

## Details

Project title: **Snap! What South African children photograph: A study of the photographic behaviour of children at three age levels.**

Name: Sia Antonakas

Student number: 202514991

Supervisor: Professor Jill Bradbury

Declaration: **Submitted in partial fulfillment of the requirements for Psychology Masters, in the School of Psychology, University of KwaZulu Natal. Unless specifically indicated to the contrary, this research project is the result of my own work.**

## Acknowledgments

I would like to thank my supervisor Jill for her continued interest, enthusiasm and dedication to this project. While I know I was at times argumentative, you continually stood by my side and inspired me to continue. You have been a great inspiration to me over the past year, and your support has meant so much to me. Thank you so very much.

To Brandon, my co-supervisor, I know you were not able to be a part of the project for the entire duration of his production. But for the vital input and initial interest in the topic I thank you.

A special thanks also to Karl, my research assistant who helped me with the data collection, and organizing of the cameras and development.

To my family and friends, you have all been so supportive throughout the year it has taken me to complete this project. I know I whined continually about having to do endless drafts, and I thank you all for enduring those whines and encouraging me to move ahead! A special thank you to Nick for always being by my side regardless of how frustrated and irritable I was. Thank you particularly for offering the much needed distraction I often craved when I was all out of energy to continue working on my research. You created an important balance for me and reminded me that life and work should go hand-in-hand and neither should be all-consuming.

Finally to the children who participated in the study, you are the real stars of this project. I am so glad I had the opportunity to work with you and engage you in the world of photography. Your excitement and enthusiasm about being a part of this project was the biggest inspiration of all. It was so rewarding for me to give you cameras and your developed photographs, your work was amazing and you truly are incredible photographers who captured what is important in life and made the most of the experience.

## Abstract

This study focused on the kinds of photographs taken by twelve South African children at three different age levels (namely seven, eleven and fifteen). The children were given cameras which they used over a weekend to photograph any content of their choice. The children were then interviewed, both individually as well as in groups to discuss their photographs and experiences. The photographs were used as a trigger to explore children's development, sense of self and social worlds. Traditional developmental theory was useful in accounting for *some* of the differences in photographic ability of the different age groups but further thick description was possible using sociocultural theories of cognition, theories of the self, identity and representation. The researcher concluded that the children's understanding of themselves, the people and world around them as well as photography, is constructed by important social, cultural and historical forces which surround the children.

## Table of contents

INTRODUCTION.....	1-31
Literature review.....	1-30
Research question.....	31
DESIGN AND METHODOLOGY.....	31-42
Methodology.....	31
Participants.....	32-33
Data collection.....	33
Site or social network <b>selection</b> .....	33-34
Analysis of data.....	34-41
Limitations of the design.....	41-42
Ethical considerations.....	42
RESULTS AND DISCUSSION.....	42-82
Introduction.....	42-43
Third order <b>mediators</b> .....	43-53
Second order mediators.....	53-74
First order mediators.....	74-82
CONCLUSION.....	82-84
REFERENCES.....	85-90
APPENDICES.....	91-97
Appendix A: Interview <b>schedule for individual interviews</b> .....	91
Appendix B: Interview <b>schedule for group interviews</b> .....	91
Appendix C: Coding <b>scheme for photographic content</b> .....	92
Appendix D: Tables for all <b>the categories of the coding scheme</b> .....	93-97

## List of figures and tables

### FIGURES

Figure 1: Miller's <b>orders of mediation as a framework for organising themes</b> .....	40
--	----

### TABLES

Table 1: <b>Participants</b> .....	32
Table 2: <b>Context: Places photographed</b> .....	43
Table 3: <b>Public buildings</b> .....	44
Table 4: <b>Objects</b> .....	54
Table 5: <b>Pets</b> .....	61
Table 6: <b>Technicalities</b> .....	66
Table 7: <b>Images of the photographer him / her self</b> .....	70
Table 8: <b>Friends and family</b> .....	74

## Introduction

Many contemporary studies, in an attempt to explain children's development, have relied strongly on the Piagetian view which postulates that development is predominantly a cognitive-biological process depending on chronological growth in order to attain new competencies. The current study explores photography (as a form of representation) in relation to children of different ages, as its topic of interest. The little research which has been done on this topic specifically tends to be dominated by the Piagetian theory of development. The study entitled 'Children as Photographers: an Analysis of Children's Photographic Behaviour and Intentions at Three Age Levels' (Sharples, Davison, Thomas & Rudman, 2003) explored the content of photographs taken by children from different cultures at ages 7, 11 and 15. The study concluded that children at the three different ages took different kinds of photographs and the authors postulated that the reason for this is due to their different developmental ages/levels. Thus the older children took more creative/artistic and complex photographs due to the fact that they were at a higher cognitive-developmental level (Sharples et al., 2003). Similarly a study entitled 'A Trip to the Zoo: Children's Words and Photographs' (DeMarie, 2001) yielded a similar conclusion, namely that children at different ages were at different cognitive-developmental levels and thus took varying types of photographs. These studies raise two questions which are of particular interest for the current research project. First, is the traditional cognitive-developmental model adequate for understanding the photographic behaviour of children at different ages and in different contexts? Second, what can the children's photographs and the way in which they talk about them tell us about their social worlds of meaning and identity?

In answering these questions the present study draws on three main theoretical and conceptual frameworks: 1) traditional cognitive, social and moral developmental theories as well as a critique of these theories in relation to their application in a particular South African context; 2) social, cultural and historical forces in the construction of identity; 3) photographic form of representation. These three threads in the literature offer a critical and insightful lens through which to analyse and understand the data in this study.

### *Context of the study*

It is useful to contextualize this particular study as the participants come from quite different social worlds from those in the Sharples et al. (2003). The children in this study come from lower socio-economic homes and are mother tongue isiZulu speakers who live in a township. Townships are racialised spaces which were established during the Apartheid era in order to segregate people across racial lines. For many years the residents in these townships faced the threat of forced removal and relocation contributing to high levels of anxiety and discomfort for these people (Mohamed, 2002). A study conducted on some of the townships in Durban indicated that 75% of residents in the townships fell below the poverty line (Mohamed, 2002). Similarly a study concerning children countrywide indicated that 20 million children (76%) live in poverty. In KwaZulu Natal, 80% of children live in poverty (Hammond, 2002). In this context the 'luxury' of the participants owning or having ever used cameras is highly unlikely. Of course with the demise of apartheid, segregation is no longer legislated but townships remain almost exclusively black and predominantly working class. While there is certainly an emergent black middle class and the families of the children in this study are not the 'poorest of the poor' they still have highly constrained access to ordinary services such as health care and education. Furthermore the trappings of middle class consumerist culture (such as computers, DVD players, cars) are highly valued luxuries.

Another important aspect to take into account in this context is the very high rate of HIV/AIDS in South Africa. Within South Africa, KwaZulu Natal is one of the most HIV/AIDS infected provinces in the country, owing mainly to the high rates of infection in townships and informal settlements in the province (Hook, 2002). The Goelama project (Magongo, 2005) indicated that in informal settlements in South Africa most households house at least one orphan (one or both parents of which have died due to HIV/AIDS related illnesses), are headed up by a single caregiver, house children and adults who have limited education and are unemployed. The study concluded as follows:

The households were found to be impoverished, poorly educated and with limited economic activity to sustain a quality livelihood. Those who managed to have an income derived it largely from social grants or piecemeal jobs. [...] The level of household assets was found to be poor, although it seems slight increase in assets ownership in these households has occurred since the baseline survey (Magongo, 2005, p7).

While the picture painted above is a gloomy one it highlights the reality of the situation for many children in South Africa. On a more positive note, many non governmental organizations (NGOs) are active in these communities. Furthermore, due to the hardships in the informal settlements the residents team up and try to be supportive. For this reason many of the households form bonds with their neighbours, friends and relatives who all become part of a 'family' to help and support each other when need arises. The following is an example of this kind of community support:

People in these households have created social networks to aid their survival and perhaps as a temporal escape from the burdens of poverty. These networks are important starting points for improving social cohesion and trust. For example, numerous households reported that they belong to a burial society to which they contribute money. This may be their best option to relieve the household burden associated with a death in the household, as opposed to having a savings in a community savings scheme (Magongo, 2005, p7-8).

The above while providing only a brief description of some of the important factors which may be associated with the participants in this study, helps the researcher and reader understand the context from which these children come. This is important in trying to understand the kinds of photographs which the children choose to take and how they describe these. Photographs in this study are used as a particular kind of way of representing the world from which these children come. The stories which arise from these photographs also add to a deeper and richer understanding of the children's lives.

#### *Traditional theories of development: An overview*

Sharples et al. (2003) is framed by a Piagetian theory of development and is thus underpinned by two important assumptions namely, that cognitive development is universal, and that it progresses through stages depending on competencies which increase with a child's age (Moll, Gultig & Winkler, 2001). For this reason Sharples et al. (2003) selected age-appropriate (that is 7, 11 and 15 years old) children relative to the Piagetian stages of cognitive development namely, preoperational, concrete and formal operations. Subsequently Sharples et al. (2003) assessed whether children's ability in relation to photography, as well as the contents of their photographs, corresponded with the abilities of the age-appropriate stages of cognitive development. The authors concluded in the positive

and in doing so, substantiated an argument for Piagetian stages of cognitive development as universal.

The present study similarly adopted these Piagetian stages of cognitive development as a framework but in an attempt to attain a more holistic view, takes social development into account. In so doing the researcher has a more substantial base with which to approach and make sense of children's photographic ability and importantly, the meaning of these photographs for these particular children. The various schools of thought in relation to cognitive development may be represented paradigmatically by: Montessori (who saw people's ability as being innate and activated through interaction with the environment), Skinner (who saw the mind as a 'blank slate' only developing through exposure to the environment), Piaget (who rejects both views in suggesting that cognition is constructed) and Vygotsky (who saw the process of development as socio-cultural, mediated for the child through caregivers, and internalized for self-regulation) (Moll et al., 2001). One of the major contributions of Piaget's theory of development is the introduction of the idea of stages of development. Children at 7, 11 and 15, according to Piagetian theory, fall into different stages of development and these stages provide the basis for this study.

#### *Preoperational stage*

Children who are seven are likely to be in a transitional phase between preoperational (aged two till seven years of age) and concrete operational (seven to eleven years of age). The preoperational stage is characterized by a rapid increase in the development of representation (Sadock & Sadock, 2003). One form of representation, which is of importance in this study, is language. In this stage, Piaget argues that thought is detached from action through language/semiotic functioning which allows for cognition that is more advanced in the sense that it can operate at a representational level. Children's cognitive development of representational ability is evident in this stage in make-believe play which becomes increasingly detached from the real-life conditions associated with it (for example, a hair brush is used to symbolize a microphone), begins to involve not only the self but other people and objects as well (for example, feeding a doll), and finally play begins to involve much more complex and elaborate schemas (for example, children role-playing and acting as other people). What is most important here is the ability that children gain to represent the world in a symbolic way through make-believe play. This is important because as the child moves from preoperational to concrete operational thought, the child increasingly understands the

self as well as the other and in so understanding, pays more attention to the other and interacting more and more with the other. Piaget termed this process decentration. Piaget suggested that the biggest cognitive limitation for children at this stage is their egocentric quality of thought, the inability to look beyond their own perspective or their inability to attend to more than one aspect of something at the same time. While becoming aware of 'the other' during this stage, the child is limited by believing that all others think and feel the same way he/she does. Animistic thought is related to egocentrism and refers to preoperational children's tendency to invest inanimate objects with lifelike qualities, for example the belief that a doll feels and thinks (Ginsburg & Opper, 1979; Sadock & Sadock, 2003). Children in this developmental stage also show increasing development in their drawings which initially are simply an array of lines and scribbles but which with time come to act as representational tools in that their drawings begin to more closely reflect existing objects in reality. Similarly it is expected that their photographs would also have a more representational quality in that the content children choose to photograph would be less randomized and more reflective of existing objects which are important to the children.

Due to the preoperational child's slow shift toward decentration, seven year old children would likely have the ability to understand that different perspectives may arise due to people having access to different kinds of information (Nucci, 2002; Dixon & Moore, 1990; Selman & Byrne, 1974). Thus social interaction is increasingly possible due to the child's increasing awareness of him/herself as well as 'the other' and being able to understand that 'the other' has a different perspective to him/herself (Ollhoff, 1996). Selman & Byrne (1974) and Dixon & Moore (1990) explore the different stages of perspective taking. Perspective taking is defined as: "the capacity to imagine what other people may be thinking and feeling" (Berk, 1989: p464). Damon (1977) used a Piagetian approach to develop a stage-theory concerning friendship and children's understanding of friendship at different ages which has been used extensively in child development research. Much research concludes that seven year olds see friendship in a very concrete manner, specifically in terms of exchanging goods and participating in joint play activities. Being friends with someone at this level entails having the same interests and basically doing the same kinds of things (Simpkins, Parke, Flyr & Wild, 2006; Kravetz, Faust, Lipshitz & Shalhav, 1998 and Gallagher, 1993).

To conclude this section, seven year old children display remnants of egocentric thought and while they are developing an awareness of 'the other' they remain very much self-focused.

They have the ability to use representation, through language and through make-believe play. In relation to perspective taking and friendships these children are becoming aware that varying perspectives exist and form friendships based specifically on common interest and play. In relation to photographs the researcher thus expects their photographs to feature family members, who at this age play an important role in guiding the children in relation to the development of skills (particularly language) as well as being primary 'rule-setters' in the children's lives. The researcher also expects to find a combination of photographs of objects (which children of this age invest with life-like characteristics) and friends (though it is expected that older children would photograph friends more frequently as friendships have more meaning to older children). Finally the researcher would expect seven year olds to have a developing sense of the meaningful nature of things around them and thus fairly purposeful activity in taking photographs.

#### *Concrete operational stage*

In terms of *cognitive development*, the concrete operational stage is characterized by the child's thinking becoming a lot more logical, flexible and organized, but specifically in relation to information which is not abstract (i.e. information which applies to objects). Children in this stage of cognitive development are capable of a series of what Piaget terms logico-mathematical operations. At this stage children develop the ability of hierarchical classification: the ability to classify objects in a particular order/hierarchy. For example, objects are 'ranked' and grouped separately based on their varying degrees of importance. In this stage children also develop the ability to accurately understand conservation tasks because of decentration. This, for example, means that the child is able to recognize that the change in one aspect (say for example the height of water in a beaker) is compensated for by a change in another aspect (for example the width of the water in the beaker). This ability also confirms that the child is using reversibility. Concrete operational children also are capable of seriation, that is the ability to order items along a dimension such as weight or length. This ability is taken further to incorporate transitive inference which allows the child to seriate mentally, that is the child is able to order items without seeing the items in front of them. In addition to the above-described logico-arithmetic operations, concrete operational children are also capable of a series of spatial operations, for example in relation to direction. The most essential feature of this developmental stage is that all the abilities are specifically in relation to non-abstract material. Thus these children are capable of doing mathematics that is related to existing objects (i.e. word sums) but are less likely to be capable of mathematics relating to

abstract material (for example, quadratic equations using X's and Y's). So, for example a child in this stage can decentre but only in relation to non-abstract material which the child can see or picture in his/her mind. This task would not easily be achieved by the child if he/she had to decentre in relation to X's and Y's of an abstract mathematical equation (Ginsburg & Opper, 1979 and Sadock & Sadock, 2003).

In terms of *social development* it is suggested that eleven year olds are able to empathise with others, that is attempt to see the world from another person's point of view (Selman & Byrne, 1974; Dixon & Moore, 1990 and Ollhoff, 1996). This may be a result of cognitively developing and beginning to move beyond egocentrism (Nucci, 2002). Children at this level also realize that others too have the ability to empathise, in other words children would expect other children of the same age to also have empathetic skills. Damon (1977) suggests that children of eleven years old develop friendships which move beyond simply relying on engagement in the same activities. Rather children in this level see friendship as a mutually agreed-upon relationship in which friends help/assist each other when need arises. This level also sees 'trust' as entering into the field of friendship as an important component (Simpkins et al., 2006; Kravetz et al., 1998 and Gallagher, 1993).

To conclude this section on eleven year olds' development, it is clear to see that children in this age group are capable of complex thinking and reasoning but only in relation to non-abstract material. Thus complex thought is possible but only if the child can see or picture in his/her mind the material with which he/she is engaging. Children of this age are capable of empathising and having more meaningful relationships, however, these are most often based on mutual assistance. While children at this age level do not invest inanimate objects with lifelike qualities (as the younger children do), they are still 'concrete' thinkers who are less abstractly-minded and thus the researcher would still expect photographs of objects which are immediately and quite personally important to the children to appear. Due to an increasing sense of friends and the social structures that surround them, the researcher expects children in this developmental level to photograph their friends and an increasingly wider social network as opposed to preoperational thinkers who focus more on family and objects.

#### *Formal operational stage*

In relation to *cognitive development* the final stage which Piaget posits is the formal operational stage. This stage is characterized by a capacity for abstract and scientific

thinking. Children in this stage of cognitive development are capable of hypothetico-deductive reasoning. This type of thinking involves the child taking cognizance of a range of possible factors that could affect an outcome and making hypotheses which are tested in an orderly and logical manner. Formal operational thinkers are also capable of propositional thought which involves the evaluation of verbal statements in order to assess their logic. Formal operational thinkers are capable of all the abilities that concrete thinkers are with the advancement of being able to conduct all these operations without the need to see or be able to picture the concrete objects. Thus these thinkers are capable of complex thought concerning abstract material (which cannot be seen or 'pictured' in the mind) for example, formal operational thinkers can theorize about abstract concepts such as beauty or justice. For this reason these thinkers become increasingly concerned with broader and wider issues of their community, because their understanding of more abstract matters is more advanced. An element of this is formal operational thinkers' ability to explore meaning and ask a range of questions in trying to hypothesize and understand their world (Ginsburg & Opper, 1979 and Sadock & Sadock, 2003).

In relation to *social development* fifteen year olds are generally able to view situations and interactions more objectively (Selman & Bryne, 1974; Dixon & Moore, 1990). This is largely due to the cognitive development and the shift away from egocentric thought and the development to think about situations hypothetically (Nucci, 2002; Ollhoff, 1996). A fifteen year old may also begin to learn that objective perspective taking is often strongly influenced by systems and structures from larger societal values and beliefs (Selman & Byrne, 1974). Damon (1977) suggests that fifteen year olds generally form friendships which are more meaningful and have a great deal more energy invested into them from the children. Factors such as loyalty, trust and intimacy are essential. Children in this level seek close friendships with people who can understand them and offer support when the individual is distressed, scared or lonely (Simpkins et al., 2006; Kravetz et al., 1998 and Gallagher, 1993).

To conclude it is evident that fifteen year old children are capable of abstract and more complex thinking such as hypothetic-deductive reasoning. Furthermore and possibly due to their cognitive abilities, these children are likely to form more meaningful friendships that are built on more complex and abstract principles such as trust and loyalty. Finally children in this age group are likely to view the world more holistically by taking into account the wider community and society. Thus the researcher expects the children in this age level to more

frequently photograph their friends and the wider community and for their explanations of their photographs to be more abstract.

*The problem with universal stages and the dominance of cognition*

While the current research project focuses on children's photographic ability and content at the above age-appropriate developmental levels (in relation to cognitive, social and moral development), the researcher is also cautious of this process due to various critiques concerning the view that development can be understood in relation to age-appropriate stages. Cole (1996) argues that cross-cultural studies increasingly show that Piagetian stages are not applicable to different contexts due to a range of factors, particularly level of education. While Cole (1996) does not assert an extreme cross-cultural approach which posit that different cultures have different cognitive styles (a cognitive style being a unique and particular style of thought), he argues that understanding development as universal and as stage-based is problematic. Cole (1996) stresses the importance of needing to take an individual's sociohistorical context into account when trying to understand their development. For this reason, it may be limiting to assess children's photographs by trying to compare them to their equivalent age-appropriate developmental levels. Rather, it appears to be more useful to assess the photographs more contextually, thus keeping in mind the above-discussed developmental levels and stages, while primarily trying to understand each child's particular context and experiences which may impact on their photographic ability and the meanings of this practice for them.

