judges before rating the drawings may have been beneficial. However, there was sufficient similarity between the scores of the independent raters and those of the researcher for the study to proceed.

3.8 Ethics

Consent was obtained for this study with the principal of the school involved signing a form of informed consent (Appendix B), which guaranteed that the students, school, teacher and principal involved in the study would in no way be identified, either by name or by description in the thesis. Permission for the students to participate was granted by the principal, art-specialist, classroom teacher and parents of the students involved. Students were not identified by name on the interview audio-tape. Annotations on each drawing indicated a number for identification purposes and indicated whether the child was male or female.

3.9 The Scoring Procedure for the Drawings

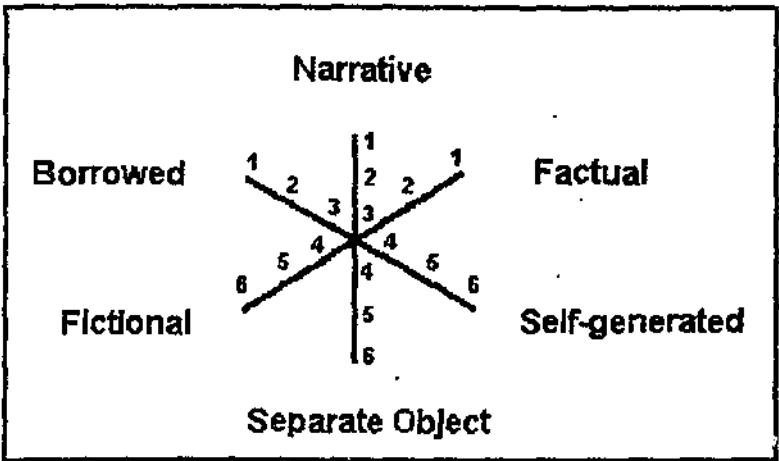


Figure 2. The Scoring Procedures for the Drawings.

Each drawing was rated according to a scale adapted from Duncum's (1992) model of spontaneous drawing types. The drawings were analysed to determine the extent to which they contained Borrowed/Factual/Narrative components. Each drawing was given three scores (from one to six), based on the following criteria.

Borrowed/Self-generated

"Those [drawings] that are more or less consciously and directly borrowed or copied from other sources and those that are generated by the children themselves" (Duncum, 1992, p. 6).

1. Image directly copied from another source.
2. Mostly borrowed images, including common schema such as puffy clouds, and birds.
(See Appendix A).
3. Some self-generated images/composition.
4. Self-generated images/composition with some borrowed images.
5. Mostly self-generated images and composition.
6. Totally self-generated, with no common schema.

Narrative/Separate Object

"Drawings may tell a story, or some aspect of a story, or they may represent objects" (Duncum, 1992, p. 3).

1. Drawing used only as a "backdrop" or "prop" for story-telling.
2. Story told about a drawing.
3. Aspect of story connected with drawing.
4. Some evidence of a story connected with the drawing (including presence of text).
5. Little evidence of a story connected with the drawing, but a collection of separate objects, rather than a single object.

6. Totally separate object, with no narrative dimension.

Factual /Fictional

"Are drawings the product of actual experience or 'Constructive Imaginations' (Roberts, 1916, p. 7); are they 'realistic' or 'imaginative'? (Hildreth, 1941, p. 55)" (Duncum, 1992, p. 5).

1. Drawing based entirely on experience.
2. Drawings mostly based on experience.
3. Drawings with an experiential base, but with some fictional elements.
4. Drawings with a fictional base, but with some experiential elements.
5. Drawings mostly imagined.
6. Drawings totally imagined.

This system was quite subjective as it is similar to a Likert Scale and although inter-rater reliability was obtained for the results of the pilot study, it is acknowledged that because of the nature of the data another researcher might classify the drawings differently, or allocate different scores to the drawings.

3.10 Other Data Analysis

Data in relation to Question 1 (children's choice of subject matter) were collected through careful analysis of the children's drawings and noting the subject matter. Results were then displayed in the form of frequency tables and conclusions drawn from these tables. The data for Question 2 (influences on children's drawings) were treated similarly to that of Question 1 in that data were displayed in the form of frequency tables and results drawn from the tables. Data relating to Question 3 (gender as a determining factor in drawing types) were analysed through the construction of clustered bar graphs to discover any trends or differences between the drawing types produced by boys and

girls. Non-parametric procedures were then carried out on these results to discover any statistically significant differences in drawing types between boys and girls.

Summary of Chapter.

Chapter 3 outlined the methodology used for the study, and documented the procedures followed in an attempt to ensure that the results from the study were as valid and reliable as possible, considering the limitations and assumptions connected with the study. It has been shown that the research design relied heavily on qualitative methods to ensure that comprehensive and appropriate data were obtained.

Chapter 4

RESULTS

4.1 Overview of Chapter

This chapter examines the subject matter children chose to portray in their drawings, possible influences on these drawings and the drawing types produced (from Duncum's (1992) model of spontaneous drawing types). The results obtained from the data collected in the study are presented in the forms of frequency tables, clustered graphs, and results from the non-parametric procedures, with a brief explanation of the findings provided. Each research question is dealt with separately.

4.2 Children's Choice of Subject Matter.

The first research question asked; What do children draw when offered a free choice of subject in the context of the classroom?

A frequency table showing children's choice of subject matter was most appropriate for displaying the results relating to Research Question 1. A number of broad categories was created by the researcher after studying the drawings, and each drawing was allocated to one of these categories, according to its dominant feature. (See Table 1.)

Table 1. Children's Choice of Subject Matter.

Subject	Frequency
Game	5
Animals and Landscapes	4
People and Buildings	4
People	3
Flowers	2
Landscapes	2
Animals	2
Animals and Buildings	2
Animals and People	1

From Table 1, it can be seen that the category of "games" was the most popular subject matter among the group of children studied. For the purpose of analysis, games were taken to refer to those drawings which were based on the computer game format. The action in these drawings occurred on a two-dimensional plane, with various levels, and movement vertically and horizontally across these levels (e.g. Appendix C, Interview/drawing 20). The high frequency of this subject was due to the fact that five boys sitting in the same group all produced drawings based on the computer game format. Animals and landscapes, perhaps more traditional subject matter, were the next most popular choice in the children's drawings (e.g. Appendix C, Interview/drawing 14).

The drawings were also analysed with the aim of discovering whether there were any differences in subject matter which could be attributed to gender. Table 2 identifies the subjects represented in the drawings of the boys and of the girls. The results show that, with the exception of the drawings based on computer games, there was similarity

between the subject matter of the boys and the girls, including subjects such as landscapes, flowers, people, buildings and animals.

Table 2. Subjects in Boys' and Girls' Drawings.

Subject	Boys %	Girls %	Total %
Game	50	-	19.23
Landscapes	20	-	7.69
Animals	10	16.25	7.69
Flowers	10	22.5	11.54
People and Buildings	10	28.75	15.38
Animals and Landscapes	-	25	15.38
People	-	18.75	11.54
Animals and Buildings	-	12.5	7.69
People and Animals	-	6.25	3.85
Total	100	100	100

Table 3 refines the data shown in Table 1. The results for Table 3 were obtained by analysing the drawings and recording the number of times each of the major subjects identified from Table 1 occurred in the drawings. For example, the drawing by child 26 (Appendix C, Interview/drawing 26) was classified as a game and therefore allocated to that category in Table 1. However, this drawing also contained a drawing of a rabbit, and this was taken into account in Table 3, with the drawing being recorded as containing an animal in the subject matter. The aim in producing Table 3 was to provide a more comprehensive picture of children's choice of subject matter. It does not detail

every object portrayed in the children's pictures, merely those which were identified as most common. People, animals, flowers, buildings and landscapes, were found to be the most common objects in the subject matter of the children's drawings.

Table 3. Common Subjects in the Children's Drawings.

Total number of drawings containing -	
Animals	13
People	10
Landscapes	7
Buildings	6
Flowers	5

4.3 Influences on the Drawings.

The second research question asked; Are children influenced by popular culture, their peers, recent in-school experiences or recent out-of-school experiences?

In order to answer this question, data were collected through the analysis of the children's drawings, the children's behaviours recorded by the researcher while they were drawing (in the form of anecdotal notes) and from analysing the interviews conducted with each child. Specific questions were asked in the interview in an attempt to elicit information from the children about the possible influences on their drawings. In some cases, children replied that they did not know where they got their ideas from when asked a specific question aimed at eliciting this information but gave some hint as to their influences during the rest of the interview. Table 4 displays the frequency of certain identified influences on the children's drawings.

Table 4. Influences on Children's Drawings.

Influences	Frequency
Out-of-school experience	13
Peers	10
Popular culture	8
In-school experience	3
Other (Mother, sister)	2

The anecdotal notes provided information for the researcher and were especially helpful when attempting to identify peer influence on the drawings. Child 15 and Child 19 were sitting next to each other during the drawing session. As evidenced by the interview comments (Appendix C, Interview/drawings 15, 19) neither child indicated that there was any peer influence and the comments they made suggested that they both decided to draw lizards based on previous personal experiences. From the anecdotal notes however, it was clear that Child 15 was "borrowing" or copying the image drawn by Child 19. A similar situation occurred with five boys sitting in the same group, who all produced drawings based on computer game formats. In this group of children; 17, 20, 22, 25 and 26 (Appendix C, Interview/drawings 17, 20, 22, 25, 26), only child 20 mentioned peers as being an influence on his drawings. He did not specifically mention peer influence as an influence on the particular drawing he produced for the study, although it was clear from remarks recorded in the anecdotal notes that peer influence was a significant factor in the production of the drawing.

The data for Table 5 were collected from the interview. A question was asked, "Where do you think you get your ideas from?" A variety of responses was obtained and sometimes, as stated previously, children would answer this question during the course

of the interview, or in response to another question. The aim of producing this table was to discover the influences which children believed impacted on their drawings, to see whether their responses were similar to the factors the researcher identified as influencing the drawings produced in the study. As can be seen in Table 5, children identified the four major influences the researcher expected to find: out-of-school experiences, peer influence, popular culture and in-school experiences. However, from the results of Table 5, it seems that parents and siblings are also extremely important influences on children's drawings, with 14 children identifying either parents or siblings as being an influence on their drawings.

Table 5. Children's Perceived Influences on Drawings.

Influences	Frequency
Out-of school experience	10
Parents	8
Sibling/s	6
Peers	6
Popular culture	3
Books	3
In-school experience	2
Other graphic images	1

4.4 Drawing Types.

Question 4 asked; Does the application of Duncum's (1992) model of drawing types reveal gender as a determining factor in the drawings produced by eight year old students?

Three clustered bar graphs are presented here. The graphs show the percentage comparison between the scores of the boys and the girls on each of the three dimensions of Duncum's (1992) model of spontaneous drawing types. From the results of the graphs, a number of trends are apparent. Figure 3 shows that the boys tended to produce strong narratives, while girls produced more separate object drawings. An example of the comments made about weakly Narrative drawings (separate object) is provided by child 15 (Appendix C, Interview/drawing 15). "Um, it's just a piece of, this is the log, and this is the lizard and he's just like crawling along." This can be contrasted with comments offered by child 25, who produced a strongly Narrative drawing:

Well, the idea is to get a key to open up doors, and all the black spots are the secret doors, and if you enter some you, you get, there's traps, and you can get hurt ... And that key can blow up any enemy except for spikes, and the idea is to make it from the start down to the finish without being hurt, and there is lava, dragons, monsters, bullets, spikes and bombs, and there's a treasure chest which you can go down that one or over there ... and that key helps you to go through there to get through that door and finish it, and you're only allowed to go one time across the bridge, and if you go in there you die instantly and that's all.

Figure 4 shows that the boys produced drawings which were strongly fictional, while the girls produced drawings which were either strongly fictional or strongly factual. The results from Figure 5 shows that boys also used less borrowed images in their drawings while the girls drawings produced a fairly even spread of scores in this category, with perhaps a tendency towards using more borrowed images in their drawings.

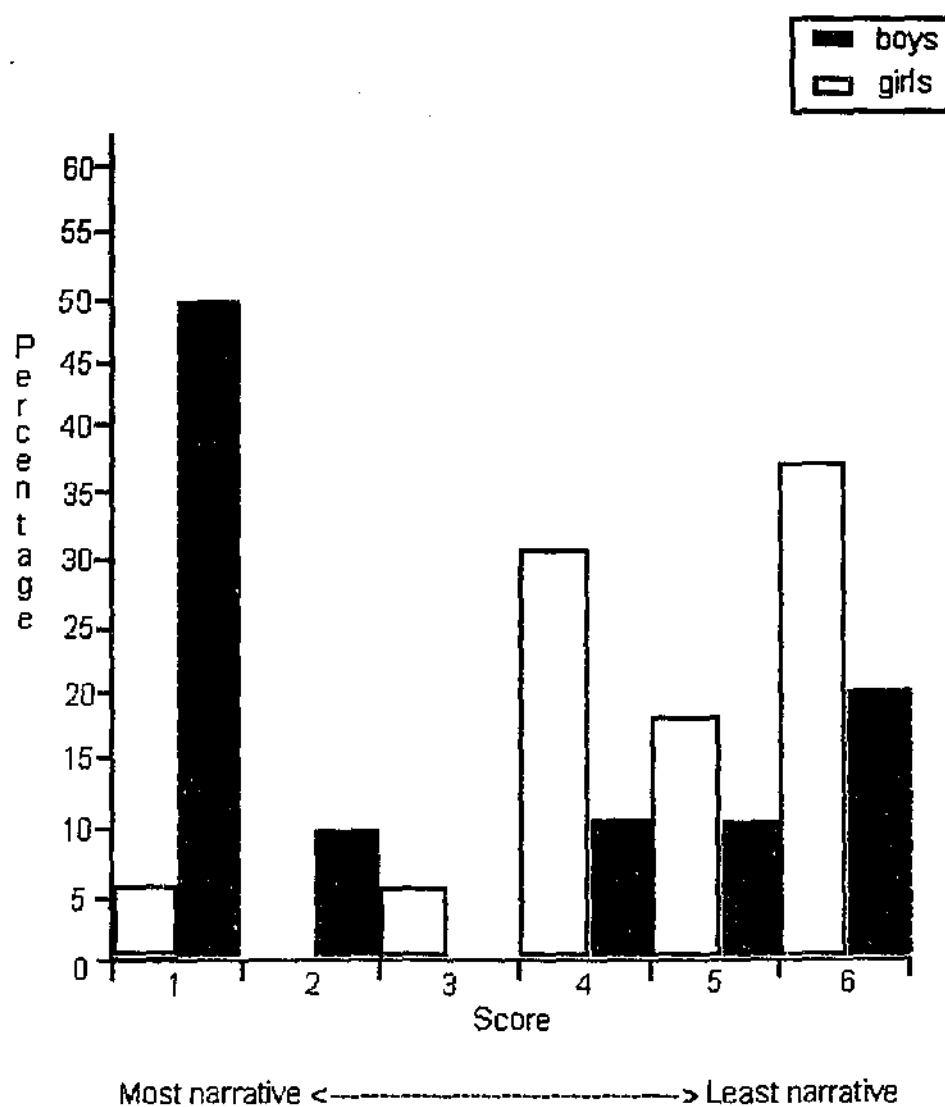


Figure 3. Percentage Comparison of Boys' and Girls' Scores - Narrative.