In assessing the adequacy of traditional cognitive-developmental models in understanding photographic behaviour, the main source of reference is Erica Burman's text entitled 'Deconstructing Developmental Psychology' (2000). Burman (2000) raises questions concerning the efficiency and adequacy of developmental psychology in understanding children's behaviour. Burman (2000) argues that traditional developmental models were created by and for a middle-class Western society. Thus developmental models seem to adequately explain the development of children being brought up in a middle-class Western society yet these models have been adopted world wide and appear to lack efficiency in explaining the development of children from different socio-economic statuses and cultures. The Sharples et al. (2003) study, while being cross-cultural and using participants from varying cultures in Europe and showing that a Piagetian theory can be applied more universally to varying cultures, falls short in that all the cultural groups used in the Sharples et

al. (2003) study were similar in that they were all from a developed world and thus a higher socio-economic class. The children in the current study however are from a third-world country and fall in a much lower socio-economic bracket. Burman (2000) explores the inadequacy of theories being applied universally as follows:

The presentation of a general model which depicts development as unitary irrespective of culture, class, gender and history means that difference can be recognised only in terms of aberrations, deviations – that is, in terms of relative progress on a linear scale. The developmental psychology we know is tied to the culture which produced it. And, while such insights have had some impact within academic psychology, they are maintained in policy and in popular representations of childhood and child development (p183).

As the above quotation suggests, traditional developmental models are simply adopted and applied to children from different cultures despite their lack of ability to account for differences in culture and particularly class. Rather than exploring alternative (or fuller) explanations for the development of children in these different contexts, these societies are viewed rather, as being deficient. Zelizer (1985) and Boyden (1990) suggest the same issue with the adoption of traditional developmental models in non-Western middle-class societies and postulate that the unitary and undifferentiated, model of childhood (what Boyden (1990) terms ‘globalization of childhood’) does not adequately address the varying cultural value and position of children and has been inappropriately imposed onto ‘developing countries’.

One of the biggest problems with traditional developmental models is the lack of acknowledgement of the importance of ‘the social’ and predominant dependence on a purely individualistic (and biological) explanation for development. This idea is suggested further by Avis (1991) as follows: “Each child and student is categorized atomistically and expected to pursue their own separate and autonomous development” (p117). In ignoring the impact of the social and cultural world, children from ‘developing countries’ are seen as deficient in relation to cognitive-developmental stages provided by models such as Piaget’s (or the similar social development theories). Children from developing countries may not be reaching the developmental stages that Piaget postulates, not due to a cognitive deficit/delay but rather due to not having been exposed to particular kinds and ways of thinking necessary to complete Piaget’s developmental tasks. In relation to the current study, children from developing contexts, such as South Africa may take photographs that may be interpreted as “developmentally delayed” in comparison to the photographs taken by children in the

Sharples et al. (2003) study. This delay if it does indeed exist, is more likely to be a result of not being exposed to cameras rather than cognitive deficits in the children. Furthermore this “delay” may be due to the possibility that children in this particular South African context may use photographs in different ways, that is, have different sociocultural meanings or significances related to photography and its practice in their worlds. Thus, the current study attempts to highlight the shortcomings of traditional models of development and present an alternative (or more comprehensive) way of understanding children’s activities.

Building on the notion that different cultures may have different sociocultural meanings attached to photography, the study also explores what children’s photographs (and the way they talk about them) tell us about their social worlds of meaning and identity. Furthermore, the way in which individuals choose to represent themselves varies from culture to culture and can help one gain a better understanding of a particular socio-cultural world. For example, in developed countries, cameras are very common and are frequently used by children and adults as a way of recording memories and capturing every-day occasions while in less developed countries where cameras are less common, photographs are seen more as a novelty used only on very special occasions and normally handled by a hired ‘photographer’, which is termed a “bashuti” in isiZulu. Interestingly, “bashuti” is derived from an isiZulu verb meaning “to shoot”. This is similar to the Westernized view of photography, which is often described in terms of ‘shooting’ or ‘taking a shot’. Photographs can be seen as one form of representation that works in a particular kind of way and allows the child a means to represent aspects of his/her world and identity thus providing an intriguing insight into the socio-psychological realities of these children.

#### *Sociocultural theories of identity and ‘the self’*

The question of what defines ‘the self’ is an age-old debate. Contemporary theories argue that ‘the self’ is a multi-faceted phenomenon, equipped with roles for various contexts, and constituted by social, historical and cultural forces. While being constituted by the ‘other’ the self is also responsible for constituting the other. The two are dialectically linked: the ‘other’ constructs the formation of the self, through which process the self is affirmed and constituted (Fay, 1996 and Shweder, 1991).

The roots of this debate lie in Cartesian dualism which suggests that the mind (or self) and body are separate (Hatfield, 2003). Many thinkers post Descartes, such as Hume and Kant, strongly rejected his dualistic claims and tried to locate 'the self' as inherent in mind and body together as a single unit. This dichotomy is a persistent feature of much psychological theorizing. There is one particular strand of thought from Descartes which is of particular relevance for this exploration of the self, that is his idea of 'the veil of perception'. Hatfield (2003) explores this Cartesian idea as follows:

Sometimes it is claimed that Descartes' contribution of treating thought and perception as representational includes "veil of perception" skepticism, which says that no one ever knows the world because all they can know are their own ideas (p327).

The implication of this is that one is completely unable to step out of the confines of one's own perception. Thus 'the self', in this regard, is described as the individual 'veil of perception' through which each person encounters and understands the world. An individual's engagement with and experience of the world is determined by his/her individual perception. While Descartes makes an important step in pointing out that people are constrained by their own perceptions/'veils', his explanation is somewhat lacking in that he does not take into account the role that social forces play in molding and creating the 'veils' that individual people 'wear'. Contemporary writers see Descartes' view as problematic as it suggests that: "... the self seems to be a single, coherent, persistent entity which as the perduring subject of our consciousness and behaviour is the core of our being" (Fay, 1996, p33). Fay (1996) therefore suggests that this Cartesian 'veil' is not defined and created by the individual but rather that it is constructed through 'the other'. As humans we possess self-consciousness, which is the ability to know that one is able to assess oneself (Fay, 1996). This ability arises *because of the 'other's'* consciousness of a person. Thus it is in your presenting yourself to others that others understand you and re-present *you* back to yourself. Therefore you know yourself through the other's view of yourself. So, in effect, the self is constituted by and through the social 'other'. Thus working with and extending the Cartesian term, a person develops a veil which constructs his/her way of understanding the world. This veil is created through interactions with 'the other'. Furthermore, although perceiving the world through a veil, a person becomes aware of (and even critical of) this veil. This can be expressed in the following quotation from Fay (1996):

A self-conscious creature is one which is itself the object of its own reflections and assessments. It knows that it forms certain beliefs or desires certain things, and scrutinizes its own perceptions, wants and opinions and the bases on which these are formed (p35).

Thus, opinions and understandings are formed through the veil of perception which is woven through a complex intertwinement of social, cultural and historical forces. Althusser (1969) and Hall (1996) similarly argue that individuals are not unique beings with innate selves, but rather are *subjects* constituted by ideological forces. Althusser (1969) suggests that our awareness of these ideological forces is not overt due to these forces functioning at an embedded and underlying level. From birth, social forces are at play and not only influence, but in fact construct who we are, how we view the world and how we understand ourselves and those around us. These forces become so embedded because they are transmitted to the individual in ways which disguise them as a norm and something positive, for example, media portrayals of young women affect the way that young women see themselves and those around them. But because media messages occur at an underlying level and are covert, young girls would take them to be a norm and thus they become an important part of shaping their own perceptions. Thus our 'veils' are so tightly woven and so tightly-fitted that we are in fact unaware of them. Perhaps people have an awareness of their veils to an extent but certain threads of the veil are more tightly woven than others; some forces affect us at a more embedded and underlying level.

Descartes, in seeing thought and perception as representational and constructivist, raises the idea that the world and experience is in a sense 're-presented' by our thoughts and perception. Thus there is no 'real' and 'inherent' world or experience, there is *only* the world as it re-presented through our veils of perception. Dennett (1989) also concerns himself with this view of 'self' being entangled in 'representation'. Dennett engages in a discussion concerning 'the origins of the self' and in so doing he explores how the human 'self' is different to the selves of insects and other living creatures and he concludes the following:

[Humans], in contrast [to animals], are almost constantly engaged in presenting ourselves to others, and to ourselves, and hence *representing* ourselves -- in language and gesture [...]. The most obvious difference in our environment that would explain this difference in our behavior is the behavior itself. Our human environment contains not just food and shelter, enemies to fight or flee and conspecifics with him to mate, but words, words, words (p169).

There are two important points in the above quotation worth exploring further. First, the idea that we present, or rather re-present ourselves (an idea already suggested above by Fay (1996)) to others *as well as* to ourselves. We are continually engaged in a process of 'discovering' ourselves, our identities, our 'selves', and in so doing telling others as well as ourselves who we are. The 'self', or rather 'the veil of perception' which the self is, is something that is affirmed in being described to ourselves and others. The second important point in the above quotation concerns the role of 'words, words, words': Language is the key to 'the veil of perception' or the construction of 'the self'. The world is thus perceived *through* words which allow us to perceive in the way we do (Dennett, 1989). Language is a particular form of representation and it is of particular importance because as Miller (2003) suggests in interpreting Vygotsky's notion of mediation, it is the means of first order mediation, "talk". Instruction from the parent (mediator) to the child is possible through language. Through mediation however, the child is not only taught how to do particular things, but inherent in this process is the transmission of a cultural and historical way of understanding as Miller (2003) suggests:

Understanding that is achieved through mediation can only be an understanding of a self whose consciousness is constituted by others. Consciousness is the continuity that transcends the finite being of particular persons. Almost in a literal sense, consciousness is handed over and down through the generations. This process of handing down, of pulling history across time, is what we call tradition and culture is the substance that is passed along (p15).

Through language, culture is mediated to the child, particular ways of understanding the world thus constitute the child. 'Culture' is thus learned through a process of interacting with parents and elders who already possess the cultural understanding of a particular group. Tradition, rather than being something innate which the child is born knowing, is something which is learned and taught to children from a young age and in so doing shapes the way in which children come to view themselves and those around them. This all occurs through action as Miller (2003) suggests:

The process of cultural transmission is accomplished through the medium of action and it is these actions, that constitute tradition and whose source is external to the actor, that become enfolded in consciousness (p15).

Furthermore, language is one of the first and the most important ways in which children learn to represent in a symbolic manner. Words are symbols that help describe the world and allow

for communication and interaction between people. The ability to use symbolic representation is one which is learnt through action and self-regulation. A young child interacts with the world and so learns about the world and how the world works. The child learns to regulate his/her action by internalizing the language and meanings of his/her parents (Vygotsky, 1978). Thus it is through *actively engaging with the parents* that the child internalizes the language and understanding that the parents have. In so doing particular ways of engaging with the world and understanding the world are learned. There are other forms of symbolic representation that mediate children's experiences, what Miller (2003) terms 'second order mediation', 'objects' or cultural artifacts. These are objects that have been designed to be used in particular ways. These objects while being able to be used in various ways, have a way of functioning which is inherent in their structure. For example, while a scissors could be used as a stabbing tool, inherent in the way it is shaped is its way of being held and used to cut things (Miller, 2003). In relation to the current study, photographs and cameras can be seen as particular kinds of objects that help to mediate the technology of new possible ways of acting and engaging with the world. At the same time photographs also produce symbolic representations of the world. Cameras come with particular ways in which they need to be used to function correctly. For example, the flash needs to be used when the lighting is not bright enough, the camera needs to be held relatively steady in order to avoid a blurred photograph and the viewfinder needs to be positioned correctly in order to frame the desired content. These are but a few of the technical elements of a camera which make it a particular kind of tool. This is important because a person wishing to represent what they see in a particular way through using a camera will be limited by what the camera can do; by the kind of structure that it is. Thus often photographs come out not expressing what the photographer intended them to. One can also look at photographs and cameras in a less concrete manner and see them rather as particular kinds of structures that have particular kinds of meaning in any given group/culture. Thus, what cameras/photographs mean to a particular culture will determine the way in which young people in that culture understand and use cameras/photographs. For example in a lower socio-economic group cameras / photographs are seen as a novelty. Cameras are only handled by 'professional photographers' and only used on special occasions. Therefore if a child in this group has access to a camera, like in this study, they will have a strong preconceived idea about what kind of structure a camera is, what it is used for and when it should be used which will influence the child's engagement with the camera and photographs. The central point here is that children learn about the world and objects in the world through mediation; through interacting with their

environment and those in their environment. It is through these interactions with others that the child's action is regulated and shaped to fit that particular culture. These ideas of acting on the world, and regulating action are central to understanding how the individual comes to think of him/herself and thus requires further exploration.

Miller (1984) interprets Piaget's notion of action as the driving force behind learning. Through acting on the world, "cognitive structures" (Piaget, 1977) are constructed in a child's mind. These structures are systems enabling thought; frameworks for understanding. These structures are used when we interact with the world in order to make sense of our experiences. When faced with a situation which is unfamiliar to us we experience a "disequilibrium" (Piaget, 1977), our cognitive structures are unable to apply to or construct meaning from what we are experiencing. This disequilibrium requires us to act and engage further with such experiences. Through this interaction we learn, that is our cognitive structures change in order to incorporate new meanings and understandings. A Vygotskian understanding adds to this focus on action by introducing the notion of regulation. A child's action is regulated by social others (Vygotsky, 1978). Children internalize particular ways of doing things and understanding things, it is in this process that the social, cultural and historical forces which around us constitute the formation of 'the self' (Vygotsky, 1978). Hence, it is clear that the social (through the experiences and encounters we are exposed to) is intertwined with the individual through regulation of action. Waite (2005) and Nardi (1996) further explores the notion of internalization through interaction with parents by suggesting that it is in the child interacting with the world that he/she is mediated through parents (who have existing ways of understanding the world informed and created by their culture). In so doing the child internalizes these ways of understanding and these become part of the child's overall and ingrained way of understanding the world (Waite, 2005 & Nardi, 2006). Again, the point being stressed is that meanings, understandings and knowledge are constructed through individuals engaging with the social world of meanings through mediated action on the world. Humans by nature will act on the world to construct knowledge. The human ability to construct knowledge is clearly expressed through Shweder's (1991) notion of intentionality. In Shweder's (1991) article on cultural psychology he, like Miller (1984), critiques the tendency of various fields of psychology to study human nature based on either an internal (CPU - individual determines social) or external (social determines individual) view. Shweder (1991) suggests that it is problematic to view these two entities separately and suggests rather that we integrate them and see a human being as a complex composition of

both the internal and external. Miller (1984) posits that individual and social realities are brought together in the sense that it is through acting on the world that the social becomes part of and constitutes the individual. Shweder (1991), in a similar fashion, introduces the notion of intentionality. Intentionality is defined through his concept of “intentional world”. He describes intentional worlds as follows:

The principle of intentional (or constituted) worlds asserts that subjects and objects, practitioners and practices, human beings and socio-cultural environments, interpenetrate each other’s identity and cannot be analysed into independent and dependent variables. Their identities are interdependent; neither side of the supposed contrast can be defined without borrowing from the specifications of the other (Shweder, 1991:p74)

Shweder’s (1991) concept of intentional world is further explained through his illustration of a weed. In this illustration he indicates that the objects around us are what they are by virtue of the fact that we ‘made’ them what they are. Thus because we name and define a weed as a weed for that reason alone it *is* a weed. Similarly, the objects around us (which we define and so ‘create’) determine our experience of the world, or create a meaningful field of attention and action. Thus we create our perceptions of the world through action (as Miller (1984) and Piaget (1977) suggest) and in so doing, our perceptions define our experience and understanding of the world. The self is constituted through the other and the other is reaffirmed and also constituted through the self. Fay (1996) reaches the same conclusion as Shweder as is indicated in the quotation below:

[Humans] act on the basis of roles and rules which they glean only from others; and one of their most characteristic needs – the need for recognition – arises out of their relations to others. [...] Selves are the active traces which have been precipitated out of their relations with other selves. [...] Selves are not mere others to each other they mutually help to define each other such that without others selves cannot have the capacity to be selves or the material to be the particular selves they are (p47-48).

‘The self’ is thus created and affirmed through interactions with other ‘selves’. The ‘veil of perception’ is woven by these interactions with other ‘selves’. It is for this reason that one can say particular social, cultural and historical forces (conveyed through ‘selves’ or ‘the other’) define the individual. Vygotsky (1978) suggests that the process of the other constituting the individual occurs due to and through mediation and self-regulation. Our engagement with the world is mediated through language used by our parents and others in our context. We internalize this language and in so doing internalize ways of understanding and interacting in

the world. Mediation is **informed by culture and tradition**. In other words, how we teach a child to engage in the world is based on our preconceived understandings which we too internalized from our parents when we were children. Wittgenstein (2001) describes a similar process and terms it a 'form of life':

The idea of a form of life applies rather to historical groups of individuals who are bound together into a community by a shared set of complex, language-involving practices... our human form of life is fundamentally cultural in nature (McGinn, 1977: p51).

Thus turning once again to the metaphor of the 'veil of perception' one could say the veil is created by social, cultural and historical forces. That is, our veil is woven by particular culturally beliefs and understandings (which are largely informed by history) and social expectations. Fay (1996) concludes this point succinctly as follows:

Each separate self does not construct its own private, individual world nor live in one; rather, each self is a self only because it is part of a community of other selves that builds up a public, social world which uses a common system of symbols and which underwrites an ongoing pattern of interaction whereby these selves recognize and respond to one another. *The self is an essentially social entity* (p47).

*Language* enables the veil to be designed in the first place. Language is the thread of the weave for the veil, without the thread for the weave, there is no veil. Similarly without language there is no perception and no self. The role of language in weaving the veil of perception can be taken one step further as follows:

... words are potent elements of our environment that we readily incorporate, ingesting and extruding them, weaving them like spiderwebs into self-protective strings of *narrative*. Our fundamental tactic of self-protection, self-control, and self-definition is not building dams or spinning webs, but telling stories – and more particularly concocting and controlling the story we tell others – and ourselves – about who we are (Dennett, 1989, p169).

'The self' is not defined and shared with others through the existence and passive use of language, rather 'the self' is defined and shared with others through the ways in which we use language, as Dennett (1989) suggests, the way we "concoct" language into commentaries(p169). The threads of language are pulled together in all sorts of directions and patterns to tell a kind of 'story', an individual's commentary on the self, on the world. The commentary is told to others as well as expressed to him/herself. It is in so doing that 'the

self' exists. Descartes' 'I think therefore I am' might in these terms be expressed as 'I tell my story or commentary on life, therefore I am'. It is in this telling of 'the self' and the world that we (as individual selves) exist.

Billington et al (1998) can add to the above picture in their important suggestion that there is not one self but rather a range of different selves which present (or rather *re*-present) themselves in different social settings, 'social selves' if you like. Thus depending on what social situation you find yourself, you will play the corresponding role, be that particular self. For example, a woman who is a business woman, mother and wife plays three separate roles, or has three distinctive selves which are naturally constituted with regards to the social context. As Fay (1996) suggests:

Perhaps there isn't a "true self" at all; instead maybe the self is rather a way of being which is created anew in the very process of interacting with others and with one's environment. [...] [The self] is various states of consciousness related in a certain manner (p36 & 37).

However, Fay (1996) suggests that while there are various social selves in various contexts, there is still a 'unity of the self' in that all those particular roles and selves are related in a field of unity, thus creating a view of a person as a complex intertwinement of various roles and selves depending on the social setting. Relating this to the metaphor of the veil, instead of there being only *one* 'veil of perception' there are a series of veils each with different weaves. Each veil is weaved in a particular way to incorporate particular social settings. The 'mother-veil' is worn while the woman is with her children and performing motherly roles such as cooking and nursing her children. This veil is woven by the woman's cultural beliefs concerning what it is to be a mother as well as social norms surrounding motherhood. Similarly a different veil is woven for the woman as a business woman etc. Thus we 'wear' many varying veils depending on which situations we find ourselves and with each different veil we tell a different narrative. There is a story behind each veil which is told to affirm that particular self to the person as well as to everyone else.

The veil of perception metaphor can be taken yet one further step. The commentaries we tell about our lives and experiences are not only told through words, rather there are various ways of commenting, interpreting and sharing one's views and experiences in the world, all of which function as re-presentations of our selves. Metaphorically, the thread which weaves

our veils of perception does not necessarily have to be language; rather there are various kinds of threads which can be used to weave a veil. for example. other kinds of texts such as paintings and photographs. For example through art, one's painting is in a sense a way of graphically depicting a commentary of their experience. Similarly, a photograph is a way of capturing moments in one's life, bits of a commentary. What one chooses to photograph, how he/she frames the content, the lighting etc. are all related to the photographer's understanding of the world, the photographer's veil. The meaning that the photograph has for the photographer however will not be the same as it is for those who view the photograph as the viewers view the photograph with their own veils their own understandings. The photograph is a re-presentation of a self, a different kind of thread and weave.

To conclude, it is clear to see that the self and the social world are dialectically linked and constitute each other. The self is created through the other and the other is in turn re-affirmed through the self. The self is 'confined' by its veil of perception which results in the person viewing the world in a particular way. This veil is woven by social, cultural and historical threads which determine the way in which the person will, behave, understand and create meaning. Meaning is expressed to others through commentaries which take various forms including most essentially language. In relation to the current study, the above suggests that photographs are a way of commenting on one's experience of the world. Thus it is expected that the photographs the children take, and the comments they make about others' photographs will be suggestive of each child's social world.

#### *The photographic form of representation*

Currie (1991) and Keenan (1989) describe representation as a process of mediation between us and the world around us. Representations create a particular kind of perception of the world, a perception which is constructed through the artist. For example, the writer translates what he/she sees into language and the painter translates what he/she sees into a painting. Through this process something of the 'true' reality is lost in the representation. Authors such as Barthes (1981), Derrida (in Navab, 2001) and Ricoeur (1981) all explore the relationship between texts and other forms of representation and how these representations all, while attempting to replicate reality', instead interpret reality and re-create it / construct it into what they perceive. Ricoeur (1981) suggests, in relation to texts, that the reader is in fact positioned 'in front of the text'. That is the reader does not, as is often thought, read 'behind

the text' and gain the understanding and meaning that the writer was trying to posit, but rather the reader reads the text from his/her interpretive stance. The reader is 'in front of the text' because he/she reads the text and constructs their own understanding of it. Barthes (1981), Sontag (1978) and Currie (1991) pose the question of whether or not photography belongs in the category of other forms of representation (like text and painting). This question exists because the photograph seems somehow to be a different kind of representation to texts and paintings, there seems to be something more authentic in relation to reality about a photograph. This question is one which has plagued much of the critical discourse surrounding photography from when it first originated.

The practice of photography was originally thought of as something magical and mystifying (Navab, 2001). There were high degrees of fascination and praise at the creation which could produce what was then thought to be an exact mirror image of that which is photographed. As Holmes (1980) suggests, "... the photograph has completed the triumph, by making a sheet of paper reflect images like a mirror and hold them as a picture" (p81). This 'exactness' of the photograph in relation to the photographed set photographs above other forms of representation such as paintings, drawings and even writing. Photographs were seen as somehow less representative and rather more directly reflective of that which is photographed. The following quotation by Edgar Allan Poe (cited in Navab, 2001) suggests that there is a great deal of awe surrounding the process of photography and its startling connection with reality such as no other form of representation can achieve:

All language must fall short of conveying any just idea of the truth... Perhaps if we imagine the distinctness with which an object is reflected in a positively perfect mirror, we come as near the reality as by any other means... photography discloses a more absolute truth, a more perfect identity of aspect with the thing represented. The variations of shade, and the gradations of both linear and aerial perspective are those of truth in the supremeness of its perfection (p71).

Language falls short in conveying 'the truth' because it is open to and indeed necessitates, interpretation. The writer has to go through the process seeing what is in front of him/her, or as Ricoeur (1981) terms 'the event' and implicit in this process of seeing is interpreting and perceiving. Words are then used to describe this perception and create a text/a story to express it. The writer is unable to divorce him/herself from his/her own subjective standpoint and interpretation. In other words one is unable to remove himself/herself from his/her own viewpoint or veil of perception. (Sayedoff, 1992). Ricoeur (1981) argues that any reader is

distanced from a text (or by analogy, an event that requires interpretation) due to his/her perception, interpretation and construction of the event in his/her own mind. The process of 'seeing' the event can include writing about it and in so doing turning the perception into a narrative to be shared with others. Photographs on the other hand were seen as 'positively perfect mirrors' (Navab, 2001). Something about the photograph seems to transcend the usually unavoidable interpretative standpoint of the artist. The artist, in this case the photographer, seems not to taint the photograph with his/her interpretation or subjective impression, the photograph is simply a direct copy of the reality which it photographs. This early and traditional view of photography is one which remains in more current and recent theorising about photography. Writers such as Susan Sontag, John Berger and Roland Barthes while all part of the critical discourse surrounding photography, all recognise this unusual quality of photographs in that although photographs are not replications of reality they are indeed forms of representation, the interesting thing about photography is this representational quality is and has for so long been misleadingly concealed. Berger (1980) explores how paintings and drawings, while also representations of reality, lose something of the true reality in the process of translation into the artistic impression. In the following quotation Berger (1980) suggests the apparent ability of the photograph to exactly copy reality:

A photograph is not a rendering, an imitation or an interpretation of its subject, but actually a trace of it. No painting or drawing, however naturalist, belongs to its subject in the way that a photograph does (p50).

The distinction here is made between paintings and photographs as forms of representation. While both represent reality, the latter is somehow more accurate and 'truthful' in its representation. Something about the photograph places it in the position of being more objectively reflective of reality (Sayedoff, 1992). In the following quotation Currie (1991) tries to make this distinction more clear and distinct for us by naming them as different classes of representation:

... photographs and paintings are different kinds of things without having to go to the extreme of saying that photographs give us perceptual contact with the things they are of. We may say instead that photographs are natural representations and paintings intentional ones (p26).

Paintings are clearly intentional because the process of painting involves the painter partaking in a process whereby he/she intends to convey a particular message; a particular expression or interpretation of the reality he/she perceives. The photograph on the other hand seems to be free of this process. The existing belief at the time was thus that the photograph has 'no strings attached' if you like. The photograph simply creates a 'copy' of the reality it photographs (Svedoff, 1992).

This view of photographs being a mirror of the reality which is photographed is taken further in suggesting that photographs actually carry something of the nature they photograph in them. Something from nature is 'captured' in the photograph. The photograph is seen as being an impression of the 'real'. This is suggested in the following quotations by Sontag (1978) and Navab (2001) respectively:

... a photograph is not only an image (as a painting is an image), an interpretation of the real; it is also a trace, something stencilled off the real, like a footprint or a death mask (p154).

What is implicit in this idea is the belief that the photograph has taken something from something. What that something taken is and to whom that something-taken-from-something belongs is a question that still initiates debate in contemporary criticism of photography (p71).

Photographs come to be seen as carrying some element, some part, of what they photograph. They do not only represent the reality of what they photograph, they actually have some remnant. This idea is taken to the extreme by suggestions that photographs are paradoxically more real than the reality they trace. This is because they transcend the confines of time. The reality of 'the real' is that it fades, it is a victim of time. People age and eventually die, similarly objects weather with time until they disintegrate into nothingness. Photographs capture a moment of reality and forever hold that piece of reality, keeping it youthful and allowing it to transcend the time barrier. In this way it goes beyond what is real. It keeps a real 'moment' forever real, while that moment if not photographed would pass on to oblivion. This idea is expressed by Barthes (1981) as follows:

The photograph is literally an emanation of the referent from a real body, which was there, proceed radiations which ultimately touch me, who am here; the duration of the transmission is insignificant; the photograph of the missing being... will touch me like the delayed rays of a star.

A photograph thus has the ability to connect the present with the past. In capturing a frozen moment, the camera allows that moment to continue to exist. We are able to remain connected to the past by having images that trace that past moment. We do not only have an interpreted representation of that moment (as a painting would be), but rather we have an actual trace, some piece of it to hold on to and keep with us. Photographs become a way of bearing witness to an event. The fact that something is photographed means that it exists, or did exist in the moment it was photographed (Navab, 2001). Therefore, people take photographs as a way of asserting that something or someone exists / existed, that what was photographed did actually happen. Photographs become a means of 'truth', a tool of proof.

Another view concerning photography posits that there is something violating in the process of photography. This view arises originally out of the discourses and jargon surrounding photography. One 'takes a shot of something' when photographing it. One aims, then clicks and the shot is taken. The language used to describe the action of taking a photograph is interchangeable with the language used to describe someone firing a gun (Navab, 2001). Interestingly in isiZulu, the language of the participants in this study, the word 'Bashuti' meaning 'photographer' is derived from an isiZulu word meaning 'to shoot'. Thus the discourse of violence surrounding photography exists in isiZulu as well. This violence arises out of the predatory and voyeuristic standpoint of the photographer. Photographers often talk about their photographing in a predatory way as the following quotation from the photographer Cartier-Bresson (cited in Navab, 2001) suggests:

I went to Marseilles... I prowled the streets all day, feeling very strung-up and ready to pounce, determined to "trap" life – to preserve life in the act of living. Above all, I craved to seize the whole essence, in the confines of one single photograph, of some situation that was in the process of unrolling itself before my eyes (p75).

The photograph is a violation in that it 'traps' a moment or a person. Often the photographer does not give the subject a choice in the matter, the subject is relentlessly 'captured' in the photograph. Taking this one step further the camera has the ability to capture a person in a photograph in a way that they have never themselves been able to see themselves. The person is trapped in a moment and then views that moment in the photograph and sees themselves in a way that is unexpected and foreign to them. The person is 'shot' and imprisoned in the confines of the photograph. The explored view above is that photographs are a way of bearing witness to a moment or event - a way of proving that that moment existed. The

photograph is seen as a way of filling the gap for where the memory fails, it is also seen negatively as proof of events that people wish not to be remembered or even known about. This brings to mind infamous stories of wives hiring private detectives to find and ‘capture’ on film their husbands with their lovers. Here, the fact that photographs are proof of events is intrusive, defamatory and incriminating. It is for this reason that Berger (1980) suggests that cameras can be dangerous and it is in our best interests to know exactly how to use them as well as to know how to protect ourselves from them. Sontag (1978) explores this view further in the following quotation:

To photograph people is to violate them, by seeing them as they never see themselves, by having knowledge of them they can never have; it turns people into objects that can be symbolically possessed. Just as the camera is a sublimation of the gun, to photograph someone is a sublimated murder – a soft murder, appropriate to a sad, frightened time (p14-15).

This objectification of the person photographed is an important aspect of photography. By freezing a moment of time, one is turning the person in the photograph into an object. An object which can be passed over with ease to many different hands, an object which can even be published and extended to the world through mass media. Bearing witness to an event is both the advantage and disadvantage of photography and while having a symbolically objectified imprint of a moment serves us where our memory fails, sometimes in serving us photographs violate and exploit us by keeping that which we wish to forget scathingly imprinted in the present for all to see.

The above presents photography as being a natural and truthful representation of reality, more so than other forms of representation such as paintings and writing. This ‘truthful’ representation sometimes violates the person photographed as it bears witness and acts as proof of that which is in the photograph. It acts as proof only because a photograph is seen to be an accurate and reliable copy of reality. There is a contemporary view in the critical discourse of photography which questions this supposed accuracy and reliability of photographs to represent (to the extent of ‘mirroring’) reality (Brook, 1983). Navab (2001) goes as far as to say that the argued ‘transparency’ of a photograph in relation to reality is a fallacy. Navab (2001) believes that the Western civilization is preconditioned to view art in particular ways, one of which is to perceive the photograph as a particularly realistic form of representation, however, paradoxically recognising the object as requiring particular processes

of deciphering, reading and interpreting in order to make sense of an image in a photograph. This idea is explored and substantiated in the following quotation by Barrett (1990):

Styles of representation, realistic and otherwise, are invented by artist and draughtsman in a culture and learned by viewers of that culture. Styles of picturing are made up of invented codes to become conventional. [...] Ease of information retrieval from a style of picturing is mistaken by a culture for pictorial accuracy because the viewers are unaware of the representational system within their own culture; they are too familiar with it to notice it. A style becomes so easily readable that it seems realistic and natural – it seems to be the way the world is (p144).

Barrett's (1990) quotation is suggesting that the view that photographs are a very realistic form of representation has been created and internalised by people. The fact that one sees a photograph as being a mirror of reality is not because that is what a photograph is but rather because that is what one is *told* and taught that a photograph is. Thus one internalises this view, believes this view and perpetuates this view to others. A photograph has *become* a mirror of reality although of course it is not this inherently. Increasingly authors such as Snyder (cited in Navab, 2001) have come to see the photograph as much less accurately reflective of reality than it was previously perceived as being. This is explored in the following quotation by Snyder (cited in Navab, 2001):

A photograph shows us "what we would have seen" at a certain moment in time, from a certain vantage point if we kept our head immobile and closed one eye and if we saw things in Agfacolor or in Tri-X developed in D-76 and printed on Kodabromide #3 paper. By the time all the conditions are added up we are positing the rather unilluminating proposition that, if our vision worked like photography, then we would see things the way the camera does (p77).

The preconceived view that the photograph is a particularly realistic representation of reality is exactly that, a preconceived view. When exploring the process of photography, as Snyder does above it becomes increasingly clear that much of the truthful reality of that which is photographed is in fact lost in the process of taking and developing the photograph (Brook, 1983). This becomes evident when one takes into account the current status of the process of photography in the 'digital era'. Digital cameras allow one to change colour, brightness and sharpness of that which is photographed in an instant. This changes that which is photographed into something quite different to the reality. Furthermore, photography computer programmes allow one to in fact distort the reality that is initially photographed. One can cut up photographs and paste them together, all while changing the background to

situate it in an entirely different setting and then smoothing off the edges to make it look authentic. Thus the above-mentioned view of photographs being used as proof, often of an incriminating nature, becomes disregarded. When photographs of an incriminating kind appear in tabloids today, there is often much debate concerning the authenticity of the photographs. Photographs are no longer seen as necessarily bearing witness or proving an event. In fact they are nowadays used for the opposite – to create an event that did not in fact occur. By then playing on people's preconceived belief that photographs are accurate representations of reality, one will get away with fabricating an event. Berger's earlier warning seems more fitting than ever, we need to understand the power of photography and how it works in order to protect ourselves.

It seems apt to explore the notion of 'essence' described by philosophers such as Heidegger, Hume and Barthes. The notion of 'essence' would question the authenticity of the photograph, the argument being that photographs do not in fact 'mirror' reality but rather only *represent* it in much the same way that other representative art forms represent reality (Huckle, 1985). In relation to photography, one could ask what the 'essence' of the person in the photograph is? Barthes struggles with this question when viewing a photograph of his deceased mother, he sees his mother in the photograph and knows it is his mother and that it is not someone else, but at the same time it is somehow not his mother (cited in Huckle, 1985). Some 'essence' of his mother is indeed in the photograph, but this would be true too of a painting of his mother. Any painting or other kind of form of representation would attempt to capture not the surface of his mother but her 'essence'. The fact remains that the photograph, while capturing some form of an 'essence' of that which is photographed, loses something of the reality and it is this 'something' which places photography firmly in the field of representation rather than mirroring.

Navab (2001) and Brook (1983) conclude by suggesting the distinction between the different kinds of representation is warranted in the sense that each form is a different kind of representation, a different way of representing. But Navab (2001) and Brook (1983) assert that photography is in no way a 'truer' form of representation than for example a painting, rather; "... photography is merely another way of constructing, ordering, and communicating meaning, and relies on convention and construction as do other media" (p78). Navab (2001) also draws on Derrida's idea of deconstruction which is generally applied to writing as a representative form. Derrida (cited in Navab, 2001) talks about deconstructing language in

order to understand where it falls short in representing that which it represents. In the same way one can deconstruct a photograph. One can pick it apart and look at various elements and in so doing get a more accurate reflection of the relationship between the photograph and that reality it attempts to mirror. Derrida's conclusion in relation to language is that no theory can be perfectly accurate; no theory can answer every question and be accepted as completely unflawed and truthful. In the same way, there is no photograph that can perfectly and accurately reflect the 'reality' it represents without any technical flaws and without raising questions about accuracy and the point of view of the person who holds the camera and decides to 'click'. The person holding the camera and choosing when to 'click' does so based on his/her particular 'veil of perception'. The 'reality' is never directly knowable, because it is always interpreted and constructed through individual's perception.

In concluding this section of the literature review it is important to track and understand the history of photography. Photography was mystified as something magical, something that transcended other representative art forms. A photograph seemed to have the ability to truthfully and accurately represent the reality it photographed. Furthermore photographs transcend time in their ability to freeze time and capture a moment and in so doing bear witness to that moment. Part of this gave rise to the more critical view of photography which describes it as a violating representative form imbued with a voyeuristic drive. People are photographed and trapped in a moment that they cannot escape. More recently post-modern writers such as Derrida have raised questions concerning the perceived transparency between any art form, including photographs, and the reality they represent. This supposed transparency has been argued to be a preconditioned understanding of photography that is in fact not accurate. These writers argue that a photograph falls short of representing reality accurately because of the technicalities involved in the process of taking and developing the photograph and the necessarily subjective positioning of the photographer. For this reason a photograph is argued to be in the same league as other representative art forms such as painting.

### *Conclusion*

Tying the three threads of the literature review allows for a comprehensive framework through which to think about and understand the children in this study's photographs. It is clear that traditional developmental theory (cognitive, social and moral) provides a basis

through which to analyse the children's photographs. Developmental theory provides a review of expected competencies which would influence the kinds of photographs that children at the three age levels would be expected to take. However, it is suggested that traditional stage theories are limited in that they are largely ignorant of context and miss the rich qualitative situatedness of children's worlds and their commentaries on these worlds. In order to understand the children's photographs, one needs to have a clear understanding of what their particular and unique context is about. In order to do so it is important to have knowledge about the complex intertwinement between the individual and the social. As is suggested above the individual is constituted by and constitutes 'the social'. Furthermore it is in giving commentaries about one's life to others, that the individual is reaffirmed and identity is formed. Thus in assessing the photographs that the children in this study take, it is important to understand that the children are largely influenced by various social, historical and cultural forces which constitute what a photograph is, should be used for and means in that particular context. Finally, the individual, in giving commentaries, represents him/herself to the world. While there are many forms of representation, photographs are the form which is of most interest to the researcher. In relation to the present study it is important to understand the kind of representational tool that a photograph is and the limits that arise through this particular form. Using these inextricably intertwined threads to frame the study will allow for a holistic and comprehensive analysis of the children's photographs and their corresponding commentaries.