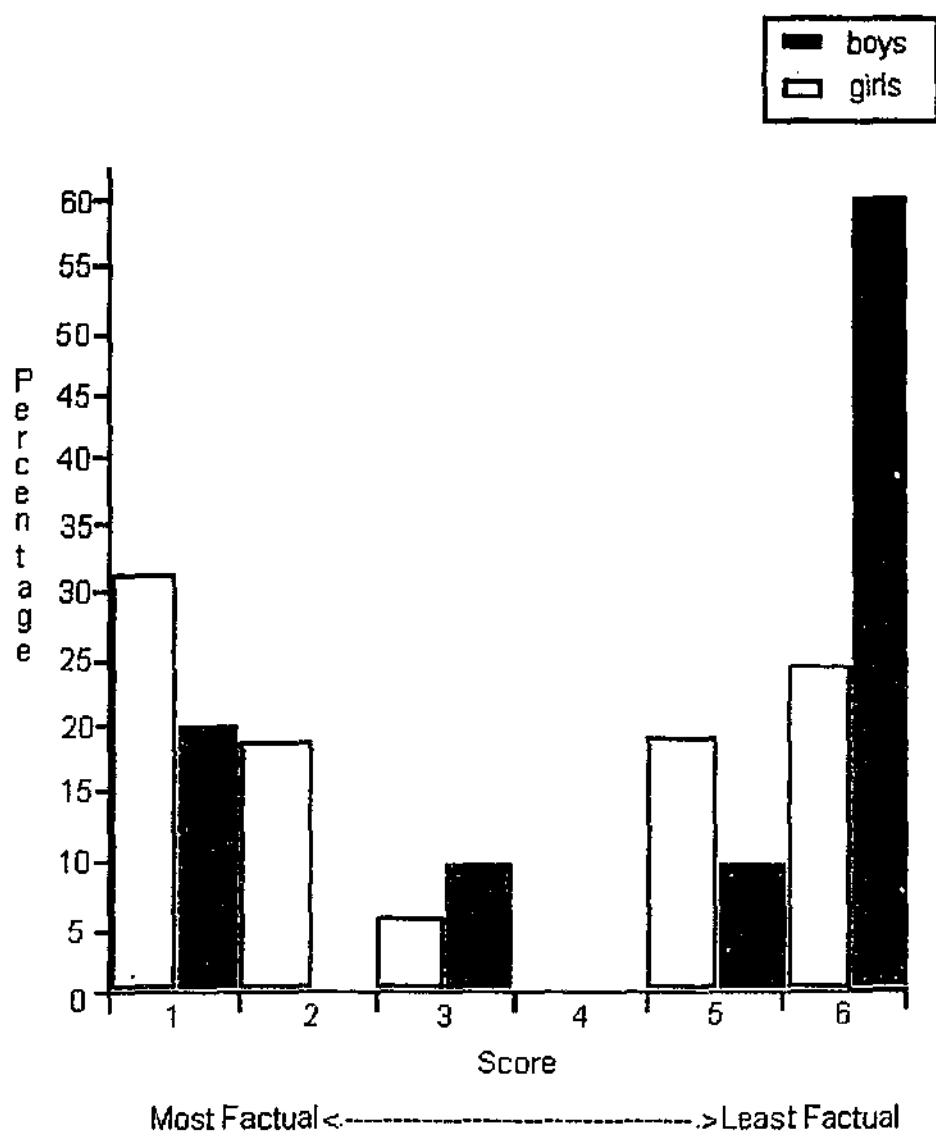


Figure 4. Percentage Comparison of Boys' and Girls' Scores - Factual.

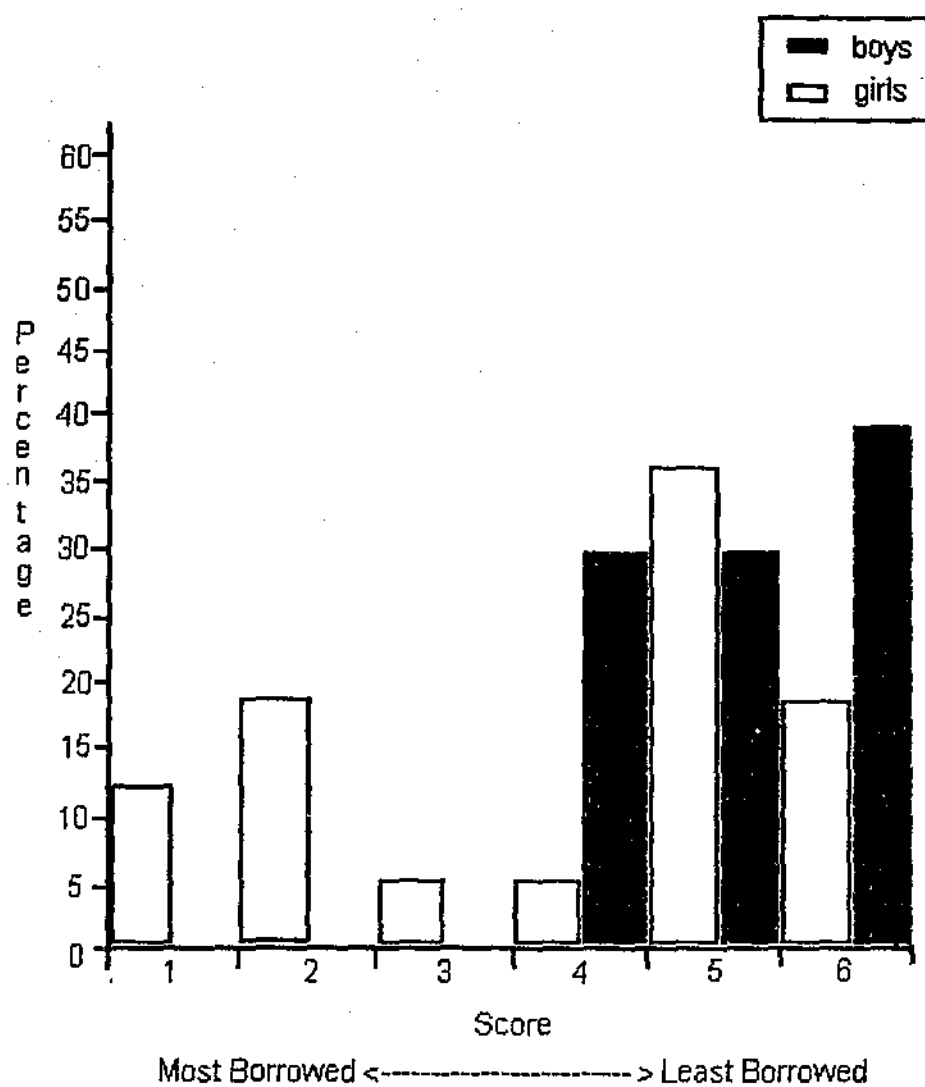


Figure 5. Percentage Comparison of Boys' and Girls' Scores - Borrowed.

Non-parametric tests were conducted on the scores of the tests to determine any statistically significant differences between the scores of the boys and the girls in any of the three dimensions of Duncum's model of spontaneous drawing types: Narrative, Factual and Borrowed. The Mann-Whitney U test was used because the data was not of interval level, there was not an equal number of boys and girls, and there was not a large enough sample to be able to use a parametric procedure such as a t-test. From the results of the Mann-Whitney U test it can be seen that there was no statistically significant difference between the drawings of the boys and the girls in the Borrowed or the Factual variables. However, a statistically significant difference was discovered in the Narrative variable ($p=0.0063$). Using these results in combination with the results from Figure 3, it can be seen that boys are producing more Narrative drawings than girls, with 50% of the boys producing Narrative drawings with a score of 1 (most narrative). This may be contrasted with the girls' scores, with only 12.5% of girls producing Narrative drawings with a score of 1, 2 or 3.

Table 6. Mann-Whitney U-Test Results.

Variable	Boys	Median	Girls	2-Tailed P
Borrowed by Gender	5.00		5.00	0.1338
Narrative by Gender	1.50		5.00	0.0063
Factual by Gender	6.00		2.50	0.1238

Table 7 shows the possible combinations of drawing types, and displays a breakdown of the number of boys and girls who produced each drawing type. From the results of Table 7 it can be seen that of the eight combinations of drawings which could be created, only five were produced. Those drawing types not produced were; the Borrowed, Factual, Narrative, the Borrowed, Fictional, Narrative and the Self-generated, Factual, Narrative. It was found that the self-generated drawings were popular with both

boys and girls, with boys favouring the Self-generated, Fictional, Narrative drawing types, and the girls the Self-generated, Fictional, Separate Object drawing type.

Table 7. Types of Spontaneous Drawings - By Sex.

Drawing Type	Girls%	Boys%
Self-generated, Fictional, Separate object.	31.25	10
Self-generated, Factual, Separate object.	25	30
Self-generated, Fictional, Narrative.	18.75	60
Self-generated, Factual, Narrative.	-	-
Borrowed, Factual, Separate object.	18.75	-
Borrowed, Fictional, Separate object	6.25	-
Borrowed, Factual, Narrative.	-	-
Borrowed, Fictional, Narrative.	-	-

4.5 Summary of Chapter

Findings showed that the most popular subjects in children's drawings were games (based on the computer game format), animals, people, landscapes, buildings and flowers. With the exception of the games there were similarities in the drawing subjects chosen by both boys and girls.

Out-of-school (personal) experiences were found to be the major influence on children's drawings, followed by peer influence, popular culture, in-school experiences and the influence of family members. Children's perceived influences were similar, with family members cited by children as being the most important influence on their drawings,

followed by personal experiences, peer influence, popular culture, school experiences, books and other graphic forms.

A significant difference was found between the Narrative element in the drawings of the boys and the girls, but no significant difference was found between boys' and girls' drawings in the Borrowed or Factual dimensions of the drawings. The most popular drawing type produced by the girls was the Self-generated, Fictional, Separate object, and the most popular drawing type amongst the boys was the Self-generated, Fictional, Narrative.

Chapter 5

DISCUSSION

5.1 Overview of Chapter.

Chapter 5 presents a discussion of the results outlined in the previous chapter. Drawings which were identified as interesting or unusual cases are discussed, and Duncum's (1992) model of spontaneous drawing types is evaluated for its worth as an instrument for classifying children's drawings into drawing types. The research methods used in this study are also evaluated.

5.2 Subject Matter.

The findings of this study showed that the most popular category of subject matter was games, based on the computer game format. This subject is not reported in the literature, probably because the literature concerning children's subject preferences in drawing is based on information generated from studies conducted over 10 years ago. When the children who had produced the game drawings were questioned they confirmed that they had a computer game at home, showing that this form of popular culture has increasing influence on contemporary children. Peer influence is also thought to have had an influence on the production of these drawings, as the children who produced the drawings based on the computer game format were all sitting together. Other popular subjects included people, animals, houses and buildings. Overall, apart from the computer games, the children's subject matter preferences confirmed findings from other studies such as those reported by McNiff (1982), Duncum (1992) and Wilson and Wilson (1982) who found that common subject matter in children's drawings included the human figure, animals and landscapes.

Most of the drawings produced by the girls conformed to the common subject preferences outlined in the literature, such as houses, people, animals and flowers. One exception was Child 7 (Appendix C, Interview/drawing 7), who drew a picture of Superman with a man falling off a building in the background. As reported in the review of literature, Wilson and Wilson's (1982) studies of children's drawings revealed that subjects from popular culture, such as superheroes, were more commonly found in the drawings of boys. The researchers believed that this was due to the fact that boys were more influenced by popular culture than girls. Child 7's picture also contains elements of conflict, with a suggestion that Superman may not rescue the falling man in time. Conflict, according to McNiff (1982) is another factor associated with the drawings of boys, whereas the drawings produced by girls are usually reported as being peaceful and tranquil, depicting "benign animals, bugs and blooms" (Wilson & Wilson, 1982, p. 163). Child 14 (Appendix C, Interview/drawing 14), also drew a picture with elements of conflict, which could be classified as slightly unusual subject matter for a girl. Child 14 drew a pack of wolves, with wolves chasing mice and wolves which had caught mice, showing evidence of a form of conflict.

It is difficult to generalize about the subject matter in the boys' drawings because of the small number of boys in the sample and because five of the boys were obviously influenced by one another. However, from the results obtained it is noteworthy that there was not the variety of subject matter that might have been predicted from the results of previous studies. McNiff's (1982) research into subject matter found that popular subjects in boys' drawings included drawings containing elements of conflict and power, sea animals, exotic places, outer space and sports. The only subject found in this study was the element of conflict which was evident in the boys' drawings based on the computer game format. However, the other drawings depicted flowers, landscapes, and people, which were peaceful with little evidence of conflict. Again, this finding does not confirm McNiff's research whose results led her to state that "boys' drawings exemplify action in every way" (1982, p. 285).