This study is thus significant in that it expanded on the Sharples et al. (2003) research and in so doing raised important questions about the usefulness of traditional cognitive developmental models in explaining the interpretive behaviour of children, particularly as expressed in photographs. The cognitive developmental model would posit that as children age they become more cognitively developed and as a result their abilities in various activities become increasingly advanced. This is a result of their changing and developing way of perceiving. Using this premise one would suspect, as Sharples et al. (2003) elucidated that children of increasing ages would take increasingly 'advanced' photographs, that is photographs of a better quality (well framed and focused and consisting of creative or nicely posed content). Testing if this premise holds for children in the South African context, the current study posed an important discussion concerning the difficulties in applying Eurocentric theories to a particular South African context. The current study made use of

marginalised subjects in order to ‘test’ the assumptions about cognitive development raised in the Sharples et al. (2003) study.

The study also intended to illustrate the vital importance that social, cultural and historical forces have on children and their experience of themselves and the world around them. The researcher attained this kind of data through exploring the photographs the children took and also in their general approach to photography explored in the interviews. Finally, the study explored the way in which South African children used photography as a form of representation and a way of the children telling their stories. In so doing the researcher examined the quality of the children’s experience and explored their views, opinions and beliefs about photography as well as the world around them and how they access this world.

An understanding of how individuals perceive themselves and the world around them is vitally important for psychology as it is only in understanding the complex intertwinement of forces influencing individuals’ lives that psychologists can begin to truly understand the world of the individual and the community and context in which he/she exists. Much traditional theory in psychology is born from either European or American contexts. It is of vital importance to realise that these models, while useful to certain extents, become largely problematic when applied to the South African context. Thus a deeper and more socially contextualised analysis is necessary in order to have a representative and authentic understanding of the South African context.

#### *Research questions*

The main research questions for the current study are as follows:

- 1) How useful are traditional developmental models in explaining the interpretive behaviour of children as expressed in photographs?
- 2) What can the children’s photographs and the way in which they talk about them tell us about their social worlds of meaning and identity?

## Design and methodology

### *Methodology*

This study makes use of both quantitative and qualitative methods in collecting and analysing data and in so doing taking advantage of both methodologies. The quantitative element of the study is derived from the Sharples et al. (2003) study. The advantage of this for the present study is that the use of the same procedures allows for a comparison of the data from this small study with the large scale study. The qualitative methodology extends and provides a very different richer and more detailed kind of insight which brings to the fore the voices of a marginalised group. The following quotation highlights the advantage of using quantitative and qualitative methods combined:

...the descriptions of quantitative analysis show how researchers can create a series of tally sheets to determine specific frequencies of relevant categories. The reference to qualitative analysis show how researchers can examine ideological mind-sets, themes, topics, symbols, and similar phenomena, while grounding such examinations to the data (Berg, 2001, p242).

By using both methodologies the researcher is advantaged by getting two different sets of information which can be compared to either compliment or contradict each other.

Furthermore the researcher has two different kinds of information to draw conclusions from, one being a lot more quantifiable and the other being a lot more explorative and deeper.

### *Participants*

Through the use of purposive sampling the researcher selected a very specific group of children. The 12 participants in this study were drawn from two schools, a primary and secondary school. Both schools are situated in African lower socio-economic urban contexts. The researcher's intention was to select marginalized children who would gain the opportunity to have their voices heard in the process of the project. The researcher was assisted by the class teachers of the children in order to select children who were talkative and interested in the research topic. The researcher was concerned with each participant's individual experience of photography and hence using participants who were more likely to

be descriptive and expressive was most likely to achieve responses of more depth and description. Children of three particular age groups were selected; 7 years (grade 2), 11 years (grade 6) and 15 years (grade 10) old. There were four participants per group, 2 of each sex. Table 1 presents the profile of the participants of this study<sup>1</sup>:

**Table 1: Participants**

<b>School level</b>	<b>Age</b>	<b>Males</b>	<b>Females</b>	<b>Total participants</b>
Primary	7 (grade 2)	2	2	4
Primary	11 (grade 6)	2	2	4
Secondary	14 (grade 10)	2	2	4
<b>TOTAL</b>		6	6	<b>12</b>

The age groups chosen for this study were selected as these are the ages used in the Sharples et al. (2003) paper and represent the Piagetian stages, preoperational, concrete operational and formal operational. While the Sharples et al. (2003) study was cross cultural in that it included children from various countries in Europe and the East, it did not include any children from Africa, thus this study allows for a comparison between various European children and a small group of South African children. Using children of the relevant Piagetian stage ages, was useful in determining whether or not traditional cognitive developmental theory is in fact accurate when applied to South African children. The equal division of gender was presented again to replicate the Sharples et al. (2003) study; although the Sharples et al. (2003) study concluded that there were no significant differences between the photographic behaviour of children of different genders.

#### *Data collection*

After selecting the children and ensuring that informed consent forms were signed and returned by the children's parents the researcher then presented each of the children with a disposable camera. The children were taught how to use the cameras and thereafter took them home to use for the weekend. The researcher collected the cameras the following Monday, had the photographs developed and presented the children with their photographs two days

<sup>1</sup> As in the Sharples et al. (2003) study no significant differences were found in relation to the photographic

later. After developing these photographs the researcher had a total of 307 photographs with which to work. Further data were collected through focus group discussions with the children about their photographs. First, individual descriptive interviews were conducted with each child in order to give the child an opportunity to describe each photograph that they took and to make any comments that they felt they wanted to about each photograph. Each child was then asked to choose their two favourite photographs and to give reasons for their choices. Thereafter a semi-structured focus group discussion was conducted with each of the three groups (each group comprising of the four same-aged participants). The group discussion was structured in order to allow each child to show the rest of the group their two favourite photographs and to allow the rest of the group to comment on what they thought of the photographs. The interviews were thereafter left open for discussion to allow the children to talk about anything concerning photography that they wanted to. The choice to use small focus groups as opposed to only individual interviews was made based on Buckingham's (2000) assertion that children are more inclined and comfortable to describe aspects of their experience and perception of the world around them in small groups of children the same age as themselves.

#### *Site or social network selection*

The site at which the data were collected was the two schools from which the participants were drawn. The choice for this location was motivated by two reasons. Firstly it was convenient for the children as no transportation needed to be organised, the children simply remained at school. Secondly the venues offered a place that was familiar to the children and thus allowed them to be placed at ease. Therefore the experience of feeling unsettled due to being in an unfamiliar setting was avoided. Conversely being in the schooling environment may influence participants' engagement in discussions due to feeling the need to answer desirably and appropriately within a schooling context. To overcome this possibility the researcher tried to create a more relaxed environment by providing sweets and cool drinks for the children to enjoy while participating in the discussion. The researcher also repeatedly reassured the children that there were 'no right answers' and that they could say whatever they wanted to.

---

ability of males and females, therefore little reference is made to the question of gender.

## *Analysis of data*

### *Content analysis*

The *quantitative* methods provided a detailed summary of the content of different kinds of photographs that every child took. The content was grouped in a specific way based on a coding scheme designed and used by Sharples et al. (2003) in their study. The Sharples et al. (2003) coding scheme divides the content into the following groups: photography context (this refers to where the photograph was taken), time (the time of day during which the photograph was taken), subject matter (this is made up of people, animals, buildings, manmade/crafted objects, nature and sport) and judgement (referring to the viewer impact, technical quality, staging and main subject). Some slight adaptations to this coding scheme were made in order to include aspects of the photographs of the South African children not captured in the Sharples et al. (2003) scheme. The changes made included the addition of 'community photographs' in the photography context section and 'photographing the self' in the subject matter section (refer to Appendix C for a copy of the coding scheme).

Determining which category to place a photograph was in some instances not very clear. Thus there was a level of interpretation involved in determining which categories each photograph belonged in. To try and compensate for this the researcher made use of cross-rater reliability by allowing another individual who went through a range of the photographs and coded these. These codings were then compared to the researcher's codings and only minimal differences were found. Arranging the content of the photographs in this coding scheme allows for quantitative analysis through analysing the frequencies of the data according to the coding scheme (explored below).

The research questions are addressed by the quantitative analysis as follows: 1) In focusing on the kinds of photographs the children took (based mainly on what content they included) the researcher was able to explore whether the children at the different age levels displayed abilities reflective of their corresponding developmental level. For example it is expected that the content of the older children's photographs would include broader social networks and settings, while the younger children's content would be focused on their immediate family and surroundings. 2) The social worlds (that is the social, cultural and historical forces) that influence the children were expected to be highlighted in the content of their photographs as what they choose to photograph is arguably directly affected by the social and cultural forces that construct each child's perception of themselves and the world around them. Each

photograph carries meaning for the child and is an interpretation of his/her world/experience. It is exactly this meaning and interpretation that the researcher attempted to explore. 3) Photography, as explored in the literature review, is a form of representation. This use of photography to represent one's world was explored through analysing the photographs that the children took. In so doing the researcher attempted to understand the children's photography as a way of them articulating the self and their world.

While the study has a small sample size of only twelve participants, a total of 307 photographs were collected for analysis thus making quantitative analysis through frequency distributions appropriate (Pallant, 2001). The data from the coding scheme were analysed through frequency distribution tables. For each category of the coding scheme two frequency tables were created; the first showing the frequency of the different codes in that category for the three age groups, and the second showing the frequency for the different gender groups. This frequency distribution allowed the researcher to make comparisons across the three age groups.

Content analysis is described by Holsti (1968, in Berg, 2001) as follows: "... any technique for making inferences by systematically and *objectively* identifying special characteristics of messages" (p240). Berg (2001) adds to this: "from this perspective, photographs, videotape, or any item that can be made into text are amenable to content analysis" (p240). Content analysis is achieved through data being analysed by means of 'rules' which are entitled 'criteria for selection', these are established before hand by the researcher and applied to the data once collected. The criteria for selection need to be consistently applied and able to account for any kinds of variations in the data, to the extent that other readers looking at the data and using the same criteria, would yield the same or comparable results (Berg, 2001).

Determining the criteria of selection is a process which makes use of existing literature in the same field as well as an examination of the particular study's data. In this study the normally complex process of determining criteria for selection was made easier by using an existing coding scheme from Sharples et al. (2003) which was applied to this study. Additions were however made to account for different kinds of data which appeared in this study but not in the Sharples et al. (2003) study. For example, the addition of the category of 'photographs of self'. This appeared frequently in the current study and therefore was added as a criteria for selection. Normally the process of determining criteria for selection involves frequent

reading and re-reading of the texts, in this case examining and re-examining of all the photographs, and in so doing identifying important categories of information worth discussing and using for the purpose of comparison. In this study, the criteria for selection were predetermined from the Sharples et al. (2003) study and were adapted slightly by examining and re-examining the photographs, giving rise to new criteria for selection being added (Berg, 2001).

### *Qualitative analysis*

The qualitative analysis was introduced as a means of gathering contextualised data that was richer and more representative of the experiences of each individual participant. The qualitative analysis focuses specifically on the research question pertaining to social worlds and photography as a form of representation. Ulin et al. (2003) suggest that qualitative thematic analysis allows the researcher to identify how data fits together by bringing together meaning and context.

As explored in the literature social, cultural and historical forces are largely responsible for individual's perception of him/herself and his/her perception of the world around him/her. For this reason it was expected that the children in this study are influenced by the social and cultural forces in their lives in relation to the photographs they chose to take. Furthermore the photographs and their talk about them would provide a commentary of their social worlds. A focus group discussion was aimed at getting children to talk about their photographs and in so doing articulate their view of themselves and the social world that surrounds and influences them.

While photography is a common form of representation generally, the researcher aimed to discover if this was the case in the marginalised group of participants selected in this study. Furthermore, while a conventional view of what exactly constitutes 'artistic' in relation to photography exists, 'the artistic' is still to a large extent a social construct which means it may vary based on context. Through conducting focus group discussions the researcher aimed to determine whether the South African children in this study subscribed to the conventional view of 'the artistic'. The view of photographs as being "representational objects" was also highlighted in trying to elucidate how children are influenced by and develop an understanding of, the world around them.

The data collected from the interviews were analysed through thematic analysis. All interviews were recorded and transcribed. For the interview schedule for the individual interviews, the interview schedule for the focus group discussions refer to Appendix A and B respectively. For the full transcripts of individual and group interviews refer to separate Appendices booklet.

Miles & Huberman (1994) suggest that: “The core requisites for qualitative analysis are a little creativity, systematic doggedness, some good conceptual sensibilities, and cognitive flexibility”. In attempting to keep such an open frame of mind during the analysis the researcher made use of Ulin et al.’s (2003) steps for conducting thematic data analysis of interviews. These steps allow for a systematic analysis however also leave room for interpretation and creativity. The researcher followed each of the steps which Ulin et al. (2003) suggest, an outline of which process follows.

*a) Reading: developing an intimate relationship with the data*

In the first step the researcher read and re-read the interview transcripts and in so doing becoming ‘immersed’ in the data (Uline et al., 2003). Furthermore as Ulin et al. (2003) suggest, this process began from the start of the research and gradually escalated as data was collected. The assumption here is that the more ‘intimately’ the researcher is connected with the data, the more detailed and in-depth the analysis will be. This step included three processes which made the reading and re-reading more structured, these processes are “reading for content”, “noting quality” and “identifying patterns” (Ulin et al., 2003).

The researcher ensured that she obtained and collected the kind of information that she intended to collect. Various factors influenced the content that emerged in the interviews, some of which included the researcher’s probes, the choice of the venue, the composition of the group and the characteristics of the interviewer. This process was particularly important from the start of data collection as it allowed the researcher to make changes in order to make the data collection more meaningful. At this point the researcher also began to identify emerging themes and noted new topics which arose in the interviews. These were then incorporated into the interview schedule and used in the remaining interviews (Ulin et al., 2003). Noting the quality of the transcripts and notes is important for the credibility of the interpretation and analysis. The researcher was aware of the quality of the questions asked, for example she tried to avoid leading questions which can compromise the quality of

responses. Furthermore comprehensive notes were made during the process to ensure that in the event that the quality of a response was compromised due to a question from the researcher, this compromise could be noted and taken into account when formulating the interpretation (Ulin et al., 2003). To identify patterns in the data the researcher looked at the various sources of information as a whole and tried to identify common themes, links, contradictions and gaps. The various sources in this project included the actual photographs that the children took (which were explored and analysed quantitatively as described above), their individual interview as well as their focus group discussions. Hence through using this form of triangulation, the researcher attempted to find the links between all three of these data sources (Ulin et al., 2003).

*b) Coding: Identifying the emerging themes*

The coding step is an essential one for the interpretation of the data and began with the researcher writing notes in the margins of the transcripts in order to highlight important themes which emerged. These notes acted as ‘flags’ for the researcher and reminded her of important themes that were evident in the transcripts. Identifying sub-themes was also important at this stage and was done in the same way as the coding for major themes. Having clarity about the two processes of “labelling aspects of the text” and “evolving the coding scheme” made the coding easier and more structured for the researcher (Ulin et al., 2003).

The researcher labelled the emergent themes in two ways. First, by borrowing existing terms from the social science literature (which has the advantage of being recognized and more easily understood by a wider range of people). For example, the theme of “activity” was introduced from the central role afforded it in Vygotskian theory. Second, by allowing the codes and their labels to match closely the ideas and language from the actual data (this has the advantage of being more authentic and more closely tied into the actual data). For example, the importance of ‘possessions’ and ‘relatives’, not necessarily evident in the literature, are stressed in the discussion due to their relative importance to the participants in this study. Labelling codes allowed for a range of disparate bits of text to be placed under one essential label thus making comparisons and connections across labels easier (Ulin et al., 2003). While the researcher labelled the transcripts to identify themes and codes which emerged, it was also essential to remember that no theme, category or code is rigid. They were labelled with the knowledge that they all had the potential to change and the researcher

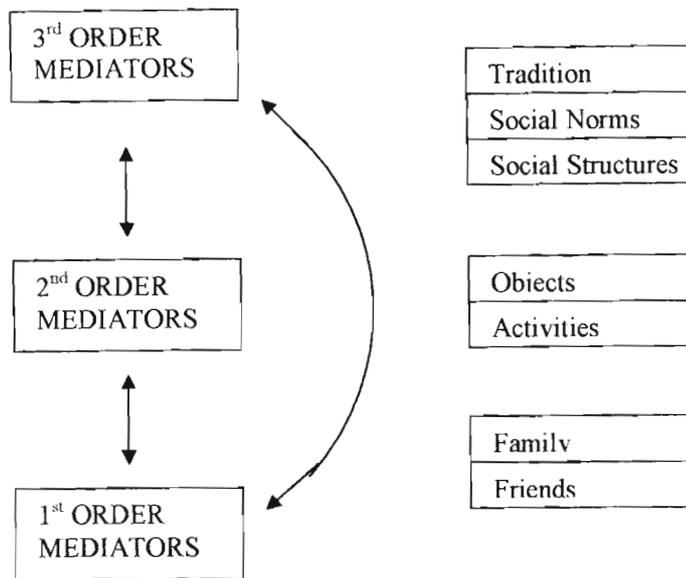
took on the responsibility of changing labels that did not seem to apply properly to certain bits of text (Ulin et al., 2003).

*'Mediation' as a framework for analysis*

The data (both quantitative and qualitative) have been organized into prominent themes which emerge from the literature as well as from the data itself. Related quantitative and qualitative data is explored under each of the prominent themes below.

In terms of using ideas from the literature as a framework for this study, the researcher focused on the three central areas of the study; development, social worlds and photography as representation through applying Miller's (2003) idea of three mediators. The first order mediators (family, friends and broader social network) gave insight into the developmental levels of the children in that it was expected that younger children would more prominently photograph their families while the older children would increase their social base by interacting with more people and thus accessing the broader social network (Piaget, 1977). Photography and representation is explored essentially through the second order mediators through which cameras and photographs (and the activities which surround these) can be seen as particular kinds of 'objects' which have various ideas and meanings attached to them from the given society. And finally social worlds are explored through all the mediators as all give insight into the interactions that the individual experiences with 'the social' and how these interactions construct the way the individual perceives and understands the world. As the literature suggests the individual's identity is constructed and strongly influenced by various social forces such as one's family, cultural, history, peers and interactions with objects in the world (Waite, 2005; Engestrom & Miettenin, 1999; Rodriguez, 1998; Fay, 1996; Shweder, 1991). An analysis of the interview transcripts in this study suggest that the children in this study are strongly influenced by their family, relatives, friends and social structures; of which embedded in all is a strong sense of tradition and social norms. This can be diagrammatically represented as follows:

Figure 1: Miller's orders of mediation as a framework for organising themes.



The above diagram is a presentation of Miller's (2003) concepts of first, second and third order mediators which has been applied to this specific study based on data drawn from the content and thematic analysis explored in this section. This idea from Miller (2003) has been used as a basis for the exploration of the interaction between the individual and social. The individual is influenced in the first instance by first order mediators (such as family). The first order mediators, however, have preconceived ideas about identity and the world from second and third order mediators (including ideas from tradition and norms and 'cultural artefacts' or objects which carry meaning in their structure as well as cultural activities which too carry meaning). As the doubled arrows in the diagram suggest the mediators are all interactive and influential on each other. One could understand the interaction of the mediators as starting with the first order mediators (as described above) or in the opposite direction in which case culture and social norms construct the way that individuals understand and perceive the world. This perception of the world is transmitted through interactions with objects and activities (second order mediators) which carry meaning about the world. These interactions then shape the way in which individuals perceive the world around them, and it is these individuals who in turn become first order mediators and transmit the meanings derived from first and second order mediators to young children still learning about the world. Through internalising the parents' ways of perceiving the world and interacting in the world,

the child adopts the norms and traditions of their society and culture. Through content and thematic analysis the themes of family, relatives and friends were identified as first order mediators; objects and activity (including the environment in which the activity occurs) were identified as second order mediators; and tradition, social norms and social structures were identified as third order mediators. The relationship that exists between the individual and the social in this study is expressed and represented through the actual photographs as well as the commentaries which accompany them and serve as ways of bearing witness to events. The individual's relationship with the social also seems to depend on age suggesting a developmental influence on the individual's relationship with the social. The above diagram and its various components appeared to be the most relevant data for the study and thus form the basis for the themes explored in the results and discussion.

#### *Limitations of the design*

The design may be seen to be limited in that, unlike the Sharples et al. (2003) study, this study made use of a much smaller sample of only twelve participants. For this reason the content analysis of the photographs as well as the thematic analysis of the focus groups cannot and should not be used to make assumptions about the wider population. The researcher was not very concerned about this as the study is contextualised in relation to the large scale study of Sharples et al. (2003) and as the study intended to make use of a marginalised group of participants and to explore their understanding of their world around them.

The project was limited by a language barrier in that the participants in the study were isiZulu-speaking, while the researcher is English-speaking. This may of, and did indeed seem to, limit the extent of the participants' comments during the focus group discussions and individual interviews. The researcher tried to compensate for this limitation by making use of a translator. This seemed advantageous in that the children could ask for assistance with words that they did not know in English; however translators can impair the study in that they may disrupt the rapport between the researcher and the participants. For this reason, while having a translator at all the interviews, the researcher encouraged the children to rather try and talk in English and only ask the translator if they were completely unable to say what they wanted to in English. While the researcher does feel that the study was limited by the

language-barrier, the data collected still had much substance and was amenable to interpretation.

### *Ethical considerations*

All the participants in the study took part voluntarily and verbally consented to being participants. Due to the participants being scholars and underage the school principals, school superintendents and Department of Education were all informed in writing about the study and what it entailed. They all consented. The participants' parents also received consent forms (which were written in isiZulu for their convenience) which they all signed. The participants were informed that they could withdraw from the study at any time they wished. Finally pseudonyms were used in the research write-up and the tape recordings of the interviews were destroyed to protect the identity of the participants.

## Results and Discussion

### *Introduction*

Miller's (2003) orders of mediation provide the framework for the presentation and discussion of results. All three orders of mediation are interconnected; inform and are informed by each other. However, it could be argued that the specifics of first and second orders of mediation are ultimately circumscribed by the third order mediation of wider social structures. This kind of mediation therefore provides the initial platform for analysis.

In each instance, the quantitative content analysis of the photographs is presented together with the qualitative thematic analysis of the focus group discussions. Importantly the selection of particular coded content for analysis<sup>2</sup> and the constructions of the organising framework of "orders of mediation" were informed by the thematic emphases of the children themselves in the focus groups.

---

<sup>2</sup> The complete coding of all photographs is available in Appendix F.

*Third order mediators: Social structures, social norms and religious events*

While “social structures” are quite evidently abstract rather than visual, concrete activities, photographs of places can be used as indicators of the children’s social worlds; particular places implying certain social practices and institutional forms of life, e.g. schools, shops or churches. Table 2<sup>3</sup> therefore presents the *places* which the children photographed:

**Table 2: Context: Places photographed**

	Age							
	Seven		Eleven		Fifteen		Total	
	n	%	n	%	n	%	n	%
Domestic interior (own home)	33	29.7%	19	17.1%	19	22.4%	71	23.1%
Domestic interior (relative home)	0	0%	9	8.2%	0	0%	9	2.9%
Domestic exterior (own home)	22	19.8%	21	18.9%	6	7.1%	49	16%
Domestic exterior (relative home)	2	1.8%	0	0%	0	0%	2	0.7%
Domestic exterior (friend home)	1	0.9%	1	0.9%	0	0%	2	0.7%
Educational (school)	12	10.8%	37	33.3%	16	18.8%	65	21.2%
Religious (church / Sunday school)	4	3.6%	2	1.8%	0	0%	6	2%
Entertainment / recreation	0	0%	0	0%	2	2.4%	2	0.7%
Tuck shop	1	0.9%	0	0%	2	2.4%	3	1%
Shopping centre	0	0%	0	0%	14	16.5%	14	4.6%
Urban / suburban	0	0%	2	1.8%	1	1.2%	3	1%
Garden / park	4	3.6%	0	0%	3	3.5%	7	2.3%
In vehicle	8	7.2%	1	0.9%	0	0%	9	2.9%
Road / vehicle	13	11.7%	1	0.9%	2	2.4%	16	5.2%
Community centre	0	0%	0	0%	7	8.2%	7	2.3%
Total of places	100	90.1%	93	83.8%	72	84.7%	265	86.3%
Not present	11	9.9%	18	16.2%	13	15.3%	42	13.7%
<b>Total</b>	<b>111</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>85</b>	<b>100%</b>	<b>307</b>	<b>100%</b>

Younger children take more photographs at home. 49.5% of the seven year olds’ photographs were taken at their homes (interior and exterior combined) while this figure is decreased as

<sup>3</sup> It is important to note that in the tables, values indicated represent a frequency of *all* the photographs as a set.

age increases, with 36% of eleven year olds' photographs and 29.5% of fifteen year olds' photographs being of their homes. This can be explained by the literature in that younger children are more socially intertwined with their immediate families (and thus their homes), while older children tend to broaden their social networks and venture into the wider community (Nucci, 2002; Ollhoff, 1996; Dixon & Moore, 1990; Piaget, 1977). The fifteen year olds had an increased percentage of photographs of their wider communities extending beyond their homes, for example 9.6% and 19.4% of their photographs were of community centres and shopping centres respectively. To make this shift in photographed content clearer, Table 3 presents the amount of physical structures (buildings) photographed. 'Buildings' in this instance includes public structures such as community centres, shopping centres and schools. This excludes private houses.

**Table 3: Public buildings**

	Age							
	Seven		Eleven		Fifteen		Total	
	n	%	n	%	n	%	n	%
Public buildings	2	<b>1.8%</b>	4	<b>3.6%</b>	13	<b>15.3%</b>	19	<b>6.2%</b>
Not present	109	<b>98.2%</b>	107	<b>96.4%</b>	72	<b>84.7%</b>	288	<b>93.8%</b>
<b>Total</b>	<b>111</b>	<b>100</b>	<b>111</b>	<b>100</b>	<b>85</b>	<b>100</b>	<b>307</b>	<b>100</b>

Table 3 refers to all public buildings that were photographed by the children, this is predominantly made up of community centres and shopping centres (the frequency of which is clearly indicated in Table 2). It is evident that 15.3% (in comparison to 1.8% and 3.6%) of fifteen year olds' photographs consisted of buildings, suggesting the older children's inclination to photograph the wider social context. This appears to be in accordance with developmental theory which suggests that as children age they broaden their interactions not remaining limited to their immediate family and surrounding. Furthermore, with an increase in cognitive ability, the older children are capable of thinking more broadly and theoretically and in so doing being more inclined to desire a greater understanding of the social forces and structures around them. This may be reflected in the attempt to document their lives by photographing these less personal or private spaces (Ginsburg & Opper, 1979; Piaget, 1977).

### *Community centres*

The above clearly indicates that the older children were more inclined to photograph aspects of their wider community. As the children develop they have an increased interest in a wider 'shared space', that is they become more actively involved in more and more social activities and in so doing learn more and more about their world around them. The data below are examples of the older children's interest in community centres:



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6

Thembi (15 years): And then this is the community ground. I think I took this photo of the ground because when the boys play soccer they use this ground. *(Goes to next photograph)* this is the tuckshop you know where you can buy bread or anything to eat you know. *(Goes to next photograph)* then this is our school and I think

this is during assembly, early in the morning you know when everyone comes to assemble. [...] *(Goes to next photograph)* This is the community phone shop. If you don't have a phone and you want to call someone then you have to use this container. *(Goes to next photograph)* this is the bridge. We use it when we are coming to school because if you don't have a car you can use this then you won't have an accident in the road. *(Goes to next photograph)* this is the community college. *(Goes to next photograph)* this is the community crèche for children. *(Goes to next photograph)* this is the community clinic. *(Goes to next photograph)* this place... it's ah... for... HIV progress. HIV progress? What do you mean?

Interviewer:

Thembi (15 years):

It's a place where you're *(sic)* talking about HIV/AIDS and they just talk to you about all of that. *(Goes to next photograph)* and this is the funeral service place (Thembi, transcript 12: p44-45).

It is particularly interesting to note that in addition to having a broader range of photographic content, and being more descriptive about this content, the older children also appear to be more inclined to elucidate their particular context / social world. In reading the transcripts of the fifteen year olds in comparison to the seven year olds, the reader is able to get a clearer sense of the particular world and context which the children live in. For example Thembi's (15 years) description above allows the reader to get a clear indication that this child is from a poorer community in which the children are more inclined to have to walk to school (hence the use of the bridge) and there is a service for those community members who do not have telephones, again indicative of a poorer community. Furthermore, the mention of the clinic, the HIV centre and the funeral service parlour may be suggestive of high HIV rates and related deaths in the community. Furthermore, not only do these photographs suggest the children's interest in capturing the wider community, it also shows their engagement and experience with this community. The older children clearly have an awareness of and concerns with issues such as HIV / AIDS. These descriptions of the community in which these children live are all suggestive of the communities described in the literature where health and economic concerns are a major part of these people's lives (Mohamed, 2002; Hammond, 2002; Magongo, 2005).

Another participant also gave insight into this aspect of community life in a more indirect manner. Nonhlanhla (15 years) was only able to take four photographs as during the weekend in which the photo-taking was meant to happen she needed to plan a funeral. Such a young person needing to plan a funeral is also possibly suggestive of the poorer community in which

HIV rates (as well as related deaths) are prevalent. In the interview with Nonhlanhla she spoke about her community in relation to photography and explained that few people have cameras and that when a special occasion needs to be photographed “bashuti” (or literally, “those who shoot”) are called in and they charge R7 per photograph. Nonhlanhla’s description of photography and how it is handled in her community helps the reader understand what photographs mean in these communities and how they are perceived by those who inhabit the communities. People from this community engage with photographs in a very particular kind of way, photographs are seen as particular kinds of texts which are able to convey messages and meanings that are only to be used on special occasions. This kind of way of perceiving photographs is suggestive of a particular way of engaging with the world and objects in the world. As the literature suggests the way in which a person perceives the world is constructed by the way his/her family (first order mediators) teaches him to perceive the world and the way in which the child interacts with cultural artefacts and objects (second order mediators) which carry strong messages and meanings concerning cultural and social norms (third order mediators) (Miller, 2003). ‘Veils of perception’ are worn which are unable to be removed. The world is seen in particular kinds of ways created by social, cultural and historical forces which surround a person (Shwedder, 1991; Waite, 2005; Rodriguez, 1998; Dennett, 1989).

#### *Shopping centres*

Another example of the older participants venturing into the broader social network and community is evidenced in Sifiso’s (15 years) photographs of Ushaka Marine World displayed below:



Photograph 7



Photograph 8



Photograph 9

Sifiso (15 years): Here is just at Ushaka Marine World where you buy the j jewellery.

Interviewer: Oh, ok, the jewellery shop.

Sifiso (15 years): *(Goes to next photograph of Fotofirst)* photos, here they take beautiful photos. *(Goes to next photograph of curio shop)* Here it's traditional clothes. Here also in the shop is the lion skin. *(Goes to next photograph of a restaurant)* and here's the shop where we also go to buy something to eat (Sifiso, transcript 9: p37).

While Thembi's (15 years) exploration of various community centres painted a realistic picture of the children's social world in terms of poverty and illness, Sifiso's (15 years) exploration displayed another part of the children's social world. Ushaka Marine World is an interesting choice of place to photograph as it is a tourist attraction which is designed to present the isiZulu culture. While the layout of the shopping centre features animal skins, spears and shields which are meant to represent Zulu tradition, it juxtaposes this with Western consumerism displaying a variety of luxury goods and designer items which require large amounts of recreational spending money. The participants in this study, being from a poorer community, are not likely to be able to engage in shopping sprees at Ushaka Marine World yet they choose to spend time there. Furthermore, there is some strange "twist" of choosing a tourist version of "Zuluness" as representations of themselves. This is possibly suggestive of culture as 'moving'. Rather than subscribing to culture as something specific consisting of rigid rules, beliefs and practices, culture can be seen as existing in a state of motion. Township life, while being imbued with various cultural practices and flavours, is certainly not only about lion skins and spears. Similarly some aspect of the children's cultural beliefs is evident to them in Ushaka Marine World. Western beliefs and consumerist ideals have become a part of these children's lives and understanding of their culture and their world around them. In photographing this shopping centre the children may be attempting to capture elements of their culture for example Sifiso's (15 years) photograph of the lion skin. This of course is ironic in that Ushaka Marine World is not a true representation of the children's culture but rather a Western interpretation of the Zulu culture. This then is interesting as the reader can see how the West has infiltrated and influenced these children's lives. In relation to the literature it is evident that the children in this study learn about and construct their sense of self and identity based on the way in which 'the other' represents them. In this case 'the other' is the West which reflects a particular image of isiZulu culture and in so doing creates a perception in the children's minds about what isiZulu culture, and thus part of their identities, is (Fay, 1996). By photographing a particular part of one's social

world, in Sifiso's (15 years) case, a shopping centre, one is able to gain great insight into the person's identity and sense of self. It becomes increasingly evident that social, historical and culture forces are responsible for constructing the ways in which the individual thinks about, understands and experiences the world around him/her self (Shweder, 1991; Waite, 2005; Rodriguez, 1998; Dennet, 1989).

### *Religious events*

In addition to the role of culture suggested above in the children's choice to photograph uShaka Marine World, is the children's decision to photograph religious events. Religion and the events which pertain to religion can be seen as third order mediators in that religion gives rise to and disperses beliefs and understandings to individuals which impact on the way in which these individuals come to experience and makes sense of the world around them. An example of such an event is evident in the data below:



Photograph 10

Sipho (11 years):

Interviewer:

They were praying for me in church in this picture.

How does that work? How were they praying for you?

Sipho (11 years): They were taking water and pouring it over me (Sipho, transcript 5: p21).



Photograph 11

Interviewer: What's that?

Bongani (11 years): Oh, I was taking a picture of Mary at the church (Bongani, transcript 8: p33).

As can be seen in the above examples the more embedded social influencer of religion and / or religious events is implicit in the above experiences being described. Religious beliefs and rituals/procedures are described in these quotes and help give one insight into the individual's life and commentary and also highlight the interactions between the individual and more embedded social forces such as tradition and religious beliefs. As the literature suggests it is through actively engaging in cultural / religious practices and rituals (be they as seemingly ordinary as a particular way of hair-styling) that particular ways of understanding and experiencing the world become internalised in the individual (Waite, 2005; Rodriguez, 1998; Vygotsky, 1978). As is suggested in Vygotskian theory it is through having mediated experiences that the child learns and internalises particular ways of understanding (Nardi, 1996). It is clearly indicated by the photographs in this study that these children have learned and internalised particular ways of experiencing and being in the world they live in. It is however interesting to note that the religion being referred to in the above photograph of Mother Mary is a Western religion. This may once again be suggestive of shifting boundaries in relation to traditional beliefs and Western beliefs. As in the case of the Westernised shopping centre, the influence of the Western world is clearly evident in the lives of these children. It appears that there has been a kind of fusion, or coming together of traditional

cultural beliefs and activities with those of the West. The children's identities thus are constructed by and exist in a kind of motion between various aspects of different belief systems.

*Social norms: 'beauty'*

A social norm implicit not in the actual photographs but in the children's reasons for choosing their favourite photographs, was the norm that posits that photographs should present content which is 'beautiful' (Sontag, 1978). When the children chose their favourite photographs they seemed to make this call on the basis of the content being 'beautiful' or 'special'. This seems to link directly to the children's belief and assertion that photographs, in their community, are used on *special* occasions. Thus the social practices surrounding photography are created by the community and construct the way that the youth in the community come to attach meaning to photography (Billington et al., 1998; Shweder, 1991). There is a particular 'form of life'; set of practices, involving photography and the understanding of photography in the community which is that photographs are used in order to capture that which is beautiful or special (Wittgenstein, 2001; McGinn, 1997). Furthermore, as is suggested in the literature, the history of photography sets up various debates concerning what is beautiful. The belief underlying these debates is that 'beautiful' content, whatever that may be, should be photographed (Berger, 1980; Sontag, 1978). The children in this study seemed particularly preoccupied with selecting photographs which they suggested were 'beautiful', which the researcher interpreted as referring to 'valuable', that is photographing things and people which have value to the children and are seen as special. This can be evidenced from the excerpt of one of the interviews below:



Photograph 12

*(Lerato shows group her second favourite photograph)*

Lebo (7 years): I think this is his dog.  
Interviewer: This is her dog, yes.  
Nomonde (7 years): I think it's her favourite dog. I think he likes this dog.  
Interviewer: Yes, she likes her dog very much. What do you think of this photo?  
Lebo (7 years): I think this dog can do tricks.  
Interviewer: Ok, but do you like this photo?  
All (7 years): Yes.  
Interviewer: Can you tell me why you like it?  
Theo (7 years): I think because his dog likes him.  
Nomonde (7 years): I think it's a beautiful picture.  
Interviewer: But why do you think it's a beautiful picture?  
Nomonde (7 years): I just like it (Group interview: transcript 13, p49-50).

As is seen in the excerpt above, even when the interviewer tried to push the issue of aesthetics / representation and why the children selected the photographs that they did, the children resisted this way of viewing the photographs. The reason for this could be a result of various factors. First, the interviewer was disadvantaged due to her being unable to communicate in the children's mother tongue. Second, the children may have been preoccupied with the particular belief surrounding photographs concerning their expectancy to capture beauty, that they were unable to move beyond this. Thirdly, the idea of 'beauty' is not aesthetic to the children in this study but rather deals more with human qualities such as love or an appreciation of the *things* in the photographs rather than the quality of the photograph as such. This love and appreciation of *things* could stem from the fact that the participants are from a poorer community where valuable objects are a sign of wealth and thus are worth capturing in a photograph. As the literature suggests townships such as those which the participants stem from are very poor and thus ownership of valuable goods would be expected to be of importance to these participants (Magongo, 2005; Hammond, 2002; Mohamed, 2002). Finally, even the fifteen year old children did not give the expected explanations of their choice of favourite photographs as was the case with the older children in the Sharples et al. (2003) study. The researcher expected descriptions about the actual photographic quality for example lighting, angle, setting and content however the children in this study did not give these kinds of descriptions. The reason for this, rather than having anything to do with competence or cognitive development, may be due to the children in this study having a completely different understanding of photography and attaching different kinds of meanings to photographs. As Burman (2000), Cole (1996), Avis (1991), Boyden (1990) and Zelizer (1985) suggest, children who lack exposure and experience in particular fields and activities

are often labelled as being incompetent or incapable where in fact due to lack of exposure the children have a different understanding of such activities. The children in this study see photography as a means of capturing special occasions and are not used to using cameras. For this reason they were likely to be less experienced and less interested in what constitutes a good photograph and much more interested in the *content*.

### *Second order mediators: objects and activities*

With an understanding and exploration of third order mediators described above, it becomes easier to understand second order mediators. Objects and activities are imbued with social, cultural and historical understandings and beliefs. Thus second order mediators can be seen as the vehicles which carry third order mediators, i.e. it is through the second order mediators that the understandings and beliefs of the third order mediators are relayed and ingrained into the individual. This section will explore the objects that are important to the children and the meanings attached to these as well as an exploration of photographs as particular kinds of objects that have preconceived ideas and meanings behind them. Finally this section will also comment on the role of activity in transmitting the meanings and beliefs of third order mediators.