It was interesting to note that some of the girls' drawings (as previously discussed) contained elements of conflict. Perhaps this could be due to the fact that boys and girls are treated more equally in today's society than they were 10 years ago, at the time of McNiff's research, and so are exposed to similar experiences. The push for gender equality in schools may also mean that girls feel more comfortable producing subjects which are not identified as traditional, gender stereotypical subject matter.

Unexpectedly, there was a basic similarity found in the subject matter chosen by the boys and the girls, with the exception of the drawings of the games. This does not agree with the literature on gender differences in the subject matter of children's drawings. From the literature, it was predicted that boys and girls of this age-group would produce vastly different subject matter. Results showed that the girls mostly produced predictable subject matter such as houses, horses, and flowers, while the boys' drawings did not altogether conform to the findings reported in the literature. Perhaps the small number of boys in the sample would account for this discrepancy and had more boys been included in the sample, a greater variety of subject matter might have been apparent. Alternatively, as suggested previously, a possible decrease in the gender gap may account for this finding.

An interesting case of unusual subject matter was Child 23 (male), who drew an abstract picture containing flowers, a huge eye, a moon, and half a planet (Appendix C, Interview/drawing 23). This may be considered unusual as the literature reports a growing fascination with children of this age for depicting reality, and trying to obtain a realistic representation of objects (Gardner, 1980). This child obviously attempted to portray the objects in the picture in a representational manner but the composition and the context in which the objects are placed are far removed from "reality". The subject matter, with the portrayal of the flowers is also unusual, as the literature reports that flowers are more commonly found in the drawings of girls (Wilson & Wilson, 1982).

However, as Feinburg (1977) wrote, "Individuality dominates" (p. 63) in children's drawings. Although categories for subject matter may be created, children are unique and there will always be individuals who produce something unusual and different from the others. Although the researcher attempted to discover why the child had produced this abstract arrangement, no "satisfactory" reason was established, and so it is not known why the child decided to produce this drawing.

5.3 Influences on Children's Drawings.

It was interesting to note that there was not as much evidence of the influence of popular culture as might be expected in children's drawings, given the increasingly pervasive nature of the mass media. The growing variety of popular culture was not reflected in the children's drawings. Computer games, television, films, baseball and basketball cards, and comic books are very popular among children today, and so were predicted influences on children's drawings in this study. However, half of the drawings by the boys were directly influenced by popular culture (computer games). Again, as Wilson and Wilson (1982) stated, boys are more influenced by the media than girls and so the lack of popular culture in the subject matter of the drawings may be as a result of the small number of boys in the sample.

The literature stated that personal, or out-of-school experiences were an important influence on children's drawings. This was confirmed in the study, with results showing that personal experiences were the major influence on children's drawings. A variety of these personal influences impacted on the children's drawings. These ranged from excursions/holidays and home experiences, to children's everyday informal experiences with the environment.

Peer influence was identified as the second most important influence on the children's drawings. This was probably due to the fact that because of the classroom setting the

children were surrounded by their peers. It was difficult to determine to what extent the children were influenced by their peers. Did they coincidentally draw a similar subject in a different way, or were they influenced by their peers? It was interesting to note that children did not mention peer influence as having affected their drawings. This may be due to the fact that schools discourage copying in other subjects, an explanation suggested by a quote from Child 12 (Appendix C, Interview/drawing 12), "I've seen things like that, but um, sometimes I copy off people but not often any more, because if you copy off a person they'll just mark it wrong, and then you're not trying for yourself." This child was the only one who stated that she was influenced by her peers in her drawing, when she further stated, "And, um, I told a couple of people for some ideas, and, and I said, 'What other kind of ideas can I draw?' " Another child (Appendix C, Interview/drawing 20) said that he got ideas for drawings from his friends. Although it was evident that there was peer influence in the drawings produced for the study, the child did not identify it as being an influence. It is possible that the children may have been unaware of the role that their peers play in influencing their drawings.

An interesting finding from the study was the influence of the family on children's drawings, with mothers and siblings mentioned by the children as being particularly dominant influences. Child 24 (Appendix C, Interview/drawing 24), when asked why he decided to draw a particular subject replied, "I thought my Mum would like it." Many other children said that their mothers gave them ideas for drawings and were the people most likely to take an interest in their art-work. Siblings were more often identified as providing models for drawing skills, rather than ideas. An example of this is provided by Child 16 (Appendix C, Interview/drawing 16), who stated, "My sister, she copies off squirrels, I was going to draw one in a tree ... she even draws a fox, I can't draw that though, because that wouldn't be on a farm." Families are acknowledged as being the most important influence on children's lives, and therefore it is only logical to expect that they will also be an important influence on children's drawings. This subject has not really been explored in the literature, except by Wilson and Wilson (1982), who wrote a

book for teachers and parents, entitled Teaching Children to Draw, which gives practical advice and tips designed to encourage and improve children's spontaneous drawings.

It was interesting to discover the children's perceptions of the factors that influenced their drawings. It can be seen from the results that children's perceived influences were almost the same as those influences identified by the researcher as impacting on the drawings produced in the study, which supports the assumption that personal/out-of-school experiences, peer influence, popular culture, and school experiences, with the addition of family influence, are the major factors which affect children and their drawings.

From the results concerning influences on children's drawings, the researcher concluded that the classroom context may have affected the children's drawings. The children were surrounded by their peers and as a result of this influence, they might have produced drawings which were different to those which they might have produced had they drawn spontaneously in a different setting.

5.4 Drawing Types.

There were no significant differences found between boys and girls in the Borrowed or Factual dimensions of drawing types, although a significant difference was found between boys and girls in the Narrative dimension, with boys producing more Narrative drawing types than girls. Because a small sample size and non-parametric procedures were used, the fact that a difference was found between the two groups in the Narrative dimension means that the difference must have been quite substantial. The fact that there was no significant difference found between boys and girls in the other two dimensions may mean that either there was no significant difference between boys and girls in this dimension, or there was a difference but the test used was not sensitive enough to pick up that difference.

The fact that there was a significant difference between boys and girls found in the Narrative dimension is interesting, because it does not support the claims of Wilson and Wilson (1982), who claimed that nearly all drawings were used for the purpose of creating a narrative. Gardner (1982) also expressed the view that girls were more likely to draw for the purpose of creating a narrative, or using their drawings as a back-drop for a narrative, whereas boys were more likely to produce drawings which had less of a narrative element as they endeavoured to show all the action on the page.

There were no Self-generated, Factual, Narratives created in the children's drawings, which was surprising considering the important role of personal experiences on the children and their drawings. Personal experience was identified as the most important influence, and was also perceived by children as being an important influence on their drawings. A Self-generated, Factual, Narrative drawing would be a drawing used to tell a story based on a personal experience, a drawing type which the researcher expected the children to produce. The most popular drawing types amongst the girls and the boys contained both the Self-generated and the Fictional dimensions, with the difference between the two being that the girls' drawings were Separate Object drawings, and the boys' drawings contained a Narrative element.

5.5 Evaluation of Duncum's Model.

One of the aims of the study was to determine whether or not Duncum's (1992) model of spontaneous drawing types was a comprehensive framework of children's unsolicited drawing types and whether or not it provided a useful instrument for the classification of children's drawings.

When first considering Duncum's model for use in this study, it was evident that there was a deficiency in the method used for the classification of the drawings. The model

presented a dichotomy consisting of three dimensions; Narrative/Separate Object, Borrowed/Self-generated, and Factual/Fictional. It was suggested by Duncum (1992) that the drawings may be a combination of types, for example, a Narrative, Borrowed, Fictional image. However, there was no provision made in the model for drawings which contained both borrowed and self-generated images, images based on a combination of fantasy and reality, or drawings containing different degrees of narrative. It was decided that a continuum should be established on each of these dimensions, to determine to what degree each child's drawing was Factual, Narrative and Borrowed. A six-point scale was constructed on each axis, which meant that each of these points needed to be defined. (See Scoring Procedure for Drawings, p. 50)

In order to define each of these categories, some major decisions had to be made. Duncum did not outline whether common schema, such as puffy clouds, birds and houses (Appendix C) should be classified as borrowed. Undoubtedly, children would have seen these stylised representations of common objects, a sort of short-hand way of drawing objects common in children's drawings. However, it has been suggested that this is a drawing stage which all children pass through (Gardner, 1980), so perhaps these common schema should be regarded as self-generated. Duncum (1992) stated that borrowed images are those which are "more or less consciously and directly borrowed or copied from other sources" (p. 6), and so it was decided that as children had probably copied these symbols from somewhere at some stage, they should be regarded as borrowed images in the present study.

Another problem identified was that Duncum did not make provision in his model for drawings which portray a collection of objects, such as a farm yard scene, where there is no narrative offered by the child, but there is suggestion of a narrative by virtue of what is happening in the picture. This type of picture with connections and relationships between the objects, cannot be labelled as separate object or narrative, as it does not meet the requirements of either category. Duncum simply stated, "drawings may tell a

story, or part of a story [narrative], or they may represent objects [separate object]" (1992, p. 3). In order to overcome this problem, drawings such as that produced by Child 16 (Appendix C, Interview/drawing 16) were given a score of 5, and classified as weakly Narrative.

Another decision needed to be made concerning the narrative connected with the drawing. Duncum (1985; 1992) is adamant about the importance of consulting children about the drawing they have produced, to ensure that a possible narrative dimension is not overlooked. However, there is a potential problem relating to the identification of the narrative aspect of children's drawings. Through questioning, the researcher might influence the child, causing him/her to create a story which was not what they were consciously thinking when producing the drawing. It was decided that the interview data should provide supplementary information to the drawings which were the primary source of information.

Overall, Duncum's model provided a basic framework for the classification of children's drawings. It was found to be a fairly comprehensive model of children's drawing types, as there were no drawing types discovered in the study which were not included in the model. A possible exception, or qualification, was the drawing type which has relationships between separate objects but where the child does not offer a narrative. Duncum's model was found to be a helpful instrument for the classification of the children's drawings but needed clarification on several points. This was perhaps due to the fact that the model was probably not intended to be tested or actually used for classifying children's drawing types, and was provided by Duncum as a tool for presenting his argument about the different types of drawings which children may produce.

5.6 Evaluation and Limitations of Methodology.

The methodology used in this study yielded all the information necessary for answering the research questions and so was considered to be successful. One improvement may have been to conduct the sessions over three drawing sessions involving ten children at each time (as set out in the original proposal), rather than involving all the children in only one session, which would mean that there was not such a substantial time span (2.5 hours) between interviewing the first child and the last child. As previously explained, conducting the study over only one session was a constraint imposed by the school and so could not be avoided.

Another limitation connected with the methodology was that an equal number of boys and girls was not available, so parametric procedures could not be carried out. Parametric procedures may have established a significant difference between boys and girls in the Borrowed and Factual dimensions. A larger sample would also be an improvement, as results would be more generalizable to other groups.

A third limitation was that the drawing sessions were conducted under less than spontaneous conditions. True spontaneous drawings would be very difficult to collect and analyse, which was the justification for producing the drawings in the school context. Different settings would almost certainly mean that different subject matter would be produced.

5.7 Summary of Chapter.

The high incidence of games as a subject could be attributed to the increasing popularity of computer games amongst children today. There is no mention of this subject in the literature, probably due to the fact that the studies relating to the subject matter of children's drawings are over 10 years old and, as stated by Lark-Horovitz et al (1973) children have a fascination with anything new and modern. However, the other subject matter produced by the children agreed with findings from previous studies.

There was less conflict evident in the boys' drawings than was predicted from the results of previous studies, which was possibly as a result of the small sample size. Conflict was evident in some of the girls' drawings, and it was suggested that this may be due to the fact that boys and girls are treated more equally in today's society, which may mean that the gender gap is decreasing. There was not as much evidence of the influence of popular culture as might be expected, which may also be attributed to the fact that there was a small number of boys in the sample. As boys are believed to be more influenced by the media (Wilson & Wilson, 1982) a larger sample might have confirmed this belief.

Surprisingly, a significant difference was found between the boys' and girls' drawings in the Narrative dimension, a finding which is not supported by the literature. The most popular drawing types amongst the boys and the girls both contained Self-Generated, Fictional images.

Chapter 6

CONCLUSION

6.1 Overview of Chapter.

This Chapter presents recommendations for future research which were generated from the results of this study. A concluding summary of the study is also provided, which outlines the main findings of the study .

6.2 Recommendations for Further Research.

This study generated some unexpected results. There was evidence of non-traditional subject matter in both boys' and girls' drawings and there was not the difference in subject matter between boys and girls which was outlined in the literature. There was a significant difference in the incidence of narrative drawings between boys and girls with boys, rather than girls, tending to use their drawings for narrative purposes. This brings into question some of the assertions made by Wilson and Wilson (1982) and Gardner (1982) concerning the role of narrative in children's drawings.

It is recommended in future research that the findings of this study could be tested through replication, using a larger sample size. There were some interesting results generated by this study, but the small sample means that little generalization can be made regarding the applicability of these findings to other situations and contexts.

The changing subject matter as evidenced by the popularity of the games could be an important area for investigation. On the other hand however, there is also the question of why children depict subjects in 1994, which were reported as being popular in studies

conducted over one hundred years ago. Children in today's society are exposed to totally different life-styles and experiences and yet some depict similar subject matter to those reported in the early studies. Some subject matter, such as houses and animals, are still popular among children because they are as important in children's lives today as at the time of the early studies. However, the researcher expected the children's drawings to reflect more of the varied experiences to which children are exposed in today's society.

The possibility of the decrease in the gender gap as evidenced by children's drawings is also a possible area of study. The incidence of conflict in the girls' drawings and lack of it in the boys drawings, coupled with the non-traditional subject matter produced by both sexes may also be an interesting area for investigation.