#### *Objects*

The children photographed objects that exist in their world and are important to them. This is because these objects have meaning attached to them concerning the way in which the children experience and understand the world. Table 6 presents the number of photographs taken of the most prominent objects:

Table 4: Objects

	Age							
	Seven		Eleven		Fifteen		Total	
	n	%	n	%	n	%	n	%
Toy / game	6	5.4%	1	0.9%	0	0%	7	2.3%
Food / drink	1	0.9%	4	3.6%	5	5.9%	10	3.3%
Cars	14	12.6%	1	0.9%	0	0%	15	4.9%
Pictures / posters	5	4.5%	0	0%	1	1.2%	6	2%
Furniture	12	10.8%	7	6.3%	2	2.4%	21	6.8%
Other	3	2.7%	2	1.8%	0	0%	5	1.6%
Electronics	9	8.1%	0	0%	8	9.4%	17	5.5%
Total of objects	50	45%	15	13.5%	16	18.8%	81	26.4%
Not present	61	55%	96	86.5%	69	81.2%	226	73.6%
<b>Total</b>	<b>111</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>85</b>	<b>100%</b>	<b>307</b>	<b>100%</b>

As traditional cognitive developmental theory suggests, younger children who are preoperational and concrete operational thinkers are more inclined to photograph objects (like toys) (Sadock & Sadock, 2003; Sharples et al., 2003; Berk, 1989; Piaget, 1977). 45% of the younger children's photographs were of objects while this figure decreased to 13.5% and increased to 18.85% for eleven and fifteen year olds respectively. Thus these results seem to contradict the expectations of traditional developmental theory which would suggest that photographs of objects decreases with age. This difference may be explained by the fact that the fifteen year olds had a relatively high number of photographs of electronics which are a particular kind of object that the older children from this community seem to be more interested in, an idea which is discussed further below. Closer examination of the kinds of objects that the younger children photographed gives insight into the community from which these children come. For example the objects photographed the most by the seven year olds were related to transport (12.6%). Most of these photographs were of cars, often not belonging to the participants' family but to friends or neighbours. This may be suggestive of particular needs/desires of the participants resulting in them wishing to photograph them. These are needs/desires which can be understood when bearing in mind how poor these kinds of communities are (Mangongo, 2005; Hammond, 2002; Mohamed, 2002). Alternatively cars may be seen as symbols of wealth and achievement which the children may be proud of and thus choose to photograph.

The above quantitative findings do not only indicate that younger children are more inclined to photograph the specific concrete objects they interact with than the older children (who seem more inclined to photograph their interactions with people and wider community structures), but also gives insight into the world and community of these particular children. As stated the children show particular interest in motor vehicles possibly due to their lack of motor vehicles and desire to own them (or in the case where they do own them, pride in owning such an object) as well as their desire to own an object that is worth a lot of money; cars are seen as status symbols. The following quotations are examples of children's comments about motor vehicles:



Photograph 13

Lebo (7 years):

That's my dad's car. (*Goes to next photograph*) this is my dad's friend's car. (*Goes to next photograph*) this is the bus. (*Goes to next photograph*) this is my dad's car. (*Goes to next photograph*) and this is my dad's car again (Lebo, transcript 1, p2).



Photograph 14



Photograph 15



Photograph 16

Nomonde (7 years): And this is my mother's car. (*Goes to next photograph*) and this is my mother standing by her car. (*Goes to next photograph*) and this is my sister also standing by my mother's car (Nomonde, transcript 4, p17).

The children also tended to photograph their favourite sweets from the spazashop. Whether this is common for children in general is not known by the researcher, however the tendency of *these* children to photograph sweets may be indicative of the fact that due to lack of finance sweets are luxuries and thus worth photographing. The following quotations are examples of reference to sweets:



Photograph 17

- Nomonde (7 years): And this is my favourite chips.  
Interviewer: Hmm, yum. Where's this photo from?  
Nomonde (7 years): From the shop (Nomonde, transcript 4, p17).



Photograph 18

- Thembi (15 years): This is the tuckshop you know where you can buy bread or anything to eat you know [...] (*goes to next photograph*) and this is the tuckshop again from the inside.  
Interviewer: Why did you take that photo?  
Thembi (15 years): Because it's nice inside, I like it, it's the tuckshop (Thembi, transcript 12, p42).

The above is indicative of the children's experiences of particular kinds of objects in their environment and how interactions with these objects form significant parts of their commentaries which the children feel are worth bearing witness to and remembering. Documenting favourite sweets, family cars, furniture and toys seems an important part of the children's (particularly the younger children) commentary. The preoccupation with particular kinds of objects also gives the reader insight into the children's quality of life.

### *Possessions*

In discussing objects it became evident to the researcher that the idea of 'possession' was a prominent feature when the children discussed photographs of particular kinds of objects. Possessions are in this instance seen as particular kinds of objects. Objects referred to as 'possessions' warrant a specific and separate discussion to other kinds of objects because the

children in this study seem to have a strong tendency to photograph objects which they own and that are worth a lot of money (and thus considered important and significant).

'Possessions' refers specifically to televisions, DVD players, cellphones and computers which were the most frequently described possessions of the children and their families. As can be seen above 8.1% and 9.4% of seven and fifteen year olds respectively photographed possessions. A possible explanation for this can be derived by examining the two ages separately. As already suggested in the section above on 'objects', young children are more likely to photograph objects due to their interaction with objects – the choice to photograph the electronic objects may be because they are expensive and thus the children are proud of them and would like to show others these photographs as well as remember the expensive objects their families owned. For the older children televisions, cell phones and computers are access points of knowledge and communication which as developmental theory suggests, are likely to be used more frequently by older children who have increased interest in their broader community (Crain, 1985; Damon, 1977; Piaget, 1977) hence due to possibly more interaction with these kinds of objects, the older children may have chosen to photograph them.

'Possessions' are presented as a specific category of objects because the children seemed particularly focused on the notion of 'ownership' in relation to these particular objects. This seemed to go hand-in-hand with a pride about owning particular kinds of objects the majority of which were electronics, probably due to the fact that these types of objects, like cars, are symbols of status. As already suggested these kinds of status symbols may be of greater importance to children from poorer communities as they generally experience a lack of luxuries such as expensive electronic equipment (Mangongo, 2005; Hammond, 2002; Mohamed, 2002). Owning expensive electronic equipment seems more linked to middle class society than individuals living in lower socio-economic settings, however it is clear to see that the meaning placed on such items for the individuals in this study go far beyond what would be expected from middle socio-economic class individuals who are less likely to photograph such objects as they are not seen as luxuries. As already indicated in the content analysis the eleven year olds seemed to have less of an interest in photographing electronics while the seven and fifteen year olds took relatively large amounts of photographs of electronics as evidenced by the data below:



Photograph 19 and 20

Theo (7 years): That's my dad's DVD player. *(Goes to next photograph)* and that's my mum's TV. *(Goes to next photograph)* and that's my dad's TV.

Interviewer: So they each have their own TV?

Theo (7 years): Yes. And you put these like that *(places TV and DVD photographs together)* (Theo, transcript 2, p7).



Photograph 21

- Thabo (15 years): This is the DVD player and TV [...] (*Goes to next photograph*) My DVD again [...] (*Goes to next photograph*) this is computer.
- Interviewer: Is that your computer?
- Thabo (15 years): Yes (Thabo, transcript 11, p41).

The relatively large amount of photographs taken of electronic equipment was fascinating in contrast to the photographs of the participants in the Sharples et al. (2003) study where such photographs were absent. The researcher postulates the reason for this interest in electronic equipment for these particular children is due to the fact that expensive electronic equipment is linked with status and wealth which is an image that they may wish to portray while the children in the Sharples et al. (2003) study may have chosen other objects as representations of status.

#### *Pets*

Pets, while not inanimate 'objects', can still be perceived as kinds of objects that hold particular kinds of significant meaning for some children. As suggested in Table 5, only 3.9% of all the children's photographs featured their pets.

Table 5: Pets

	Age							
	Seven		Eleven		Fifteen		Total	
	n	%	n	%	n	%	n	%
Pets	5	4.5	7	6.3	0	0	12	3.9
Not present	106	95.5	104	93.7	85	100	295	96.1
Total	111	100	111	100	85	100	307	100

While a percentage of 3.9 seems relatively low in comparison to the overall amount of photographs, the choice to discuss 'pets' is motivated by the fact that the children who did photograph their pets felt particularly strongly about these photographs. The trend in the above table suggests an increase in photographs of pets from the seven to eleven year olds, followed by a decrease in photographs of pets in the older children. Pets were more frequently photographed by the younger children rather than the older children who took no photographs of pets. This may be due to the fact that pets generally are kept at the children's homes, thus the younger children, who more frequently photograph their homes and immediate families, are more likely to photograph pets in comparison to older children who appear to spend less time at home. The increase particularly in eleven year old children (as opposed to seven year old children) may be due to the fact that children as young as seven may not have their own pets due to being quite young, while eleven year olds are possibly more likely to be responsible enough to look after pets and thus have pets of their own. In the case of three of the younger children a photograph of a pet was selected as a favourite photograph as is illustrated below:



Photograph 22

Lebo (7 years):

I chose this one because my dog, he is clever  
(Lebo, transcript 13, p47).

(Refer Photograph 12 on page 52)

Interviewer:

Tell me why you chose these two photographs?

Translator for Lerato (11 years):

Because it [the dog] is a present from her mother. Her mother got her that dog as a present when she was still young (Lerato, transcript 3, p13-14).

The participants come into contact with their pets frequently and hold these interactions in high esteem. The children's pets are very special and particular kinds of objects to the children that are imbued with various beliefs and understandings.

#### *Photographs as tools*

As described in the literature a photograph and camera can be seen as particular kinds of objects or tools that have particular kinds of constraints and meanings attached to them (Miller, 2003). As already explored above, there is a preconceived social norm concerning photography surrounding the idea of 'beauty'. Another of these preconceived ideas attached to photographs is the view, suggested in the literature, that photographs have the ability to represent events and people in a realistic manner, arguably more realistic than other forms of representation (Savedoff, 1992; Barthes, 1981; Berger, 1980; Holmes, 1980). This belief surrounding photographs and photography can be seen as a third order mediator which influences the way in which individuals use, make sense of and understand photographs. The photograph then becomes a particular kind of object or tool that has particular embedded meanings and understandings attached to it, the primary one in this case being the purpose of photographs to capture and bear witness to important moments,

Due to photographs arguably being able to capture a close copy of reality, photographs can serve as a way of remembering that which is photographed (Navab, 2001; Barthes, 1981). The children in this study found it important to use the photographs as ways of identifying, sharing and remembering things, people and events which are important to them; which they liked a great deal. This can be evidenced in the excerpt below:



Photograph 23

*(Shows group Nonhlanhla's photograph)*

Interviewer: Ok, what do the three of you think of this photo?

Sifiso (15 years): Um, this person knows how to direct everyone coming from the library.

Thabo (15 years): I like the library because you need to read and you need the books to learn.

Nonhlanhla (15 years): I like this place because it's a place where I get information and I like it at the library.

Interviewer: Ok, so that's why you like the library, but I want to know why do you like this photo?

Thembi (15 years): I want to show you that our community has a library and that we like the library (Group interview, transcript 15, p58).



## Photograph 24

*(Nosipho shows her photograph)*

- Bongani (11 years): I think that is her bestest friends. That's why she took that picture.
- Sipho (11 years): It's a nice picture because she will be able to remember all of her friends.
- Fiona (11 years): I think it's a nice picture because everyone is together in the picture. It looks nice.
- Interviewer: Why does it look nice?
- Fiona (11 years): Because they're all together there so you'll always remember them as well as being friends together (Group interview, transcript 14, p56-57).

Thembi's (15 years) comment above about wanting to show the researcher something from her community is telling. As the literature suggests, part of what makes up the individual is what he/she presents to others, and how others in turn use this to create an understanding of that person, what Fay (1996) terms self-consciousness. The excerpts above clearly indicate that what the children like about the photographs is their ability to act as memory; a way of remembering important people, places and experiences; a way of *telling* their commentary. For example in photograph 24, it is likely that Nosipho (11 years) wanted a photograph of her friends so that in the future she can look back at the photograph and remember her friends. In the instance represented above in photograph 23 it is interesting to note the choice to photograph the library which is in fact also a community centre, representing institutional education. This was obviously something important to Thembi (15 years) and thus worthy of representing and remembering through a photograph. Furthermore the library is a particular *place* in which particular kinds of *activities* occur. These activities surround reading, studying and learning more about the world through books and interactions with those in the library. It is activities such as these that can come to construct the particular ways in which individuals view and experience the world (Waite, 2005).

For the children in the study one of the main pleasures of being able to keep the photographs was that they would have a way of remembering events, places, people and pets that are important to them which they photographed. The children described their photographs as being a kind of *proof* that something happened or that someone existed, an idea strongly linked to photographs throughout history as is suggested in the literature (Navab, 2001; Savedoff, 2001; Barthes, 1978; Sontag, 1978). This idea of proof is evidenced in the quotation below from the interview transcripts:



Photograph 25

Fiona (11 years): I took the photos to remember all my gymnastics friends for when I grow old and won't see them anymore. So I'll always remember them and this one particular competition. I took this photo of the bird, as you said, if the bird does fly away, which it actually has done already, but then we found it. I took it because you know I'm used to the bird flying away, so I don't know maybe one day we might not see it again then I'll at least always be able to see it (Fiona, transcript 7, p56).

As is seen above, photographs are seen by the children to be a record of reality, one which can serve as a way of remembering experiences.

#### *Technicalities*

Interestingly the children were also aware of how photography sometimes misrepresents an event due either to technicalities or inadequacies in the photographer's ability. Once again, the technicalities associated with cameras and photographs are suggestive of the kinds of objects / tools that they are. Due to being objects that have technical inadequacies and flaws, the way in which they deliver and represent meaning and essentially the way in which they act as second order mediators is affected. Cameras and photographs are particular kinds of objects / tools that can only convey meanings in a particular kind of way. The number of technical errors can be evidenced in Table 6:

Table 6: Technicalities

	Age							
	Seven		Eleven		Fifteen		Total	
	n	%	n	%	n	%	n	%
Not in focus	67	39.6%	55	50.5%	66	32.4%	188	61.2%
Camera shake	0	0%	9	8.1%	0	0%	9	2.9%
Over/under exposed	14	12.6%	17	15.3%	13	15.3%	44	14.3%
Fingers in frame	11	9.9%	19	17.1%	3	2.7%	33	10.7%
Cut off	13	11.7%	6	5.4%	0	0%	19	6.2%
Content not clear	6	5.4%	4	3.6%	3	3.5%	13	4.2%
Total of technicalities	111	100%	110	99.1%	85	100%	306	99.7%
Not present	0	0%	1	0.9%	0	0%	1	0.3%
<b>Total</b>	<b>111</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>85</b>	<b>100%</b>	<b>307</b>	<b>100%</b>

As is indicated in the above table, many of the children's photographs did not come out as expected due to technical problems. 118 of the total 307 photographs came out 'flawed', that is 38.4%. This could suggest that rather than photographs being an exact copy of the content they exhibit as much of the early literature suggests (Savedoff, 1992; Barthes, 1981; Berger, 1980; Holmes, 1980), photographs are in fact often quite distorted versions of the content they intend to display (Navab, 2001; Barrett, 1990; Huckle, 1985; Brook, 1983; Berger, 1980; Sontag, 1978). It is also interesting to note that the decrease in errors across the ages is not linear or uniform and in some cases older children in fact make more technical errors than their younger counterparts. This may *possibly* be a result of the fact that older children take more risks in the kinds of photographs they try to take. Moreover the older children may place more emphasis on the meaning of the photograph rather than the precision of the process and technical quality of the photograph.

Another way in which photographs misrepresent photographed content is through the photographer's influence and inability to step out of his / her own context and perception; his / her inability to remove is 'veil of perception'. For this reason, the children's high percentage of technically flawed photographs may be indicative of their lack of experience in using cameras. The following quotations and photographs from the children are examples of photographs not representing what the children had intended them to:



Photograph 26

- Bongani (11 years): Wow, here I made a mistake.  
Interviewer: Why what happened?  
Bongani (11 years): You see there was a lady who was making her first communion, so when I was trying to make a photo and they, the car was coming passed, she was here (*points to area behind the car in the photograph*)  
Interviewer: Oh, the car got in the way?  
Bongani (11 years): Yes (Bongani, transcript 8, p32).



Photograph 27

- Sifiso (15 years): This (*looks at photograph of TV screen which appears blank due to flash*), I tried to take a photo of the opening ceremony of the World Cup (Sifiso, transcript 9, p36).

As is evidenced by the above quotations the children believe that photographs offer close representations of reality but also acknowledge that photographs sometimes misrepresent reality as is suggested in the literature (Navab, 2001; Barrett, 1990; Sontag, 1978; Huckle,

1985; Brook, 1983 and Berger, 1980). So not only can photographs misrepresent due to flaws on the photographer's part or in the environment being photographed (as in the quotation above) but also due to the nature of the kind of object / tool that a photograph is. Being a technologically created object / tool a camera requires the right amount of light, the correct focusing and various other technical requirements which if not provided result in the photograph not representing in the way the photographer expected (Snyder in Navab, 2001). This is because, as is suggested in the literature, photographs and cameras can be seen as particular kinds of objects / tools, particular kinds of 'functional structures' (Miller, 2003). While the child has control over what he/she photographs, this control is limited by the kinds of structures that a camera and photograph are, and also because of the inevitable subjectivity of this selection process. The child has to attempt to represent what they photograph as best as they can given the structure that it is. So in the above example, Sifiso (15 years) wanted to photograph the World Cup opening ceremony on the television, but due to what a camera is and the light that it requires and the reaction of the flash, the desired representation was not achieved.

Finally, as already suggested the children used photographs as a way of bearing witness to events and as commentaries, a way of commenting on the events of a person's life (be it the photographer's or the person being photographed). Almost all the children in the study seemed preoccupied with being able to remember and to tell their particular tale around the photographs they took. Even when the researcher repeatedly asked the children to describe *why* they liked the photographs that they chose as their favourites, they would elaborate further about the commentary surrounding the photograph, which suggests that what is most liked about the photograph is the tale that it enables the child to tell and remember, for example:

Bongani (11 years): I chose them (*his two favourite photographs*) because when I was maybe... eight years old, I was in church and I had no friend and they came and they ask me 'do you have any friends?' and I said: 'no I don't have anyone' and they said too they don't have any and that we can be friends altogether and then I said 'ok'. And then we were friends and then we were playing and playing and then I took them home and they took me to their home and we became all better friends. That's why I want a photo of them because we so good friends (Bongani, transcript 8, p53).

As is clear to see from the above quotation the children were eager to share the commentaries of their lives rather than talking about photographs per se, the photographs seem merely a means to jog the memory and represent a token of some element of each child's life commentary. This seems to be supported in the literature which suggests that an essential element of a child forming his/her sense of self is through representing him/herself to others (for example through the form of photographs) and in so doing having him/herself affirmed and described *to* him/herself by the other (Fay, 1996). When an individual presents him/herself to 'the other', 'the other' takes this information and *re-presents* it back to the individual. It is in so doing that the individual has his/her identity affirmed and constructed. Thus, through the focus on the process of presenting oneself to 'the other', the individual develops self-consciousness; the awareness of the self as a result of / due to, 'the other'. It is for this reason that the individual's identity is inextricably intertwined and constructed through the social. In the case of this study, the children feel a need to tell their stories and give their commentaries as it is in so doing that their identities are presented to 'the other' and so affirmed (Fay, 1996).