6.3 Concluding Statement.

The aims of this study were to investigate children's choice of subject matter when drawing, the influences which affected their drawings, and whether or not gender was a factor contributing to the production of different drawing types (as identified by Duncum's 1992 model of spontaneous drawing types). Another aim was to discover whether or not Duncum's model provided a comprehensive, accurate framework for the classification of children's drawing types.

The results of this study showed that there was a change in the subject matter of children's drawings, as evidenced by both the drawings based on computer games (new subject matter) and the fact that girls and boys produced drawings which, according to the literature, were unusual for their gender (non-traditional subject matter). There were also similarities in the subject matter as depicted by the boys and the girls, which again could be considered unusual considering the results of previous studies, but as previously noted, the sample may have been atypical.

The influences affecting children's drawings were investigated, and findings confirmed the researcher's predictions that personal experiences, peer influence, popular culture and school experiences were the most important influences on children's drawings. The influences cited by children as those which affected their drawings were similar to those identified in the literature as impacting on children's drawings. There was one major difference however; the children perceived the family as being the major influence on their drawings.

A statistically significant result between boys' and girls' drawings was recorded in the Narrative dimension. As previously stated, the small sample size and the non-parametric procedures used meant that the difference between boys and girls in the Narrative dimension was quite substantial. Duncum's (1992) model was used for the classification of the drawing types, and was found to be a fairly comprehensive model of drawing types. There were modifications and adjustments which needed to be made to the model in order for it to be practical, but no fundamental flaws were discovered.

From the results of this study it can be seen that this statement by Duncum (1985) is very pertinent:

We need to refocus our attention, to consider children's drawings not as an isolated, art-like phenomenon, but to see them, as Raymond Williams (1977) says of all cultural products, as constitutive of lived experience ... We need to read children's drawings in the context of the children's lives (p. 44f.).

It is important for teachers and parents to realise that children do not live in a vacuum, that the experiences they have in their everyday lives will influence or affect them in some way. If teachers identify and utilise the influences and interests of the children in their classrooms, more effective teaching may occur as the children will be interested

and the teaching and learning will build on their experiences. Looking at children's drawings, and talking about them with the children who have produced them is one way of discovering these influences.

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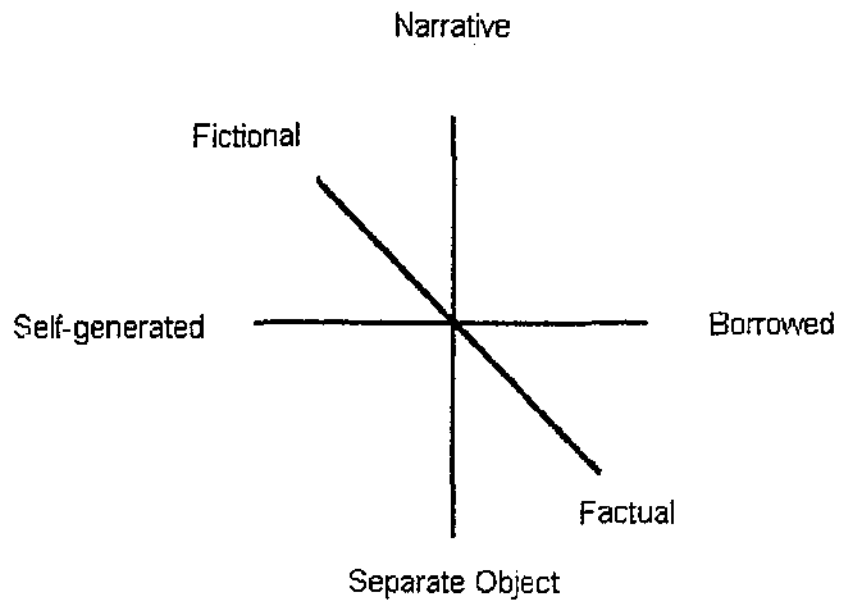
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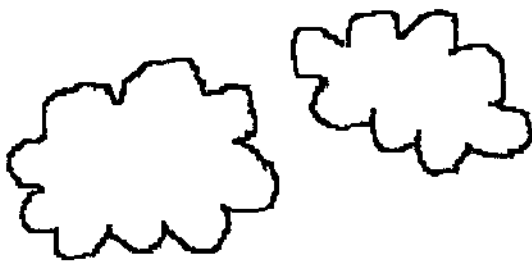
Appendix A

Duncum's (1993) Grid of Spontaneous Drawing Types.

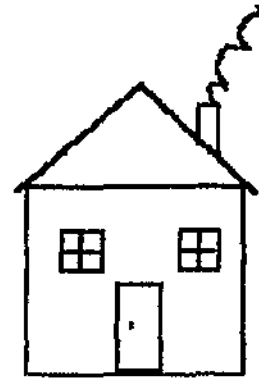


Examples of Common Schema.

These are examples of subjects commonly found in children's drawings, usually similar in style.



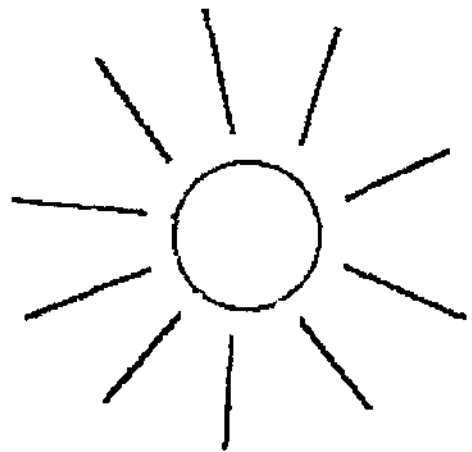
Fluffy clouds



Standard house



Flying birds



Sun

Appendix B

Dear Principal,

I am a Bachelor of Education (Honours) student at Edith Cowan University. I am conducting research into children's drawing for my thesis. I would like to arrange an interview with you to discuss the possibility of collecting my data from your school.

I would be conducting the research on one grade three class, with a near equal balance of boys and girls. The procedure would be conducted over one session. The children would each complete one drawing of a subject of their choice, and a short interview (3 - 7 minutes), would be conducted with each child to determine the influence which have affected his/her drawing.

The results will be used to determine influences on children's choice of subject matter. The drawings will also be analysed, to classify them into various drawing types and to discover whether gender is a determining factor in the subject matter of the drawings produced.

I will contact you in the next week to arrange an interview to discuss the possibility of conducting my research in your school. Thanking you in anticipation.

Yours sincerely,

Stella Clark

Form of Disclosure and Informed Consent

The main purpose of this study is to investigate;

1. What children draw.
2. Influences on children's art work.
3. Whether gender influences types of drawings produced (as identified by Duncum, 1990).

The participants in this study will be one class of year three (eight year old) students. The procedures to be followed will include children completing a drawing of their choice, and participating in an individual interview.

This study should be of benefit to teachers, as an analysis of social influences (including gender) on children's art will provide an insight into children's motivations in producing drawings, help teachers understand children's perceptions of the world, and discover the influences which have affected, and continue to affect the children in their classroom.

Confidentiality and anonymity are guaranteed at all times. A participant will not be prejudiced in any way by their refusal to participate and should a participant wish to withdraw from the study at any time, then all data relating to the participant will be destroyed. Participants will be actively encouraged to take further interest in the study.

Any questions concerning the project entitled "Children's Drawing: Factors Influencing Choice of Subject Matter" should be addressed to Stella Clark on

Agreement

I have read the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in the study, realising that I may withdraw at any time.

I agree that the research data gathered for this study may be reported in a thesis provided that names of the participants, or any information which may identify teachers, school or children is not used.

.....
Participant

Date

.....
Researcher

Date

Appendix C

Interview Questions

What can you tell me about your drawing?

Why did you decide to draw....?

Do you know where you get your ideas from?

Is there anyone at school, or at home that is interested in your drawings or gives you ideas for drawings?

Is there anything else you'd like to tell me about your drawing?

Sample Supplementary Questions

Have you been learning about that in school?

Is that out of your own imagination?

How did you know how to draw...?

Have you been there/seen that lately?

Interview Transcripts

The following interview transcripts are presented verbatim. Only the interviews/drawings referred to in the main body of the thesis are provided. Interviews 7 to 16 are those of the girls, while interviews 17 to 26 are the interviews conducted with the boys.

I=Interviewer

S=Student

Interview 7 (Female)

I - This looks interesting, would you like to tell me about your drawing?

S - Well, I didn't know what else to draw.

I - You didn't know what else to draw? Right, so what have you drawn?

S - I drew Superman staring at something, and he didn't know the man was falling off the building.

I - He didn't know the man was falling off the building?

S - No.

I - Oh dear! Right, so why did you decide to draw that today?

S - Umm.... It's very similar to (Indistinguishable)

I - Was it? So what made you think of that?

S - (pause) I wanted to put some funny bits in, so I drew him.

I - Drew the man falling off? (Yes) Right. So have you seen any Supermans anywhere lately?

S - Yeah. Yeah, I've seen it on TV, on the weekend I watch "Lois and Clark."□

I - Right, so is that why you decided to draw Superman, because of "Lois and Clark" was it? (nods) Great. So where else do you get your ideas for drawing from?

S - Umm... I just made them up in my head.

I - Right, so they're usually out of your own imagination?

S - Yeah.

I - Are they. Is there anyone at home or school that gives you ideas for drawing?

S - My mum's an artist.

I - Oh, is she? So does she give you ideas?

S - Yep.

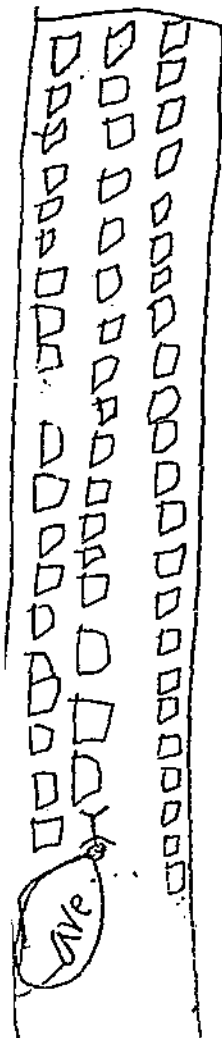
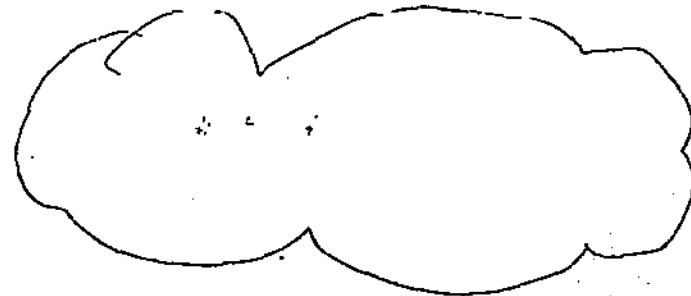
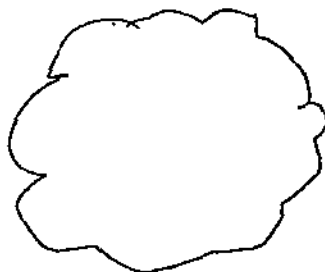
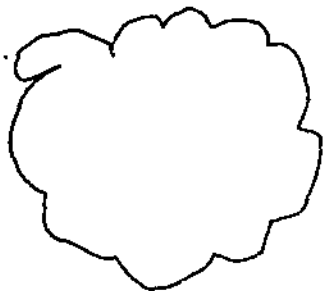
I - She does. Great. Right, so is that one out of your own imagination is it?

S - Yes.

I - It is except, after seeing "Lois and Clark". OK, is there anything else you'd like to tell

me about your drawing?

S- No



red "S"
on shirt

Interview 12 (Female)

I - Right, now this looks interesting, would you like to tell me about your drawing?

S - Umm, it's a house, (mmm) and I made it up myself, and there's three people, the mum and the dad, the mum and the dad, and the baby, the baby fell over and the mum's gone to get it (mmm) and they had a good sleep, and and then dad says to the mum while they were on the table they dad said, "Do you want me to go and plant some, some roses?" and mummy said, his mum said, "Yes, I think you should." And so he did. And, and I forgot to draw another picture cause I didn't have enough time.

I - Right.

S - So and they, and then they asked some people to come and put a pool in, so they did, and then, and then the mother got in, into the pool and was swimming, (mmm hmm) and that's her bathers (points) and ... and there's, it's a two-storey house, and ... that's enough.

I - Wow, that's a lot isn't it? Great. Right, so did you make that up yourself?

S - Yes, and I, I decided to make a house, so it looks nice and pretty.

I - Right, so why did you decide to draw that today?

S - Because I thought that was my favourite picture.

I - Right, so do you know where you get your ideas from to draw pictures?

S - Yes, sometimes I do, sometimes I ask people, "what should I draw?" and they say, "you should draw anything, a tree, a school, a house"...

I - Right, so what sort of people do you ask, when you ask them for ideas?

S - Umm, in my class, umm, and I drew a table there, cause then I put six chairs, cause I thought six kids were in the house, (right) and I did some stairs, that's the carpet, (mmm hmm) and, I, I forgot what that is, but the spikes are coming out because um, cause when I take that out the spikes come out from there and it looks like spiky.

I - What's the spikes for?

S - Cause when like, when you draw things, I like spikes coming out from it so it looks nice and pretty.

I - Oh. Goodness. Right, so, um, let's see. Have you seen anything like that, or is that all your own idea?

S - I've, I've seen things like that, but um sometimes I copy off people but not often any more because if you copy off a person they'll just mark it wrong, and then you're not trying for yourself.

I - Right, but did you get some good ideas off people when you saw their ideas for drawing?

S - Yep, yep.

I - Right.

S - I got some ideas.

I - Mmm hmm. So did you get any ideas off someone for this drawing?

S - Yes, a little bit. I got an idea off K (girl in the class) in the drawing. Has K had a go? (ie an interview)

I - No, not yet.

S - When is she?

I - Coming up.

S - Fourth. And um I told a couple of people for some ideas, and, and I said, "What kind of other ideas can I draw?" See, I forgot to draw my sun, (oh right) I forgot to draw a sun (mmm hmm) And um the pool is sort of blue, but I was going to put light blue, and there wasn't light blue, so I just did it dark blue ... I was going to draw some little rubbish, and she was going to dive and get the rubbish.

I - Oh right, out of the pool?

S - And put it next, to the side there. And the baby was going to put it, I mean the mother was going to put it to the side there.

I - Right.

S - And ... I was going to like draw I was going to like put, I was going to put something there, I was just going to put a little tiny house, like that (mmm hmm) a one-storey house, and I was going to, I was going to put a thing like that, but with not spikes up the thing,

like that, and just without no spikes.

I - A chimney?

S - Yeah, like a chimney.

I - Right, great.

S - And I was going to draw at the back, instead of putting my name I was going to draw a house, and Santa Claus going in (mmm) but I didn't have enough time to do that.

I - Why did you want to draw a house with Santa Claus?

S - Because I thought, I thought it would of been a good idea for them to have Christmas,

(right) so I decided that um thing so that they can have a nice Christmas, and have a nice ending at the back (oh right) so and um I was going to do that at the back...

I - So that was going to be the end of the story was it?

S - Yeah, but um when Santa Claus goes in he made a noise, and the baby woke up and went and hugged him, (oh) but Santa Claus didn't tell him the presents. I was going to put that, but I didn't have enough time, so I just drew that, I was going to draw a different picture, too at the back, like half of Santa Claus going into the chimney, and half a um, just a um stack, of little woods, for them so when the mother comes and picks it up for the fire, (right) and ... um, I got a couple of ideas from these people, just from my group I said, "Do you want me to draw the mother in the swimming pool?" and they said, "Yes, you'd better." And so I did, and, and then I looked on my next door neighbour's and just to see what ideas, but I didn't copy the ideas cause they put five kids in one bed (right) five kids, I just put three, mother, dad and baby, because baby's in the middle, dad

and mother, mother, mummy's there, daddy's there, and the baby's there. (right) I've got

another brother.

I - Oh, have you?

S - In year seven.

I - Oh, an older one.

S - Yeah, his name's V.

I - Right

S - And, aah! Are you taping me?

I - Mmm (yes)

S - Can you put it up loud?

I - Yes it is up loud.

S - But why can't I hear?

I - Because it's quiet when you're taping, you have to play it back, to be able to hear it.

S - Can you, can I can I hear it?

I - No, we haven't got enough time.

S - Please?

I - Right, so is there anything else you'd like to tell me about your drawing?

S - Yes, a little bit more.

I - OK, quickly.

S - And um, when I got my ideas, I thought of drawing the carpet, because it would of looked neater drawing a carpet because, you know how you draw the carpet it looks more

neater. Say like, say like if I was to draw like carpet there, say if I was to draw a carpet there, that's just little like that, and I would draw some little things like that

(demonstrating) and little things like that, and then I would put wool over it, so it would look nice and neat. (right) So for my stairs, I've just drawn the stairs like that because

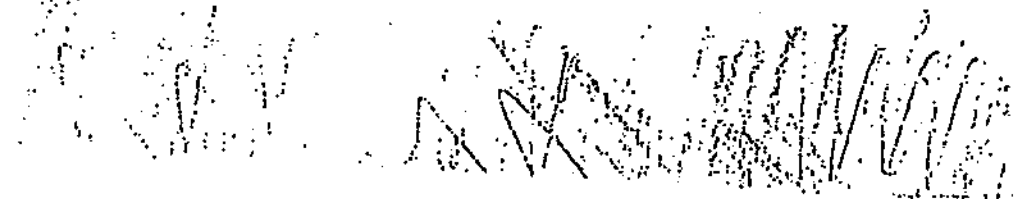
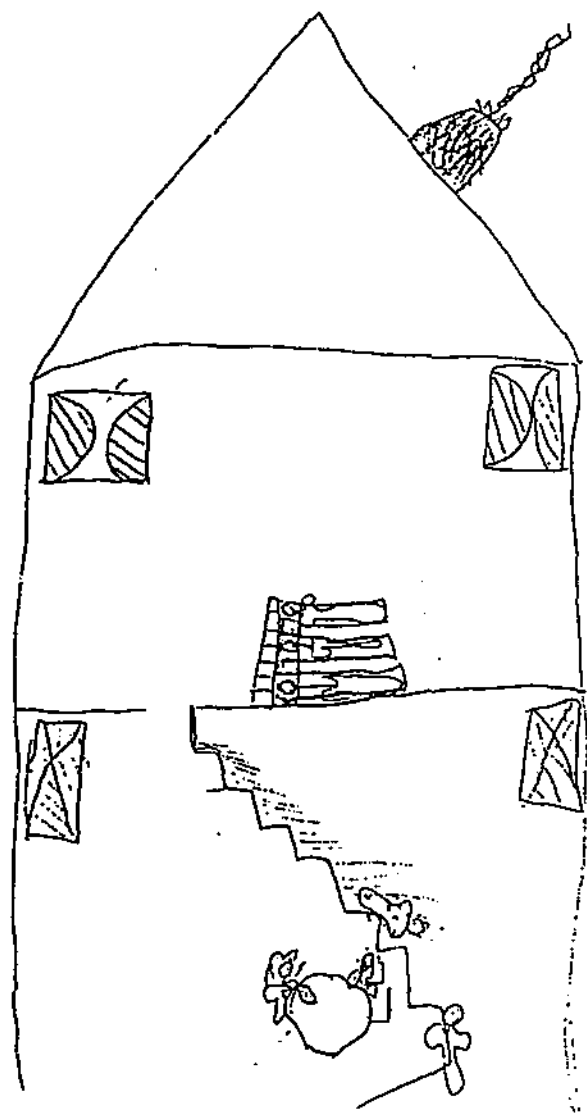
that's how you draw stairs in drawing, and then I leaded it to there, so they can easily get up to the kitchen (right) And because I wanted to draw a two-storey house is because

that (coughs) pardon me, because I wanted to draw, cause I wanted to draw three

people, because if it's one-storey, I would only draw two people, cause it doesn't look nice

with one-storey house, it looks nice with two (right) So I accidently rubbed out that

(points) cause if I rubbed out that they will fall, so I just rubbed out that so they can get on the stairs and then go down.



Interview 14 (Female)

I - OK, well this looks very interesting, would you like to tell me about your drawing?

S - Well, I uh, drawn a picture of wolves, because wolves are my favourite animal, (mmm hmm) and I'm quite good at drawing them. (pause)

I - Anything else? Would you like to tell me about what's happening in the picture?

S - Well, that one there's howling, (Right) and there's four wolf cubs there...

I - Right, and what's this?

S - That would be the wolf's den.

I - Right.

S - That one would be the mother with the cub which caught a mouse, (mmm hmm) and that one's chasing a (indistinguishable).

I - Right, lots of things going on in the picture isn't there? So why did you decide to draw wolves today?

S - Um, I like drawing animals, and wolves are my favourite animal.

I - Right, so have you seen any, like wolves anywhere lately?

S - At the Zoo on Monday.

I - So you just went to the Zoo did you? (nods) Great, and is that what gave you the idea to draw wolves, or you weren't really thinking of that?

S - (Shakes head)

I - You weren't really thinking of that.

S - Ever since I watched "White Fang" wolves have been my favourite animal.

I - Right, so you saw them on TV did you? (nods) Great. So who, um, where do you get your ideas for drawing do you know? (pause) Can you think of anything that gives you ideas for drawings?

S - (pause, shakes head)

I - No, OK. So is this one out of your own imagination, or have you seen something like this somewhere else?

S - Well, in the movie "White Fang" it's got lots of smoke, and pine-trees (mmm) and the den looks a bit like that.

I - Right, so it's a bit like the movie? Is it? (nods) But a bit out of your imagination.

Great. OK, Is there anyone at home or at school that gives you ideas for drawings?

S - (shakes head)

I - Noone?

S - Um, mum thinks um that people go back to, when they go back to life, mum thinks I would have been an Italian, a famous Italian artist.

I - Oh? Why's that?

S - I like all Italian foods, and I'm really good at drawing.

I - Great, well that's lucky isn't it? So how did you know how to draw the wolves?

S - I don't know.

I - You don't know?

S - Well, I got good at drawing wolves not long ago, when I was looking at a book on wolves, when we were doing our projects.

I - Right, oh, so you've done something about wolves at school have you?

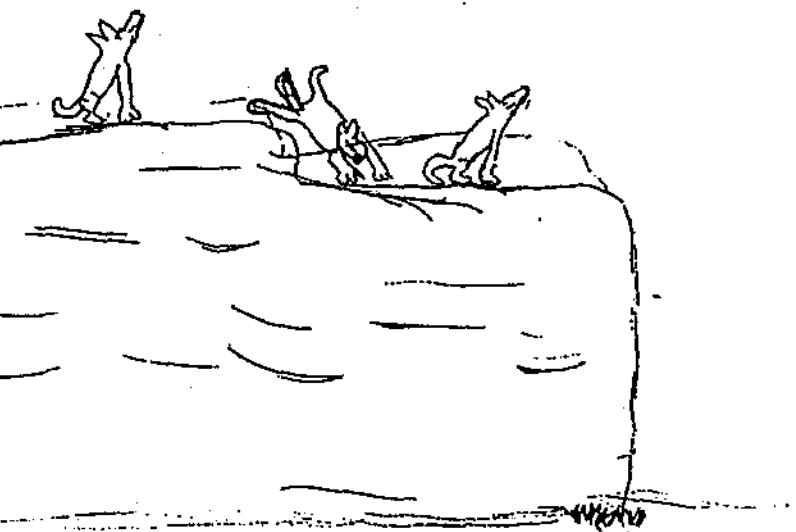
S - A few weeks ago.

I - What did you do?

S - A project on wolves (mmm hmm) Like we had to do a diagram. (right...) I just traced it and only drew in the rest (right) and then on the front cover I put, drew a wolf howling.

I - Oh so you've done a bit a school as well, drawing wolves, great. Right, was there anything else you'd like to tell me about your drawing?

S - (pause) No.



Interview 15 (Female)

I - Well this looks interesting, would you like to tell me about your drawing?

S - Um, it's just a piece of, this is the log, and this is the lizard and he's just like crawling along.

I - Great, anything else about it?

S - Mmm...I've got to finish it off.

I - Got to finish it off, right. So why did you decide to draw a lizard on a log today?

S - Because it's interesting.

I - Right, where did you get the idea from?

S - I just like lizards.

I - You like lizards do you? Right, have you been learning about them in school?

(shakes head) Have you seen them anywhere else lately? (nods) Where have you seen them?

S - (pause) I found a really big one at the end of the garden, and um, but the cats killed him, our kittens, and um when I went down to this river place, I seen this big um, lizard, and there was this goannz eating them, a lizard, too.

I - Was there? Goodness. And so um, did that give you the idea to draw a lizard, or you weren't really thinking about that?

S - I wasn't really thinking about that, I just like it.

I - You just liked it. Right, OK, we'll just wait till these people go past ... Is there anyone at home or at school that gave, gives you ideas for drawings?

S - Um, no.

I - Not really? So is that one out of your own imagination? (nods) So how did you know how to draw a lizard?

S - When I saw them, or when I go down to the water places.

I - Right, so just from that you can...

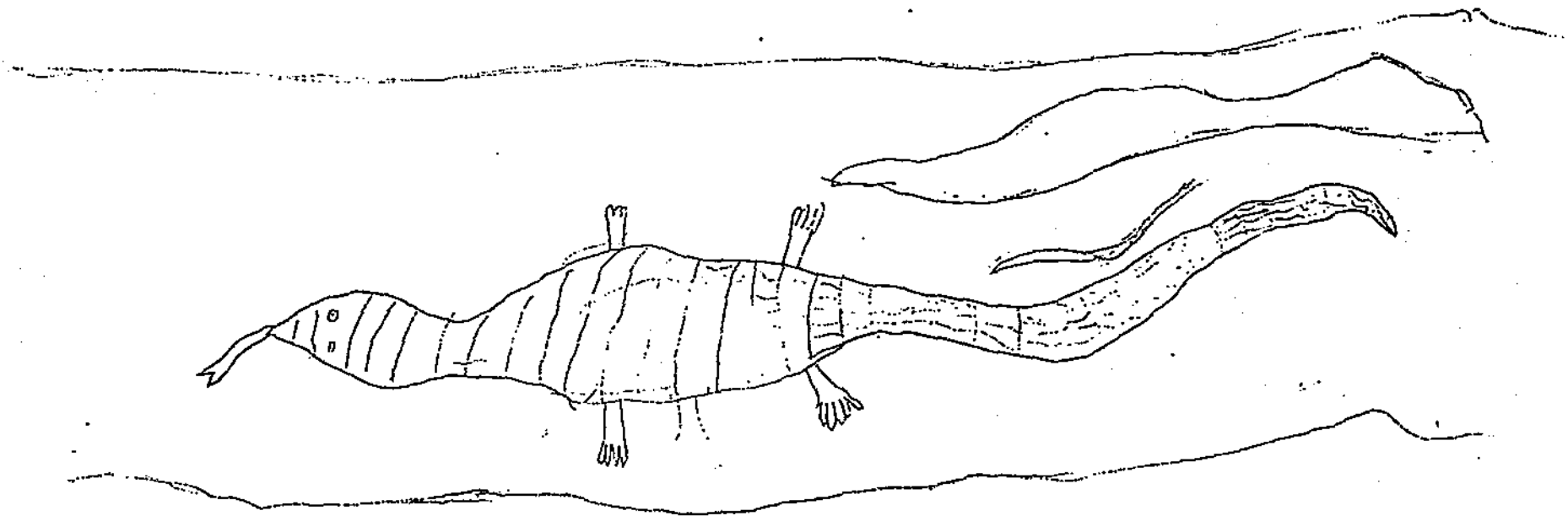
S - It gives me ideas when I went um to Bali and I, um, there was this crocodile person and he was trying to feed this crocodile, and he gave him four lizards to him.