#### *Photographs of the photographer him / her self*

Another interesting finding in this study was the way in which the children wanted to use the photographs as a way of remembering not only people, things, and places but also *themselves*. Once again, photographs are seen as particular kinds of objects that portray particular messages and meanings, thus making them second order mediators. In wanting to capture themselves in a photographic form the children suggest their need and desire to have an object that represents themselves, an object which acts as memory and a way of bearing witness to the children's lives. In comparison to the Sharples et al. (2003) study as well as the DeMarie (2001) study in which the participants essentially managed the cameras on their own and photographed others the participants in this study were inclined to hand over their cameras to others in order to have themselves included in the photographs. Table 7 illustrates the number of photographs taken of the children themselves:

**Table 7: Images of the photographer him / her self**

	Age							
	Seven		Eleven		Fifteen		Total	
	N	%	n	%	n	%	n	%
Self	8	7.2%	8	7.2%	6	7.1%	22	59.5%
Self with friend	1	0.9%	9	8.1%	1	1.2%	11	3.6%
Self with relative	0	0%	2	1.8%	0	0%	2	0.7%
Self with friend and relative	0	0%	1	0.9%	0	0%	1	0.3%
Total of pictures of self	9	8.1%	20	18.01%	7	8.2%	36	11.7%
Not present	102	91.9%	91	82%	78	91.8%	271	88.3%
<b>Total</b>	<b>111</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>85</b>	<b>100%</b>	<b>307</b>	<b>100%</b>

It can be derived from the table above that 36 photographs of the total 307 included the participants themselves. Furthermore children at all three age levels had photographs featuring themselves indicating that photographs of oneself appears to be important to the children in the community as a whole. In total the participants were in 11.7% of the photographs. While this may not seem high it is when compared to the Sharples et al. (2003) study which did not even include a category for photographing oneself. The participants in the Sharples et al. (2003) study had little need to photograph themselves as the children in that study, coming from higher socio-economic classes were more likely to have many photographs of themselves already. While the children in this study, coming from a poorer community as the literature describes saw photographs as a luxury and thus wanted to take advantage of the opportunity to have a few photographs of themselves (Mangongo, 2005; Hammond, 2002; Mohamed, 2002). Photographs to these children were particularly special and valued as the ‘self’ can be seen as an object which is presented to ‘the other’, and as described above, is in so doing re-affirmed. Pictures of the self affirms that very self and allows it to be presented to ‘the other’ and in so doing allows meaning and perception about that self to be expressed and developed.

*Activity*

As already suggested all three of the mediators are complexly intertwined. The main way in which the mediators come together is essentially through action (Miller, 1984; 2003). Activity can be seen as a second order mediator in that ‘actions’ we perform or witness have social and cultural norms attached to and embedded in them, in the same way that objects do. The young child interacts with their family and friends (first order mediators) and in so doing

learn about the social norms, cultures / traditions and ways of understanding the world (third order mediators) (Miller, 2003). The child also interacts with particular kinds of objects and engages in particular kinds of activities (second order mediators) which too have cultural and social understandings (third order mediators) attached to them (Nardi, 2006). Many of the children's photographs displayed the children and those close to them engaging in activities which represent the kinds of lives they lead. These "active" photographs seemed particularly telling in that they captured the people in the photographs engaged in *living*. The viewer is able to glimpse a piece of another person's life; part of that person's commentary is told and expressed through the photograph. Despite the photograph capturing a single instant, it still manages to capture the essence of the movement which was occurring at the time of the photograph being taken. The photographs and quotations below are examples of this:



Photograph 28

Interviewer:

Whose camera is that in the picture?

Theo (7 years):

It's a toy camera. They are playing. He's showing her how to use the toy camera (Theo, transcript 2, p6).



Photograph 29

Fiona (11 years): These photos are all of gymnastics. This is Ida, she's doing the rope at gymnastics (Fiona, transcript 7, p29).



Photograph 30

Nosipho (11 years): That's a picture of my cousin. My cousin... he's doing a... a... a back flip (Nosipho, transcript 6, p25).



Photograph 31

Nosipho (11 years): That's my cousin, he was trying to do the splits and then I tried to take a picture of him (Nosipho, transcript 6, p25).

As is illustrated in the above quotations, the “activity” photographs give insight into the daily lives of those photographed. For example the two photographs above taken by Nosipho (11 years) give us insight into the kind of lives that her friends/family lead. They are playful and active children, posing for the camera, trying to impress and show off their abilities. The viewer of the photographs captures a distinct sense of the children's lives through looking at photographs, like these, which display the children engaging in activity. Interestingly one way of identifying the children's / photographer's agency is through viewing these kinds of photographs and the commentaries that accompany them (Giddens, 1984). The kinds of photographs that the children took were similar in terms of content, however, each child seemed to inject an element of ‘individual flair’ into their photographs making the researcher able to actually distinguish (in some cases) which photographs were taken by which child. For example Nosipho's (11 years) style and choice of content to photograph is very active, playful and posed while Fiona's (11 years) is more closely linked to a more particular kind of activity namely, extra-murals and sport. A second element of activity is that which occurs in the photographs between people and objects. Many of the children's photographs capture people engaging with each other as well as different elements of their environment. Through

a photograph we are able to see the ways in which friends, family, relatives and wider social structures interact with the individual.

*First order mediators: family, relatives and friends*

Table 8 suggests the number and percentage of photographs per age group which consisted of family<sup>4</sup>, friends or both family and friends as is illustrated below:

**Table 8: Friends and family**

	Age							
	Seven		Eleven		Fifteen		Total	
	n	%	n	%	n	%	n	%
Friend	8	7.2%	20	18%	17	20%	45	14.7%
Family	29	26.1%	40	36%	6	7%	75	24.4%
Both family and friend	4	3.6%	9	8.1%	0	0%	13	4.2%
Total of friends and family	41	36.9%	69	62.2%	23	27.1%	133	43.3%
Not present	70	63%	42	37.8%	62	72.9%	174	56.7%
<b>Total</b>	<b>111</b>	<b>100</b>	<b>111</b>	<b>100</b>	<b>85</b>	<b>100</b>	<b>307</b>	<b>100</b>

The above table illustrates that 26.1% of seven year olds' photographs were of their family; while 36% of eleven year olds' and 7% of fifteen year olds photographs were of their families. Thus the seven and eleven year old children take a lot more photographs of their family in comparison to the fifteen year old children. It can also be seen that the older the children the greater the number of photographs of friends (7.2%, 18% and 20% of photographs for seven, eleven and fifteen year olds respectively). These findings may be suggestive of the fact that younger children are more influenced by, spend more time with and thus are more likely to photograph their family members rather than their friends. As children age they appear to be more influenced by and thus more inclined to photograph their friends. The percentage of photographs of both friends and family is relatively low for seven and fifteen year olds (3.6% and 0% respectively); seven year olds have a relatively low percentage of photographs of friends (7.2%) and high percentage of photographs of family (26.1%) while these figures are almost reversed in the case for fifteen year olds who have a relatively high percentage of photographs of friends (20%) and relatively low percentage of photographs of family (7%). One can also see that children of eleven are more likely to

<sup>4</sup> 'Family' includes extended family / relatives.

photograph both family and friends (8.1% of photographs) in comparison to the seven and fifteen year olds possibly suggesting the transition from increased interest in family to increased interest in friends. This suggestion could be supported by the literature which suggests that as children age they invest more energy in their friendships, while younger children focus their attention on their family members (particularly caregivers) (Selman & Byrne, 1974 and Nucci, 2002). Traditional developmental theory also suggests that while young children are most influenced and mediated by interaction with their families (specifically caregivers), older children are more influenced by their interactions with peers (Vygotsky, 1978 and Ginsburg & Opper, 1979).

### *Family*

The thematic analysis of the interview transcripts, younger children's descriptions more frequently included their families than that of the older children who spoke more about their friends as was expected based on the content analysis. Interestingly, family did not only appear in the photographs in the sense that they were the main content; rather the children photographed their family members *as well as* the family members' belongings. Furthermore the children often handed the cameras to their family members (particularly their primary caregivers) to take photographs. The following quotations and photographs are examples of this theme:



Photograph 32

Nomonde (7 years): Who's this one? Oh it's me!

Interviewer: (Laughs) yes that's you! Who took that photo?

Nomonde (7 years): My mother. My mother photo-ed this, because I want my mother to have this picture (Nomonde, transcript 4, p15).



Photograph 33

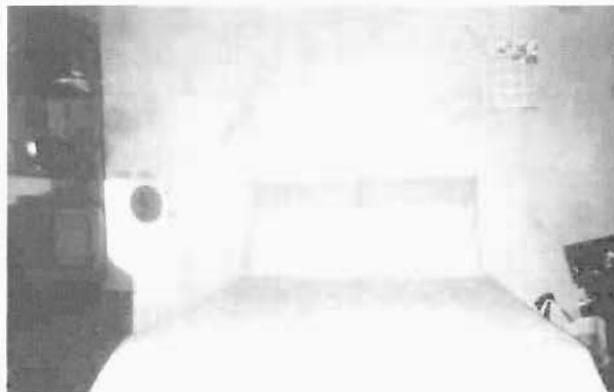
Nomonde (7 years): And this is also my mother's photo where I wanted my mother to have her photo.

Interviewer: Oh, is that your mom?

Nomonde (7 years): Yes.

Interviewer: And who took this photo?

Nomonde (7 years): Me (Nomonde, transcript 4, p16).



Photograph 34



Photograph 35

- Lerato (7 years): This is my mother's room. (*Goes to next photograph*) This is me and this is my mother's curtains. This curtains are for, for... for my mother's birthday.
- Interviewer: Ok, so she got those curtains as a birthday present. Those are lovely.
- Lerato (7 years): Yes. (*Goes to next photograph*) this is my mother's clock (Lerato, transcript 3, p8).

### *Homes*

In addition to taking a relatively large number of photographs of family (26.1% for the seven year olds and 36% for the eleven year olds) the children also took many photographs of their houses. One's house can be seen as a particular kind of place that has meaning attached and embedded in it. It was interesting to note that in describing these photographs the children spoke frequently of their "homes" rather than their "houses". This focus on one's 'home' rather than one's 'house' is what places this discussion in the first order rather than third order mediators category. The focus here is not on the *physical* structure of the actual house, but rather on the sense of belonging and family which resonates strongly in a *home* rather than a physical structure of a house. It is this strong sense of family and all that this brings to the child that places this discussion in the first order mediators section. There was clearly a strong sense of family and home connected both playing an important role in the children's lives; again this was more frequently the case with the younger children (49.5% for seven year olds and 36% for eleven year olds). Some examples of this can be evidenced in the following data:



Photograph 36

Theo (7 years):

I like this photo. This is my mother and my little brother. This is at my home (Theo, transcript 2, p6).



Photograph 37



Photograph 38

Lerato (7 years):

This is my friend's house.

Interviewer:

Ok, let's go to the next photo.

Lerato (7 years):

*(Goes to next photograph)* ok. This is my home.

Interviewer:

That's your home? That's a lovely home. Lovely nice trees.

Lerato (7 years):

Yes. *(Goes to next photograph)* this is also my home (Lerato, transcript 3, p9).

It is interesting to note in the latter quotation above that Lerato (7 years) refers to her friend's home as a "house" while her own is a "home". The impact that 'home' and all that is connected to 'home' is clearly evident and can account for the reason that the children choose to photograph their homes. 'Home' is integrally linked to family and thus speaks to a strong sense of belonging, love and security. 'Home' is where the younger children interact with their primary caregivers and being to learn and internalise the way of life implicit in their culture. As the literature suggests, younger children spend more time with their immediate families and in their homes as opposed to the older children who broaden their social network, spend time with friends and become more inclined to venture into the wider community (Nucci, 2002; Ollhoff, 1996; Dixon & Moore, 1990; Piaget, 1977). Furthermore the young child's sense of self is, as the literature suggests, constituted by 'the social'; the social, historical and cultural forces which surround the child (Fay, 1996; Hall, 1996; Shweder, 1991). Social, historical and cultural forces surround the child through their families. Through interacting with their families the young children learn about customs, norms, culture and essentially an entire framework for understanding and creating meaning in the world. For the young child their sense of self would likely be intertwined with their home and the particular immediate family circle, as this is where they spend much of their time and much of their interaction with their primary caregivers takes place, this could thus suggest a

possible explanation for the use of the term 'home', which has a sense of family and connectedness attached to it as opposed to 'house' which is more suggestive of a building structure.

### *Relatives*

The children in this particular study seem to be part of a community which is very close-knit in terms of immediate family (as just explored above), extended family/relatives and friends. 'Family' is extended to include not only immediate family members, but also relatives, neighbours and friends. This is substantiated by the literature which suggests that due to broader and deeper cultural and historical values residents of these kinds of communities form close bonds with each other and act as support structures (Magongo, 2005). All the children took photographs of aunts, uncles and/or cousins suggesting that this particular group of children are more closely linked to their extended family perhaps than in other cultural groups. The following quotations are examples of the children's tie with their relatives based on the fact that the relatives, and/or places and objects connected to the relatives, appear so frequently in their photographs:

Interviewer:  
Theo (7 years):

And who's that?  
That's my uncle with a cross face (Theo, transcript 2, p5).



Photograph 39

Lerato (7 years):

This is my uncle's house. *(Goes to next photograph)* this is my mother's sister *(hesitates and asks translator to translate)*.

Translator:

It's a picture of her aunt graduating (Lerato, transcript 3, p11).

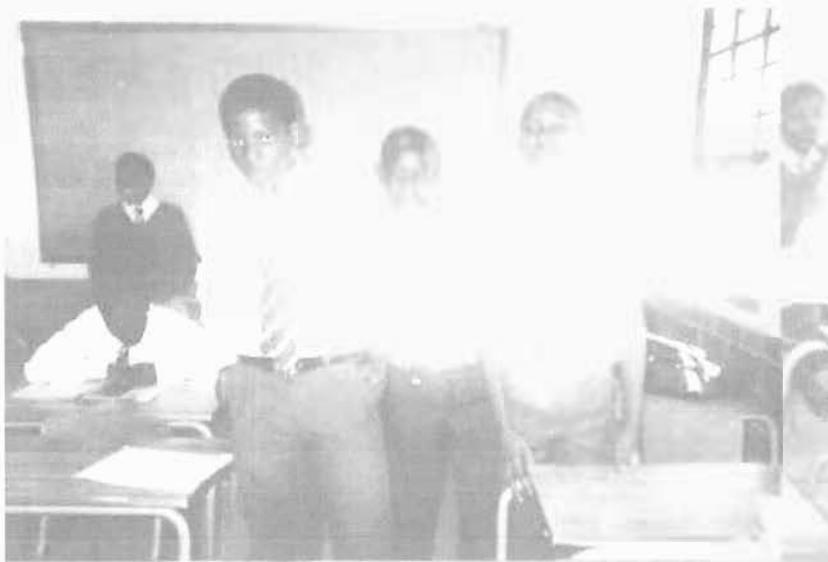
(Refer to Photograph 24 on page 64)

Nosipho (11 years): They are... this is my cousins and my cousins' friends. (*Goes to next photograph*) this is my mother's cousin (Nosipho, transcript 6, p24).

The children's lives seem to be closely tied to their relatives who seem to function as an extended 'immediate family'. As the literature suggests, the reason for this may be due to poverty and that which accompanies poverty, namely high rates of illness (particularly HIV/AIDS), lack of education and employment and scarce resources. The result of this is that many families are broken due to members dying or needing to move away in order to find and maintain work, the result of which is smaller nuclear families which become extended by including relatives as central parental figures (Mohamed, 2002; Hammond, 2002). There are many photographs of the relatives' homes and furthermore the children seem to know a lot about the relatives and even give small commentaries about their lives as they do of their own suggesting a possible kind of interdependence. Once again it appears that in the younger children more attention is paid to family and relatives while this appears to be less so the case with the fifteen year olds who appear to have broadened their interaction with the wider social network.

### *Friends*

All the children photographed their friends however the percentage of photographs taken of friends differed across the age groups with 7.2%, 18.0% and 20% for seven, eleven and fifteen year olds respectively. Thus it can be seen that the older children more frequently photographed their friends suggesting the possibility that older children are more influenced by and spend more time with their friends in comparison to the children at the younger age levels (Nucci, 2002; Ollhoff, 1996; Dixon & Moore, 1990; Piaget, 1977). The following quotations are examples of the children photographing their friends:



Photograph 40

Thabo (15 years): And this is my friend Sapho in class. *(Goes to next photograph)* this is my friends in class. *(Goes to next photograph)* this is my friends again. *(Goes to next photograph)* and this is Veronica, she's also my friend (Thabo, transcript 11, p41).



Photograph 41

Sifiso (15 years): This is my best friend. His name is Siyanda. *(Goes to next photograph)* here we are marching in the band (Sifiso, transcript 9, p37).

As the above analysis indicates the older children tend to be more inclined to photograph their friends than their families while the opposite is the case for the younger children. This appears to correspond with the literature concerning social development which suggests that older children (such as fifteen year olds) form stronger and more meaningful relationships with friends (Simpkins et al., 2006; Kravetz et al., 1998; Gallagher, 1993). In addition to spending more time with friends and broadening their social network, the older children also seem more inclined to be exposed to different contexts and engage in many activities, some of which were discussed in the second order mediators such as exploring community centres, shopping centres and different kinds of extra mural activities. Thus as the child ages, he/she is exposed to more experiences and activities and in these interactions slowly begin to broaden their social world and relations to 'the other'.

To conclude the discussion around first order mediators it is clear to see that, as the literature suggests, the individual's identity is constructed and strongly influenced by various social forces such as one's family, relatives and friends (Waite, 2005; Engstrom & Miettinen, 1999; Rodriguez, 1998; Fay, 1996; Shweder, 1991). It is important to note that it is not simply family and friends that construct the child's reality and understanding of the world, but rather the preconceived social norms, understandings, traditions and culture which inform family and friends which in turn become a part of and create the child's identity and understanding.

### Conclusion

While assessing the frequencies in the content analysis and exploring the transcripts of the interviews it became increasingly evident that the children at the three different age levels took different kinds of photographs. This suggests that photography in children is, to an extent, influenced by developmental levels. However, it was also vitally important to take into account the children's unique background in order to get a true understanding of why the children took the kinds of photographs that they did and how they explained their photographs (Burman, 2000 & Avis, 1991). The children in this study, being from a disadvantaged background were not familiar with using cameras and had a very particular view of photography which consisted mainly of the belief that photographs are only taken on 'special' occasions. In their communities, cameras are only owned by a few people (and are generally not used by children). These children seemed preoccupied with wanting to please the researcher and take the "correct" kind of photographs which they believe to be photographs of

“beautiful” content. Rather than subscribing to universal theories of development, taking context into account is as Cole (1996) suggests very important in trying to understand development. The kinds of photographs that the children took and the way in which they spoke about the meaning of the photographs gives us insight into their context / social worlds.

Traditional developmental theory is a useful tool in assessing the kinds of photographs that children of different age levels take. The analysis elucidates that as the children develop cognitively they become more inclined to broaden their social circles, spending more time with friends and exploring the wider community, while the younger children seemed more inclined to spend their time at home with their families (Nucci, 2002; Ollhoff, 1996; Dixon & Moore, 1990; Piaget, 1977). In this regard traditional developmental theory was useful and elucidated similarities between the children from poorer South African communities and those from higher socio-economic classes around Europe used in the Sharples et al. (2003) study. This suggests some grounds and basis for universal theories of development. However, the use of traditional developmental theory also indicated important differences between the children in the Sharples et al. (2003) study and the current study including the lack of progressively more abstract / stereotypically ‘artistic’ photographs with the increase of age, the preoccupation with photographing electronics, cars and oneself and finally the high percentage of technical flaws in the photographs across all the ages.