I - To eat?

S - Yeah, he chunked them up in the air but they were already dead.

I - Were they? Great. Is there anything else that you'd like to tell me about your drawing?

S - Not really.



Interview 16 (Female)

I - OK, well this looks very interesting, would you like to tell me about your drawing?

S - Well it's a farm, (mmm hmm) and I did it because I like animals, there's a horse there, chickens there, cows there (right) I haven't finished it, I haven't finished the flowers. I was going to do more chooks next time too and a goat, and I'll draw a second thing ... and I can't remember. And I did a cow, cause I like cows, I did chickens and they're all over there, and I did a horse because I love horses.

I - Right ...

S - And I did a bird because, I did a yellow bird because I like canaries. (right) I like yellow canaries and I might be getting one when I move to my new house.

I - Mmm.

S - It's a two-storey, and ... they're bunches, of flowers. It looks like one flower, but it's bunches. That's about the house, S (girl in class) said it was a stable, but it, I don't think chooks go into doors (no) I don't think they could go upstairs onto the balcony! And they wouldn't watch television.

I - No, they wouldn't, would they? Right, so why did you decide to draw that today - a farmhouse?

S - Um ... I don't know, probably because I like to draw animals, I like to draw chooks, um, (indistinguishable), things like that.

I - Right . OK, so do you know where you get your ideas from, to draw things?

S - Um, horse-riding, mostly.

I - You get your ideas from horse-riding do you?

S - Yes. I get the horse idea from horse-riding, and I get the, I go to a Innaloo pet-shop.

I - Right, great. OK, so um, is there anyone at school or at home that gives you ideas for drawings?

S - Well ... C, my sister, she copies off squirrels, I was going to draw one in a tree ... and ...

I - Does she give you ideas does she?

S - Yes, she even draws a fox, I can't draw that though, because that wouldn't be on a

I - Does she give you ideas does she?

S - Yes, she even draws a fox, I can't draw that though, because that wouldn't be on a farm. That's what she's traced so far. She's she's copying from a sdord, "Sword in the Stone", I get mixed up.

I - Right, so is that a book with pictures in it?

S - Mmm...

I - "The Sword in the Stone" ... Oh, like um, with King Arthur and ...

S - Yeah.

I - Right great, OK, so um, is that one all out of your own imagination, or have you seen something like that somewhere else?

S - Um ... Probably out of the pet-shop, about, oh well not really out of the pet-shop, well I went to a farm down at Albany (mmm hmm) that would have my pictures of animals.

I - What about the house and everything is that your own imagination, or is that like the one in Albany?

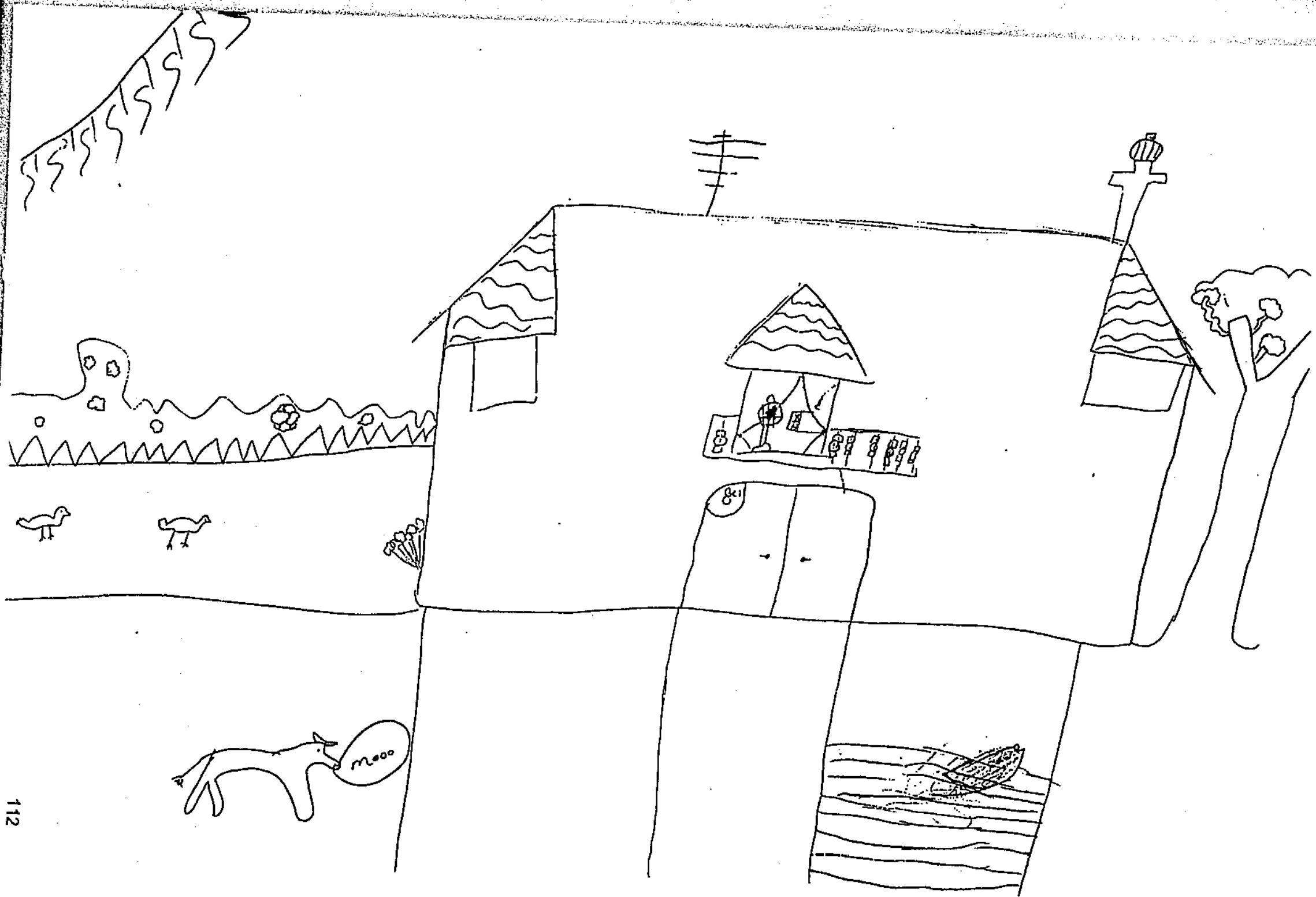
S - That's like the one in Albany, but it's like separate, so there's still one house.

I - Right, so it's kind of a bit of your own imagination, but a bit of that farm in Albany.

S - Yeah.

I - OK, um, anything else you'd like to tell me?

S - No.



Interview 17 (Male)

I - OK, well this looks very interesting, what's, would you like to tell me about your drawing?

S - Oh well, it's sort of a map, cause you start there, (right) and you go down, down the candle-stick, and you knock them guys off the um wings, and you go into the whirlpool and then you come out and get all your money.

I - Oh wow! Great. So why did you decide to draw a special game today?

S - (pause)

I - You're not sure? What gave you the idea?

S - (pause) Not sure.

I - Not sure? Ok, so um, do you know where you get your ideas for drawings sometimes?

S - (pause)

I - What sort of things give you idea for drawings?

S - Books.

I - Do they? What sort of ideas do you get from books?

S - (pause)

I - Can you think of anything? (shakes head) Not really? OK, that's fine. Is there anyone at school or at home that gives you some ideas for drawings?

S - My dad.

I - Your dad does? Right, what sort of ideas does he give you?

S - All.

I - All sorts? Great. So have you seen anything like this anywhere else, or is it all out of your own imagination?

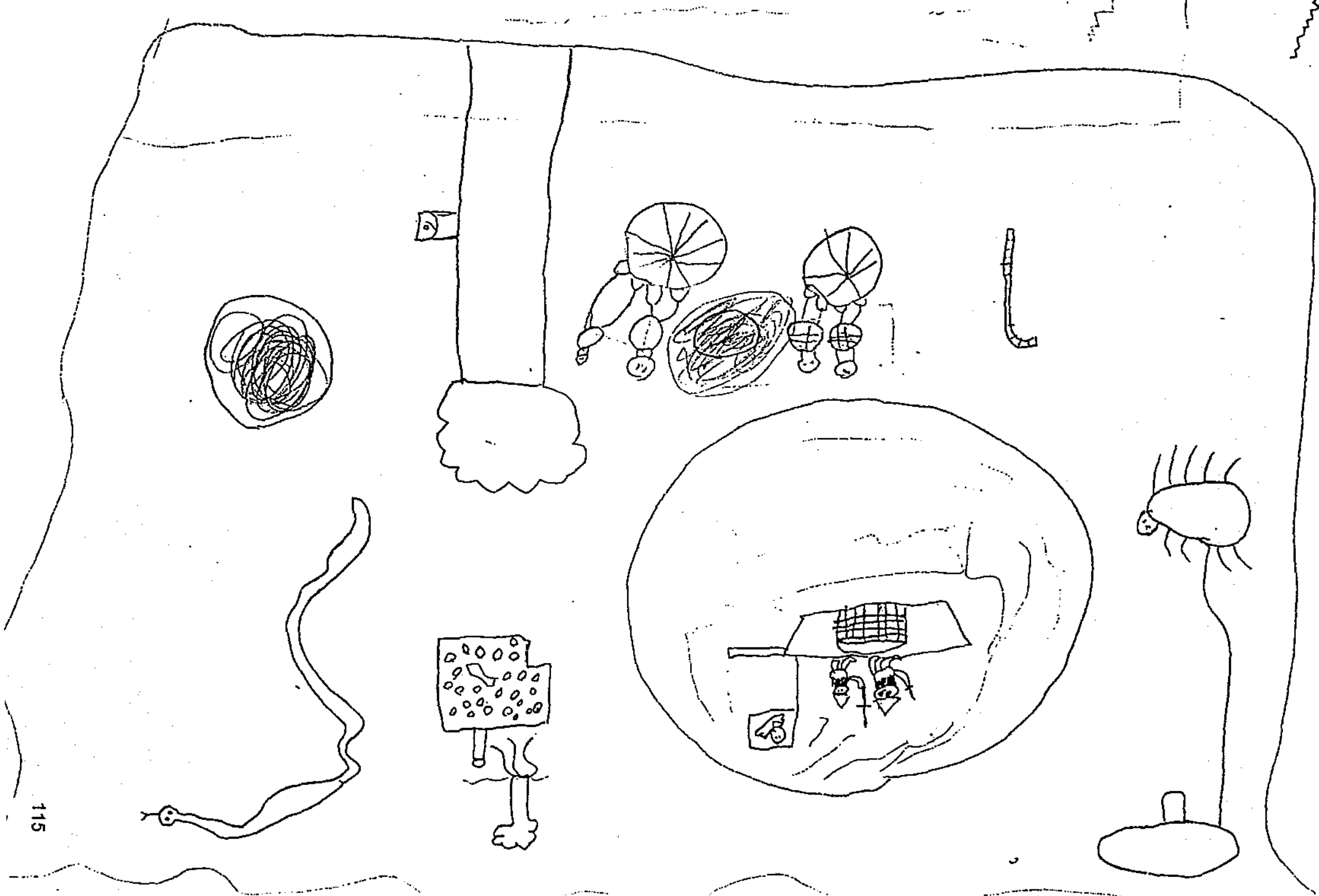
S - Out of my imagination.

I - Is it? You haven't see any games a bit like this somewhere? (shakes head) No?

Have you got a computer game at home? (yes) Is it a bit like this? (shakes head) Not like that, but the same sort of idea is it? (nods) Great. OK, so how did you know how to draw it?

S - (pause) I just did.

I - Is it all out of your own imagination? (nods) Great. OK, anything else you'd like to tell me about your drawing? (shakes head).



Interview 19 (Male)

I - OK, well this looks interesting, would you like to tell me about your drawing?

S - Um, well it's a lizard, and um, I drew it because I like having lots of animals, and I like to draw them, I'm good at drawing them.

I - Right, you're good at drawing animals? (nods) Mmm Hmm ... So why did you decide to draw a lizard specially today?

S - Um, because it's about the best animal that I can really draw.

I - Is it? Great. So do you know where you get your ideas for drawing from?

S - Just from um, going to, going camping and going in the bush and stuff.

I - Right. Anywhere else?

S - Um, no not really.

I - Not really? So camping and going into the bush. (nods) Great. OK, is there anyone at home or at school that gives you some good ideas for drawings?

S - Um ... Well, sometimes, um, like when my brothers get, or I get an invitation to, and I want to draw a picture, and I don't know how to draw a clown or something, I just take off an invitation or something.

I - Off an invitation, like to a party or something?

S - Yeah, just the picture of it.

I - Right, so you get some, um help from finding drawings on different things? Great, that's a good idea isn't it? Right, so is this out of you own imagination, or have you seen a lizard like that somewhere before?

S - Well, I've seen a fairly big one, but I haven't seen any like this. I've seen a blue-tongued lizard, and a couple of others.

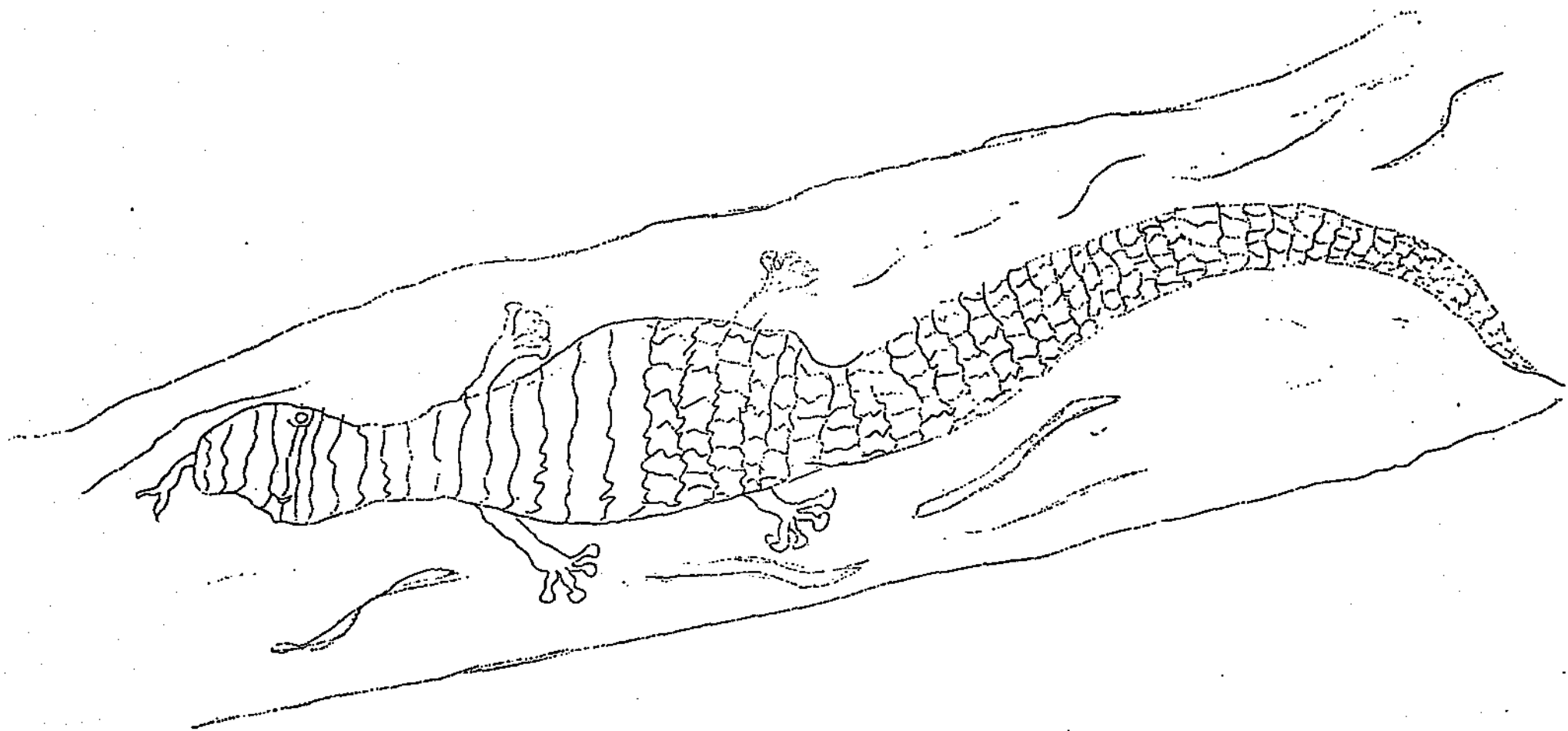
I - So is this one out of your own imagination is it?

S - Mostly.

I - Mostly. Great. So um, you haven't seen any lately that made you want to draw that one?

S - No, not really.

I - No, you just thought of it. Right, anything else you'd like to tell me about it?



Interview 20 (Male)

I - Ok, well this looks really interesting, would you like to tell me about your drawing?

S - Well ... that key pops belongs to that one, but I didn't have time to, um, and that one and some other doors.

I - Right ...

S - That's the front door (mmm hmm) this is the maze room ...

I - Is the what?

S - Maze room.

I - The maid's room?

S - The maze room.

I - Oh the maze room! Oh I see, the mazes, sorry.

S - That's the cold room (mmm hmm) and that's the trap room ...

I - The what room? Trap?

S - Yeah, it traps people. □

I - Right, mmm hmm ... so what's this building?

S - It's like ... just a building ...

I - Right ... So is it like a game you have to go through is it?

S - Yes.

I - Right. So what gave you the idea to draw that today?

S - (pause) I don't know, I just thought of it.

I - Did you? You haven't see anything that made you want to draw that?

S - (long pause)

I - Right, so do you know where you get some of your ideas for drawings?

S - I just think of them.

I - Right, they're not like, right, OK, so um, you're not sure where you got that idea from though? (no) OK. Is there anyone at home or at school that gives you good ideas for drawings?

S - Yep.

I - Who's that?

S - A, B, C ...

I - Right, so some of the boys in this class?

S - Yep.

I - Right, so your friends.

S - Yep.

I - Mmm hmm ... OK. So is this one all out of your own imagination? (nods) It is. Is it a bit like a computer game?

S - Um ... well sort of.

I - Have you got, have you seen a computer game like this one, or is this one your imagination?

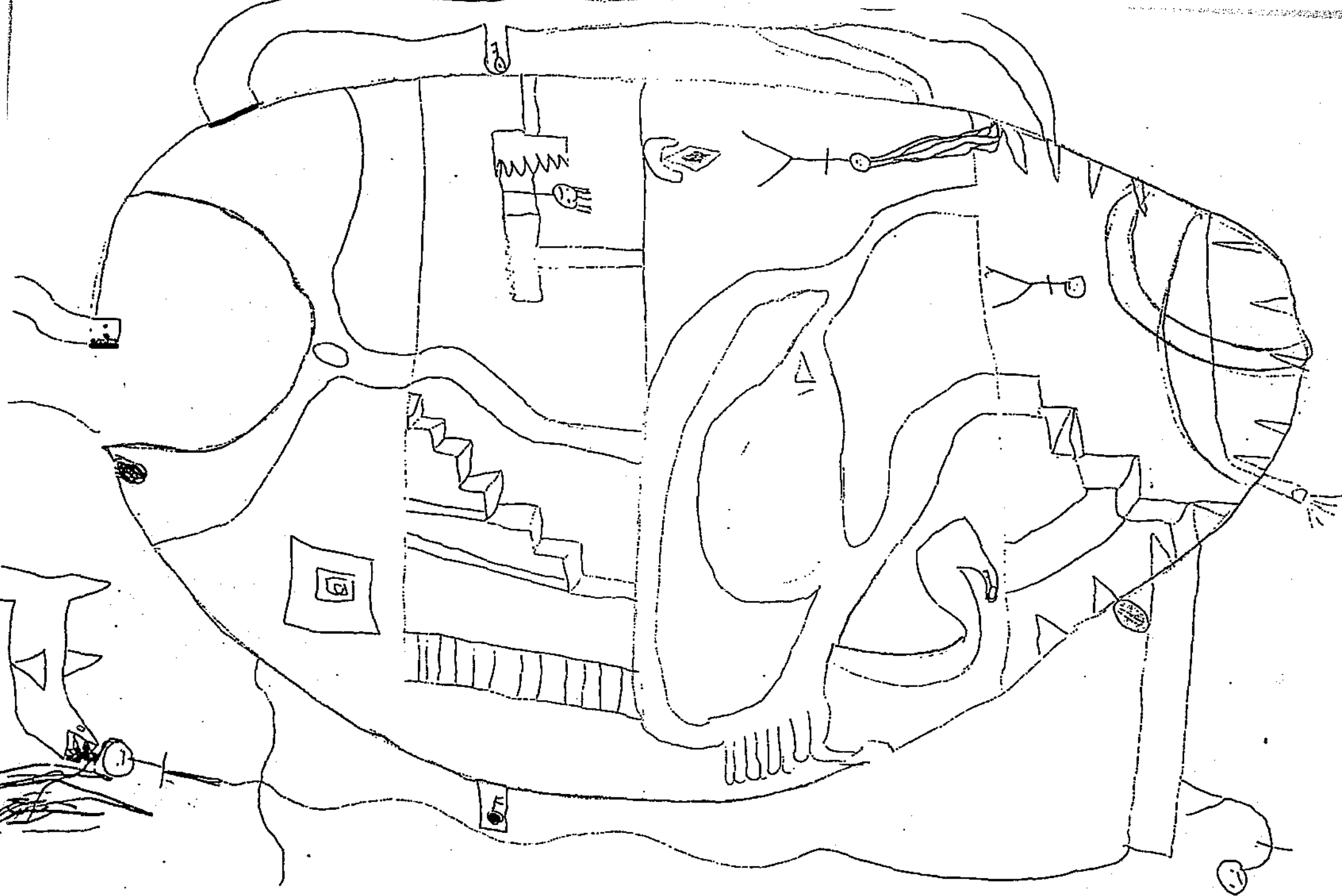
S - (pause) My imagination.

I - Right, so this is your imagination this one?

S - Yep.

I - OK. Right, so, you haven't seen anything like that lately? (shakes head) No? OK anything else you'd like to tell me about it?

S - (pause) (shakes head).



Interview 22 (Male)

I - Well it looks very interesting, would you like to tell me about your drawing?

S - Well, it's a maze, and you have to get from here to there, and there's special ways to get there. Like you move those (pointing), and if you get that you go through there and that takes you there, (right) and if you go in there, that's a special whirlpool, and it takes you there.

I - Right, so there's special places that can get you through?

S - Yep. Yeah.

I - Right, so why, where did you get the idea to draw today?

S - I'm just good at mazes and things.

I - Mmm hmm ... So that's why you decided to draw it is it?

S - Yeah.

I - Right. So do you know where you get other ideas for drawings from?

S - From my mind, if you don't know what to do, you can just use your mind to think of anything.

I - Right, so you use your imagination a lot?

S - Yeah.

I - Right, is this one out of your own imagination?

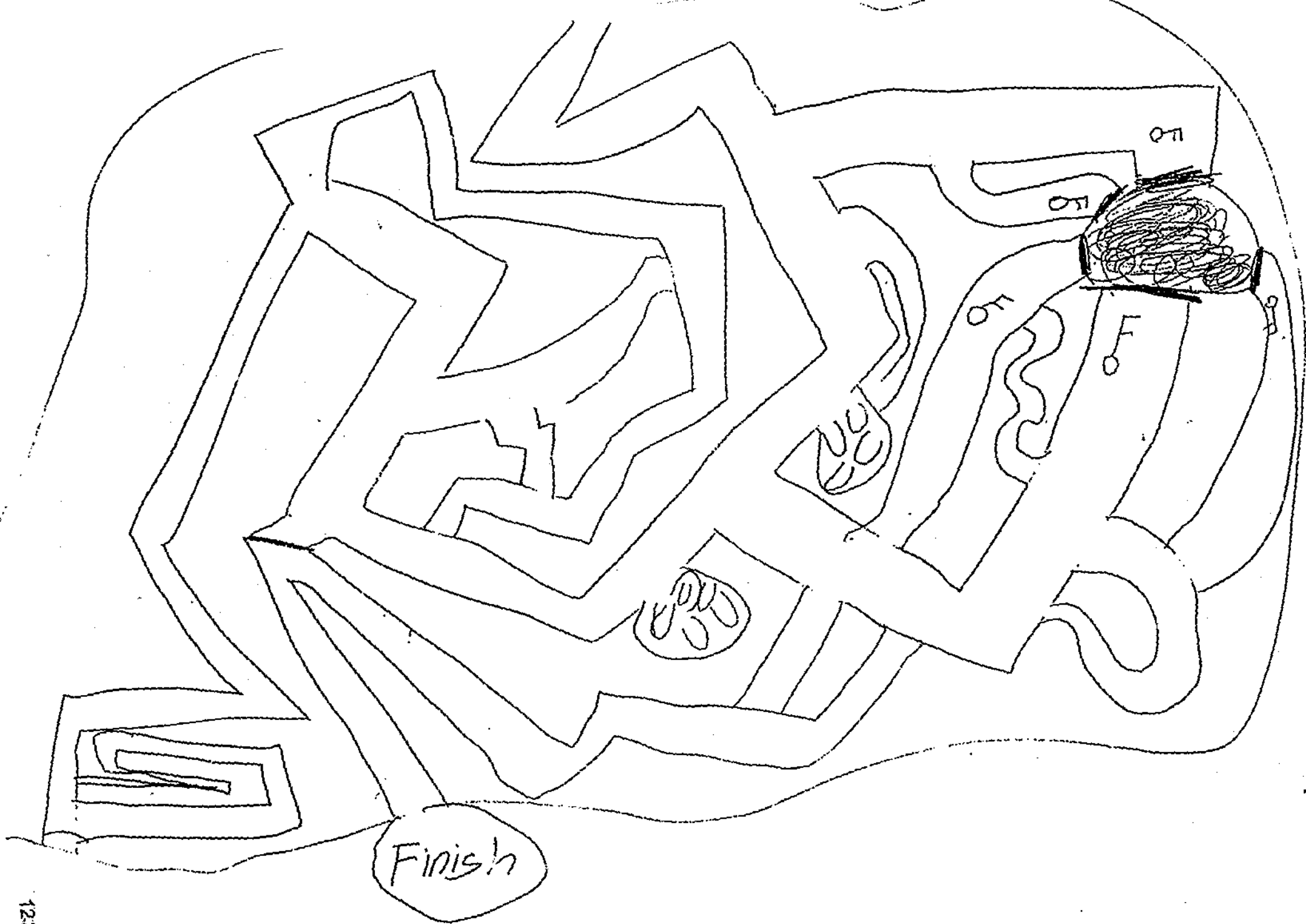
S - Yes.

I - It is you haven't seen any othe games a bit like that lately? (no) No? Right. OK, is there anyone who gives you ideas for drawings, like at home or at school?

S - Not really.

I - You usually use your own ideas do you? Great. OK, is there anything else you'd like to tell me about your drawing?

S - (pause) Not really.



Interview 23 (Male)

I - OK, well this looks very interesting, would you like to tell me about it?

S - Yes. Um, I drawn half of the planet, and I drawn a moon, and I drawn an eye beside the moon, and I drawn some leaves, gumnuts and flowers, and one log and branches ... and ... I coloured in the eyeball.

I - So why did you decide to draw this today?