Traditional developmental theories were however found to be limiting in this analysis in that they were ignorant of important contextual factors which influenced the children’s understanding of photography (Burman, 2000; Cole, 1996; Avis, 1991; Boyden, 1990; Zelizer, 1985). It became increasingly clear to the researcher that by taking into account specific contextual factors, the differences in photographic behaviour between the South African children in this study and the European children in the Sharples et al. (2003) study could be explained in other ways rather than concluding that the South African children were cognitively delayed. Another way of accounting for the difference and perceived ‘delay’ in the South African children’s photographic ability is by taking into account the fact that the children from this study are drawn from lower socio-economic communities where little exposure to cameras occurs in these children’s day-to-day lives. The analysis clearly indicates that cameras and photographs have a particular kind of meaning in these communities whereby they are seen as luxuries, used only on special occasions to capture special moments. This belief influenced both the content of the children’s photographs as

well as their descriptions of their photographs; the latter of which is most clearly evidenced in the children's reasons for liking particular photographs which was mainly the fact that the photograph was, and captured that which was/is beautiful.

The researcher also relied on studies and theories about identity and the self which suggested that a person forms their sense of self and understanding of the world as a result of interactions with social, historical and cultural forces around them. This was clearly indicated in the analysis by the large amounts of photographs of family, relatives and friends of the children. They photographed those which were of most importance to them, those who had the greatest impact on them. The children seemed preoccupied with giving commentaries about their photographs and in so doing bearing witness to events. This tendency to give commentaries about themselves (as well as photograph themselves) could be indicative of literature which suggests that it is in presenting oneself to the other, that the self is then reaffirmed and re-presented back to the self (Fay, 1996).

Finally this analysis explored two means of representing oneself, photographs and commentaries about photographs / the stories of the participants' lives, both of which were used by the children as tools to present themselves to the researcher and to others. In accordance with the literature suggestions, most of the children perceived photographs as, and used them as a way of 'recording' and capturing memories (Svedoff, 1992; Barthes, 1981; Berger, 1980; Holmes, 1980). However the children also seemed aware of the limitations of photographs as representative tools in that due to technicalities, many of the children's photographs did not come out in the way that they intended them to (Navab, 2001; Barrett, 1990; Huckle, 1985; Brook, 1983; Berger, 1980; Sontag, 1978).

To conclude, photographs and the commentaries which accompanied them functioned as a way for South African children to express themselves, who they are, how they see themselves and how they perceive the world around them. In so doing the various social, historical and cultural forces which play important roles in their lives are elucidated to the researcher and reader. This allows for a deeper and broader understanding of the children's lives as well as their photographic behaviour. This kind of an analysis, which goes beyond traditional developmental explanations for behaviour and cognition offers an alternative way of understanding how children at different ages function and how this functioning is not solely a result of psychological development.

## References

- Althusser, L. (1969). *Ideology and ideological state apparatuses* in Lenin and Philosophy and Other Essays. London: New Left Books, 170-86.
- Avis, J. (1991). *The strange fate of progressive education*, in Education Group II, Cultural Studies University of Birmingham, *Education Limited: schooling and training and the new right since 1979*. London: Unwin Hyman.
- Barger, R. (2000). *A Summary of Lawrence Kohlberg's Stages of Moral Development*. URL: <http://www.nd.edu/~rbarger/capp40140syl.html>.
- Barrett, T. (1990). *Criticizing Photographs: An Introduction to Understanding Images*. Mountain View: Mayfield Publishing Company.
- Barthes, R. (1981) *Camera Lucida: Reflections on Photography*. New York: Hill and Wang.
- Berg, B. (2001). *Qualitative research methods for the social sciences*. Allyn & Bacon: Boston.
- Berger, J. (1981). *Ways of Seeing*. New York: Penguin Books.
- Berger, J. (1980) "Uses of Photography," in John Berger, *About Looking*. New York: Pantheon Books.
- Berk, L.E. (1989). *Child Development* (5<sup>th</sup> ed.). Boston: Allyn and Bacon.
- Billington, R., Hockey, J. & Strawbridge, S. (1998). *Exploring Self and Society*. New York, Palgrave.
- Boyden, J. (1990). *Childhood and the policy makers: a comparative perspective on the globalization of childhood*, in A. James and A. Prout (eds) *Constructing and Reconstructing Childhood: contemporary issues in the sociological study of childhood*. Basingstoke: Falmer, 190-229.

- Brook, D. (1983). Painting, photography and representation. *The Journal of Aesthetics and Art Criticism*, 171-180.
- Buckingham, D. (2000). *The making of Citizens: Young People, News and Politics*. London: Routledge.
- Burman, E. (2000). *Deconstructing Developmental Psychology*. London: Routledge.
- Cole, M. (1996). *Cultural Psychology: A once and future discipline*. Cambridge: Harvard University Press.
- Crain, W.C. (1985). *Theories of Development*. Prentice-Hall, 118-136.
- Currie, G. (1991). Photography, Painting and Perception. *The Journal of Aesthetics and Art Criticism*, 49 (1), 23-29.
- Damon, W. (1977). *The Social World of the Child*. San Francisco: Jossey-Bass.
- DeMarie, D. (2001). A Trip to the Zoo: Children's Words and Photographs. *Early Childhood Research & Practice*, 3 (1), 1-26.
- Dennett, D.C. (1989). The origins of selves. *Cogito*, 3, 163-73.
- Descartes, R. (1901) *Descartes' Meditations* (transl) John Veitch. URL: <http://philos.wright.edu/DesCartes/MedE.html>, date retrieved: 15-02-2004.
- Dixon, J.A. & Moore, C.F. (1990). The development of perspective taking: understanding differences in information and weighting. *Child Development*, 61, 1502-1513.
- Fay, B. (1996). *Contemporary Philosophy of Social Science: A Multicultural Approach*. Oxford: Blackwell Publishers.
- Gallagher, T.M. (1993). Language skill and the development of social competence in school-age children. *Language, Speech, and Hearing Services in Schools*, 24, 199-205.

- Giddens, A. (1984). *The Constitution of Society* Berkely: University of Calafornia Press.
- Gilligan, C. (1982). *In a Different Voice*. Cambridge: Harvard University Press.
- Ginsburg, M., & Opper, S. (1979). *Piaget's theory of intellectual development*. NJ: Prentice-Hall.
- Hammond, S. (2002). *Three quarters of SA's children live in poverty*. URL: <http://www.lowveldinfo.com/news/showstory.asp?story=2838>, date retrieved: 02/02/2007.
- Hall, S. (1996). *Introduction: Who Needs 'Identity'?* London: Sage Publications.
- Hatfield, G. (2003). *Routledge Philosophy Guidebook to Descartes and the Meditations*. London: Routledge.
- Holmes, O.W. (1980). The Stereoscope and the Stereograph in *Classic Essays on Photography*, ed. Alan Trachtenberg. New Haven: Leete's Island Books.
- Hook, D. (2002). Critical issues in developmental psychology. In D. Hook, J. Watts & K. Cockcroft (eds). *Developmental Psychology*. UCT Press: Landsdowne, 343-366.
- Huckle, N. (1985). On representation and essence: Barthes and Heidegger. *The Journal of Aesthetics and Art Criticism*, 275-280.
- Keenan, A. (1989). The politics of representation: Writing practices in biography, photography and policy analysis. *MLN*, 104 (5), 1206-1210.
- Kravetz, S., Faust, M., Lipshitz, S. & Shalhav, S. (1998). *LD, Interpersonal Understanding and Social Behaviour in the Classroom*. URL: <http://www.ldonline.org>. Date retrieved: 11/12/2006.
- Magongo, B. (2005). *2005 Impact assessment survey on sustainable livelihoods and households for the Goelama Project*. URL: <http://www.nelsonmandelachildrensfund.com/framework/index.asp?newcore=content/reports.asp>. Date retrieved: 02/02/2007.

McGinn, M. (1997). *Routledge Philosophy Guidebook to Wittgenstein and the Philosophical Investigations*. Routledge: London.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook, 2<sup>nd</sup> edition*. Sage: Thousand Oaks.

Miller, R. (2003). Understanding: the nature of nurture – part 2. *Psychology in Society*, 29, 6-22.

Miller, R. (1984). *Reflection of Mind and society*. Inaugural lecture, University of Natal, Durban: South Africa.

Mohamed, S. (2002). *The four townships survey (4TS): Chesterville, KwaMashu, Phoenix, Umlazi. A study undertaken by the organization of civic rights*. URL: <http://www.ocr.org.za/Research/Four%20Townships.pdf>, date retrieved: 02/02/2007.

Moll, I., Gultig, J., Bradbury, J. & Winkler, G. (2001). *Learners and Learning: Reader*. Oxford University Press Southern Africa: Cape Town.

Nardi, B. (1996). *Context and Consciousness: Activity theory and human-computer interaction*. Cambridge, MA: MIT Press.

Navab, A.D. (2001). Re-Picturing Photography: A Language in the Making. *Journal of Aesthetic Education*. 35 (1), 69-84.

Nucci, L. (2002). *Studies in Moral Development and Education*. URL: <http://trigger.uic.edu/~lnucci/MoralEd/overview.html>. Date retrieved: 20/11/2006.

Ollhoff, J. (1996). *Human Development Theories: A Comparison of Classic Human Development Theorists and the Implications for a Model of Developmental Social Interaction*. URL: <http://eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED407125>. Date retrieved: 20/11/2006.

Piaget, J. (1977). *The Development of Thought*. Oxford: Blackwell.

Ricoeur, P. (1981). *Hermeneutics and the Human Sciences*, edited and translated by Thompson, J.B. Cambridge: Cambridge University Press.

Sadock, B.J. & Sadock, V.A. (2003). *Kaplan & Sadock's Synopsis of Psychiatry Behavioral Sciences / Clinical Psychiatry (9<sup>th</sup> ed)*. Philadelphia: Lippincot Williams & Wilkins.

Savedoff, B.E. (1992). Transforming images: photographs of representations. *The Journal of Aesthetics and Art Criticism*, 50 (2), 93-106.

Selman, R.L. & Byrne, D.F. (1974). A structural-developmental analysis of levels of role taking in middle childhood. *Child Development*, 45, 803-806.

Sharples, M., Davison, L., Thomas, G.V. & Rudman, P.D. (2003). Children as Photographers: an Analysis of Children's Photographic Behaviour and Intentions at Three Age Levels. *Visual Communication*, 2, 303-330.

Shweder, R. (1991). Cultural Psychology: What is it? In *Thinking through Cultures* Massachusetts: Harvard University Press.

Simpkins, S.D., Parke, R.D., FLYT.M.L. & Wild, M.N. (2006). Similarities in children's and early adolescents' perceptions of friendship qualities across development, gender, and friendship qualities. *The Journal of Early Adolescence*, 26(4), 491-508.

Sontag, S. (1978). *On Photography*. New York: Farrar, Straus and Giroux.

Ulin, P.R., Robinson, E.T., Tolley, E.E. & McNeill, E.T. (2002). *Qualitative methods: A field guide for applied research in sexual and reproductive health*. Family Health International: North Carolina, USA.

Vygotsky, L. (1978). *Mind in Society. The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.

Waite, T. (2005). *Activity Theory*. URL: <http://www.slis.indiana.edu/faculty/>

[yrogers/act\\_theory2/](#). Date retrieved 16/11/2006.

Wittgenstein, L. (2001). *Philosophical Investigations* (transl. by Anscombe). Blackwell Publishers: United Kingdom.

Zelizer, V.A. (1985). *Pricing the Priceless Child: the changing social value of children*. New York: Basic Books.

## Appendices

### Appendix A: Individual interview transcript

The individual interviews will be semi-structured. The child will be given an opportunity to go through all their photographs and while doing so inform the researcher of what the content is. The researcher will probe where necessary to get a better understanding of the context of the photograph. Thereafter the child will be asked to select his/her two favourite photographs based on criteria of their choice. The children will also be asked the following questions concerning their history of camera use:

- 1) Do you or anyone in your family own a camera?
- 2) Have you ever used a camera?
- 3) What do you normally photograph? / What would you photograph if you had a camera?
- 4) Where do you normally see photographs and what are they of?

### Appendix B: Interview schedule for focus groups.

The interviews conducted with the three focus groups will be semi-structured. Each child will have a chance to present their two favourite photographs (selected from the process in Appendix A) to the rest of the group. The group will then comment on the photographs, suggesting what they like/dislike about the photograph and then the photographer will get a chance to explain why he/she selected the photographs that he/she did as his/her favourite. Questions used to encourage discussion will be as follows:

- 1) Why do you like / dislike this photograph?
- 2) Why did you take this photograph?
- 3) What does this photograph mean to you?
- 4) How did it feel to take photographs?
- 5) Are you happy with the way the photographs came out?
- 6) What were you trying to take a photograph of?

Appendix C: Blank coding scheme for photographic content

Content form		Age	Gender	Name
P H		Indoors		
		Outdoors		
O T O G R A P H I C		Don't know		
		Domestic interior (own home)		
		Domestic interior (relative home)		
		Domestic interior (friend home)		
	C	Educational (school)		
	O	Commercial (work)		
	N	Entertainment/recreation		
	T	Urban/suburban		
	E	Countryside		
	X	Bank/beach/water		
	T	Underwater		
		Garden/park		
		In vehicle		
		Road/vehicle		
		Community centres		
	Other			
	Don't know			
T I M E		Day		
		Night		
		Twilight		
		Don't know		
S U B J E C T	PEOPLE	Child/children		
		Adult/adults		
		1 person		
		2 people		
		3 people		
		More than 3 people		
		Body part/back view		
		Male/males		
		Female/females		
		Males and females		
	Self			
	Self with others			
Family/relatives				
Friends				
	ANIMALS	Animal/animals		
M A T T E R	BUILDINGS	Building/buildings		
		Cityscape		
M A T T E R	MANMADE/ CRAFTED OBJECT	Toy/game		
		Food/drink		
		Transport (cars)		
		TVs/radios/phones/computers		
		Pictures/posters		
		Furniture		
Other				
M A T T E R	NATURE	Landscape		
		Waterscape		
		Plants/trees		
		Natural phenomena		
	Others			
M A T T E R	EXTRA- MURALS	Sporting activity		
		Extramural activities		
		Church		
J U D G E M E N T	VIEWER IMPACT	Humorous/silly		
		Unusual subject		
		Unusual angle		
		Artistic		
J U D G E M E N T	TECHNICAL QUALITY	Exhibition quality		
		Focused		
		Camera shake		
		Over/under exposed		
J U D G E M E N T	STAGING	Fingers in frame		
		Ceremonial		
		Posed/staged		
		Surprised/shy		
		Don't know		

Appendix D: Tables for all categories of the coding scheme

Table indicating photographs taken indoors & outdoors

		Age			Total
		Seven	Eleven	Fifteen	
InOut	Indoors	50	41	35	126
	Outdoors	55	53	41	149
	Don't know	6	17	9	32
Total		111	111	85	307

Table indicating photographs taken of different contexts

		Age			Total
		Seven	Eleven	Fifteen	
Context	Domestic interior (own home)	33	19	19	71
	Domestic interior (relative home)	0	9	0	9
	Domestic exterior (own home)	22	21	6	49
	Domestic exterior (relative home)	2	0	0	2
	Domestic exterior (friend home)	1	1	0	2
	Educational (school)	12	37	16	65
	Religious (church/sunday school)	4	2	0	6
	Entertainment / Recreation	0	0	2	2
	Tuck shop	1	0	2	3
	Shopping centre	0	0	14	14
	Urban / suburban	0	2	1	3
	Garden / park	4	0	3	7
	In vehicle	8	1	0	9
	Road / vehicle	13	1	2	16
	Community centre	0	0	7	7
	Other	5	1	1	7
	Don't know	6	17	12	35
Total		111	111	85	307

Table indicating photographs taken during daytime or nighttime

		Age			Total
		Seven	Eleven	Fifteen	
DayNight	Day	66	55	52	173
	Night	2	0	4	6
	Twilight	9	0	0	9
	Don't know	34	56	29	119
Total		111	111	85	307

Table indicating photographs taken of children or adults

		Age			Total
		Seven	Eleven	Fifteen	
ChildAdult	.00	54	29	54	137
	Child	29	56	22	107
	Adult	22	17	8	47
	Child and adult	6	9	1	16
Total		111	111	85	307

Table indicating number of people appearing in photographs

		Age			Total
		Seven	Eleven	Fifteen	
NoPeople	.00	54	29	55	138
	One person	34	48	19	101
	Two people	18	16	2	36
	Three people	4	8	1	13
	More than three people	1	9	6	16
	Body part	0	1	2	3
Total		111	111	85	307

Table indicating photographs taken of men and / or women

		Age			Total
		Seven	Eleven	Fifteen	
MFB	.00	54	29	54	137
	Male	18	26	22	66
	Female	21	40	8	69
	Both male and female	18	16	1	35
Total		111	111	85	307

Table indicating photographs which include the photographer

	Age			Total
	Seven	Eleven	Fifteen	
SelfOther .00	102	91	78	271
Self	8	8	6	22
Self with friend	1	9	1	11
Self with relative	0	2	0	2
Self with friend and relative	0	1	0	1
Total	111	111	85	307

Table indicating photographs of the photographer's friends and / or family

	Age			Total
	Seven	Eleven	Fifteen	
FriendFam .00	70	42	62	174
Friend	8	20	17	45
Family	29	40	6	75
Both family and friend	4	9	0	13
Total	111	111	85	307

Table indicating photographs taken of animals / pets

	Age			Total
	Seven	Eleven	Fifteen	
Animals .00	106	104	85	295
1.00	5	7	0	12
Total	111	111	85	307

Table indicating photographs taken of buildings

	Age			Total
	Seven	Eleven	Fifteen	
Buildings .00	109	107	72	288
Building	2	4	13	19
Total	111	111	85	307

Table indicating photographs taken of objects

	Age			Total
	Seven	Eleven	Fifteen	
Manmade .00	70	96	77	243
Toy / game	6	1	0	7
Food / drink	1	4	5	10
Transport	14	1	0	15
Pictures / posters	5	0	1	6
Furniture	12	7	2	21
Other	3	2	0	5
Total	111	111	85	307

Table indicating photographs taken of electronics

	Age			Total
	Seven	Eleven	Fifteen	
TRCC .00	102	111	77	290
TV and or DVD player	6	0	6	12
Cell phone	2	0	0	2
Computer	1	0	2	3
Total	111	111	85	307

Table indicating viewer's impression of photographs

	Age			Total
	Seven	Eleven	Fifteen	
ViewImp .00	82	101	64	247
Humorous / silly	2	2	0	4
Unusual subject	20	3	20	43
Unusual angle	0	1	0	1
Artistic	7	4	1	12
Total	111	111	85	307

Table indicating technical quality of photographs

	Age			Total
	Seven	Eleven	Fifteen	
TechQual .00	0	1	0	1
Focused	67	55	66	188
Camera shake	0	9	0	9
Over/under exposed	14	17	13	44
Fingers in frame	11	19	3	33
Cut off	13	6	0	19
Content not clear	6	4	3	13
Total	111	111	85	307

Table indicating staging of photographs

	Age			Total
	Seven	Eleven	Fifteen	
Staging .00	0	1	0	1
Ceremonial	0	1	0	1
Posed / staged	102	87	74	263
Surprised / shy	3	5	0	8
Don't know	6	17	11	34
Total	111	111	85	307