S - Because it looks inter, interesting, and my mum is an artist (mmm hmm) and ... I wanted to draw that because it looks interesting and everybody was saying, "That looks good H." and that's it.

I - Great. So um, where do you usually get your ideas from?

S - From my mum.

I - You do get them from your mum do you? Anywhere else?

S - From trees and leaves, grass, and ... houses ... everything.

I - Right, so have you been learning about this (point to leaves etc) at school?

S - No.

I - You haven't?

S - No, but I did learn in art, we do um, we make leaves out of clay, I wanted to draw that, and I did.

I - Right, you did. OK. Is there anyone else at home or school that gives you ideas for drawings?

S - Yes, my brother in year six, and my big sister, (right) and ... my cat because I can draw my cat but I didn't want to, because I didn't have time, (mmm hmm) and no one else.

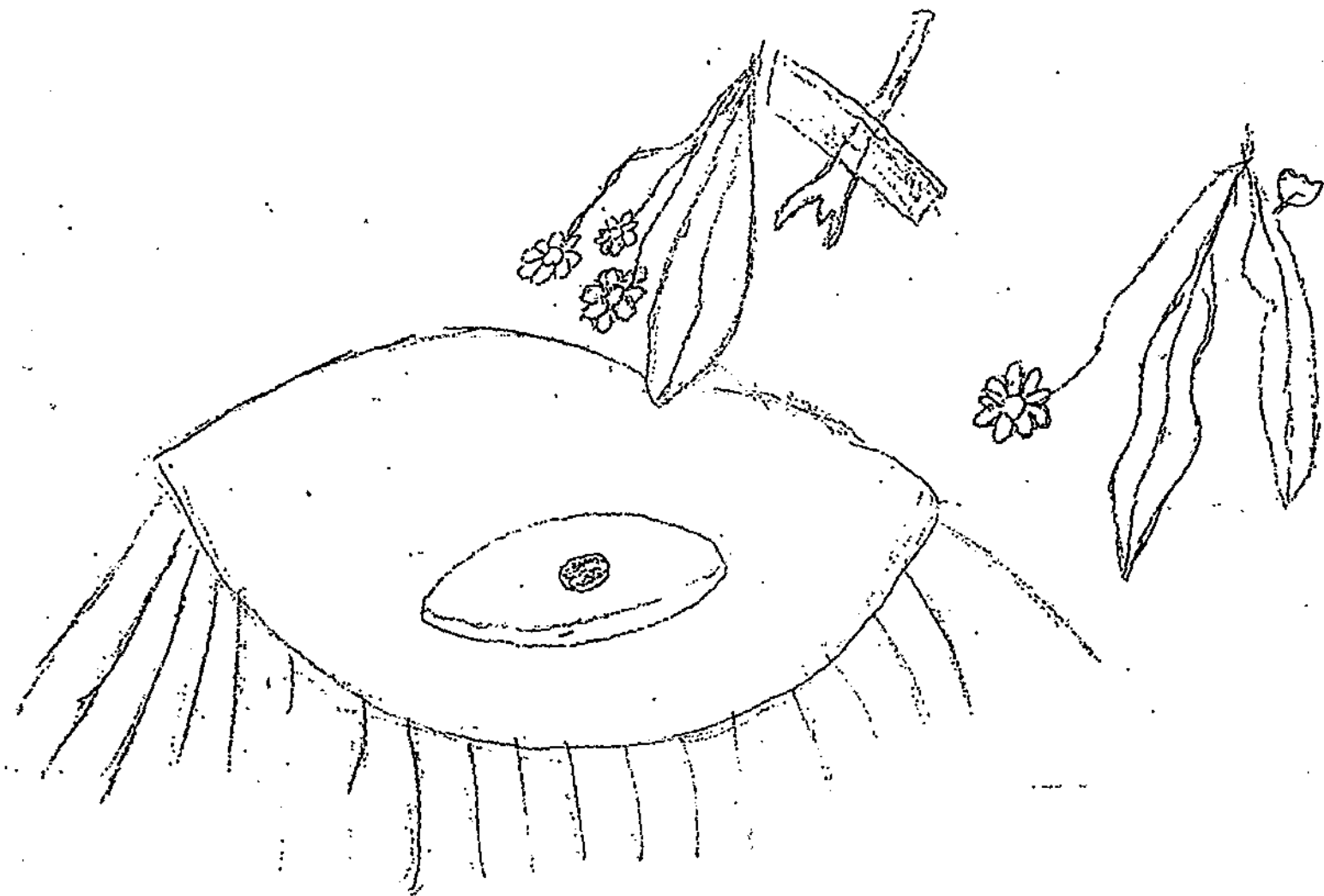
I - Right, well that's a lot of people isn't it? OK, so this is all out of your own imagination is it?

S - Yes.

I - It is, right. You haven't seen anything like that anywhere else?

S - No.

I - No, OK. Anything else you'd like to tell me about it? (No)



Interview 24 (Male)

I - OK ...

S - I've had it a million times with my spelling teacher. (referring to tape-recorder)

I - You had what?

S - I had this with my spelling teacher.

I - Oh have you, so you're used to it.

S - Yeah.

I - Right, would you like to tell me about your drawing?

S - Tell you the things?

I - Tell you, me anything about your drawing.

S - Anything what's in it? This is supposed to be the wildlife, in the bush and all that.

(right) And um, there was supposed to be a cave there but I couldn't finish it off.

I - Right.

S - And there was this rock, and the water was just broke through the rock. Because the water just breaks through this type of rock. (pause) And this was supposed to be a big one ...

I - A big what?

S - Pond, and there was supposed to be another one here, but I couldn't fit it in. There were these rocks on the top rocks up ...

I - Right, so why did you decide to draw that today?

S - Um, because I felt like it would be um, nice to draw, and my mum would probably like it.

I - Your mum will probably like it?

S - Yeah, if I took it home.

I - Ok, well I'm taking it for now, but I'll make sure you get it back. Right, so do you know where you get your ideas for drawings from?

S - Like, I think about them, or I see them on TV ...

I - See them on TV ...

S - Or, I go for walks, and I see the ideas. Or I can see them around the school, from in

the art room.

I - Right, so at school? Some of the Ideas from school? (yeah) Right, um, is there anyone at home or at school that gives you ideas for drawings?

S - Yeah, sometimes mum, sometimes other people from school ...

I - Some of your friends?

S - Yeah ... my uncle sometimes, and my grandma and my grandpa, everyone in my family gives me ideas.

I - Do they?

S - Yes, and my brother and sister.

I - Lots of people, that's great. OK, um, so have you been learning anything about this at school, about the rocks or anything?

S - No.

I - No, you just knew about it?

S - Yeah.

I - How did you know?

S - Because I've seen um this on TV, and we're going to go there one day, and I decided to draw it, and but this was about in the picture ...

I - Right, so some of it was out of your own imagination, but some of it's from TV?

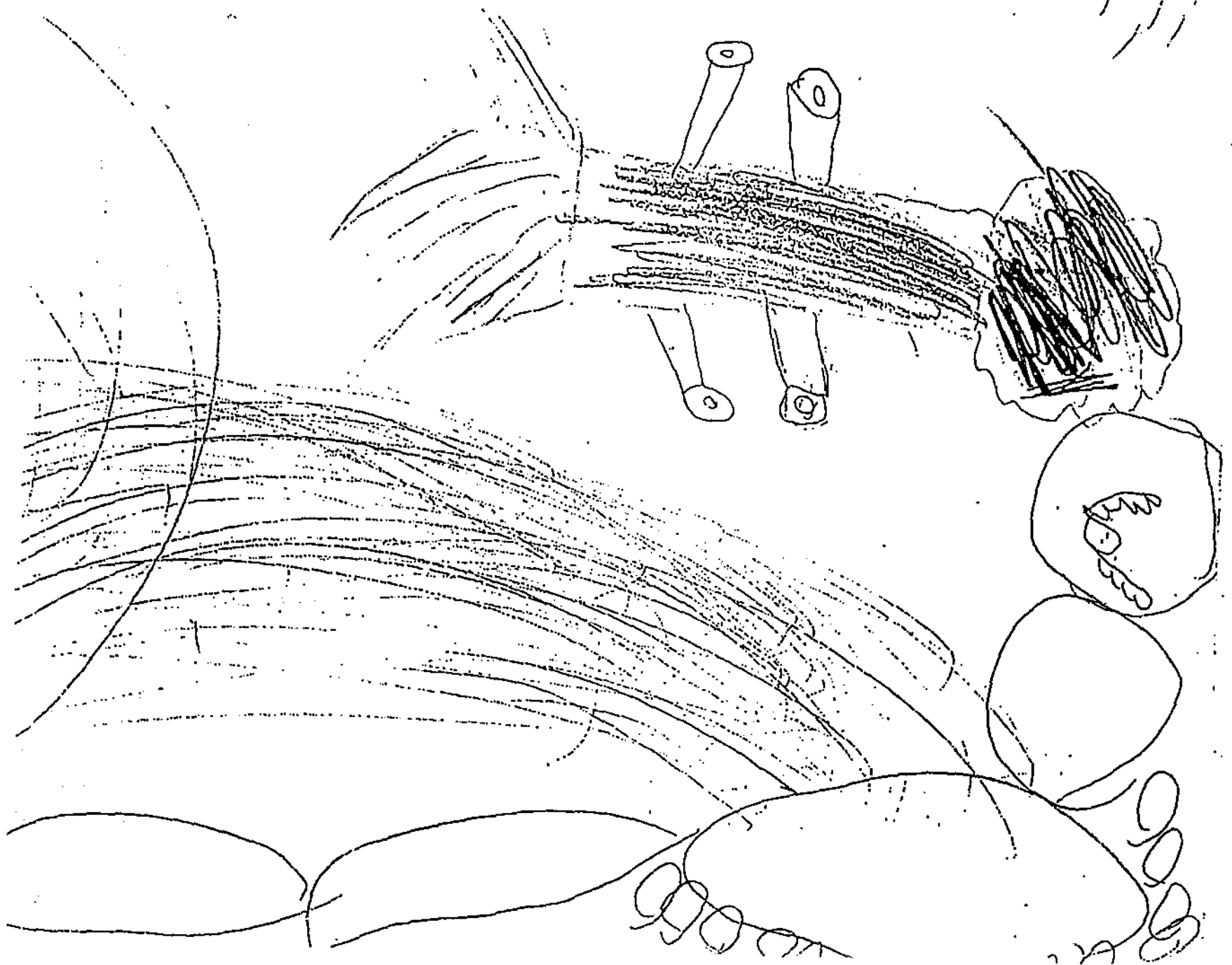
S - Yeah, and walking as well.

I - And walking as well.

S - Yeah, yeah.

I - So you've put all three things together to make a nice picture? (nods) Great. So is there anything else you'd like to tell me about your picture?

S - No.



Interview 25 (Male)

I - OK well this looks really interesting, would you like to tell me about your drawing?

S - Well, the idea is to get a key to open up doors, and all the black spots are the secret doors, (mmm hmm) and if you enter some you you get, there's traps, and you can get hurt.

I - Right.

S - And that key can blow up any enemy except for spikes, and the idea is to make it from the start down to the finish, without being hurt, and there is lava, dragons, monsters,

bullets, spikes and bombs, and there's a treasure chest which you can go down that one or over there ... and that key helps you to go through there to get through that door and finish it (right), and you're only allowed to go one time across the bridge, and if you go back, you fall into the lava ... And that's got lava and spikes in the room, so if you go in there you die instantly, and that's all.

I - Great. So How did you get the idea to draw this today?

S - We do other things like this. (boys in the class)

I - In art lessons?

S - Yep.

I - Right, so do you often get time to do drawings of your own choice?

S - Not really.

I - But when you do, do you do ...

S - Yes, sometimes we do this, and sometimes we do others.

I - Mmm hmm. Right. So do you know where you get any other ideas to do drawings?

S - (pause) Not really.

I - Can't think of anything that gives you ideas for drawings?

S - No.

I - OK, um, is there anyone at school or at home that gives you ideas?

S - (pause) Yeah, mum gives me ideas at home, and my brothers give me ideas sometimes, but not all the time.

I - Right, so a few people do give you ideas. Right, so have you seen anything like this anywhere else, or is it all out of your own imagination?

S - It's out of my own imagination.

I - Right, it kind of looks a bit like a computer game doesn't it? (yep) Is it, have you got a computer game at home?

S - Yep.

I - Is it a bit like that?

S - Yep.

I - It is, right. So is that how you knew how to draw it?

S - Yep.

I - Great, OK, is there anything else you'd like to tell me about it?

S - Not really.

Interview 26 (Male)

I - Ok, well this looks interesting, would you like to tell me about you drawing?

S - Yep, it's just this um, rabbit, rabbit's dungeon, and like it's got traps and all that stuff.

I - A rabbit's dungeon?

S - Yeah.

I - Ooh.

S - And like there's maze and things and all that, and um, and like things that swing things and diff, and three different doors and all that stuff, and different stuff and all that, mmm ... that's it.

I - Right, so what gave you the idea to draw this today?

S - I don't know, I just think of it.

I - You just thought of it did you? (mmm) You can't think of anything that made you think of it?

S - I draw this all the time.

I - Oh do you? Right, so where do you get your other ideas for drawing from, do you know?

S - Movies, and cartoons, and that's it.

I - Right. So is there anyone at home or at school that gives you ideas for drawing?

S - No.

I - No one? Right, have you seen anything like this one I a, like recently, or, or is that one out of your own imagination?

S - Own, own imagination.

I - Is it? You haven't seen anything like that. Not any computer games, or anything on cartoons?

S - No.

I - All your own idea?

S - Oh something like on, on a game on, on Super Nintendo.

I - It's kind of like Super Nintendo is it? (yeah). Right. Is that how it is on Super Nintendo, or have you changed it a bit?

S - Changed it a bit.

I - But some of it's the same?

S - Yep.

I - Right, OK, so is that how you knew how to draw it? (nods) Mmm Hmm ... anything else you'd like to tell me about it?

S - No.

